

CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
AIR POLLUTION CONTROL BOARD

**AIR MANAGEMENT REGULATIONS I, II, III
OF THE
AIR POLLUTION CONTROL BOARD**

Adopted:

Air Pollution Control Board.....April 10, 1970

Approved:

Board of Health.....April 1, 1970

Department of LawApril 15, 1970

Department of RecordsApril 29, 1970

(CONTAINING AMENDMENTS AND REVISIONS THROUGH APRIL 10, 1995)

**PREFACE TO AIR MANAGEMENT REGULATIONS*
REGULATIONS I, II AND III**

(Containing amendments and revisions through April 10, 1995)

These Regulations have been developed to provide guidance for compliance with the Air Management Code. They specify limits and delineate procedures to be followed in improving the quality of the air for both the City of Philadelphia and the Delaware Valley Region.

In recognition of the concept that the atmosphere is a resource to be used by all, but which should not be abused by any, these Regulations are based on the principle that the use of the atmosphere for disposal of waste materials or for other purposes which tend to degrade the quality of the air for other users implies a responsibility to use every means available to limit bad effects resulting from such use.

To this end, the numbers set forth herein indicate levels which have been selected to represent limits possible under available technology and beyond which point justification for additional degradation can be properly required.

To enable public and technical examination of those instances for which technology might not yet be available to meet these desirable limits, a review mechanism has been provided with appropriate procedures set forth to make possible adjustments to specific needs. This relief is to be applied in cases where it is impossible to meet, by any known equipment, procedures, or changes in process, the proposed levels of control.

At such time as the maintenance and protection of the air resource has been established at the level representing the limits of today's technology, aerometric measurements and evaluation of air quality may properly be made. Then decisions can be planned to determine if unacceptable insults to the air resource still exist and what action is needed to get and maintain acceptable air quality for the Region.

* This Preface is a brief explanatory statement describing the principle upon which the levels set by the Regulations are based. It is not to be construed as part of the Regulations; the provisions of the Regulations and the levels set therein are definite and should be consulted for any question of requirement.

**REGULATIONS OF THE AIR POLLUTION
CONTROL BOARD
CITY OF PHILADELPHIA, PENNSYLVANIA**

These Regulations are adopted pursuant to Section 5-302 of the Philadelphia Home Rule Charter, which reads as follows:

"The Air Pollution Control Board shall advise the Department of Public Health and the Board of Health on all matters pertaining to the control of air pollution and shall make reasonable regulations, not contrary to a statute or ordinance or to the regulations of the Board of Health."

These Regulations are also adopted pursuant to Title 3, Air Management Code, of the Philadelphia Code, specifically, Section 3-302, which reads in part as follows:

"The Air Pollution Control Board shall have the following powers and duties:

- (1) To promulgate regulations, implementing this Title, preventing degradation of air quality, preventing air pollution, eliminating air pollution nuisances and limiting, controlling, or prohibiting the emission of air contaminants to the atmosphere from any sources..." and
- (2) To promulgate regulations to establish objectives for the quality of community air, to establish areas where objectives are applicable, and limiting, prohibiting, or otherwise controlling emissions to achieve this quality of air...≡

REGULATION I

GENERAL PROVISIONS

SECTION I. DEFINITIONS

- A. The following definitions are in the Air Management Code and apply to the regulations:
1. *Aerosol* - A dispersion or suspension of small solid or liquid particles or any combination thereof in the air or other gaseous medium.
 2. *Ashes* - The residue from combustion, including cinders, flyash or any other solid material resulting from combustion, as well as partially combusted materials and unburned combustibles.
 3. *Air Contaminant* - Any smoke, soot, flyash, dust, cinders, dirt, noxious or obnoxious acids, fumes, oxides, gases, mists, aerosols, vapors, odors, toxic or radioactive substances, waste, particulate, solid, liquid or gaseous matter, or any other materials in the outdoor atmosphere.
 4. *Air Pollution* - The presence in the atmosphere of one or more air contaminants or combinations thereof in such quantities and of such duration that they are or may tend to be injurious to human, plant, or animal life, or property, or that interfere with the comfortable enjoyment of life or property or the conduct of business or other human activities.
 5. *Air Pollution Nuisance* - The emission or discharge of one or more air contaminants to the atmosphere meeting one or more of the following criteria:
 - a. In excess of emission standards promulgated by the Air Pollution Control Board;
 - b. In such quantity and of such duration that they do or may tend to:
 - (1) interfere with health, repose, or safety;
 - (2) cause severe annoyance or discomfort;
 - (3) lessen food or water intake;
 - (4) produce irritation of the upper respiratory tract;

- (5) produce symptoms of nausea;
 - (6) be offensive, or objectionable, or both, to persons because of inherent chemical or physical properties;
 - (7) be detrimental or harmful to health, comfort, recreation, living conditions, welfare, or safety;
 - (8) cause injury or damage to real or personal property of any kind;
 - (9) or interfere with the conduct of industry, commerce, or transportation.
6. *Board* - Means the Air Pollution Control Board.
 7. *Cinders* - Particles consisting of fused ash or unburned matter.
 8. *Carbon Dioxide (CO₂)* - A colorless, odorless gas at standard conditions which has the molecular formula CO₂.
 9. *Commercial Fuel* - Liquid or gaseous fuel normally produced, manufactured, used, or sold for the purpose of creating useful heat.
 10. *Condensed Fumes* - Minute solid particles 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 airborne particles.
 11. *Department* - The Department of Public Health, Health Commissioner or any authorized representative thereof.
 12. *Dust* - Solid particles projected into the air and capable of temporary suspension therein.
 13. *Facility* - The area, buildings and equipment used by any person at a single location in the conduct of business.
 14. *Flyash* - Particulate matter capable of being gasborne or airborne and consisting essentially of fused ash and/or burned or unburned material.
 15. *Fuel* - Any combustible matter.

16. *Fuel Burning Equipment* - Any device, machine, mechanism or structure used in the process of burning fuel for indirect heating.
17. *Fuel Merchant* - Any person who stores, offers for sale or sells commercial fuel in retail or wholesale trade, excluding agents, brokers, wholesalers, distributors or producers who sell commercial fuel for use in single steam and/or electric power generating facilities having rated hourly capacities that equal or exceed two hundred (200) million BTU gross heat input, or in a group of steam and/or electric power generating facilities at one location having a combined rated capacity which equals or exceeds four hundred and fifty (450) million BTU gross heat input.
18. *Fuel Oil* - A liquid or liquefiable petroleum product burned for lighting or for the generation of heat or power and derived directly or indirectly from crude oil.
19. *Household Appliances* - Any electric or gas operated device, commonly used in a dwelling, other than incinerators, heating systems, or hot water heating systems.
20. *Incinerators* - All devices, including but not limited to crematories, intended or used for the destruction of garbage or other combustible materials by means of burning, or for the salvage of materials by means of burning of extraneous materials.
21. *Installation, Equipment or Devices* - Any assembly or elements or components the operation of which does or may directly or indirectly affect the emission of air contaminants to the atmosphere.
22. *Minor Repairs and Alterations* - Repair or alteration of any part of any existing installation, equipment, or device which does not materially alter the quantity or character of discharge or emission into the atmosphere of air contaminants.
23. *Mist* - A suspension of any finely-divided liquid in any gas or the atmosphere.
24. *Non-Commercial Fuel* - Liquid or gaseous fuel not normally produced, manufactured, used or sold for the purpose of creating useful heat.
25. *Odor* - Smells or aromas which are unpleasant to persons, or which tend to lessen human food and water intake, interfere with sleep, upset appetite, produce irritation of the upper respiratory tract, or create symptoms of nausea, or which by their inherent chemical or physical nature, or method of

processing, are or may be detrimental or dangerous to health. Odors and smell are used herein interchangeably.

26. *Open Fires* - Any fire from which the products of combustion are emitted directly into the atmosphere without passing through a stack or chimney.
27. *Particulate Matter* - Any material, liquid or solid, except uncombined water, which exists in a finely divided form at standard conditions.
28. *Person* - Any individual, natural person, syndicate, association, partnership, firm, corporation, institution, agency, authority, department, bureau or instrumentality of federal, state or local government or other entity recognized by law as a subject of rights and duties.
29. *Smoke* - Small gas-borne particles resulting from combustion, consisting of carbon, ash, and other material.
30. *Soot* - Agglomerated particles consisting mainly of carbonaceous material.
31. *SSU Viscosity* - The number of seconds it takes 60 cubic centimeters of an oil to flow through the standard orifice of a Saybolt Universal Viscometer at 100° F.
32. *Stack or Chimney* - A flue, conduit or opening permitting particulate or gaseous emissions into the open air, or constructed or arranged for such purpose.
33. *Standard Conditions* - A gas temperature of 60 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute.
34. *Sulfur Dioxide(SO₂)* - A colorless gas at standard conditions which has the molecular formula SO₂.
35. *Vapor* - The gaseous form of a substance which is in the liquid or solid state at customary atmospheric temperature and pressure.
36. *Viscosity* - The measure of a fluid's resistance to flow.
37. *Toxic Air Contaminant* - A chemical substance or material the discharge of which into the atmosphere, based upon relevant available scientific evidence establishing the toxic, mutagenic and/or carcinogenic effects of such substance or material, may pose a potential hazard to the community in terms of a significant increase in risk of acute or long-term health effects.

- B. In addition to definitions provided in the Air Management Code, the following definitions apply to these Regulations.
1. *Anthracite Coal* - A hard, black, lustrous coal containing 85-95% carbon characterized by its small percentage of volatile matter, high specific gravity, hardness, nearly metallic luster, rich black color, and semi-conchoidal fracture. Volatile matter is usually less than seven (7) percent.
 2. *Bituminous Coal* - A coal containing 70-85% carbon leaving usually more than 7 percent volatile matter.
 3. *Dosage* - Is the summation of the hourly averages of the concentration of a pollutant in the atmosphere for the specified time in hours.
 4. *Fugitive Dust* - Is any dust released or dispersed into the air by natural forces or mechanical processes which escapes from the premises where the dust originated.
 5. *PPM-Hrs* (Parts per million-hours) - Is the sum of the average ppm hourly dosages measured for the number of hours stated.
 6. *Process Weight* - Is the total weight of all materials introduced into any specific process which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. "The Process Weight Per Hour" will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding anytime during which the equipment is idle.
 7. *Process* - Is any method, reaction, or operation whereby materials introduced into the process undergo physical change (i.e. the size, shape, appearance, state or other physical properties of the material are altered without changing chemical composition) or chemical change (i.e. a substance or substances with different chemical composition or properties are formed or created). A specific process, independent or production unit, is one which includes all of the equipment and facilities necessary for the completion of the transformation of the materials to produce a physical or chemical change. There may be several specific processes in series necessary to the manufacture of a product. However, where there are parallel series of specific processes, the similar parallel specific processes shall be considered as a single specific process for emission regulation.

8. *RUD-Hrs/1,000 ft. (Reflectance units of dirt shade-hours per 1,000 linear feet of air)* Is the sum of the hourly RUDs/1000 ft. measured for the number of hours stated. RUDs/1,000 ft. are the measured percentage reflectance of the filter tape reduced by dividing by the number of thousands of feet of air actually drawn through the tape in the test.
9. *Soiling Index* - Is an expression of the measurement of the light reflectance of a stain produced on paper tape through which a set rate of air volume has passed for a period of time. The standard for this expression in these Regulations is RUD-hrs/1,000 ft.

SECTION II. SOURCE REGISTRATION AND EMISSION REPORTING

A. Registration of Emission Sources

1. Installation Permits

- a. No person shall build, erect, install, alter, or replace any article, machine, equipment, device, or other contrivance or appurtenance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants until an Air Management Permit, as specified by the Air Management Code, has been obtained for such installation and construction. The permit shall remain in effect as specified by the Air Management Code.
- b. Within 60 days of receipt of an application for an installation permit, the Department shall act to approve or disapprove the application or notify the applicant that additional information is required.

2. Operating Licenses

- a. The person responsible for each source of emission of air contaminants must have a current operating license as specified by the Air Management Code.
- b. The application for a license to operate a new installation shall be filed at least two weeks in advance of the date of initial operation. Prior to the operation of the installation, the Department shall approve or disapprove the application, or notify the applicant that the installation is incomplete with approval withheld pending completion or that a period of demonstration or test operation is required before

approval may be granted.

3. Submission of Source Information

- a. The Department shall establish procedures and forms for use in the review of applicants for permits and licenses. These procedures shall prescribe the information to be supplied in order to determine if the proposed installation will conform to these regulations.
- b. Information to be given in the permit or license application shall include, but not be limited to, the following:
 - (1) Description of the proposed installation.
 - (2) Design capacity of the process equipment including process weight and process weight per hour.
 - (3) Expected physical and chemical composition of the emissions and pertinent design criteria such as discharge rate, concentration, volume and temperature.
 - (4) Type and general characteristics of the air pollution control equipment.
 - (5) Description and evaluation of the location of the discharge point of emissions of air contaminants and other factors relating to the dispersion and diffusion of air contaminants in the atmosphere.
 - (6) The relation of the discharge point to nearby structures and topography if necessary to appraise the possible effects of the emissions.
 - (7) Type and general characteristics of any equipment for monitoring emissions and related alarm and recording systems.

Any additional information, plans, specifications, evidence or documentation that the Department may require shall be furnished upon request.

4. Conditions of Source Approval

- a. Approval to construct, install, alter, replace, or operate any source of

emission shall be granted only upon demonstration to the satisfaction of the Department that the source will not violate any provision of the Air Management Code or Regulations of the Air Pollution Control Board or prevent or interfere with attainment or maintenance of any national ambient air quality standard.

- b. Issuance of a permit or license shall not exempt any person from prosecution for violation of the Air Management Code, Regulations of the Air Pollution Control Board or any applicable laws of the Commonwealth of Pennsylvania or the United States Government. Where regulations are amended or new regulations adopted, the holders of permits and licenses issued prior to the effective date thereof shall comply with any new requirements within the period of time provided therein.

5. Reporting Changes to Existing Installations

- a. Where it is planned to take any approved installation, equipment, or device out of service for any reason, except for normal plant shutdowns, the Department shall be notified at least three days in advance. Where the reason for being out of service is breakdown, malfunction or similar emergency which may increase emissions, the Department shall be notified by telephone immediately with a written confirmation in 24 hours.
- b. No person shall change any installation such that the registered information concerning it is no longer accurate without first notifying the Department.
- c. Where a change of ownership occurs at any approved installation, the new owner shall notify the Department within 30 days of the change of ownership.

B. EMISSION REPORTING

1. Recording and Submission of Emission Information

- a. In addition to the provisions and requirements of Section II.A., the person responsible for any source of emission shall, upon notification from the Department, maintain such records as will disclose the nature, effects, extent, quantity or degree of air contaminants which are or may be discharged from such source or any other information as may be deemed necessary by the Department to determine

compliance with applicable emission limitations or other control measures as well as the relative contribution of such source to air quality.

- b. The required information shall be summarized on source reporting forms supplied by or in a source reporting format as may be prescribed by the Department and shall be complete. The required information shall be submitted within 30 days after the receipt of a source reporting form or notification, unless a time extension has been granted by the Department. When notified by the Department of the necessity to submit an annual source report, the person responsible shall submit by March 1 of each year a source report for the preceding calendar year and, subsequent to the initial source report provided, each annual report shall include information for all previously reported sources, as well as for all new sources which began operation or sources which were modified during the reporting period and not previously reported.
- c. Information recorded and copies of the source reporting forms submitted to the Department shall be retained by the person responsible for each source of emission for two years after the date on which the pertinent report was submitted. The person responsible shall also maintain and make available upon request by the Department records, including computerized records, that may be necessary to verify the information submitted in source reports and emission statements. These may include records of production, fuel usage, maintenance records for production or air pollution control equipment, or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

2. Emission Statements

- a. The person responsible for any source of emission that emits 25 or more tons of nitrogen oxides or volatile organic compounds per calendar year shall provide the Department with an emission statement showing the actual emissions of nitrogen oxides and volatile organic compounds from each such source during the prior calendar year. The emission statement shall be provided in a format as the Department may prescribe and that is acceptable to the U.S. Environmental Protection Agency (EPA), and shall include a detailed

description of the method used to calculate or derive the emissions and the time period over which the calculation is based. The statement shall also include a certification by the individual owner, company officer, or plant manager that the information contained in the statement is accurate and complete.

- b. Annual emission statements shall be submitted to the Department by March 1 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of the Air Management Code or Regulations of the Air Pollution Control Board.

3. Availability of Emission Data

Emission data obtained from source reporting forms and emission statements submitted to and verified by the Department will be correlated with applicable emission limitations and other control measures. All such emission data, or summaries thereof, will be available for public inspection at the Department during normal business hours.

C. Confidential Information

Any records, reports, information, or particular part thereof, other than emission data, relating to secret processes, methods of manufacture or production, or otherwise entitled to protection as trade secrets, provided to, required or obtained by the Department shall be kept confidential.

SECTION III. TESTING AND TEST METHODS

- A. The Department shall establish standard methods for the sampling and analysis of emissions to determine compliance with these Regulations.

These standards shall be published and made available upon request at the office of the Department.

- B. Requirements for testing.

The Department may require any person to conduct, or have conducted, testing to determine compliance with these regulations. The Department may at its option witness or conduct such tests. Such testing will be done at a reasonable time, and all

information gathered during a testing operation will be provided to both parties.

When the Department conducts or has such tests conducted, the person shall provide such sampling facilities, exclusive of instruments and sensing devices, as may be necessary to determine the quantity and character of emissions.

SECTION IV. AVAILABILITY OF TECHNOLOGY

Any person who believes that there does not exist technology adequate for an existing installation to meet the requirements of these regulations may request within six months of the effective date, the Commissioner of Health, or his designated representative, to appoint an advisory committee of technical experts. The Commissioner of Health shall appoint the committee within two weeks of the receipt of such a request. The committee shall review the process and make a recommendation to the Department within 90 days, from the date of their appointment. This recommendation may be any of the following:

- A. Compliance with these regulations.
- B. Adoption of a regulation proposed by the committee governing the process, or processes, in question which provides for the application of known technology to control emissions.
- C. Approval of a compliance schedule which considers any unusual problems in adapting known technology to the process in question, but not to exceed two years.

If the committee fails to make a report and recommendation, this regulation shall apply.

The committee report shall be forwarded to the Air Pollution Control Board, by the Department within two weeks of its receipt from the committee together with its own recommendations, for consideration and action. For a period of 150 days from the appointment of the committee, the Health Commissioner may withhold prosecution.

SECTION V. IMPROVEMENT AND PLAN

Where an improvement plan and compliance schedule has been approved, as provided in the Air Management Code (Section 3-301(17)), the compliance schedule in the approved plan shall govern.

SECTION VI. PRE-EXISTING REGULATIONS

All existing regulations of the Air Pollution Control Board not in conflict with these Regulations shall remain in force.

SECTION VII. CIRCUMVENTION

No person shall build, erect, install or use any article, machine, equipment or other contrivance, the sole purpose of which is to dilute or conceal an emission without resulting in a reduction in the total release of air contaminants to the atmosphere.

SECTION VIII. SEVERABILITY

The provisions of these Regulations are severable and if any provision, sentence, clause, section or part thereof shall be held illegal, invalid, unconstitutional or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality or inapplicability shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts of the ordinance or their application to him or to other persons and circumstances. It is hereby declared to be the legislative intent that these Regulations would have been adopted if such illegal, invalid or unconstitutional provision, sentence, clause or part had not been included therein, and if the person or circumstances to which the ordinance or any part thereof is inapplicable had not specifically been exempted therefrom.

SECTION IX. EFFECTIVE DATE

Except as otherwise provided, these Regulations shall become effective upon adoption. The owner of any source of emission, in existence or under construction at the time of adoption, shall notify the Department, within six months from the effective date, of his intent to discontinue any operations or activities which cause any emission that result in an emission in violation of these Regulations or to control such emission to the extent required by these Regulations, or that the emission is in compliance. Within a period of twelve months from the effective date, compliance shall be obtained at all sources of emission within the scope of these Regulations.

SECTION X. COMPLIANCE WITH REGULATIONS OF THE ENVIRONMENTAL QUALITY BOARD OF PENNSYLVANIA

No person shall discharge into the atmosphere any air contaminants in excess of the limits established in the regulations of the Environmental Quality Board of Pennsylvania, or shall utilize air contaminant control of less efficiency than required by the regulation of the Environmental Quality Board of Pennsylvania.

SECTION XI. COMPLIANCE WITH FEDERAL REGULATIONS

The provisions of this Section shall apply to all existing, new, and modified stationary emission sources for which regulations have been promulgated by the Administrator of the Environmental Protection Agency pursuant to the following sections of the Federal Clean Air Act (42 USC Sect. 7401 et seq.) and Code of Federal Regulations, including future additions and amendments thereto, which are hereby incorporated by reference into these Regulations.

- A. Standards of Performance for New Stationary Sources (40 CFR, Part 60)
- B. National Emission Standards for Hazardous Air Pollutants (40 CFR, Part 61; 40 CFR, Part 63; and Section 112 of the Clean Air Act)
- C. Prevention of Significant Deterioration of Air Quality (40 CFR, Part 52, Section 52.21)

The Department, at any time, may request from the EPA Administrator delegation of authority to enforce specific portions of the referenced Federal regulations. Subsequent to published notice by the EPA Administrator approving such request, the Department shall act to enforce all limits, requirements and procedures for which authority has been delegated, and the owner of any affected source of emission shall comply with all applicable requirements within such time and manner as the Department may prescribe.

Nothing in this Section shall prohibit the Department from enforcing any applicable provision of the Air Management Code or any Regulation adopted thereunder.

SECTION XII. ALTERNATIVE EMISSION REDUCTION OPTIONS

Any person responsible for a facility which discharges a given air contaminant from multiple emission points, each of which is subject to a specific emission limitation under these Regulations, may propose, for approval by the Department, an alternative emission control approach for a specified group of existing emission points, subject to the following conditions:

- A. It must be demonstrated by the person responsible for such facility that, at a minimum, the alternative mix of emission controls will achieve a total emission reduction for the specified emission points and result in an air quality impact equivalent to or better than that which would be achieved through application of the specific emission limits under these Regulations.
Emission characteristics for the points specified in the alternative control plan shall be based on actual operating conditions averaged over the three (3) calendar years immediately preceding the date of proposal submission. Whenever the Department determines that such period is not representative or applicable, the Department may specify a different baseline for determining actual emission characteristics.
- B. Air contaminants to be included under an alternative control approach must be comparable in nature, emissions must be quantifiable and trade-offs among emission points must be at least equal.
- C. Each alternative emission reduction proposal taken under consideration for approval

by the Department shall be made available for public inspection and shall be subject to public notice and a hearing. Each alternative emission reduction plan approved by the Department shall be subject to submission as a revision to the Pennsylvania State Implementation Plan (SIP).

- D. Approval of any alternative emission reduction proposal for any facility shall be subject to a determination of consistency with the provisions and requirements of the U.S. EPA Policy Statement on Alternative Emission Reduction Options of December 11, 1979 (44FR71780) and any subsequent additions or revisions thereto.

REGULATION II

AIR CONTAMINANT AND PARTICULATE MATTER EMISSIONS

SECTION I.

- A. In addition to the previous citations, these Regulations are adopted pursuant to Title 3, Air Management Code, which reads in part as follows:

1. "Section 3-202, Open Fires.

No person shall ignite, burn or permit the continuation of the burning of garbage, refuse, or other waste material, demolition materials, leaves, grass, weeds, trees, batteries, wire, tires, cars, vehicles, or parts thereof, or any other combustible material in an open fire.

Any open burning for salvage purposes is prohibited. This requirement shall not apply to outdoor home cooking. A special exception may be made by order of the Commissioner of Health where the Fire Commissioner certifies an emergency exists which endangers the public safety, and the Health Commissioner finds that no practical alternative method of disposal of hazardous or flammable material exists. The conditions for allowing open fires shall be approved by both the Health and Fire Commissioners."

2. "Section 3-302, Power and Duties of the Air Pollution Control Board.

To promulgate regulations, implementing this Title, preventing degradation of air quality, preventing air pollution, eliminating air pollution nuisances and, limiting, controlling, or prohibiting the emission of air contaminants to the atmosphere from any sources.

Such regulations may include, but are not limited to, the following:

- (a) The concentration, volume, weight, and other characteristics of

emissions of air contaminants into the atmosphere, the circumstances under which such emissions are permitted and the degree of control of emissions of air contaminants required;

- (b) the emissions of air contaminants to the atmosphere and related actions which are prohibited;
- (c) the types and kinds of control measures and actions, equipment, storage and handling facilities, processes and systems, including specifications and/or performance requirements, which may be required to control emissions of air contaminants to the atmosphere;
- (d) the characteristics of fuels and wastes which may be combusted in the city, insofar as such characteristics may affect the emissions of air contaminants to the atmosphere;
- (e) the density, opacity and duration of discharges and emissions of air contaminants to the atmosphere which obscure and reflect light, and the establishment of methods for evaluating density, opacity, equivalent opacity or density."

- B. These Regulations control, and/or prohibit, the discharge or escape of certain air contaminants and particulate matter in the atmosphere.

SECTION II. OPEN FIRES

- A. No person shall ignite, burn or permit the continuation of the burning of garbage, refuse, or other waste material, demolition materials, leaves, grass, weeds, trees, batteries, wire, tires, cars, vehicles, or parts thereof, or any other combustible material in an open fire. Any open burning for salvage purposes is prohibited. Any person who operates, owns or controls premises where junk cars, demolition materials, refuse or other salvaged or waste materials are stored, processed or deposited, shall take all necessary measures to prevent fires and to extinguish any fires which may occur. Fire prevention measures shall include, among others, security measures to exclude unauthorized persons from entering upon the premises.

If a fire occurs when the premises are unattended, the Department may order fencing and/or a watchman to be employed by the owner, operator, or other person who controls the premises, for periods, when there are no other attendants.

- B. It shall be prima facie evidence that the person who owns or controls property on which open burning occurs has caused or permitted said open burning.

SECTION III. TOXIC OR RADIOACTIVE AIR CONTAMINANTS

The discharge of toxic or radioactive air contaminants is regulated under the provisions of Air Management Regulation VI, Control of Emissions of Toxic Air Contaminants.

SECTION IV. VISIBLE EMISSIONS

1. No person shall discharge into the atmosphere from any single source of emission whatsoever any air contaminant, except uncombined water,
 - a. for a period or periods aggregating more than three minutes in any one hour which
 - (1) is equal to or darker in shade than that designated as No. 1 on the Ringelmann Chart, as published by the U. S. Bureau of Mines, or
 - (2) is equal to or darker than a comparable standard using such other charts or devices as the Department determines to be equivalent thereto; or
 - b. for any period, which is equal to or darker than No. 3 on the Ringelmann Chart, or its equivalent; or
 - c. of such opacity as to obscure an observer's view to an equal or greater degree than either (a) or (b) above;
 - d. The provisions of (a) above, do not apply to incinerators. Incinerators are regulated under the provisions of Air Management Regulation XI, Control of Emissions from Incinerators.
2. The provisions of (1) above shall apply to visible emissions of air contaminants that are white, black, shades of grey or colored.
3. Trained employees certified by the Department may make observations to determine compliance with the provisions of (1) and (2) above without direct reference to standards.

SECTION V. PARTICULATE MATTER EMISSIONS FROM THE BURNING OF FUELS

No person shall cause, suffer, allow or permit to escape or to be discharged into the atmosphere any particulate matter resulting from the combustion of fuels in excess of the following rates:

1. From exiting units legally constructed or installed under provisions in effect prior to

the adoption of these Regulations, particulate matter emissions shall not exceed 0.20 pounds per million BTU gross heat input, except as provided below.

2. From units constructed or installed after the effective date of this Regulation, and any units not covered by (1) above, particulate matter emissions shall not exceed 0.10 pounds per million BTU gross heat input.
3. From existing units burning anthracite coal for space heating purposes subject to Section III(A)(2)(c) of Regulation III, particulate matter emissions shall not exceed the applicable limits set forth in Chapter 123, Standards for Contaminants, Section 123.11, Particulate Matter Emissions-Combustion Units, of the Pennsylvania Air Pollution Control Regulations.
4. From existing industrial units approved by the Department pursuant to Section III(A.3) of Regulation III for conversion to coal as an alternative or supplemental fuel, particulate matter emissions shall not exceed 0.12 pounds per million BTU gross heat input after July 1, 1980, and 0.06 pounds per million BTU gross heat input after July 1, 1984.
5. This section does not apply to motorized vehicles nor to incinerators.

SECTION VI. SELECTION OF FUEL FOR PARTICULATE MATTER EMISSION CONTROL

The fuel used shall be compatible with the burning equipment and the furnace or boiler. Where there occur repeated violations of Sections IV or V, above, the Department may order the use of a specific alternate fuel.

SECTION VII. PARTICULATE MATTER EMISSIONS FROM CHEMICAL, METALLURGICAL, MECHANICAL AND OTHER PROCESSES

No person shall cause, suffer, allow or permit the discharge, emission or escape of particulate matter into the atmosphere from chemical, metallurgical, mechanical or other processes for any one hour period in excess of the amount shown in Table I.

SECTION VIII. FUGITIVE DUST

No person shall cause or permit the handling, transporting, storing or disposing of any substance or material which is likely to be scattered by the wind, or is susceptible to being wind-borne, without taking effective precautions or measures to prevent air contamination. No person shall operate or maintain, or allow or cause to be operated or maintained, any premises, open area, right of way, storage piles, or vehicle, or any construction, alterations, demolition, or wrecking operation, or any other enterprises, which involves any material or substance likely to be scattered

by the wind, or susceptible to being wind-borne, without effective precautions or measures to prevent air contamination. No person shall maintain, conduct, or use, or cause to be maintained, conducted, or used, any parking lot, or similar areas, unless the lot, area, or roadway is maintained in such manner as to prevent air contamination.

TABLE I

Process Wt. /hr. (lbs.)	Maximum Weight Disch. /hr. (lbs.)	Process Wt. /hr. (lbs.)	Maximum Weight Disch. /hr. (lbs.)
50	.24	3300	5.36
100	.46	3400	5.44
150	.66	3500	5.52
200	.85	3600	5.61
250	1.03	3700	5.69
300	1.20	3800	5.77
350	1.35	3900	5.85
400	1.50	4000	5.93
450	1.63	4100	6.01
500	1.77	4200	6.08
550	1.89	4300	6.15
600	2.01	4400	6.22
650	2.12	4500	6.30
700	2.24	4600	6.37
750	2.34	4700	6.45
800	2.43	4800	6.52
850	2.53	4900	6.60
900	2.62	5000	6.67
950	2.72	5500	7.03
1000	2.80	6000	7.37
1100	2.97	6500	7.71
1200	3.12	7000	8.05
1300	3.26	7500	8.39
1400	3.40	8000	8.71
1500	3.54	8500	9.03
1600	3.66	9000	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	28.3
3000	5.10	50000	34.3

3100	5.18	60000	40.0
3200	5.27	or more	

REGULATION III

THE CONTROL OF EMISSIONS OF OXIDES OF SULFUR COMPOUNDS

SECTION I.

A. In addition to the above citations, these regulations are adopted pursuant to Title 3, the Air Management Code, which reads in part as follows:

"SECTION 3-207, SALE OF FUEL OIL

(1) Commercial Fuel Oil

(a) On and after the effective dates listed herein no fuel merchant shall store, offer for sale, sell, deliver for use or exchange in trade, for use in Philadelphia, and no person shall use commercial fuel oils which contain sulfur in excess of the percentages by weight set forth in the following table:

Grades of Commercial Fuel Oil	Classification by SSU Viscosity at 100E F	Percent Sulfur by Weight		
		Effective 05-01-70	Effective 10-01-72	Effective 04-01-78
No. 2 and lighter	Less than or equal to 45..... 0.3%	0.3%	0.2%	
No. 4	Greater than 45, but less than 145..... 0.7%	0.4%	0.3%	
No. 5, No. 6 and heavier	Equal to or greater than 145..... 1.0%	0.5%	0.5%	

(b) The provisions of (a) above shall not apply in any case in which it is demonstrated to the Department that sulfur dioxide emissions, caused by the combustion of commercial fuel oils, from any stack or chimney into the outdoor atmosphere, can be controlled to levels that, on and after the effective dates listed herein, do not exceed at any time those quantities of sulfur dioxide, expressed in pounds per one (1) million BTU gross heat input, set forth in the following table:

Grades of Commercial Fuel Oil	Classification by SSU Viscosity at 100E F	Permissible SO ₂ Emissions (Pounds of SO ₂ per Million BTU Gross Heat Input)		
		Effective 05-01-70	Effective 10-01-72	Effective 04-01-78

No. 4	Greater than 45, but less than 145.....	0.74 lbs.	0.42 lbs.	0.30 lbs.
No. 5, No. 6 and heavier	Equal to or greater than 145.....	1.1 lbs.	0.52 lbs.	0.52 lbs.

(2) Non-Commercial Fuel

- (a) No person shall cause, suffer, allow or permit sulfur dioxide, caused by the combustion of non-commercial fuel or the combustion of non-commercial and commercial fuel mixtures, to be discharged from any stack or chimney into the outdoor atmosphere in excess of the following limits, expressed as ppm by volume adjusted to twelve (12) percent carbon dioxide by volume, or equivalent method approved by the department:

Annual Average250 ppm

Maximum Monthly Average.....310 ppm

- (b) Where a single manufacturing facility contains multiple stacks or chimneys for discharge of flue gases from burning non-commercial fuels or non-commercial and commercial fuel mixtures, the emissions from any single stack may exceed the SO₂ concentration limits given in (2)(a) provided that it can be satisfactorily demonstrated to the Department that:

- (.1) The emission rate of sulfur dioxide from non-commercial fuel combustion on a total weight basis for the facility will not exceed that allowed by (2)(a), and
- (.2) The ground level concentration of sulfur dioxide at any point in the neighborhood, area, or region caused by the combustion of all non-commercial fuel at the facility shall not exceed those concentrations that would result from compliance with (2)(a), and
- (.3) The concentration of SO₂ emitted from any such stack does not exceed any limit imposed by regulations of the State of Pennsylvania or the U.S. Environmental Protection Agency, and
- (.4) Compliance with (2)(b) shall not prevent the achievement or maintenance of any national air quality standard for SO₂ established by the Environmental Protection Agency.

- (c) Any person responsible for the discharge of SO₂, caused by the combustion of non-commercial fuel or the combustion of non-commercial and

commercial fuel mixtures from any stack or chimney as provided for in (2)(a) and (2)(b) shall submit a detailed report to the Department at least once every month, providing fuel usage and emissions information sufficiently adequate to determine compliance with this section."

"SECTION 3-302, POWER AND DUTIES OF THE AIR POLLUTION CONTROL BOARD

The Air Pollution Control Board shall have the following powers and duties:

- (1) To promulgate regulations implementing this Title, preventing degradation of air quality, preventing air pollution, eliminating air pollution nuisances and, limiting, controlling, or prohibiting the emission of air contaminants to the atmosphere from any source. Such regulations may include, but are are not limited to, the following:
 - (a) The concentration, volume, weight, and other characteristics of emissions of air contaminants to the atmosphere, the circumstances under which such emissions are permitted and the degree of control of emissions of air contaminants required;
 - (b) The emission of air contaminants to the atmosphere and related actions which are prohibited;
 - (c) The types and kinds of control measures and actions, equipment, storage and handling facilities, process and systems, including specifications and/or performance requirements, which may be required to control emissions of air contaminants to the atmosphere;
 - (d) The characteristics of fuels and wastes which may be combusted in the city, insofar as such characteristics may affect the emissions of air contaminants to the atmosphere."

These Regulations control, and/or prohibit, the discharge or escape of oxides of sulfur compounds to the atmosphere and control and/or prohibit, the sulfur content of fuels burned in the City of Philadelphia. All available measures shall be taken to prevent the emission of oxides of sulfur to the atmosphere, but in no event shall the measures employed be less effective than those in the following sections.

SECTION II. CONTROL OF EMISSION OF SULFUR COMPOUNDS

- A. No person shall cause or permit an emission from a specific source of oxides of sulfur calculated as sulfur dioxide (SO₂) which results in ground level concentrations at any point in excess of 3.0 ppm (volume) at any time, an average 0.5 ppm (volume) for a

15 minute period, or an average of 0.1 ppm (volume) in any 8 hour period.

- B. Except as provided in Section III, no person shall cause or permit the emission of oxides of sulfur from a specific source or process in excess of 0.05 per cent by volume. Dilution or diffusion of exhaust gases is not an acceptable means of meeting this requirement.
- C. Compliance with the provisions and limitations set forth in this Regulation shall be determined by standard methods established by the Department which may include procedures for sampling and analysis or for stoichiometric calculations.

In addition, the Department may establish requirements for continuous emission monitoring and minimum data availability related thereto for sources of oxides of sulfur. When notified of such requirements by the Department the person responsible for a specific source of emission of oxides of sulfur shall install, operate and maintain an approved continuous emission monitoring system and shall submit reports of the results of such monitoring as prescribed by the Department.

SECTION III. CONTROL OF SULFUR IN FUELS

- A. No person shall store, offer for sale, sell, deliver for use, or exchange in trade for use in Philadelphia, and no person shall burn any fuels in the City of Philadelphia, except as provided below, the sulfur content of which exceeds the following:
 - 1. Fuel Oil shall not exceed the content limits of Section 3-207 of Title 3 (see above)
 - 2. Coal shall not exceed the following content limits:
 - a. Bituminous Coal shall not exceed two per cent by weight after May 1, 1970, one per cent by weight after July 1, 1971, and 0.3 per cent by weight after October 1, 1972.
 - b. Anthracite Coal except as provided in Subsection 2.c. below, shall not exceed 0.7 per cent by weight after May 1, 1970, and 0.3 per cent by weight after October 1, 1972.
 - c. Anthracite Coal used for space heating purposes shall not exceed 0.7 per cent after May 1, 1970, and 0.6 per cent by weight for existing space heating installations continuing to burn anthracite coal after October 1, 1980. No new coal burning facilities shall be installed after the adoption of this Regulation that do not comply with Subsection 2.b. above.

3. Subject to compliance with the provisions of (B) below, any person responsible for any existing oil-fired and/or gas fired industrial boiler installation containing combustion units with individual rated capacities of less than 250 million BTU per hour gross heat input, originally designed for and capable of burning coal, may petition the Department for approval to convert to coal as an alternate or the supplemental fuel with application of the following limitations in lieu of the limitations set forth in (2a) or (2b) above:

a. Effective July 1, 1980, the emissions of oxides of sulfur, calculated as sulfur dioxide (SO₂), shall not exceed:

(.1) an annual average for the installation of 0.6 pounds per million BTU gross heat input;

(.2) a daily average of 1.0 pounds per million BTU gross heat input more than two (2) days in any running 30-day period from any combustion unit; and

(.3) a daily average maximum of 1.2 pounds per million BTU gross heat input from any combustion unit at any time.

b. Effective July 1, 1984, the emission of oxides of sulfur, calculated as sulfur dioxide (SO₂), shall not exceed a daily average maximum of 0.5 pounds per pounds per million BTU gross heat input from any combustion unit at any time.

For the purpose of this Subsection the term "industrial boiler installation" shall mean any stationary steam-generating installation, comprised of one or more fuel combustion units, located within a manufacturing or chemical processing facility and operated to supply heat, process steam and/or power to such facility.

4. As of the date of adoption of these amendments, the following companies have petitioned the Department, pursuant to (3) above, for approval to

convert their respective boiler installations to coal as a supplemental fuel:

Container Corporation of America5000 Flat Rock Road

Publicker Industries Inc.....Delaware Ave. & Bigler St.

Although the petitions have not been fully acted upon, the Department has made a preliminary determination relative to information submitted by the above-named companies that subject to compliance with the provisions of this Section the proposed coal conversions would not jeopardize the attainment or maintenance of any national ambient air quality standard. The Department finds this determination sufficient to satisfy the consistency demonstration required for submission of these amendments as revisions to the Pennsylvania State Implementation Plan.

Subsequent coal conversion requests submitted to the Department pursuant to (3) above shall be considered on a case-by-case basis and shall be individually subject to submission as revisions to the Pennsylvania State Implementation Plan.

- B. For those installations where, pursuant to the provisions of (1) and (3) above, equipment or methods, including the use of supplemental low-sulfur fuels, are used to reduce the emissions from the burning fuels with a higher sulfur content than that specified in (A) above, the equipment and/or method must be approved by the Department and the person responsible for the installation shall install, operate and maintain an approved continuous emission monitoring system, provide adequate fuel-use record-keeping and submit such reports as required by the Department to determine compliance with this Section. In addition, the person responsible for the installation shall maintain an alternate fuel supply, complying with the sulfur content limits in (A) above, as determined by the Department to be adequate for standby in the event of equipment breakdown or other emergency condition.

- C. When it appears that the delivery of low sulfur fuel is, or is about to be interrupted because of unavailability, accident, or other emergency conditions, the Department may authorize the use of an alternative fuel supply, involving the least adverse impact on air quality, for a period not to exceed 30 days. Longer periods of time of 120 days each may be authorized by the Department only after a review and recommendation made by the Air Pollution Control Board for each extended period of time. Factors to be considered shall include the availability of alternate complying fuels, the availability of sulfur dioxide stack gas removal equipment, and the anticipated effect on air quality in the neighborhood, area and region. The Air Pollution Control Board, after a hearing, shall have the right to adjust, revoke, rescind, and make any changes or modifications of any authorizations if there shall occur such change in the condition of availability of low sulfur fuel or the factors set forth in this subsection.