

# **Executive Summary**

## **25 Pa. Code Chapters 121 and 126, Subchapters F and G**

### **Diesel Vehicle Idling; and Auxiliary Power Systems**

The Department of Environmental Protection recommends amending *25 Pa. Code* Section 121.1 and adding new Subchapters F (relating to diesel vehicle idling) and G (relating to auxiliary power systems) to Chapter 126.

#### **Purpose of the Proposed Rulemaking**

The purpose of this proposed rulemaking is to amend Chapter 126 (relating to motor vehicle and fuels programs) by adding a new Subchapter F (relating to diesel vehicle idling) and a new Subchapter G (relating to auxiliary power systems), as set forth in Annex A. The proposed rulemaking establishes an idling restriction of 5 minutes in a 60-minute period for diesel-powered commercial motor vehicles, with a number of exemptions. The proposed rulemaking also regulates the use of diesel-powered auxiliary power systems for diesel-powered commercial motor vehicles with model year 2007 and newer engines. The proposed rulemaking adds definitions to Section 121.1 (relating to definitions) for auxiliary power system, commercial motor vehicle, gross combination weight rating, highway and idling. The final-form rulemaking, if adopted by the EQB, will be submitted to the U.S. Environmental Protection Agency as a revision to the State Implementation Plan.

#### **Summary of Proposal**

The proposed rulemaking adds definitions for the following terms to § 121.1 (relating to definitions): “auxiliary power system,” “commercial motor vehicle,” “gross combination weight rating,” “highway,” and “idling.”

The proposed rulemaking applies to owners and operators of diesel-powered commercial motor vehicles and owners and operators of locations at which diesel-powered commercial motor vehicles load, unload or park. The proposal prevents persons subject to this subchapter from allowing the engine of a commercial diesel vehicle to idle more than 5 minutes in any 60-minute period, except as provided in a list of exemptions.

There are several exemptions. Most importantly, the regulation proposes a temporary exemption for vehicles with sleeper berths that idle for driver comfort during hot and cold weather. This exemption would expire on May 1, 2010, allowing diesel vehicle owners and operators time to identify and finance alternatives to idling the main propulsion engine of the vehicle. The regulation also proposes to allow a longer (15 minute) idling period for passenger buses when passengers are on board. The proposed regulations also include a series of exemptions for various purposes that apply only when idling is necessary. These exemptions apply: during active loading or unloading, during operation

of work-related mechanical or electrical equipment, during on-road traffic stoppages, during official inspections, when required for servicing, due to mechanical difficulties outside the driver's control, to prevent a health or safety emergency, for vehicles used during emergencies, for guarded armored vehicles, and for school buses that must idle during queuing for the discharge or pickup of students due to the physical configuration of the school or surrounding streets not allowing for stopping. The proposed rulemaking also allows a local government or local air authority with idling regulations predating the effective date of this proposed rulemaking to approve alternative compliance plans for bus terminals. The Department is also seeking comment on whether to include an exemption for idling that is necessitated by a delay in loading or unloading due to an unforeseen facility-related problem during hot or cold weather; and for idling in specific situations in which vehicles are lining up to load or unload. According to a survey conducted by the American Trucking Associations, almost one-half of all vehicles with sleeper berths in the country may be driven in California and therefore will have to be prepared to comply with California's idling and APS use regulations. The regulation also proposes to allow idling of vehicles of model year 2007 or newer that have a California label indicating they are less polluting.

The owners and operators of diesel fleets may choose to operate a smaller auxiliary power system to meet needs otherwise met by idling the main engine. These small engines can be more polluting than model year 2007 or newer main engines for particulate emissions. The proposed regulation requires the exhaust of the auxiliary power system to be routed through the main engine's exhaust, because particulate filters reduce emissions from these newer main engines, or exhibit a California label indicating the auxiliary power system itself is cleaner.

When this regulation takes effect in 2009, it is estimated that idling emissions in the Commonwealth will account for about 3,325 tons of oxides of nitrogen (NO<sub>x</sub>), 90 tons of volatile organic compounds (VOC) and 60 tons of particulate matter per year. The benefits of this proposed rulemaking could be greater if hours spent in Pennsylvania in travel rest increase significantly. The Department expects that, once the temperature exemption for trucks with sleeper berths expires, the proposed regulation would reduce diesel-powered commercial motor vehicles idling by half and that a corresponding 50 percent reduction of emissions would occur. Therefore, the Department estimates that the proposed rulemaking would reduce emissions in the Commonwealth by about 1,610 tons of NO<sub>x</sub>, 45 tons of VOC and 30 tons of particulate matter once the temperature exemption expires.

These emission reductions are not only a part of Pennsylvania's efforts to achieve and maintain the health-based ozone air quality standard, but will also reduce direct exposure to diesel particulate emissions, a likely carcinogen. All citizens in the Commonwealth will benefit from reduced direct exposure to diesel emissions produced by idling commercial motor vehicles. However, since more air pollution from idling is produced in some counties than others because of the concentration of travel rest facilities, citizens of some counties will benefit more.

Because the United States increasingly relies on imported fuel for transportation needs, reducing idling will contribute to the country's energy independence. Another benefit of reducing idling is the reduction of carbon dioxide (CO<sub>2</sub>) emissions. EPA estimates that idling heavy-duty vehicles can consume about one gallon of diesel fuel for every hour of idling time, adding more than a pound of CO<sub>2</sub>, a major greenhouse gas. The idling of a typical long-haul truck contributes about 19 metric tons of CO<sub>2</sub> annually.

### **Affected Parties**

The proposed amendments will affect diesel-powered commercial motor vehicle owners, such as trucking and bus companies, transit agencies and school districts, and the owners and operators of facilities where these vehicles load, unload and park, such as truck stops and warehouses. Because idling can consume as much as one gallon of diesel fuel per hour, reducing unnecessary idling as a result of this regulation will save vehicle owners money in the long run. The Department has had on-going communication with the petitioner, Clean Air Board of Central Pennsylvania (CAB), since CAB filed its petition for rulemaking. The Department held a meeting with the Pennsylvania Motor Truck Association and their members, and the American Truck Associations, and contacted the National Association of Truck Stop Operators. The Department has also reached out to the Allegheny County Health Department (ACHD) and Philadelphia Air Management Services (AMS), both of which already have adopted anti-idling regulations.

The proposed amendments may affect the ACHD and AMS and any other local government entity that adopts an anti-idling regulation. Section 12(a) of the APCA allows counties, cities, towns, townships and boroughs to enact air pollution ordinances as long as the ordinances are at least as stringent as the CAA, APCA and Department regulations. 35 P.S. § 4012(a).

### **Advisory Groups**

The Air Quality Technical Advisory Committee reviewed this proposal on July 26, 2007. The committee concurred with the Department's recommendation to present the proposed rulemaking to the EQB for approval for proposed rulemaking. In addition, the proposed revisions were reviewed with the Citizens' Advisory Council on July 17, 2007. An overview of the proposal was presented to the Small Business Compliance Advisory Committee on July 25, 2007.

The Department consulted with the Department of Transportation (PennDOT) during development of the proposed rulemaking in accordance with section 5(a)(7) of the Air Pollution Control Act, 25 P.S. § 4005(a)(7), and also with the Pennsylvania State Police.

### **Public Comments and EQB Hearings**

The Department recommends a 60-day public comment period on the proposed rulemaking and three public hearings.