

Air Management Regulation XII

Pertaining to the Construction, Modification and Operation of Automotive
Facilities Equipped with Mechanical Ventilation Systems

City of Philadelphia
Department of Public Health
Air Pollution Control Board

Approved By:

Air Pollution Control Board	June 13, 1978
Board of Health	June 21, 1978
Department of Law	June 28, 1978
Department of Records	August 1, 1978

Regulation XII

Section I. Definitions

In addition to definitions provided in the Air Management Code, the following definitions apply to this Regulation:

Automotive Facility - Any building or structure, or portion thereof, which is used as a parking garage, underground parking or loading facility or tunnel; excepting open parking lots and garages of one-or-two family dwellings.

Carbon Monoxide - A colorless, odorless gas at standard conditions which has the molecular formula CO.

Emergency Action Procedure - A description of the automotive facility management's policy concerning personnel responsibilities and physical actions to be initiated in the event of equipment breakdown or when ambient conditions within the automotive facility pose a threat to the health and safety of employees or patrons.

Mechanical Ventilation System - Fans, blowers or other air moving devices with associated power systems, controls and air distribution network used for air handling in an enclosed space.

Modification - Alteration, reconstruction or conversion of any existing automotive facility; excepting minor repairs and alterations which do not materially alter the design and operating characteristics of the facility or its mechanical ventilation system, or increase the quantity, duration or resultant concentrations of carbon monoxide (CO) emissions generated within or exhausted from the facility.

Parking Garage - Any parking facility, building or structure used for the storage of motor vehicles; excepting facilities having a capacity of ten (10) vehicles or less, or facilities located entirely above grade having free openings to the atmosphere in excess of 50% of the total vertical wall space on each parking level.

Section II. General Provisions

- A. No person shall construct or modify any automotive facility, as defined in Section I and equipped with a mechanical ventilation system, before obtaining written approval from the Department for such construction or modification; and no person shall operate any such automotive facility without annual certification by the Department that the facility is in compliance with all applicable provisions of this Regulation.
- B. Nothing contained in this Regulation shall be taken to excuse or relieve any person from complying with any applicable requirement of the Philadelphia Code or of any other regulation adopted thereunder.

Section III. Facility Review, Approval And Certification

- A. Request for Approval

Request for approval to construct or modify any automotive facility subject to this Regulation shall be made to the Department by the owner of such facility and shall include submission of sufficient information to allow evaluation of potential health hazards, both internal and external to the facility, which may result either directly or indirectly from the operation of the automotive facility or its associated mechanical ventilation system.

- B. Review Procedure and Guidelines

The Department shall establish and publish procedures and guidelines related to the review and approval of automotive facilities and shall prescribe the information to be included with the request for approval. Such information shall include the following:

1. Location and general description of the facility;
 2. Information on the design, construction and operation of the facility, including plans;
 3. Information on the design, construction and operation of the associated mechanical ventilation system, including plans; and
 4. Information on the design, installation and operation of equipment to monitor carbon monoxide (CO) concentrations within the facility, including plans related to detection and warning systems, where such equipment is required by this Regulation or by the Department as a condition of facility approval. Any additional information, plans, specification, evidence or documentation that the Department may require shall be furnished upon request.
- C. Approval and Certification
- Approval to construct or modify any automotive facility subject to this Regulation shall be granted only upon demonstration to the satisfaction of the Department that the facility is equipped with an adequate mechanical ventilation system and, where required, a carbon monoxide (CO) monitoring system, and is capable of operation meeting the requirements of this Regulation.
- Further, approval to operate any automotive facility subject to this Regulation shall be obtained annually and shall be made only upon certification by the Department, through inspection at least once per year, that the facility is in compliance with all applicable requirements of this Regulation and that the mechanical ventilation and carbon monoxide (CO) monitoring systems are properly installed, well maintained, in operation, and approved by the Department.

Section IV. Parking Garages

In addition to the above, the following requirements shall apply to parking garages subject to this Regulation:

- A. Mechanical ventilation systems of parking garages shall be designed and maintained to limit internal ambient concentrations of carbon monoxide (CO) to a maximum average of 50 parts per million (PPM) by volume during any eight (8) consecutive hours.
- B. All parking garages containing thirty-five (35) or more parking spaces, the construction of which commenced after the effective date of this Regulation, and such other garages as may be required by the Department, shall be equipped with an automatic carbon monoxide (CO) detection and warning system, approved by the Department, with remote sensing or sampling points at each level of the parking garage. The owner or person responsible for the parking garage shall provide for periodic calibration and servicing of the carbon monoxide (CO) monitoring system by trained personnel to ensure measurement accuracy and operational reliability. Where required by the Department, a continuous recording of ambient carbon monoxide (CO) measurements within the parking garage shall be provided.
- C. The mechanical ventilation and carbon monoxide (CO) detection and warning systems of the parking garage shall be controlled and monitored from a central location accessible to operating, maintenance or security personnel at all times that the facility is in operation or available for use.
- D. The owner or person responsible for any parking garage equipped with a carbon monoxide (CO) detection and warning system shall submit to the Department for approval an Emergency Action Procedure and shall post and maintain a copy of the approved procedure in the central control and monitoring location of the parking garage. The Emergency Action Procedure shall be put into immediate effect by the responsible person on duty when there is a failure of the mechanical ventilation system or carbon monoxide monitoring system, or when the carbon monoxide concentration at any monitoring point in the parking garage exceeds 200 ppm during any fifteen (15) minute period.

Section V. Severability

The provisions of this Regulation 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 this Regulation 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 VI. Effective Date

This Regulation shall become effective upon adoption.