

**COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL QUALITY BOARD**

PETITION FORM

I. PETITIONER INFORMATION

Name: Clean Air Board of Central Pennsylvania, Inc.

Mailing Address: 528 Garland Drive

Carlisle, PA 17013

Telephone Number: 717-243-4571

Date: October 18, 2006

II. PETITION INFORMATION

A. The petitioner requests the Environmental Quality Board to (check one of the following):

Adopt a regulation

Amend a regulation (Citation _____)

Repeal a regulation (Citation _____)

Please attach suggested regulatory language if request is to adopt or amend a regulation. See Appendix A for Suggested Draft Regulatory Language.

Attachments:

1) **Appendix A:**

Suggested Draft Regulatory Language

2) **Appendix B:**

1. DEP Ambient Air Monitoring Data Reports –COMPAMS ATX Data Retrieval 2006, Arendtsville, Harrisburg, Lancaster, York, Reading (Temp. Site), Norristown

2. "Diesel Exhaust in the United States," EPA (EPA-420-F-02-048, September 2002)

"Diesel and Health in America: the Lingering Threat," Clean Air Task Force, February 2005

"Fine Particles Increase Hospital Admissions for Heart Failure and Cardiovascular Disease," Johns Hopkins Bloomberg School of Public Health Press Release, March 7, 2006

3. "When you can't breathe, nothing else really matters," Open letter signed by Cumberland County Physicians, Carlisle Sentinel

"The Air We Breathe", Open letter signed by Cumberland County Physicians, Harrisburg Patriot News, August 23, 2006

4. "DEP Helps Launch Truck-Idling Alternative to Cut Pollution, Save Fuel," DEP Press Release, August 9, 2006

3) **Appendix C:**

1. Transportation Industry Anti-Idling Resolution

2. Statement of Roger Westman, Manager, Allegheny County Health Department
Statement of Carmen Paris, Philadelphia Health Commissioner

3. Statement of Kirk Wilson, Mayor, Carlisle
Resolution of the Western Cumberland Council of Governments
Statement of Jesse Keen, Keen Trucking

4. Resolution Regarding Air Quality in Cumberland County, Cumberland County Medical Society

- B. **Why is the petitioner requesting this action from the Board?** (Describe problems encountered under current regulations and the changes being recommended to address the problems. State factual and legal contentions and include supporting documentation that establishes a clear justification for the requested action.)

Change being Recommended to Address Problem:

The Clean Air Board of Central Pennsylvania, Inc. is a faith-based citizen's initiative, organized to promote strategies that significantly reduce the amount of air pollution produced by on-road motor vehicles with commercial diesel engines. In this Petition, we request that the Environmental Quality Board adopt a state-wide regulation restricting the idling of diesel powered vehicles. Idling of diesel powered motor vehicles, contributes significantly to Pennsylvania's fine particulate matter pollution (PM 2.5) – an air pollutant which is of great concern to citizens of Commonwealth of Pennsylvania. This harmful and wasteful practice must be stopped. Our neighboring states of New York, New Jersey, Delaware and Maryland have anti-idling restrictions in place, along with eight other states, the District of Columbia, and the cities of Atlanta, and Denver. In Pennsylvania, Philadelphia and Allegheny County have established anti-idling restrictions. The Commonwealth needs to act on this petition to address a critical public health problem.

Problems Presented by Idling:

Fine particulate matter (PM 2.5) poses a serious health risk to Pennsylvanians because it can easily lodge deep in the lungs. When inhaled repeatedly, PM 2.5 is proven to aggravate heart and lung disease and cause other serious health problems including lung cancer, abnormal lung development in children and premature death.

Pennsylvania has serious public health and environmental problems presented by PM 2.5. The US EPA has designated 18 Pennsylvania counties (Allegheny, Beaver, Berks, Bucks, Butler, Cambria, Chester, Cumberland, Dauphin, Delaware, Lancaster, Lebanon, Mercer, Montgomery, Philadelphia, Washington, Westmoreland and York) and portions of 4 other counties, including Armstrong, Greene, Lawrence and Indiana) as "non-attainment" under the Clean Air Act for PM 2.5. By April 2008, Pennsylvania must submit its state implementation plan (SIP) to bring these non-attainment areas into compliance. By April 2010, Pennsylvania must demonstrate that these areas attain the National Ambient Air Quality Standard for PM 2.5.

The air we breathe is not clean. Due to the concentration of truck traffic, fine particulate pollution from diesel exhaust is much higher in Cumberland County than in most places, particularly in the Carlisle area. Preliminary PM 2.5 sampling indicates that significant levels are found in the areas east and west of Carlisle borough, the "Miracle Mile" and the Interstate-81 (Exit 44) warehouse district, respectively. The Clean Air Board has requested DEP to establish a PM 2.5 monitoring station to monitor the quality of the air that a large number of residents breathe. DEP has agreed to do so for one year. CAB has recommended a location for an ambient air quality monitor which would collect data representative of the air coming in to residential neighborhoods. The DEP monitoring stations around the state indicate a widespread problem in meeting the 24 hour limit for PM 2.5. Recent data from DEP ambient air quality stations across the state demonstrate that the recently revised 24 hour limit for PM 2.5 (35 micrograms per cubic meter) has been violated numerous times in 2006. (See Appendix B-1)

Public health authorities have long recognized that diesel exhaust emission can cause adverse impacts on the general population and on at-risk populations of the elderly, young children, and those who suffer from respiratory illnesses. EPA's health assessment for diesel engine exhaust examined information regarding the possible health hazards associated with exposure to diesel engine exhaust. The assessment concluded that long-term (i.e., chronic) inhalation exposure is likely to pose a lung cancer hazard to humans, as well as damage the lung in other ways depending on exposure. Short-term (i.e., acute) exposures can cause irritation and inflammatory symptoms of a transient nature, these being highly variable across the population. The assessment also indicates that evidence for exacerbation of existing allergies and asthma symptoms is emerging. The assessment recognized that diesel emissions, as a mixture of many constituents, also contribute to ambient concentrations of several criteria air pollutants including nitrogen oxides and fine particles, as well as other air toxics. (EPA/600/8-90/057F, 2002) The EPA states that nationwide, particulate matter, especially the fine particles found in diesel exhaust, cause 15,000 premature deaths every year. (EPA420-F-02-048, September 2002)

The health problems presented by PM 2.5 are well documented (See Appendix B-2). In local newspaper advertisements, Cumberland County physicians have expressed their concern with the health effects of PM 2.5 exposure -- the exacerbation of lung disease, i.e. asthma and emphysema, and the triggering of heart attacks (See Appendix B-3) Other states have developed strategies to reduce diesel pollution that Pennsylvania can emulate. These diverse strategies have been documented by EPA. See: <http://www.epa.gov/ne/eco/diesel>

Running a vehicle's diesel engine while the vehicle is not moving (known as idling) creates unnecessary emissions of PM 2.5 and wastes fuel. Exhaust from diesel engines includes PM 2.5 and smog-forming pollutants. A typical idling truck burns nearly a gallon of fuel per hour. Seven thousand trucks, about the size of the fleet for a large national retail firm, idling for one hour a day would burn 2.1 million gallons of diesel fuel each year, and create 415 tons of smog-forming pollutants and 10 tons of particulate matter. (EPA Press Release, November 1, 2005; Release # dd051101)

Emissions from commercial diesel vehicles can cause significant local concentrations of PM 2.5. On August 9, 2006, DEP Secretary Kathleen McGinty participated in a press conference at the opening of the IdleAire facility in Carlisle. According to her remarks that day and the DEP press release, 13,000 diesel trucks idle in Pennsylvania everyday -- most for up to 10 hours. (See Appendix B-4) Most operators allow their engines to idle in order to use heaters, air conditioning and electronics during their mandated rest period. This practice releases dangerous PM 2.5 and other pollutants into the air, wastes fuel, and decreases engine life.

Diesel exhaust is a major concern in central Pennsylvania. On Earth Day 2006, State Senator, Patricia Vance, noted that "Cumberland County has more truck traffic than any other county in the Commonwealth,"

Recognizing the need to eliminate unnecessary diesel engine idling, 15 representatives of the transportation industry in Cumberland County (shippers, truckers, warehouse managers, and diesel equipment manufacturers) have signed a resolution agreeing to minimize idling in their businesses. (See Appendix C-1)

The anti-idling regulation is a reasonably available control measure to reduce PM2.5. Pennsylvania should implement state-wide measures to limit idling and to reduce the air pollution. A uniform state-wide anti-idling measure will reduce local hot spots of PM 2.5, protect the health of Pennsylvanians -- especially those who suffer from asthma and other respiratory conditions, assist the state in meeting its obligations to achieve the Clean Air Act's national ambient air quality standard for PM 2.5, and ensure the citizens' right to clean air as protected under the State Constitution. This requested anti-idling rule should be included in the State Implementation Plan for PM 2.5.

Additional Idle Reduction Benefits

Reducing the idling time of heavy-duty trucks reduces petroleum consumption, fuel costs, engine wear and maintenance costs, and noise, as well as diesel particulate and sulfur emissions,. Based on the approximately 460,000 long-haul trucks currently operating in the United States, Argonne National Laboratories estimates that idle reduction technologies could reduce diesel fuel use by 838 million gallons per year. That wasted diesel fuel translates to \$1.4 billion that could be saved by drivers using idle reduction technologies.

By reducing the amount of time that trucks idle, estimated at about 6 hours per day, drivers can significantly reduce engine wear and the associated maintenance costs. Routine maintenance can be performed less often and trucks can travel farther before needing an engine overhaul.

In addition, Argonne National Laboratories estimates that idle reduction technologies used by the approximately 460,000 heavy-duty trucks operating on diesel fuel can reduce emissions of NOx by 140,000 tons, CO by 2,400 tons, and CO2 by 140,000 tons per year.(U.S. Department of Energy - Energy Efficiency and Renewable Energy http://www.eere.energy.gov/cleancities/idle/idle_benefits.html)

Current regulations

Each municipality, township, or city in Pennsylvania has the authority to adopt anti-idling ordinance. Allegheny County and Philadelphia County have anti-idling regulations similar to CAB's proposed regulation. The Borough of Emsworth and Falls Townships have anti-idling regulations. If this trend were to continue, the restrictions on idling would vary by municipality, township, or city. An inconsistent patchwork of local anti-idling ordinances in Pennsylvania would result. The knowledge of, understanding of and finally compliance with these varied requirements would create a maze for the trucking industry, law enforcement officers and municipal officials. A state-wide regulation would remedy this confusing situation and would lay the ground work for more effective compliance and enforcement.

Twenty-five states have anti-idling regulations of which 12 plus the District of Columbia are state-wide. The bordering states of New York, New Jersey, Delaware, Maryland, and nearby Virginia, Connecticut and the District of Columbia have all adopted state-wide anti-idling rules. Our neighboring states' regulations limit idling to no more than 5 minutes per hour. Some are more restrictive than the proposed regulation. Each of the states has different exceptions for situations where extended idling is allowed. In 2006, EPA released a study of all the state rules restricting idling. (EPA420-B-06-004, April 2006) The absence of a Pennsylvania anti-idling regulation may encourage operators to cross into Pennsylvania to rest and to idle.

We have attached statements from various officials regarding their experience in enforcing anti-idling programs and support for these programs. (See Appendix C-2) The Mayor of Carlisle and local government officials in Cumberland County support reasonable regulations to reduce idling. (See Appendix C-3) Attached also is a statement by Jesse Keen, a trucking company executive, in which he states his support of a state-wide anti-idling law. (See Appendix C-3) The medical community also supports an anti-idling program. (See Appendix C-4)

Alternatives to Idling

Cleaner alternatives to idling are available. One alternative to idling at truck stops is the IdleAire facilities which are being installed at major truck stops across the Commonwealth. IdleAire provides hookups to truck cabs, which can provide heating, air conditioning, internet access, phone service, and cable television and movies. Once a tractor is hooked into the IdleAire system, it does not need to run its diesel engine. As a result, in a 10 hour rest period, 10 gallons of fuel are saved and 234 pounds of diesel emissions are not released into the ambient air. (See DEP press release, August 9, 2006). Many companies have fleet agreements to use the IdleAire facilities. Keen Transport, a Cumberland County company, covers the costs of using the IdleAire facilities during mandatory rest periods for its drivers.

Another alternative to idling is the use of auxiliary power units. Auxiliary power units (APUs) are portable, truck-mounted systems that can provide climate control and power for trucks without idling. These systems generally consist of a small internal combustion engine (usually diesel) equipped with a generator and heat recovery system to provide electricity and heat. For air conditioning, an electrically powered air-conditioner unit is normally installed in the sleeper, although some systems use the truck's air-conditioning system. Auxiliary power units can help truck drivers comply with local idling ordinances, reduce emissions and noise, and save on the cost of truck fuel and maintenance. Because most auxiliary power units are integrated directly into the truck's systems, they offer a high level of convenience. In addition, APUs are a proven technology that is widely available. U.S. Department of Energy.

<http://www.eere.energy.gov/cleancities/idle/apu.html>

Legal Authority:

The proposed regulations are to be adopted pursuant to the provisions of Section 1920-A of The Administrative Code of 1929 (71 P. S. §510-20); and Section 5 of the Air Pollution Control Act (35 P. S. §4005); as amended.

C. Describe the types of persons, businesses and organizations likely to be impacted by this proposal.

This proposal will affect the transportation industry in general, including all owners and operators of commercial diesel vehicles. The trucking industry has stated that reducing idling makes good business sense. Truck owners have identified the inconsistent pattern of local town and city anti-idling restrictions as a barrier to implementing corporate anti-idling measures. Truck owners recognize that idling diesel engines wastes fuel, increases engine wear, and causes pollution. This proposal will benefit the transportation industry drivers. It will protect the health of truck and bus drivers, who are directly and negatively impacted by the particulate emissions of the idling engines.

This proposal will affect owners and operators of diesel buses and delivery vehicles. Owners and operators will need to monitor their operations more closely to ensure that unnecessary idling is prevented. They will benefit from fuel savings.

This proposal will affect the health of all Pennsylvanians, especially those who live or work in areas where commercial diesel vehicles load, unload or park and must breathe excessive diesel particulate.

This proposal will affect Pennsylvania children, elderly and others who are particularly vulnerable to asthma and respiratory illnesses. School children will benefit when school buses reduce idling and limit idling exhaust carried into the bus with them.

This proposal will affect the manufacturers of equipment which provide alternatives to idling. This proposal will positively impact the providers of those technologies. Several idle control technologies can aid fleets in limiting idling time and complying with state regulations. Automatic shut-down devices can switch off parked trucks after predetermined time intervals. The manufacturers of Auxiliary Power Units (APUs), which provide heat, air conditioning, and power without running the main engine, will find a larger market for these devices.

D. Does the action requested in the petition concern a matter currently in litigation? If yes, please explain.

There are no matters in litigation that concern the action requested in this petition.

E. For stream redesignation petitions, the following information must be included for the petition to be considered complete. Attach supporting material as necessary. **NOT APPLICABLE**

1. A clear delineation of the watershed or stream segment to be redesignated, both in narrative form and on a map.
2. The current designated use(s) of the watershed or segment.
3. The requested designated use(s) of the watershed or segment.
4. Available technical data on instream conditions for the following: water chemistry, the aquatic community (benthic macroinvertebrates and/or fishes), or instream habitat. If such data are not included, provide a description of the data sources investigated.
5. A description of existing and proposed point and nonpoint source discharges and their impact on water quality and/or the aquatic community. The names, locations, and permit numbers of point source discharges and a description of the types and locations of nonpoint source discharges should be listed.
6. Information regarding any of the qualifiers for designation as high quality waters (HQ) or exceptional value waters (EV) in §93.4b (relating to qualifying as High Quality or Exceptional Value waters) used as a basis for the requested designation.

7. A general description of land use and development patterns in the watershed. Examples include the amount or percentage of public lands (including ownership) and the amount or percentage of various land use types (such as residential, commercial, industrial, agricultural and the like).
8. The names of all municipalities through which the watershed or segment flows, including an official contact name and address.
9. Locational information relevant to items 4-8 (except for contact names and addresses) displayed on a map or maps, if possible.

**All petitions should be submitted to the
Secretary of the Department of Environmental Protection
P.O. Box 2063
Harrisburg, PA 17105-2063**