Notice of Final Rulemaking
Department of Environmental Protection
Environmental Quality Board
(25 *Pa. Code* Chapters 121 and 126)
Diesel Vehicle Idling

Order

The Environmental Quality Board (Board, EQB) by this Order amends Chapter 126 (relating to motor vehicle and fuels programs) by adding new Subchapter F (relating to diesel vehicle idling), as set forth in Annex A. The final-form rulemaking establishes an idling restriction of a total of 5 minutes in any continuous 60-minute period for diesel-powered motor vehicles with a gross vehicle weight rating of 10,001 pounds or more, with a number of exemptions. The final-form rulemaking applies to owners and operators of these vehicles as well as owners and operators of locations at which these vehicles load, unload or park. The final-form rulemaking adds definitions to § 121.1 (relating to definitions) for "bus," "bus depot," "commercial implement of husbandry," "diesel-powered," "farm equipment," "farm vehicle," "highway," "idling," "implement of husbandry," "motor home," "school bus," and "stationary idle reduction technology."

This order was adopted by the Board at its meeting of _____(blank)_____.

A. *Effective Date*

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

B. *Contact Persons*

For further information, contact Arleen Shulman, Chief, Division of Air Resource Management, P. O. Box 8468, Rachel Carson State Office Building, Harrisburg, PA 17105-8468, (717) 787-9702 or Kristen Campfield Furlan, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposal appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposal is available electronically through the Department of Environmental Protection's (Department) website, www.depweb.state.pa.us.

C. *Statutory Authority*

The final-form rulemaking is being made under the authority of section 5 of the Air Pollution Control Act (APCA) (35 P. S. § 4005), which in subsection (a)(1) grants the Board the authority to adopt regulations for the prevention, control, reduction and abatement of air pollution, in subsection (a)(7) grants the Board the authority to adopt regulations designed to

reduce emissions from motor vehicles and in subsection (a)(8) grants the Board the authority to adopt regulations to implement the Clean Air Act (CAA) (42 U.S.C.A. §§ 7401--7642).

D. *Purpose and Background*

The purpose of this final-form rulemaking is to establish restrictions on the idling of diesel-powered motor vehicles with a gross vehicle weight rating (GVWR) of 10,001 pounds or more to help attain and maintain health-based air quality standards. The idling restrictions will provide air quality benefits to citizens in this Commonwealth, particularly those in areas where diesel-powered motor vehicles congregate. Because idling of diesel-powered motor vehicles with a GVWR of 10,001 pounds or more consumes approximately 1 gallon of fuel per hour, vehicle owners and operators will not only realize cost savings by complying with this final-form rulemaking but will also contribute to the country's energy independence. With a Statewide regulation, operators of diesel-powered vehicles can easily identify where and when idling is restricted. Having a Statewide regulation should also discourage boroughs, townships, cities and counties from enacting their own idling restrictions, and hence avoid a patchwork of rules.

On October 18, 2006, the Clean Air Board of Central Pennsylvania (CAB) filed a petition for rulemaking, requesting that the EQB adopt regulations to restrict the idling of commercial diesel-powered vehicles. The statement of policy in Chapter 23 (relating to Environmental Quality Board policy for processing petitions--statement of policy) establishes the procedures for the Department’s response to rulemaking petitions. On January 17, 2007, the EQB accepted the CAB's petition for study. Notice of the EQB's acceptance of the petition was published at 37 Pa.B. 477 (January 27, 2007). Upon the EQB's acceptance of the petition, the Department had 60 days to prepare a report evaluating the petition, including whether the EQB should approve the action requested in the petition. In accordance with § 23.7 (relating to response to report), the Department provided a copy of the completed report to the petitioner for a 30-day response period. The petitioner submitted a response, after which the Department submitted a final report to the EQB. The Department's report recommended that the Department pursue a Statewide regulation restricting idling of diesel-powered commercial motor vehicles. On May 16, 2007, the EQB concurred with the Department's recommendation and directed that the Department develop a proposed regulation for consideration at the Board's September 2007 meeting.

The Department concurred with the petitioner's assessment of the impacts of diesel exhaust emissions. Diesel exhaust emissions have adverse health and environmental effects because they contribute to levels of particulates and ground-level ozone and have adverse health effects when individuals are exposed directly.

The United States Environmental Protection Agency (EPA) is responsible for establishing National Ambient Air Quality Standards (NAAQS) for six criteria pollutants considered harmful to public health and the environment: ozone, particulate matter, nitrogen oxides, carbon monoxide, sulfur dioxide and lead. The CAA established two types of NAAQS: primary standards set limits to protect public health; and secondary standards set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation and buildings.

In 1997, the EPA established more protective ozone and fine particulate primary and secondary NAAQS to be more protective of public health and the environment than earlier standards and to ensure an adequate margin of safety. Fine particles or $PM_{2.5}$ (particles with a diameter of 2.5 micrometers or less) in the atmosphere are made up of a complex mixture of components. Some, like diesel particulate, are emitted directly into the air ("primary" sources) and others, such as sulfate and nitrate, form in the air as a result of various chemical reactions ("secondary" sources). The health effects associated with exposure to $PM_{2.5}$ are significant, and the evidence for these effects is compelling. Premature mortality, aggravation of existing respiratory and cardiovascular disease, decreased lung function and asthma attacks have been attributed to exposure.

The NAAQS for $PM_{2.5}$ was established in 1997 at 15 micrograms per cubic meter on an annual basis and 65 micrograms per cubic meter over 24 hours. In 2004, the EPA designated eight areas in this Commonwealth, comprising all or part of 19 counties, as not attaining the NAAQS.

In October 2006, the EPA tightened the 24-hour $PM_{2.5}$ standard to 35 micrograms per cubic meter. Based on data from 2003--2005, all of the areas designated by the EPA in 2004 and several additional areas would violate the revised 24-hour standard. The Commonwealth submitted attainment, nonattainment and unclassifiable designation recommendations to the EPA in December 2007 for the designation of specific areas for the revised 24-hour standard; the EPA is anticipated to finalize those designations in December 2009 with an April 2010 effective date. Revisions to the State Implementation Plan (SIP) will be due to the EPA in April 2013.

The EPA and other agencies have evaluated the health effects of direct exposure to diesel particulate matter. The small size of diesel exhaust particles allows them to be drawn deeply into the lungs. Diesel particulates are, for the most part, even smaller than 2.5 micrometers. The EPA has said that long-term exposure to diesel particulate exhaust is likely to pose a lung cancer hazard. Exposure to diesel particulates has non-cancer and acute effects as well, including throat and eye irritation and inflammation, exacerbation of existing respiratory and allergic conditions, and exacerbated risk of heart attacks. Studies indicate children living near highways have more lung and breathing problems than other children. Children may also be exposed to more diesel exhaust inside diesel school buses, especially in idling buses that queue. People commuting to work in almost any mode of transportation along truck routes are exposed to high levels of diesel fine particulate matter.

Ground-level ozone, the other pollutant directly of concern in this rulemaking, is not emitted directly to the atmosphere but is formed by a photochemical reaction between volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) in the presence of sunlight. Heavy-duty vehicles contributed about 25% of all NO_x emissions in this Commonwealth in 2002. (Compared to gasoline-powered vehicles, diesel vehicles are not a significant source of VOCs.) Repeated exposure to ozone pollution may cause a variety of adverse health effects for healthy people and those with existing conditions, including difficulty in breathing, chest pains, coughing, nausea, throat irritation and congestion. It can exacerbate bronchitis, heart disease, emphysema and asthma, and reduce lung capacity. Ozone can aggravate asthma, causing more asthma attacks, increased use of medication, more medical treatment and more frequent visits to hospital emergency clinics. Ozone also has adverse effects on vegetation (forests and food crops) and, through deposition, contributes to pollution in the Chesapeake Bay.

When this rulemaking was proposed, the ground-level ozone standard, which was set by the EPA in 1997, was 0.08 parts per million averaged over 8 hours. In 2004, the EPA designated 37 counties in this Commonwealth as 8-hour ozone nonattainment areas for that standard. The final-form rulemaking will support those counties that have not yet attained the 1997 standard, including the counties in the Philadelphia area (comprising Bucks, Chester, Delaware, Montgomery and Philadelphia Counties) and in the Pittsburgh-Beaver Valley Area. The final-form rulemaking will also provide additional reductions to support the maintenance plans for areas recently redesignated to attainment of the 8-hour ozone health-based standard.

EPA published notice of the new 0.075 parts per million (ppm) 8-hour ozone standard, on March 27, 2008 (73 FR 16436). The final-form rulemaking will provide additional reductions of VOC emissions to meet the revised 8-hour ozone standard. Recommendations for attainment, nonattainment and unclassifiable areas under the new, more stringent 8-hour ozone standard must be submitted to the EPA in March 2009; final action by the EPA is anticipated in June 2010. The designations will take effect 60 days after the EPA publishes a notice in the *Federal Register*. Revisions to the State Implementation Plan (SIP) will be due to the EPA in 2013.

The Department estimates that diesel-powered motor vehicles with a GVWR of 10,001 pounds or more idle at least 27.2 million hours a year in this Commonwealth. Idling during rest stops, at truck stops and rest areas accounts for nearly 78% of this total. Long duration idling (namely, idling lasting more than 15 minutes) amounts to about 22.3 million hours a year, 95% of which has been estimated to be due to truck travel rest. Some idling, such as that from individual vehicles idling at smaller facilities or from vehicles lighter than 33,000 pounds, is difficult to quantify with existing data and has not been included.

The amount of idling by long-haul trucking is directly influenced by Federal requirements. The United States Department of Transportation's “hours of service” regulations include specific requirements for rest by truck drivers. Drivers may rest roadside or at truck stops, rest stops, motels or street locations near their loading or unloading points. During their rest periods, some drivers run their engines to operate heat and air conditioning or to avoid opening windows for their own personal security. Some drivers operate auxiliary equipment for comfort (such as for using a microwave oven or television) or to keep the engine warm in extreme temperatures.

Technology exists to assist drivers in reducing idling during their rest periods. There are of two types: equipment provided on the vehicle (on-board or mobile) and equipment provided at parking spaces (stationary).

On-board bunk heaters, cab heaters and auxiliary power systems (APS) can provide climate control, engine warming and power to run household-type appliances. At present, much of this equipment is diesel-powered, but alternatives to diesel-powered APS are increasingly available. These smaller engines generally use about 1/10th the fuel that a main engine would use to idle. Costs per truck to have an APS range from less than $1,000 for a bunk heater to $10,000 for some APS capable of supplying power for all services when the main engine is off.

The proposed rulemaking had included provisions to reduce emissions from APS on subject vehicles traveling in and through this Commonwealth but, as described more fully in Section E,

below, the EQB deleted the proposed Subchapter G from the final-form rulemaking. The Department will monitor the technological developments in the field instead, until a more satisfactory approach can be identified.

Stationary equipment or parking space electrification is increasingly available throughout this Commonwealth and the United States. Electrification refers to a technology that harnesses an electrical system to provide the truck or locomotive operator with climate control and other needs, eliminating the need to idle the main engine. This Commonwealth currently has eleven truck stops where stand-alone electrified parking spaces are available. The only additional equipment needed by the vehicle operator is an inexpensive window adapter to ensure that the service module fits securely. The service module itself provides climate control, electricity, Internet and telephone connections. Another stationary system provides plug-in stations only; truck operators need to have or rent supplementary connection equipment to operate heating, air conditioning and appliances.

While school buses may not contribute a large number of idling hours, they idle near children, and protection of children from unnecessary direct exposure to diesel particulate exhaust is important. Students who ride buses generally ride them every school day. The students may be exposed to diesel exhaust when school buses queue at pick-up and drop-off locations. Auxiliary equipment to heat or cool school buses is not available, but the EPA has found that there is no need for long-duration idling to warm up buses for either passenger or engine protection. Transit and tour buses face similar passenger comfort issues. Management strategies, such as providing lounges for bus drivers, can reduce idling; technology is not necessary.

It is estimated that highway vehicles will emit about 180,000 tons of NO_x and 3,250 tons of $PM_{2.5}$ in 2009. The heaviest trucks, which account for most of the idling, generally contribute 37% of the NO_x and 38% of the highway emissions. These estimates account for the cleaner technology required of MY 2007 and newer engines, using assumptions in the EPA's approved highway motor vehicle model, MOBILE 6.2. When this final-form regulation takes effect in 2009, it is estimated that idling emissions, without this regulation, would account for about 3,325 tons of NO_x, 90 tons of VOCs and 60 tons of particulate matter per year. This estimate does not include an anticipated increase in idling hours from the date of the proposed rulemaking because no Statewide data exists upon which to base the estimate. The benefits of this final-form rulemaking could be greater if hours spent in this Commonwealth in travel rest increase significantly. Assumptions about idling emissions were those provided by the EPA in its *Guidance for Quantifying and Using Long Duration Truck Idling Emission Reductions in State Implementation Plans and Transportation Conformity* (2004). The Department expects that, once the temperature exemption for trucks with sleeper berths expires, the final-form regulation will reduce idling of diesel-powered motor vehicles over 10,000 pounds GVWR by half and that a corresponding 50% reduction of emissions will occur. Therefore, the Department estimates that the final-form rulemaking will reduce emissions by about 1,610 tons of NO_x, 45 tons of VOC and 30 tons of particulate matter once the temperature exemption expires.

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_2) emissions. The 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_2, the major greenhouse gas (GHG). The idling of a typical long-haul truck contributes about 19 metric tons of CO_2 annually.

The experience of several other jurisdictions shows that involving property owners is key to reducing idling, especially at locations associated with truck travel rest. This may be the case because drivers, who typically travel nationally and even internationally, may not be aware of a state's rules and may have little incentive to pay the fines. In addition to holding owners and operators of load, unload and parking locations responsible for causing or allowing excessive idling, the final-form regulation includes a requirement for certain locations to post signs that inform drivers that idling is restricted in Pennsylvania.

Idling restrictions have been adopted by 15 states, the District of Columbia and many local jurisdictions, including this Commonwealth's two most populated urban areas, Philadelphia and Allegheny Counties. The Federal government does not regulate commercial highway diesel vehicle idling, and generally considers the regulation of these vehicles in use to be the prerogative of state government. In March 2006, recognizing that reducing unnecessary diesel vehicle idling would be a public health benefit and that a multiplicity of state and local rules was a "barrier to greater implementation of idling control technologies," the EPA released a model state idling law. (EPA Model State Idling Law, EPA420-S-06-001) The model law was a result of five workshops across the country in which affected stakeholders participated.

In developing the final-form rulemaking, the Department considered the petitioner's suggested language, the EPA model law, the existing regulations of the Philadelphia and Allegheny County health departments and comments received during the public comment period on the proposed rulemaking.

The Department consulted with the Department of Transportation (PennDOT) during development of the proposed and final-form rulemakings, in accordance with section 5(a)(7) of the APCA (35 P. S. § 4005(a)(7)). The Department also consulted with the Pennsylvania State Police.

The Department consulted with the Air Quality Technical Advisory Committee (AQTAC) on the final-form rulemaking on May 23, 2008. The AQTAC concurred with the Department's recommendation to seek EQB approval of the final-form rulemaking, after recommending that the words "or allow" be deleted from Section 126.611. The Department also consulted with the Air Committee of the Citizens' Advisory Council and the Small Business Compliance Advisory Committee.

This final-form rulemaking is reasonably necessary to achieve and maintain the 8-hour ozone and $PM_{2.5}$ NAAQS. The final-form rulemaking will be submitted to the EPA as a revision to the State Implementation Plan.

E. *Summary of Regulatory Requirements and Major Changes to the Proposed Rulemaking*

The final-form rulemaking adds definitions for the following terms to § 121.1 (relating to definitions): “bus,” “bus depot,” “commercial implement of husbandry,” “diesel-powered,” “farm equipment,” “farm vehicle,” “implement of husbandry,” “motor home,” “school bus” and “stationary idle reduction technology.” The final-form rulemaking deletes the proposed definitions of “auxiliary power system,” “commercial motor vehicle” and “GCWR,” as they are not used in the final-form rulemaking.

New § 126.601(a) (relating to applicability) states that Subchapter F applies to owners and operators of diesel-powered motor vehicles with a GVWR of 10,001 pounds or more, and to owners and operators of locations at which diesel-powered motor vehicles with a GVWR of 10,001 pounds or more load, unload or park. The proposed rulemaking had stated that Subchapter F would apply to owners and operators of diesel-powered “commercial motor vehicles,” as well as to owners and operators of locations. Although the term “commercial motor vehicle” was adapted from a federal definition used in EPA’s model law, it contained criteria extraneous to the scope of this regulation and therefore, in the final-form rulemaking, is replaced with “motor vehicles with a GVWR of 10,001 pounds or more.” This category of vehicles will include most trucks used for business purposes, transit and tour buses and school buses. Some school buses and light delivery trucks may not be covered by the idling restriction. Locations affected include, for example, many warehouses, terminals, truck stops, other retail locations, schools, parking lots, and roadway rest areas. A “motor vehicle” is already defined in Chapter 121 as being applicable only to those which travel on a street of highway. Construction, off-road agricultural and other off-road vehicles and equipment will not be regulated. The final-form rulemaking will regulate some idling at off-road sites, but only to the extent it is being done by motor vehicles, for example, registered pick-up trucks at a construction site.

The final-form rulemaking states in new section 126.601(b) that the idling restriction does not apply to motor homes, commercial implements of husbandry, implements of husbandry, farm equipment or farm vehicles.

New § 126.611 (relating to idling restriction) states that no person subject to this subchapter may cause or allow the engine of a diesel-powered motor vehicle with a GVWR of 10,001 pounds or more to idle for a total of 5 minutes in any continuous 60-minute period, except as provided in § 126.612 (relating to exemptions). This time limitation is in the EPA model law and was suggested by the petitioner. The time limitation, while reworded for clarity, is carried over from the proposed rulemaking. AQTAC voted to recommend removing “or allow” from this section after several AQTAC members supportive of location owners and operators expressed concerns about responsibility for location owners and location operators that do not have control over idling vehicles. The final-form rulemaking, however, retains the phrase “or allow”. The Department found that shared responsibility by owners and operators of facilities and owners and operators of vehicles is essential to reduce idling effectively. Hence, the final-form rulemaking applies not only to owners and operators of diesel-powered motor vehicles with a GVWR of 10,001 pounds or more, but also to owners and operators of locations at which these vehicles load, unload or park.

New § 126.612 describes a number of situations in which the idling restriction would not apply or would be modified. These situations are listed as follows.

Section 126.612(a)(1) allows idling by vehicles equipped with sleeper berths when idling is necessary in cold or hot weather for purposes of driver comfort. The final-form regulation clarifies that the temperature at which the exemption is triggered is the temperature at the location when the operator begins a rest period. The exemption expires on May 1, 2010. The expiration provision is designed to allow businesses the opportunity to identify, finance and install mobile idling reduction equipment before the exemption's expiration. Affordable idling reduction strategies already exist. Not only will they reduce air pollution from idling, but they also should reduce operating costs for diesel fleets by decreasing fuel use. The Department has had a financial assistance program for small businesses for pollution prevention and energy efficiency since July 2004 that can help these diesel vehicle owners purchase on-board idling reduction equipment. The exemption also recognizes that stationary idling reduction equipment, specifically electrified parking spaces, is available within this Commonwealth and is currently underutilized. Because using stationary idling reduction equipment is preferable to idling from a pollution perspective, the exemption would not apply if parking is available at an electrified parking space at the start of the rest period.

Section 126.612(a)(2) allows idling for buses or school buses with passengers onboard when idling is necessary to provide heating or air conditioning for the passengers. It allows a total of 15 minutes in any continuous 60-minute period, but provides that if idling is necessary to maintain a safe temperature for students with special needs, no idling restriction applies.

Section 126.612(a)(3) allows idling for a total of 15 minutes in any continuous 60-minute period when idling is necessary for activities associated with loading and unloading. These activities include weighing, sampling as well as waiting in line for loading, unloading, weighing and sampling.

Section 126.612(a)(4) allows idling when necessary to operate work-related mechanical or electrical equipment. Examples include trash compaction equipment, mixing equipment for concrete trucks, lifts for cargo or passengers and straight truck refrigeration. The exemption does not apply when idling for cabin comfort or to operate nonessential on-board equipment.

Section 126.612(a)(5) allows idling when required by on-road traffic or other obstruction on the highway, a stop signal or the direction of an official directing traffic, since these are normally circumstances outside the driver's control. This exemption applies only to on-road traffic conditions and does not apply to queuing for loading or unloading.

Section 126.612(a)(6) allows idling when idling is required as part of a State or Federal safety inspection. Idling must be necessary to perform the operations.

Section 126.612(a)(7) allows idling when idling is required for maintenance, servicing or repair of the vehicle, and for vehicle diagnostic purposes.

Section 126.612(a)(8) allows idling when necessary to operate defrosters, maintain temperature or refrigerate cargo to prevent a health or safety emergency or during the period in which equipment is being installed to prevent such an emergency. It also allows idling if required by Federal, State or local safety regulations.

Section 126.612(a)(9) allows idling of vehicles when necessary for vehicles being used in emergency or training situations. It does not allow idling while the vehicle is not acting in emergency or training mode.

Section 126.612(a)(10) allows idling for an armored vehicle when idling is necessary while a person remains inside to protect the security of the cargo or while the vehicle is being loaded or unloaded.

Section 126.612(a)(11) allows idling by a school bus during queuing for the sequential discharge or pickup of students when idling is necessary because the physical configuration of the school or the school's surrounding streets does not allow for stopping. The final-form rulemaking clarifies that the exemption only applies to idling taking place off of school property.

Section 126.612(a)(12), added in the final-form rulemaking, allows idling when necessary for specialized vehicles transporting very large loads that require a police escort in accordance with Pennsylvania law while waiting for the police escort. Idling may be necessary, for example, to maintain brake pressure throughout the tractor and trailer combination.

Section 126.612(b) allows idling for vehicles displaying a label indicating that the NO_x emissions from the vehicle are low enough that the vehicle is allowed to idle without restriction in California. This subsection does not require that a vehicle's emissions meet the California Air Resources Board's (CARB) standards applicable to unrestricted idling; it simply allows an exemption if they do. The final-form rulemaking expands the applicability by allowing the exemption for any vehicle, not just model year 2007 and newer engines, since manufacturers may be providing retrofit applications for older vehicles. For now, this will not include vehicles whose main propulsion engines are older than model year 2007, as CARB's regulation does not allow the label to be issued to vehicles whose main propulsion engines are not originally equipped with particulate filters. The language in the final-form rulemaking thus will provide flexibility in the event that CARB changes its regulation.

Section 126.612(c) allows idling if idling is due to mechanical difficulties over which the driver has no control. These situations are rare. An example would be a problem with the alternator. If the regulation were enforced against a driver, the enforcement action would be abandoned if the driver demonstrated within the specified time limits that the claimed mechanical problem existed and was fixed. Participants in the EPA's model law development suggested that a requirement to submit paperwork to the enforcing agency would prevent abuse of this exemption. In Pennsylvania, the enforcing agency could include the Department, the Pennsylvania State Police or a local police department. Subsection (c) was corrected in the final-form rulemaking to allow the exemption from any of the idling time restrictions in the rulemaking, not just from the 5-minute idling restriction.

Section 126.612(d) allows a local government or local air authority with idling regulations predating the adoption of the final-form rulemaking to approve alternative compliance plans for bus depots to minimize idling. The term "terminal" was changed to "depot" in the final-form rulemaking to avoid confusion with other statutory definitions of "terminal."

New § 126.613 would require owners or operators of certain locations to erect and maintain signs advising vehicle operators about Pennsylvania's idling restrictions. The provision refers to official signs as approved by the Pennsylvania Department of Transportation (PennDOT) and listed in the Bureau of Highway Safety and Traffic Engineering, Publication 236M, Handbook of Approved Signs. DEP is working with PennDOT to include idling signs in the Handbook of Approved Signs for use by location owners. The handbook will provide information about size, materials, type, text and placement.

Proposed Subchapter G (relating to auxiliary power systems) is deleted in the final-form rulemaking. Proposed Subchapter G addressed emission reductions from APS on subject vehicles traveling in and through this Commonwealth. Proposed Subchapter G required the exhaust of APS used on vehicles with MY 2007 or newer engines to be routed through the main engine's exhaust system upstream of the particulate filter; in lieu of this requirement, an APS labeled as being verified by CARB as having advanced particulate control could be used. In reviewing comments on the proposed rulemaking, the Department determined that, for practical and legal reasons, if the APS provisions were retained the Department would postpone their applicability until at least model year 2012. However, because the APS emissions reduction and alternative technology fields are still developing, the Department deleted the proposed Subchapter G and will monitor the technological developments instead, until a more satisfactory approach can be identified.

F. *Summary of Major Comments and Responses on the Proposed Rulemaking*

The Board approved publication of the proposed rulemaking at its meeting on October 16, 2007. The proposed rulemaking was published at 38 Pa. B. 229 (January 12, 2008). Public hearings were held on February 12 in Allentown, February 13 in Harrisburg and February 15, 2008 in Pittsburgh. Comments were received from 568 commentators, including petitions with over 2,200 signatures in support of the rulemaking. The Board held a 65-day public comment period, which closed March 17, 2008.

Summary of Major Public Comments on the Proposed Rulemaking

General Comments Supporting Regulation

General support was expressed for the rulemaking by residents of Pennsylvania concerned about the quality of the air they breathe. Residents requested that the Board adopt the regulation quickly, that the Department enforce it strenuously and that the Department implement an extensive driver education campaign to ensure the program is effective. Commentators noted that this rule will build upon local anti-idling regulations in Philadelphia and Allegheny Counties. In doing so, knowledge and compliance with the regulation will rise in these counties, neither of which meets the $PM_{2.5}$ NAAQS. Commentators noted that the regulation will benefit air and water quality. Commentators noted that idling pollution harms the health of drivers, workers, and residents.

The Department appreciates the initiative of the organization that sponsored the petition to develop an idling restriction regulation, the support of all those who signed a petition, and the

leadership of Allegheny County and Philadelphia in the regulation of diesel-vehicle idling. The Department agrees that reducing emissions will have a positive impact on health and possibly in water quality through reduced deposition. Cutting emissions of NOx, VOC and $PM_{2.5}$ will reduce concentrations of ozone and $PM_{2.5,}$ which will help reduce the occurrence of asthma attacks, the aggravation of existing respiratory and allergic conditions, and the exacerbated risk of heart attacks.

With regard to enforcement, efforts aimed at achieving enforcement of this regulation will begin with an education program for diesel vehicle drivers and owners, owners and operators of locations at which diesel-powered vehicles subject to this regulation load, unload and park, and enforcement personnel. The Department has received a grant from the EPA for outreach activities. The education program will involve a variety of activities, including placing posters at Turnpike toll booths and using variable message signs. The Department will encourage associations of bus and truck fleet operators to assist the Department in disseminating information. The final-form regulation places shared responsibility upon owners and operators of vehicles and owners and operators of locations at which the vehicles load, unload and park, not to cause or allow excessive idling. The final-form regulation also requires certain location owners to post signs to inform drivers that idling is restricted. Just as with speed limit rules, however, not every actual violation can be detected and ticketed given existing resources and competing enforcement priorities. While the Department will be enforcing the regulation, the Department will not be doing so alone. Local and state police can also issue summary citations under this rule. 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 (35 P. S. §4005(a)(7)). The Department also consulted with the Pennsylvania State Police. The Department will work with law enforcement agencies to make them aware of the provisions of the final-form regulation. The Department also anticipates working with the State Police and/or local enforcement agencies on concentrated high-profile enforcement events to get the word out to diesel fleet operators that excessive idling is not tolerated in the Commonwealth.

Many commentators noted that the Cumberland County/Carlisle Area is a high volume area for commercial diesel truck traffic and idling and that the high concentration of these vehicles in this area has an adverse impact on health and the environment. The Department agrees. When the final-form rulemaking becomes effective, especially after the temperature exemption for sleeper berth expires, the Department anticipates decreases in air pollution from idling vehicles in areas where diesel-powered commercial vehicles congregate.

Many commentators stated that the potential positive impacts, environmental or economic or both environmental and economic, resulting from decreased fuel use are a good reason to adopt this regulation. The Department agrees that this regulation will have positive economic and environmental impacts from decreased fuel use. The EPA estimated that idling for one hour uses one gallon of diesel fuel. The EPA also estimated that idling for one hour produces about one-third of a pound of NOx, which serves as a precursor to the formation of $PM_{2.5}$ and ozone, and more than 21 pounds of CO2, a principal greenhouse gas.

A number of commentators stated that better alternatives exist to main engine idling, and that alternative technology should be used for driver comfort. The Department responds that this regulation will likely serve as additional motivation for truck owners and operators to invest in idling reduction technology to replace main engine idling. The most expensive alternatives to main engine idling will pay for themselves in about one year, when considering the current cost of diesel fuel. The final-form rulemaking will allow time for truck owners to purchase and install an alternative technology.

Two commentators commented that the regulation should be adopted, but the cost of alternative technology may be prohibitive to small businesses and that if drivers do not own the vehicle they are driving, the drivers have no control over whether the owner installs the devices. The Department responds that the payback time at the current cost of diesel fuel is about one year, after which point APS can become profit generating. With the added impetus of state regulation, both here and in other states, the Department anticipates that trucking companies will be more responsive to the needs of their drivers in a competitive marketplace. Pennsylvania, other states and the federal government are offering financial assistance programs targeted to small businesses for the acquisition of alternative technology.

The Pennsylvania Motor Truck Association commented that the temperature range when idling is prohibited, between 40 and 75 degrees Fahrenheit, is fair to operators.

Comments Opposing Regulation

Several trucking companies opposed the regulation in general, and other trucking companies and truck drivers opposed specific provisions in it. A number of them commented that many truckers consider their trucks to be their homes during long-haul driving and that most people would not accept only being able to run their heating or air conditioning systems in their homes for only five minutes of every hour. The Department responds that the restriction on idling does not necessitate a restriction on heating or air conditioning. The final-form regulation provides sufficient time for trucks to be fitted with an APS or to acquire other technology that serves as an alternative to main engine idling. This technology will enable drivers to have climate control, electricity and other options previously provided by idling the main engine, without causing the significant amounts of pollution generated by main engine idling.

Similarly, several truckers commented that allowing drivers to run heating or cooling equipment for only five minutes of every hour can create health, comfort, safety or security issues for the drivers. The Department responds that it is not the intention of the regulation that operators only run heating or cooling equipment for five minutes of every hour. The regulation will promote the adoption of alternate technology, such as APS or stationary idling reduction technology (electrified parking spaces), to reduce main engine idling. These technologies will enable drivers to have climate control, electricity, and other options previously provided by idling the main engine, without causing the significant amounts of pollution generated by main engine idling.

Several trucking companies and truck drivers commented that the regulation should not be adopted, saying that the cost of alternative technology is prohibitive to small businesses and

noting that if truck drivers are driving for someone else's company, they have no control over whether the owner installs the devices. The Department responds that the payback time at the current cost of diesel fuel is about one year, after which point APSs can become profit generating. With the added impetus of state regulation, both here and in other states, the Department anticipates that trucking companies will be more responsive to the needs of their drivers in a competitive marketplace. Pennsylvania, other states and the federal government are offering financial assistance programs targeted to small businesses for the acquisition of alternative technology.

One commentator stated that the regulation should not be adopted because stopping the engine is bad for the engine. The Department disagrees. Unnecessary idling is harmful to the engine. Reduced main engine idling for travel rest has been shown to lower engine maintenance costs. The American Trucking Association states that one hour of main engine idling per day for one year results in the equivalent of 64,000 miles of engine wear.

Five commentators stated that the proposed anti-idling regulation is discriminatory towards truck drivers and should not be approved unless it is applied to all diesel equipment. The Department disagrees. The final-form regulation applies to a wide variety of large diesel-powered vehicles, including commercial trucks and large buses. While the regulation does not apply to all diesel equipment, it is not required to in order to be lawful. In addition, federal law generally precludes states from regulating emissions from certain types of diesel equipment, such as aircraft, locomotives, and some construction and farm equipment.

One commentator stated that the government is forcing regulations on the trucking industry without having the infrastructure in place to support the requirements. The Department disagrees. Idling infrastructure and technology are well positioned for use. Recently, the price of diesel fuel and advances in alternative diesel idling technologies have allowed truck owners and drivers to realize significant cost savings when purchasing or using an auxiliary power system or stationary idling reduction technology. The Department has helped to fund stationary idle technology projects throughout the Commonwealth. The Department has made grant money available to small trucking firms through the Small Business Advantage Grant to purchase APS. The federal government is also providing funds to reduce diesel emissions. EPA is working with the Small Business Administration and lenders to finance idling reduction and other fuel-saving technology, and the Small Business Administration Express Loans are available to companies with $23.5 million in gross receipts or less. Lenders offer a rapid approval process, low monthly payments and no collateral requirements.

Suggested Revisions to Regulation

Consistency

The Independent Regulatory Review Commission (IRRC) stated that the Board should explain whether it believes complete uniformity among states is being accomplished based on the EPA Model State Idling Law. The IRRC stated that if the requirements among states are not uniform, the Board should explain what efforts it is making to coordinate development of a regulation that is as uniform as possible with other states. The Department responds that complete uniformity is

not being accomplished based on the EPA Model State Idling Law. Regulations in many states predate the model law by many years and are not being updated. Newly adopting states, such as Maine, have adopted most parts of the model law, such as the definition of "commercial motor vehicle," but have changed other portions, such as consideration of the very low temperatures present in that area. The Department considered the provisions of neighboring states' idling laws in developing this final-form rulemaking. Should EPA or other federal organizations, including Congress, begin to develop a mandated approach to the reduction of idling, the Department would lend its expertise in reaching consensus on uniform requirements and, if required, revise its regulation.

The IRRC commented that exemptions included in the Board's proposed regulation differ in several instances from those in the EPA Model State Idling Law, and that the Board should explain whether this regulation is consistent with states that already have idling restrictions, and particularly, neighboring states. The Department responds that the Department included exemptions from the EPA Model State Idling Law but modified them in recognition of the Commonwealth's circumstances, particularly the magnitude of its truck traffic, warehouses and travel rest facilities. In addition, Pennsylvania has provided grants to operators of stationary idling reduction facilities (electrified truck stops), which are not available in all states. In developing the regulation, the Department considered the petitioners' recommended language, the regulations in effect in Philadelphia and Allegheny counties, and the regulations in effect in neighboring states. All differ from each other, and because they all predate the model law published in 2006, differ from that as well. EPA intended that the model law would be used by states prospectively in developing laws and regulations, and hoped that existing laws would be modified to conform, but also recognized the optimism of that undertaking. The final-form rulemaking balances uniformity with state-specific concerns.

The IRRC asked that the Board explain what alternatives it considered to limit idling. The Department responds that it has, in the past, provided a grant to a non-profit group to develop an outreach program that encouraged school districts to adopt "no idling" policies and helped educate districts and school bus drivers of the benefits of restricting idling emissions. Although this program seemed to have some immediate success in curtailing idling in school buses, an outreach program would not be as effective as a regulatory program. Diesel-powered motor vehicles subject to this regulation produce much of the idling emissions in the Commonwealth during periods of travel rest. Most diesel-powered motor vehicles that idle in the Commonwealth at travel rest are based out of state and would be unreachable with an outreach program. Truck stop owners and operators are often unwilling to help their customers reduce idling in the absence of regulation. The Department had considered developing a model rule that local municipalities in the Commonwealth could adopt, as EPA did. The trucking industry supported the EPA effort because the industry wanted more consistency among regulatory jurisdictions. EPA hosted a number of workshops across the country that allowed parties such as local and state governments, major tucking fleets, trucking associations, bus association, and other companies to provide input for the development of the model rule. The model rule was published in April 2006. Although a number of municipalities in the Commonwealth are considering adopting local ordinances, the trucking industry has stated that it prefers a state regulation to a patchwork of local ordinances. In order for the emission reductions from this regulation to be included in the SIP, the reductions must be secured through an enforceable

rulemaking. Non-regulatory options are not generally available as Federally enforceable measures.

Definitions

The IRRC commented that the definition of “commercial motor vehicle” was unclear. The Department acknowledges the confusion caused by this term and has deleted it from the final-form rulemaking.

The IRRC commented that the regulation needs to clearly establish what a “diesel-powered” vehicle is because it establishes who must comply with the regulation. The final-form rulemaking includes a definition of “diesel-powered.”

The IRRC commented that the final-form regulation should add definitions for “bus terminal,” “passenger bus,” “school bus,” and “stationary idling technology.” The final-form regulation has removed the use of the term “passenger bus” and replaced it with the already defined term “bus” and incorporated by reference the statutory definitions of “school bus” and “bus”. The final-form regulation also defines “bus depot” and “stationary idling technology”.

Applicability and Idling Restrictions

The IRRC commented that the regulation is complicated regarding affected vehicles and exemptions. First, IRRC stated, it is difficult to identify what vehicles are affected. The definition of "commercial motor vehicle" specifies a weight of vehicle affected but also includes factors unrelated to emissions, such as the number of passengers, compensation and transporting hazardous materials. Second, the undefined term "diesel-powered" is used in the body of the regulation in combination with "commercial motor vehicle." Third, after it is determined that the vehicle is a "diesel-powered commercial motor vehicle," a vehicle could be exempt based on several conditions. The Board should explain what alternatives it considered to limit idling and why this complicated regulatory scheme was chosen as the best way. The Department acknowledges the confusion generated by the term “commercial motor vehicle” and has deleted it from the final-form rulemaking accordingly. The final regulation is applicable to diesel-powered motor vehicles 10,001 pounds and heavier gross vehicle weight rating, except for motor homes and vehicles related to agriculture. This weight would subject most trucks used in business, buses and school buses to the idling restrictions, except when and where exempted by § 126.612. The term “diesel-powered” is defined in the final-form rulemaking; most heavy-duty vehicles are diesel-powered. In regard to exemptions, in most cases only one or two exemptions will apply to an individual vehicle at a time. The Department does not agree that the regulation is excessively complicated when viewed from the perspective of an operator or field inspector. The final-form regulation strikes a reasonable balance between complexity and ensuring the ability of the vehicle fleet to perform its function.

The Pennsylvania Farm Bureau commented that agricultural activities based on vehicle type and agricultural activities based on farm activity should be exempt from the requirements of the regulation. The Department agrees and has modified § 126.601 to exclude commercial

implements of husbandry, implements of husbandry, farm equipment and farm vehicles from the requirements of this regulation.

Several owners and operators of locations at which loading and unloading will occur commented that only the owner and/or operator of an illegally idling truck and not the owner of the location should be made responsible for the non-compliance with the regulation. The Department responds that shared responsibility by owners and operators of facilities and owners and operators of vehicles is essential to reduce idling effectively. There are many things that location owners and operators can do to reduce or eliminate excessive idling. Load and unload location owners and operators may reduce or eliminate excessive idling by, for example, improving the location's logistics system for processing truck loading and unloading, implementing a call-in system when trucks are ready to be processed, or providing a waiting room for truck drivers until they are ready to be processed. EPA recognized these possibilities in its commentary to its Model State Idling Law (EPA Model State Idling Law, EPA420-S-06-001, Discussion Comments, p.3). According to the EPA, truck drivers noted in discussions with the EPA that logistics problems at the loading and unloading locations often created long wait times, and the drivers felt they should not be solely responsible. The final-form regulation has been amended to require certain location owners to post signs advising vehicle operators about Pennsylvania's idling restrictions. However, any location owner or operator may post signs and educate customers about the idling restrictions in order to reduce or eliminate excessive idling. The posting of signs should aid in reducing or eliminating excessive idling. Hence, not only the owners and operators of illegally idling trucks are subject to this final-form rulemaking, but also the owners and operators of locations at which trucks load, unload or park.

One commentator stated that special attention should be paid to the idling of emergency vehicles, retail service vehicles and delivery trucks. The Department responds that most emergency vehicles, retail service vehicles and delivery trucks are diesel-powered motor vehicles with a gross vehicle weight rating of 10,001 pounds or more and therefore will be subject to the requirements of the regulation.

Exemptions

One commentator stated that a requirement should be added that vehicle operators must stay with the vehicle if it is idling. The Department responds that all of the exemptions in § 126.612(a) begin with the phrase, "When idling is necessary…" In most cases, a vehicle idling without a truck driver attending to the vehicle would not be necessary and would not be allowed. The final-form regulation, in response to other comments, makes it necessary for a vehicle that is waiting for loading, unloading, weighing or sampling to be attended.

Several commentators commented that the proposed temperature range is unrealistic and should be changed. They asserted that actual conditions in trucks or buses can be colder or hotter than the outside temperatures, especially in extreme temperatures. The Department disagrees that the temperature range is unrealistic or should be changed. The proposed rulemaking included the temperature range for this exemption as proposed by the petitioner, the Clean Air Board of Central Pennsylvania. The Pennsylvania Motor Trucking Association commented that this temperature range was acceptable. Money saving equipment for

maintaining a comfortable sleeping environment inside a sleeper cab is available for purchase and installation today. The Department anticipates that this regulation and other practical factors will motivate truck drivers and owners to purchase this equipment.

Several commentators stated that the temperature/sleeper berth temperature exemption should never be removed. The Department disagrees. The exemption provides sufficient time for the purchase and installation of money saving alternative technology to ensure climate control for sleeper berths.

Two commentators stated that an occupied vehicle not equipped with a sleeper berth compartment that must operate air conditioning or heating while the outside temperature is less than 40 degrees or greater than 75 degrees Fahrenheit should be exempt from the requirements of this proposed regulation. The Department disagrees. The proposed regulation included the temperature exemption for long-haul truck operators so that they could obtain a restful sleep during their federally mandated rest period. A facility can schedule deliveries and expedite operations at their property in a manner that will mostly eliminate the need to idle for the purpose of producing a comfortable cabin temperature. In addition, the final-form regulation has been amended in § 126.612(a)(3) to allow idling for a total of 15 minutes during a continuous 60 minute period when necessary for sampling, weighing, actively loading or unloading, and when necessary for waiting to sample, weigh, load or unload.

One commentator stated that an exemption should be made for drivers during their mandated rest periods. The Department disagrees. The purpose of the regulation is to encourage owners and operators of covered vehicles to choose a money-saving alternative to main engine idling. The final-form regulation provides an exemption for idling for extreme hot and cold temperatures until May 1, 2010. After that date, heating and cooling will need to be provided through a money-saving APS or one of many other alternatives.

The IRRC stated that the Board should rewrite § 126.612(a)(1) so that an exemption is extended for the full rest period if the stationary idling technology is not available at the time the driver begins the rest period. As written, IRRC stated, the regulation automatically triggers a violation when stationary idle reduction technology becomes available for use. IRRC stated that this places a burden on a driver to monitor the availability of stationary idling technology during a rest period. The Department agrees with IRRC's suggestion and has revised this paragraph. The Department points out that there have been numerous occurrences where a driver idles while parked at a space equipped with stationary idling technology; this is clearly a violation.

The IRRC stated that compliance should not require a driver trying to rest to also monitor the outside temperature during a rest period. The Department has revised the final-form rulemaking in response to this comment. The proposed rulemaking included this temporary exemption in order to allow truck owners and operators more time to develop alternatives to the practice of main engine idling while reducing idling when it is not as necessary to heat or cool the cabin for rest. The truck driver should be aware of the outside temperature before retiring to their rest period. In certain rare circumstances, the temperature may drop dramatically during a weather event. The final-form regulation has been modified to specify that it is the temperature at the time the driver's rest period begins that determines compliance.

The IRRC commented that the EQB should consider additional exemptions, if needed, for situations involving special needs children on school buses, public utility work in cold weather, idling as part of the manufacturers operating requirements and periodic stops for waste collection. The Department carefully considered all of the comments requesting additional exemptions. Some of the requested exemptions already are covered by existing exemptions (public utility work, idling as part of the manufacturers operating requirements, periodic stops for waste collection). An exemption for special needs children was added to the final-form regulation. In other cases, exemptions are not needed if the vehicle operator makes use of best practices or installs available technology that is an alternative to main engine idling.

The Pennsylvania School Boards Association commented that school bus operators should be permitted to idle their vehicle for any length of time to ensure that children with special needs are transported appropriately. The Department agrees and has provided an exemption in the final-form rulemaking to allow buses transporting special needs students to idle when necessary.

Three commentators, including a motor coach line, stated that idling limits for passenger motor coaches need to be adjusted to allow for pre-trip warm-ups and cool-downs longer than 15 minutes. The Department disagrees. The proposed regulation was based in part on the EPA Model Law. The Model Law was developed through a stakeholder effort in which many stakeholders were brought together to express concerns for their individual industries. The motor coach industry was represented. Most stakeholders thought that allowing motor coaches to idle 15 minutes in a 60-minute period was appropriate, although some stakeholders thought that motor coaches should be allowed to idle 30 minutes in a 60-minute period. The Department revised the final-form regulation to allow attended vehicles that are waiting to sample, weigh, load or unload to idle when necessary for up to a total of 15 minutes in a continuous 60-minute period in order that §§ 126.612(a)(2) and 126.612(a)(3) are consistent with each other.

Three commentators stated that the regulation should exempt attended trucks that must idle for active delivering, weighing, sampling, receiving, loading or unloading of property or passengers. The Department solicited comments on the issue of loading, unloading and waiting in line, and received comments from a diverse range of institutions, including the electric power industry, school bus associations, motor coach owners and operators and the construction industry, that provisions should be made. The intent of the final-form regulation is to provide incentives to location owners and operators to facilitate reduced idling while queuing, but this may not always be practical. The final-form regulation expands the exemption in § 126.612(a)(3) for vehicles idling when necessary when actively loading or unloading, to attended diesel-powered motor vehicles idling when idling is necessary while waiting to weigh, sample, load or unload. This exemption will allow queuing in certain circumstances. The exemption is also expanded to allow idling when idling is necessary for vehicles that are actively weighing or sampling. For this exemption, a vehicle may idle up to a total of 15 minutes in a continuous 60-minute period. Some studies have indicated that emissions are lowered in certain circumstances when an engine is turned off while progressing in queue. The Department acknowledges that drivers would be unlikely to turn off their engines in a slow-moving queue that is constantly starting and stopping.

One commentator stated that Pennsylvania should provide an exemption for commercial diesel vehicles at construction sites that are loading heavy equipment or where safety, wear on the start

system, need for air conditioning, or traffic flow at a job site is a concern. Alternatively, the commentator suggested that the construction industry should be entirely exempted. The Department responds that the final-form rulemaking does not include exemptions specific to the construction industry. A proposed exemption in § 126.612(a)(3) to allow idling for 15 minutes in a 60-minute period when idling is necessary for loading or unloading of materials such as heavy equipment has been expanded to allow an attended vehicle that is "waiting" to load or unload up to a maximum of 15 minutes in a continuous 60-minute period if idling is necessary. These exemptions should allow enough time to load and unload heavy equipment without exempting an entire industry. Off-road equipment itself, such as bulldozers or graders, is not subject to this regulation.

One commentator stated that the word "safety" should be added following the word "mechanical" in § 126.612(a)(4) to provide power to safety lights. The Department disagrees that a revision is necessary. Providing power to safety lights, which are lights required to promote more visibility than the lights normally required of the manufacturer by the U.S. Department of Transportation, is a work-related electrical operation covered by § 126.612(a)(4), when idling is necessary.

Two commentators stated that a vehicle operated by a public utility should be allowed to idle if the vehicle is involved in emergency repair work, construction, service and maintenance. The Department responds that a revision is not necessary to accommodate this exemption, as an exemption was included in the proposed regulation in § 126.612(a)(4), and is retained in the final-form regulation, to operate work-related electrical or mechanical operations. This would include, but not be limited to, a computer, electric lights, traffic control sign, power takeoff device, or a hydraulic lift. Idling vehicles that are not idling to provide some power to a work-related electrical or mechanical device is unnecessary.

One commentator stated that idling should be permitted to occur if the purpose is to supply power to a traffic control device or electric sign. The Department responds that § 126.612(a)(4) allows idling when necessary to operate a work-related electrical operation. An electric sign or traffic control device would be such an electrical operation.

One commentator stated that the exemption that is provided for maintenance, servicing and repairs should explicitly include a provision for regeneration or maintenance of the exhaust emission control device. The Department disagrees that an additional exemption is necessary. The exemption in the final-form regulation for maintenance, servicing or repair of the vehicle or for vehicle diagnostic purposes, § 126.612(a)(7), includes all maintenance procedures and should cover the procedure of concern in the comment.

Four commentators stated that § 126.612(a)(8) should be expanded to allow compliance with engine and truck manufacturers' operating requirements, specifications and warranties. The Department believes that the final-form regulation is consistent with the design of trucks and truck engines. The basic idling restriction in the final-form regulation, five minutes in a continuous 60-minute period, is based on the EPA State Model Idling Law. The Model Law was developed by groups of stakeholders, including engine manufacturers and fleet managers. Warranties and warm-up periods necessary for the proper operation of the engine and vehicle

were considered. It was determined that no longer than five minutes of idling was necessary to satisfy warranty provisions. No specific example of an applicable warranty provision that would require more than five minutes of idling or an exemption was given in the comment.

A utility company commented that an exemption should be added to provide warm-up for electric line crews working in severe cold weather. The Department disagrees that this exemption is necessary. One of the easiest and most cost-effective solutions for eliminating unnecessary idling is for the vehicle owner to purchase and install a bunk heater or other heating alternative. Bunk heaters use less fuel at less than one-tenth the rate that the main engine uses. In addition, an exemption is available under § 126.612(a)(9) for public safety vehicles being used in an emergency.

Three environmental citizens groups, including the petitioner, commented that the school bus exemption in § 126.612(a)(11) should be clarified to ensure that school buses do not idle on school property. The Department agrees and has amended the final-form rulemaking to describe clearly that this exemption only applies to buses off of school property and only when idling is necessary.

One commentator stated that an exemption should be included in the regulation for all permitted loads so that safety lighting and air pressure can be maintained while waiting for police escorts and travel restrictions to be lifted. The Department agrees. The final-form regulation provides for an exemption for heavy-duty diesel vehicles that require the issuance of a permit in accordance with 75 Pa.C. S. Chapter 49, Subchapter D (relating to size, weight and load) and are waiting for a police escort. Vehicles that carry loads that are heavy or long, so-called "super loads," require a police escort in Pennsylvania and neighboring states. Differing travel restrictions for trucks carrying super loads between these states necessitate that trucks wait for long periods of time at state borders for a police escort. Trucks hauling super loads have as many as 16 axles and require long brake lines or additional braking capacity. This additional braking capacity requires warm air from the engine to be pumped into the brake lines at all times to prevent freezing. Without this exemption, an unsafe condition could result.

The Engine Manufacturers' Association commented that § 126.612(b) should not be restricted to 2007 and newer vehicles because manufacturers are developing kits to provide low-idle NOx capabilities for prior model year engines. The Department responds that the final-form regulation allows for this eventuality. The Department included this provision in the proposed regulation to allow vehicles with very low emissions from their main propulsion engine for both NOx and PM to idle without restriction if so labeled. The Department had identified model year 2007 and newer vehicles as those that have particulate filters whether certified by CARB or EPA because of stringent PM certification standards for model year 2007 engines. CARB allows model year 2008 and newer vehicles to meet an optional low-NOx idle standard instead of an automatic engine shutdown system (that shuts the engine down after five minutes in most circumstances). A vehicle which meets this standard must bear a label meeting requirements pursuant to section 35.B.4 "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," as incorporated by reference in title 13, CCR, section 1956.8(b). The final-form regulation deletes the reference to model year 2007 and offers the exemption to all model years if the vehicle exhibits the label described

above. For now, this will not include vehicles whose main propulsion engines are older than model year 2008, as CARB's regulation does not allow the label to be issued to vehicles whose main propulsion engines are not originally equipped with particulate filters. The language in the final-form rulemaking thus will provide flexibility in the event that CARB changes its regulation.

The IRRC commented that the regulation should specify how the label must be displayed to demonstrate compliance with § 126.612(b), the low-NOx idle engine compliance alternative, so that a label is not placed in a place where enforcing compliance could result in the driver being unnecessarily disturbed during their rest period. The Department responds that the regulation references the California regulation which references the document *California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles*, Chapter 35, Section B.4.3, which outlines proper label placement. The section precisely indicates that the referenced label be placed to the driver's side hood in an area within one foot from the top and front edges of the hood. A label placed in this location will not necessitate the driver to be disturbed for enforcement purposes unless the truck is out of compliance. No need exists to further specify label location in the regulation, but this information will be provided by the Department in educational information available to fleets.

The IRRC asked the Board to explain why it is in the public interest to allow newer vehicles to idle without restriction, particularly when idling is deemed unnecessary for other vehicles. The Department responds that some of these newer vehicles will emit almost no harmful pollution. The regulation's purpose is to reduce emissions of PM and ground-level ozone. PM comes both directly from a tailpipe as well as being formed in the atmosphere as a secondary pollutant. Thus, oxides of nitrogen (NOx) emitted into the atmosphere contribute to both ozone and PM. Federal and California emission standards for model year 2007 and newer engines emit very little PM. All manufacturers have responded to the standards by equipping vehicles with particulate filters. While the newer vehicles are well-controlled for particulate matter, they still may emit significant amounts of NOx while idling. California has provided an alternative to its automatic engine shutdown requirements – the clean NOx idle standard – and will issue a label to identify those vehicles containing engines which have been voluntarily certified to that standard. Section 126.612(b thus allows idling for engines and vehicles that are well-controlled for both PM and NOx at idle. Owners and operators may still choose not to idle in order to save on fuel costs by choosing stationary idle reduction technology or various kinds of on-board idle reduction technology.

The IRRC commented that the regulation should specify who has authority to enforce this regulation and accept verification of a mechanical problem as stated in § 126.612(c)(2). The Department responds that the Department, state and local law enforcement officers have the authority to enforce this regulation. "Other enforcing agency" refers to the Pennsylvania State Police and any law enforcement agency with the ability to issue summary citations.

One commentator stated that recreational vehicles could be adversely impacted because small onboard diesel generators will be subject to these requirements, and therefore requested an exemption for the operation of generators used in recreational vehicles. The final-form

rulemaking, which applies to diesel-powered motor vehicles with a GVWR of 10,001 pounds or more and exempts motor homes, will not apply to most recreational vehicles.

Two commentators stated that Pennsylvania did not appear to consider short-haul trucking issues in the proposed regulation. The Department responds that although the Department did not quantify the emissions produced by short-haul trucking (due to the high expense necessary to obtain Pennsylvania specific data), the Department expects to realize emission reductions from every type of trucking due to this regulation.

One commentator stated that if a public vehicle has been exempted by local regulations or codes, the vehicle should be exempt from the idling requirements. The Department disagrees. The Department considered existing local codes or regulations already adopted by localities in the Commonwealth. No explanation of the specific safety or health concern was given for the need to allow all public vehicles to idle. Adequate exemptions are provided in the final-form regulation, which allow idling to provide power for work-related electrical or mechanical operations, which could include computers, power take-off devices, safety lighting and hydraulic equipment. These exemptions will allow public vehicles to idle legally in many instances.

Several commentators stated that an exemption should be extended for a commercial motor vehicle when engaged in solid waste collection, transportation, or the collection and lawful management of source-separated recyclable materials. The Department disagrees that an exemption specific to solid waste collection or transportation, or to the collection and lawful management of source-separate recyclable materials, is warranted because a number of exemptions in the proposed regulation already apply to activities undertaken by solid waste collection. Specifically, § 126.612(a)(4) allows idling when necessary to power work-related mechanical operations, such as hydraulic equipment or the power takeoff device, and § 126.612(a)(2) allows for active loading and unloading. In addition, the final-form rulemaking expands § 126.612(a)(2) to allow idling when necessary for vehicles that are waiting to load or unload.

Subchapter G – Auxiliary Power Systems

The Engine Manufacturers' Association commented regarding § 126.702, that Pennsylvania is preempted from enforcing any emission-related requirements for nonroad engines unless those requirements (as well as their implementation and enforcement) are "identical" to CARB standards that have been authorized by the EPA and Pennsylvania provides at least two years between the date it adopts such nonroad engine requirements and the date they are slated to take effect. The Department notes that the Department specifically requested comment on proposed Subchapter G in the preamble published with the proposed rulemaking. Proposed Subchapter G (relating to auxiliary power systems) is deleted in the final-form rulemaking. Proposed Subchapter G addressed emission reductions from APS on subject vehicles traveling in and through this Commonwealth. Proposed Subchapter G required the exhaust of APS used on vehicles with MY 2007 or newer engines to be routed through the main engine's exhaust system upstream of the particulate filter; in lieu of this requirement, an APS labeled as being verified by CARB as having advanced particulate control could be used. In reviewing comments on the proposed rulemaking, the Department determined that, for practical and legal reasons, if the APS

provisions were retained the Department would postpone their applicability until at least model year 2012. However, because the APS emissions reduction and alternative technology fields are still developing, the Department deleted the proposed Subchapter G and will monitor the technological developments instead, until a more satisfactory approach can be identified. The anticipated emission reductions from the proposed rulemaking will not change as a result of omitting proposed Subchapter G because Subchapter G was not accounted for in the emission reduction calculations for the proposed rulemaking. Furthermore, to the extent that vehicles with diesel-powered APS comply with California's regulation in order to operate in California and then operate in Pennsylvania, the Commonwealth will realize some emission reduction from cleaner APS.

The Engine Manufacturers' Association commented that the option for allowing the routing of the APS exhaust through the main engine should only be allowed if the main engine has been designed and approved for this purpose by the original engine manufacturer. The final-form rulemaking does not regulate APS.

The IRRC commented that the requirements in §§ 126.701 and 126.702 only require a "model year 2007 or newer engine" and do not include the requirement specified in § 126.612(b) for a label issued by CARB under 13 CCR 1956.8(a)(6)(C). The IRRC asked the Board to explain why these requirements differ. The Department has deleted Subchapter G (namely, §§ 126.701 and 126.702) in the final-form rulemaking.

An environmental citizens group commented that if a vehicle has been retrofitted with a diesel particulate filter, that vehicle should be required to reroute the exhaust from the auxiliary power system to the main engine exhaust, if it is technologically feasible. The Department responds that the final-form rulemaking deletes regulation of auxiliary power systems.

Comments Regarding Compliance and Enforcement

The IRRC and two other commentators commented that the current high cost of fuel is forcing trucking companies to change their fuel consuming practices, including reducing idling. The commentators asked the Board to explain why this regulation is needed. The Department agrees that the price of fuel is an important consideration in the operation of diesel vehicles. Though fuel prices have risen quickly over the last two years, markets are prone to change. There is no guarantee that high fuel costs will be a relevant factor for idle reduction in the future. For this reason, a regulation to control these emissions is prudent. In addition, the relationships between owners and operators of vehicles can be varied and complex in terms of who pays the cost of fuel. The existence of an enforceable regulation involving all parties puts all on a level playing field. Finally, many truck drivers will idle their engines because that is what they have always done. This regulation will provide additional motivation for the use of alternate technology to reduce idling emissions. To take credit from emission reductions in the State Implementation Plan, a control measure must generally be permanent, quantifiable and enforceable.

The IRRC asked the Board to explain how this regulation will be enforced to accomplish air quality improvement and whether the EQB expects other law enforcement agencies to enforce idling restrictions among their duties, particularly given the complicated process required to

identify a violation. The Department responds the process required to identify a violation has been simplified in the final-form rulemaking, and that emissions from main engine idling will contribute significantly less in the coming years as a result of a variety of factors such as practical concerns, community involvement, outreach, and enforcement. As described above, efforts aimed at achieving enforcement of this regulation will begin with an education program for diesel vehicle drivers and owners, owners and operators of locations at which diesel-powered vehicles subject to this regulation load, unload and park, and enforcement personnel. The final-form regulation requires certain location owners to post signs to inform drivers that idling is restricted. While the Department will be enforcing the regulation, local and state police can also issue summary citations under this rule. The Department also anticipates working with the State Police and/or local enforcement agencies on concentrated high-profile enforcement events to get the word out to diesel fleet operators that excessive idling is not tolerated in the Commonwealth.

One commentator suggested that to ensure compliance of truck and bus owners with the regulation, a reporting process such as a required quarterly report should be developed. The Department responds that additional paperwork is not necessary to improve compliance with the regulation. As many as one million trucks could be affected should such a provision be added. Many idling trucks are from out of state, and it would be difficult to require these drivers to submit reports.

Two commentators recommended that a program with projects and incentives should exist to provide truck hook-ups for power, heating, and air conditioning at commercial truck stops and state-owned rest stops. The Department agrees. The Energy Harvest Grant Program and Alternative Fuel Incentive Grants, both implemented by the Department, have already provided funds for the stationary idling technology companies to install such truck hook-ups in Pennsylvania. Eleven such sites are located in the Commonwealth. Financing opportunities for these facilities continue to be available under the Alternative Fuel Incentive Grant program as well as under the Congestion Mitigation and Air Quality program administered by PennDOT and the regional transportation planning organizations.

Several commentators stated that money should be made available to fund the grants for APS, and that a way to guarantee funds for the grant program must be found. The Department responds that the Department's Small Business Advantage Grant Program, which provides funds to small businesses for the purchase of APS, is based on a first-come, first-serve basis and the money is obligated quickly. The Department is exploring options for obtaining more funds. In addition, the Federal Small Business Administration (SBA) Express loans offer assistance in purchasing APS. The interest rate for an APS purchase through SBA Express is high, namely prime rate plus 4.25%, but at today's diesel fuel prices, an APS purchase and installation shows immediate monthly profit even when factoring in the high interest rate, according to EPA's Smartway Technology Package Savings Calculator. At the current price of diesel fuel, the payback time for the purchase of an APS without a loan for the typical diesel-powered truck is very short, a little longer than one year even without public financial assistance.

The IRRC commented that the Preamble described a Compliance Assistance Plan which will include an educational component to inform the regulated community about idling restrictions and the availability of financial assistance programs for the purchase or lease of mobile idling

reduction equipment. IRRC supports this approach and requested that, in the Order to the final-form regulation, the EQB provide detailed information on the scope of financial assistance programs available, the actual availability of the financial assistance, to whom the assistance is available and how to apply for the financial assistance. This information is set forth above.

The IRRC and another commentator asked whether the regulation will affect a facility already subject to air quality regulations or permits relating to emissions, and expressed concern that there could be unintended consequences of imposing monitoring and compliance certification obligations on Title V facilities. The Department responds that the requirements of the idling restriction regulation will not be included in Title V permits.

One commentator stated that at most, property owners should only be required to post "No Idling" signs. The Department disagrees. The Department found that shared responsibility by owners and operators of facilities and owners and operators of vehicles is essential to reduce idling effectively. In addition to prohibiting any person subject to the subchapter from causing or allowing excessive idling, the final-form rulemaking requires owners and operators of locations where vehicles load or unload or locations that provide 15 or more parking spaces for vehicles subject to this rulemaking to post permanent signs to inform drivers that idling is restricted. Involving the location owner or manager in this fashion should assist with program enforcement.

The IRRC requested that the Board explain the reasonableness of the requirement that persons not operating the vehicle are responsible for ensuring compliance with this regulation and what measures must be taken to comply. The IRRC asked what actions are required by a location owner recognizing that they do not own the vehicle. The IRRC recommend rewriting § 126.601 to take into consideration public comment on this provision and to clearly state the applicability of the regulation. The Department responds that there are many things that location owners and operators can do to reduce or eliminate excessive idling. Load and unload location owners and operators may reduce or eliminate excessive idling by, for example, improving the location's logistics system for processing truck loading and unloading, implementing a call-in system when trucks are ready to be processed, or providing a waiting room for truck drivers until they are ready to be processed. EPA recognized these possibilities in its commentary to its Model State Idling Law (EPA Model State Idling Law, EPA420-S-06-001, Discussion Comments, p.3). According to the EPA, truck drivers noted in discussions with the EPA that logistics problems at the loading and unloading locations often created long wait times, and the drivers felt they should not be solely responsible. The final-form rulemaking requires owners and operators of locations where vehicles load or unload or locations that provide 15 or more parking spaces for vehicles subject to this rulemaking to post permanent signs to inform drivers that idling is restricted. However, any location owner or operator may post signs and educate customers about the idling restrictions in order to reduce or eliminate excessive idling. Involving the location owner or manager in this fashion should assist with program enforcement. Hence, the Department did not revise § 126.601 with regard to location owners and operators.

Three commentators stated that the comment in the preamble "…a statewide regulation should also discourage boroughs, townships, cities, and counties from enacting their own idling restrictions" causes concern. The commentators stated that political subdivisions should

maintain the flexibility to be more stringent on anti-idling than the Department, and we urge the Department to affirm that no such pre-emption is intended. The Department responds that political subdivisions will continue to maintain flexibility to regulate idling more stringently than the Department, but the Department has developed the final-form regulation to be functional and stringent enough that political subdivisions will find it effective, promoting, though not requiring, consistent idling regulation across the Commonwealth. The goal of having a consistent idling regulation across the Commonwealth is in part a response to the concern of the trucking industry with the growth of a patchwork of local idling regulations.

The IRRC commented that unless the EQB can establish that § 126.612(d) is consistent with statutory authority of the Air Pollution Control Act, the subsection should be deleted. The IRRC stated that the Air Pollution Control Act states that "nothing in this act shall prevent counties, cities, towns, townships or boroughs from enacting ordinances with respect to air pollution which will not be less stringent than the provisions of this act, the Air Pollution Control *[sic]* Act or the rules and regulations promulgated under this act or the Clean Air Act...."

The Department responds that § 126.612(d) is consistent with the APCA. It does not prevent a county, city, town, township, borough or local air authority from enacting ordinances as stringent as or more stringent than the APCA, CAA or rules or regulations promulgated under the APCA or CAA; and it does not authorize local regulation that is less stringent than the APCA, CAA or rules or regulations promulgated under the APCA or CAA. It merely carves out a limited exemption from the final-form rulemaking's general rule of 5 minutes of idling per hour. Section 126.612(d) has been clarified in the final-form rulemaking to reflect more clearly its original intent, which was to allow a county, city, town, township, borough or local air authority that is already regulating idling to approve alternative time limits that are greater than those otherwise established in the final-form rulemaking, in a limited set of circumstances. As revised, § 126.612(d) only applies to buses stored outdoors at bus depots in temperatures under 40˚ F, and requires that any approval must be designed to minimize idling. The exemption parallels the Allegheny County Health Department (ACHD) diesel vehicle idling regulation. Allegheny County's Port Authority operates several bus depots at which it services and stores public transit buses. Some of the buses are stored outdoors and therefore require additional warm-up prior to beginning their routes on particularly cold days. ACHD's regulation, and §126.612(d) of the Department's final-form regulation, allow this if the regulatory conditions are met. ACHD is the only county, city, town, township, borough or local air authority expected to utilize this exemption in the final-form rulemaking. Since § 126.612(d) does not violate the APCA, there is no need to remove it from the final-form rulemaking.

G. *Benefits, Costs and Compliance*

Benefits

Citizens in this Commonwealth will benefit from reduced direct exposure to diesel emissions produced by idling diesel-powered motor vehicles. Reduced diesel emissions will also assist the Commonwealth in achieving and maintaining the fine particulate and ground-level ozone standards. However, more air pollution from idling is produced in some counties than others because of the concentration of travel rest facilities. These counties will benefit more. For

instance, idling trucks in Cumberland and Luzerne Counties produce about 20% of all idling emissions in this Commonwealth.

In 2009, it is estimated that without this regulation, idling emissions will account for about 3,325 tons of NO_x, 90 tons of VOC and 60 tons of particulate matter per year. This estimate does not include an anticipated increase in idling hours from the time of the proposed rulemaking because no Statewide data exists upon which to base the estimate. The benefits of this final-form rulemaking will be greater if hours spent in this Commonwealth in travel rest increase significantly. Assumptions about idling emissions were those provided by the EPA in its *Guidance for Quantifying and Using Long Duration Truck Idling Emission Reductions in State Implementation Plans and Transportation Conformity* (2004). The Department expects that, once the temperature exemption expires, the proposed regulation will reduce idling by diesel-powered motor vehicles with a GVWR of 10,001 pounds or more by half and that a corresponding 50% reduction of emissions will occur. Therefore, the Department estimates that the proposed rulemaking will reduce emissions by about 1,610 tons of NO_x, 45 tons of VOC and 30 tons of particulate matter once the temperature exemptions for trucks with sleeper berths expires.

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 CO_2 emissions. The EPA estimates that idling heavy-duty vehicles can consume about 1 gallon of diesel fuel for every hour of idling time, resulting in more than 21 pounds of CO_2 emissions, the major GHG. The idling of a typical long-haul truck contributes about 19 metric tons of CO_2 annually.

Vehicle operators, the people in the closest proximity to diesel exhaust, will benefit most, particularly drivers of long-haul vehicles. In addition to cleaner air, the noise of their sleeper berth should decrease if power is supplied by an alternative idling technology. This should lead to a more rested truck driver. The National Transportation Safety Board has cited fatigue as a major cause of accidents in which long-haul trucks are involved. Nearly 500,000 trucks in the nation are dedicated to long-haul trips. Since trucking companies need to replace truck drivers constantly due to high turnover rates, more truck operators would be affected than there are number of trucks. It is possible that most, if not all, long-haul drivers will idle in this Commonwealth at some time. Including bus drivers and local drivers in this Commonwealth, there are nearly 1 million drivers who may benefit through reduced exposure to diesel emissions.

The final-form rulemaking will provide consistency in idling regulations in this Commonwealth for the industry, as well as encourage consistency in other states in which Pennsylvania vehicles may idle. The Commonwealth's adoption of this final-form rulemaking will make it difficult for most long-haul trucks across the nation to avoid complying with idling regulations, since most long-haul trucks in the nation are likely to travel through this Commonwealth. The Commonwealth's adoption of the final-form rulemaking will encourage more vehicle operators across the country to invest in long-term, permanent alternatives to idling.

Compliance Costs

Savings due to this final-form rulemaking are expected to exceed the costs in 2011, and by 2012 the regulated community will see a payback of their initial investment in equipment that would replace idling for travel rest. The overall benefit to the regulated community in the first five years of this program (2009--2013) should total at least $1 billion. The costs associated with the regulation are investments in equipment to provide climate control and electrical power without idling the main engine, primarily during required periods of rest. While this final-form rulemaking will apply to more vehicles than just trucks with sleeper cabs, shorter-haul vehicles, transit buses and school buses are not likely to invest in the equipment. The savings are directly attributable to decreases in fuel use. The anticipated decreases in fuel use could reduce revenue to the Commonwealth diesel fuel vendors (truck stops and other retail outlets) by as much as $23 to $34 million per year. In addition a corresponding reduction in contributions to the Commonwealth Motor License Fund would result in a $2-3 million decrease in revenue for the Commonwealth.

Compliance Assistance Plan

Efforts aimed at achieving enforcement of this regulation will begin with an education program for three groups of people: diesel vehicle drivers and owners; owners and operators of locations at which diesel-powered vehicles subject to this regulation load, unload and park; and enforcement personnel. The Department has received a grant from the EPA for outreach activities. The education program will involve a variety of activities, including placing posters at Turnpike toll booths and using variable message signs. The Department will encourage associations of bus and truck fleet operators to assist us in disseminating this information. The final-form regulation requires certain location owners to post signs to inform drivers that idling is restricted. Just as with speed limit rules, however, not every actual violation can be detected and ticketed given existing resources and competing enforcement priorities. While the Department will be enforcing the regulation, the Department will not be doing so alone. Local and state police can also issue summary citations under this rule. The Department consulted with the Department of Transportation (PennDOT) during development of the proposed rulemaking, in accordance with section 5(a)(7) of the APCA (35 P. S. §4005(a)(7)). The Department also consulted with the Pennsylvania State Police. The Department will work with law enforcement agencies to make them aware of the provisions of the final-form regulation. The Department also anticipates working with the State Police and/or local enforcement agencies on concentrated high-profile enforcement events to get the word out to diesel fleet operators that excessive idling is not tolerated in this Commonwealth.

The information provided will include information about the idling restrictions and financial assistance programs that may be available through the Commonwealth and the federal government for purchase or lease of mobile idling reduction equipment. At present, these financial assistance programs are available for small to medium size businesses. Some of the options available to the truck owning public are described below.

Business Administration Express Loans - The Small Business Administration (SBA) has teamed with EPA Smartway Transport Partnership to fund projects through loans that lower

fuel use and emissions from diesel-powered trucks. Companies with gross receipts less than $23.5 million are eligible for SBA Express Loans, a federal program. Quick turnaround loans can be obtained for up to $350,000 through qualified lenders.

The interest rate varies in relation to how much money is borrowed. For instance, if an independent truck owner or operator wanted to borrow money for the purchase of a single APS, the interest rate associated with a loan for less than $25,000 is the prime rate plus up to 6.25%, if the loan is paid back within 7 years. Currently, the prime rate is 5%. A lower interest rate would apply to higher amounts of money borrowed. An assessment needs to be made by the borrower to determine if purchasing an APS generates cost savings over the life of the loan. Even at an interest rate as high as 9.25%, the purchase and installation of an APS could generate more in monthly fuel savings (at the current average diesel fuel cost of $4.50 per gallon) than the cost of the monthly loan payment. If less than $25,000 is borrowed, no collateral is required for loan approval.

The National Clean Diesel Campaign - This federal program administered by the EPA made available $49.2 million dollars in fiscal year 2008 under the Energy Policy Act of 2005 to reduce emissions from diesel engines. This National program has several components that could benefit truck fleets including the National Clean Diesel Funding Assistance Program, the National Clean Diesel Finance Program, and the State Clean Diesel Grant Program.

The National Clean Diesel Funding Assistance Program is funded at $27.6 million in 2008. EPA's regional offices will administer competitions to deploy EPA or CARB verified and certified technologies to significantly reduce diesel emissions from the existing fleet. Heavy-duty and medium-duty trucks are eligible for funding, At least half the funds will be for the benefit of public fleets. This includes private fleets contracted or leased for public purpose, such as private school buses, refuse haulers, or equipment at public ports. However, only eligible entities can apply directly to EPA for funding (e.g., a school district would apply and administer a project on behalf of the private school bus contractor).

The National Clean Diesel Finance Program, administered by EPA's Smartway Transport Partnership, will award cooperative agreements to establish innovative finance programs, like low cost loans, for buyers of eligible diesel vehicles and equipment to reduce diesel emissions throughout the United States. Innovative finance projects include those where the loan recipient receives a unique financial incentive (such as greater-than-regular-market rates or conditions) for the purchase of eligible vehicles or equipment. Particular emphasis is on establishing low cost loan programs for the retrofit of used pre-2007 highway vehicles (such as heavy-duty trucks) and new or used pieces of nonroad equipment (such as bulldozers) with EPA or CARB verified emission control technologies. Approximately $3.4 million will be available for fiscal year 2008.

The State Clean Diesel Grant Program funds may be used to develop and implement grant and loan programs for clean diesel projects using verified and/or certified retrofit technologies and EPA verified idle reduction technologies. States may also elect to include emerging diesel emission reduction technologies in their grant and loan programs. The

Department will not be making any money available for the purposes of funding APS purchases, but the Department could in the future.

Small Business Advantage Grant Program– This Pennsylvania program is administered by the Department. The Small Business Advantage Grant Program is open to small business owners whose business or facility is located in Pennsylvania. An eligible applicant must be a for-profit business enterprise that is a corporation, limited liability company, partnership, sole proprietorship or other legal entity that has no more than 100 employees and is a separate legal business entity at the time the application is submitted. Applicants may be manufacturers or service providers. The Small Business Advantage Grant program has typically provided $250,000 per year to truck owners who want to purchase and install an APS. The grant is capped at $7,500 per applicant and a 50% match is required.

Alternative Fuels Incentive Grant (AFIG) Program – This Pennsylvania Program administered by the Department funds projects that make use of fuels other than fossil fuels. It also has funded projects that install non-fossil fuel energy sources that reduce fossil fuel use. For instance, an AFIG grant funded a stationary idle technology projects. The AFIG Program could fund projects that purchase and install APS that make use of electricity or natural gas, for instance, but not APS that operate on conventional diesel fuel. School districts, municipal authorities, political subdivisions, non profit entities, corporations, limited liability companies or partnerships incorporated or registered in the Commonwealth are eligible to receive AFIG funds.

Paperwork Requirements

This final-form rulemaking creates no new paperwork for the regulated community at large, with one exception. Violating vehicle operators who wish to claim the exemption under § 126.612(c) will have to submit timely documentation of a repair to the enforcing agency.

H. *Pollution Prevention*

The Federal Pollution Prevention Act of 1990 established a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally-friendly materials, more efficient use of raw materials, and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. This proposed rulemaking prevents pollution by either requiring a pollution source (namely, vehicle engines) to be shut off and by encouraging the use of alternative, less polluting equipment when idling is necessary.

I. *Sunset Review*

This final-form rulemaking will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

J. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on December 21, 2007, the Department submitted a copy of the notice of proposed rulemaking, published at 38 *Pa.B.* 229, to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees (the Committees) for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing these final-form regulations, the Department has considered all comments from IRRC, the Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act (71 P.S. § 745.5a(j.2)), on ____(blank)____, these final-form regulations were deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on ____(blank)____ and approved the final-form regulations.

K. *Findings of the Board*

The Board finds that:

(1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pa. Code §§ 7.1 and 7.2.

(2) A public comment period was provided as required by law, and all comments were considered.

(3) These regulations do not enlarge the purpose of the proposal published at 38 *Pa.B.* 229 (January 12, 2008).

(4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

(5) These regulations are necessary for the Commonwealth to achieve and maintain ambient air quality standards and to satisfy related CAA requirements.

L. *Order of the Board*

The Board, acting under the authorizing statutes, orders that:

(a) The regulations of the Department of Environmental Protection, 25 *Pa. Code* Chapters 121 and 126, are amended by amending § 121.1 and adding § 126.601 and §§ 126.611 – 126.613, to read as set forth in Annex A.

(b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.

(c) The Chairperson of the Board shall submit this order and Annex A to the IRRC and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

JOHN HANGER
Acting Chairperson