

CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
AIR POLLUTION CONTROL BOARD

AMENDMENTS TO
AIR MANAGEMENT REGULATION XII
PERTAINING TO THE CONSTRUCTION, MODIFICATION, AND
OPERATION OF AUTOMOTIVE FACILITIES EQUIPPED
WITH MECHANICAL VENTILATION SYSTEMS

Air Management Regulation XII Approved:

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Air Pollution Control Board	May 17, 2017
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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 an enclosed parking garage, underground parking or loading facility or tunnel; excepting open parking lots, mechanical access parking garages, 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.

Enclosed Parking Garage – Any parking facility, building or structure used for the storage of more than ten (10) motor vehicles that is not an open parking garage as defined in Title 4 of The Philadelphia Code, Subcode “B” (The Philadelphia Building Code).

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.

Open Parking Garage – Any above ground naturally ventilated parking facility, building or structure used for the storage of motor vehicles as defined in Title 4 of The Philadelphia Code, Subcode “B” (The Philadelphia Building Code).

Section II. Applicability and General Provisions

- A. On and after the effective date of this amended regulation, no person shall construct or modify any automotive facility, as defined in Section I, before obtaining from the Department a permit for such construction or modification; and no person shall operate any such automotive facility without obtaining a license from the Department.
- B. No person shall operate any automotive facility, enclosed parking garage, or open parking garage with a mechanical ventilation system or carbon monoxide detectors and constructed before the effective date of this amended regulation, without obtaining a license from the Department.
- C. Nothing contained in this Regulation shall be interpreted 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. Installation Permit and License Requirements

- A. Installation Permit Application and Automotive Facility Guidelines

The Department shall promulgate guidelines establishing mechanical ventilation, air monitoring, and related safety requirements for automotive facilities. An application for a permit to construct or modify an automotive facility shall be accompanied by sufficient information to allow the Department to evaluate potential health hazards, both internal and external to the automotive facility, that may result directly or indirectly from its operation. Such information shall include:

1. The location and a general description of the automotive facility;
2. Information on the design, construction and operation of the automotive facility, including plans;
3. Information on the design, construction and operation of any associated mechanical ventilation system, including plans;
4. Information on the design, installation, and operation of equipment to monitor carbon monoxide (CO) concentrations within the automotive facility, including plans related to detection and warning systems, where such equipment is required by the Department; and

5. Any additional information, plans, specifications, evidence or documentation that the Department may require.

B. Issuance of Installation Permits and Licenses

The Department will issue a permit to construct or modify an automotive facility only upon a demonstration, to the satisfaction of the Department, that the facility as constructed or modified will have sufficient ventilation, and, where required, a CO monitoring system to protect the public.

Licenses required by Section II of this amended regulation must be renewed annually. The Department may only issue such licenses upon the completion of an annual inspection that determines that the requirements of this regulation, the applicable Automotive Facility Guidelines, and any permit for the facility issued pursuant to the Air Management Code, have been met.

Section IV. Enclosed Parking Garages

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

- A. *Mechanical Ventilation System* – All Enclosed parking garages shall be equipped with a mechanical ventilation system designed to limit internal ambient concentrations of CO to: a maximum average of fifty (50) parts per million (PPM) by volume during any eight (8) consecutive hours, and a maximum average of two hundred (200) parts per million (PPM) by volume during any fifteen (15) minute period.
- B. *Carbon Monoxide (CO) Detection and Warning System* – Enclosed 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 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 CO monitoring system by trained personnel to ensure measurement accuracy and operational reliability. Where required by the Department, a continuous recording of ambient CO measurements within the enclosed parking garage shall be provided.
- C. The mechanical ventilation and CO detection and warning systems specified in Sections IV. A. and IV.B. of this Regulation 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. *Emergency Action Procedure* – Subject to approval by the Department, the owner or person responsible for any enclosed parking garage equipped with a CO detection and warning system shall develop an Emergency Action Procedure to be followed in the event there is a failure of the mechanical ventilation system, a failure of the carbon monoxide monitoring system, or when the carbon monoxide concentration at any monitoring point in the enclosed parking garage exceeds design limits specified in Section IV.A. of this Regulation. Copies of the approved Emergency Action Procedure must be posted and maintained in the central control and monitoring location of the enclosed parking garage.

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.