# CITY OF PHILADELPHIA DEPARTMENT OF PUBLIC HEALTH AIR POLLUTION CONTROL BOARD

# AIR MANAGEMENT REGULATION I OF THE AIR POLLUTION CONTROL BOARD

# **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*  $(CO_2)$  A colorless, odorless gas at standard conditions which has the molecular formula  $CO_2$ .
- 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. [Not in SIP]

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.  $Sulfur Dioxide(SO_2)$  A colorless gas at standard conditions which has the molecular formula SO<sub>2</sub>.
- 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. **[Not in SIP]**

- 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 semiconchoidal 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 the Department and shall be complete. The required information shall be submitted within 30 days after the receipt of a source reporting form, unless a time extension has

been granted by the Department.

- 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.
- 2. Availability of Emission Data

Emission data obtained from source reporting forms submitted to and verified by the Department will be correlated with applicable emission limitations and other control measures. All such emission data,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.** [Not in SIP]

## 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. – C. [Not in SIP]

## D. Stack Height Regulations (40 CFR, Part 51)

The regulations cited in (D), above, are hereby adopted in their entirety. The Department shall act to implement the provisions contained threrin and the owner of any affected emission source shall comply with all applicable requirements within such 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, including, without

limitation, Air Management Regulation I, Section VII (Circumvention).

# SECTION XII. [Not in SIP]