



Low Emission Vehicles: Vehicle Emissions Standards in Pennsylvania and Delaware

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Who Regulates Vehicle Emissions?

The U.S. Environmental Protection Agency (EPA) is the federal entity charged with the regulation of motor vehicle emissions and their impact on air quality. It is the mission of the Office of Transportation and Air Quality (OTAQ, formally the Office of Mobile Sources), within EPA's Office of Air and Radiation, to "reconcile the transportation sector with the environment by advancing clean fuels and technology, and working to promote more livable communities."¹ OTAQ is responsible for carrying out laws to control air pollution from motor vehicles, engines, and fuels. EPA Region 3 oversees these activities in the states of Pennsylvania and Delaware, along with a handful of other states in the Mid-Atlantic Region.

The History of Federal Vehicle Emissions Standards

Historically, vehicle emissions standards have been established and strengthened at the federal level. The U.S. Congress traditionally mandates standards through clean air legislation. The scope and strength of the standards are established and enforced by EPA.

California is the only state that has been granted the authority, within the original Clean Air Act, to establish separate, stricter standards for vehicle emissions, independent of the federal government. All other states are required to either comply with the federal vehicle emissions standards (currently Tier 1 or NLEV and in the future, Tier 2) or adopt the stricter California standards (currently LEV 1 and in the future, LEV 2). The table over the page illustrates the progression of federal vehicle emissions standards since 1970.

State Vehicle Emissions Standards

Pennsylvania

The Department of Environmental Protection (DEP) oversees mobile source emissions in Pennsylvania. New vehicles within the state were required to comply with Tier 1 emissions standards up until December of 1998, at which point DEP formally adopted the stricter NLEV standards. Pennsylvania will follow the NLEV standards until 2004, when Tier 2 takes effect. In the case that Pennsylvania adopts a LEV II program, this would come into effect in the 2004 model year, taking the place of NLEV. Four states (Massachusetts, New York, Vermont, and Maine in the 1999, 1999, 2000, and 2001 model years respectively) on the east coast have adopted LEV II thus far.

The process necessary to adopt stronger mobile vehicle emissions standards in Pennsylvania is as follows. Under section 5 (a)(3) of the Air Pollution Control Act, the Environmental Quality Board (EQB) has the authority to "adopt rules and regulations for the prevention, control, reduction, and abatement of pollution in the Commonwealth of Pennsylvania." This includes express authorization to adopt regulations designed to reduce motor vehicle emissions, as long as they are in compliance with the Clean Air Act. Typically, the provisions of a proposed regulation are put together by DEP staff and brought before the EQB. Upon review of the proposed regulation, a public comment and hearing period is set and all comments may be incorporated into a final ruling. Regulations are subject to review upon final ruling by the EQB.

Delaware

The Department of Natural Resources and Environmental Control (DNREC) oversees vehicle emissions in Delaware. As with Pennsylvania, Delaware complied with Tier 1 vehicle emissions standards until 1999, when DNREC adopted NLEV. Like Pennsylvania, Delaware will proceed with the NLEV

FACTS

The EPA regulates motor vehicle emissions and their impact on air quality. Federal vehicle emissions standards currently include Tier 1 and NLEV and effective in 2004, Tier 2.

California is the only state that has been granted the authority to establish separate, stricter standards; currently LEV I, and in the future LEV II. All other states must comply with either federal or California standards.

DID YOU KNOW?

PA DEP oversees mobile source emissions in Pennsylvania, while DNREC oversees vehicle emissions in Delaware

As of 1998, PA DEP adopted NLEV standards.
As of 1999, DNREC adopted NLEV standards.
Both PA and DE will follow these standards until 2004, when Tier 2 takes effect.

If PA and DE were to adopt the LEV II standard, it would take the place of NLEV in the 2004 model year.



¹Office of Transportation and Air Quality. U.S. Environmental Protection Agency. www.epa.gov/otaq

standard until Tier 2 takes effect in 2004. Similarly, if Delaware were to adopt a LEV II program, it would take the place of NLEV in the 2004 model year.

The process to adopt stronger mobile emissions standards in Delaware is similar to that of Pennsylvania. Proposed regulations are developed internally within DNREC. Although there is no formal regulatory environmental quality board, as seen in Pennsylvania, DNREC often calls together a focus board to review the proposed regulation. The focus boards are called together as needed in an ad hoc fashion. The boards are facilitated by DNREC and are often comprised of representatives from state government, business, industry, academia, and community groups. Finally, the proposed regulations undergo a public hearing, a public comment period, and are the subject of a public workshop, held by DNREC.

Federal Vehicle Emissions Standards

1970- 1975	Clean Air Act of 1970	The Clean Air Act of 1970 called for the first tailpipe emissions standards for carbon monoxide (CO), volatile organic compounds (VOCs), and nitrogen oxides (NOx). The new standards went into effect in 1975 with a NOx standard of 3.1 grams per mile (gpm)
1977- 1988	Tightening of Standards	The Clean Air Act Amendments of 1977 tightened standards in two phases. Between 1977 and 1979, the NOx standard tightened to 2.0 gpm for cars and then again to 1.0 gpm in 1981. In 1979, EPA tightened light-duty truck standards to 2.3 gpm and again to 1.2 gpm in 1988. Also in 1988, EPA set the first tailpipe standards for heavier trucks at 1.7 gpm.
1990 - 1994	Tier 1	The Clean Air Act Amendments of 1990 set a new, tighter standard called "Tier 1" that marked a 40% reduction from the 1981 standard for cars, setting the NOx standard at 0.6 gpm. For trucks, Tier 1 set a new standard that ranges between 0.6 and 1.53 gpm depending upon the weight of the truck.
1998	National Low Emission Vehicle (NLEV) Program	In 1998 the Clinton Administration in collaboration with the auto industry and the Northeast states, struck an agreement to bring cleaner cars (50% cleaner than those mandated under Tier 1) to the road. This agreement was called the National Low Emission Vehicle Program (NLEV) NLEV cars operate with a NOx standard of 0.3 gpm, while NLEV trucks operate with a 0.5 gpm NOx standard. Vehicles in both Pennsylvania and Delaware currently operate under the NLEV standard.
1999 (Finalized in 2000)	Tier 2	In 1999, EPA proposed a Tier 2 tailpipe emission standard to become effective in 2004, calling for both cars and passenger trucks to be subject to the same national pollution control system. The new NOx standard is 0.07 gpm, marking a 77-86% reduction for cars and a 92-95% reduction for trucks beyond the NLEV agreement.

Source: United States Environmental Protection Agency. [Emission Facts: The History of Reducing Tailpipe Emissions](#). May 1999.

What You Can Do

- *Contact* Clean Air Council to join a clean cars campaign in your state!

Pennsylvania Clean Cars Campaign
 Kimberly Nicholas, Coordinator
 (215) 567-4004 ext. 237
knichola@cleanair.org

Delaware Clean Cars Campaign
 Emily Bertram, Coordinator
 (302) 691-0112 ext. 226
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- *Consult* the Council's Clean Cars Campaign website at www.cleanair.org/cleancars for more information on the campaign.
- *Write* a letter to your governor and state environmental agency encouraging them to adopt a program to promote lower emissions vehicles in your state.

Pennsylvania
 Governor Tom Ridge
 225 Main Capitol
 Harrisburg, PA 17120

Delaware
 Governor Ruth Ann Minner
 Legislative Hall
 Dover, DE 19901

James Seif, Secretary
 PA Department of Environmental
 Protection (DEP)
 Rachel Carson State Office Bldg.
 400 Market Street
 Harrisburg, PA 17105

Nicholas Di Pasquale, Secretary
 DE Department of Natural Resources and
 Environmental Control (DNREC)
 89 Kings Highway
 Dover, DE 19901

Join Clean Air Council- visit the Council's website at www.cleanair.org or call (215) 567-4004 for membership details and /or volunteer opportunities.