

U.S. Clean Air Act History- Government Roles and Responsibilities

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Presentation Overview

- Air Quality in the U.S.- The Beginning
- Clean Air Act Air and the Amendments
- The U.S. System of Air Quality Management
 - Federal
 - State
 - Local



Events Creating Awareness of Air Pollution

- A key event was the unexplained occurrence of eye-burning smog events beginning in 1943 in Los Angeles, one of the major urban areas which used no coal.
- Cities located in the East and Midwest of the U.S. like Chicago, Northern Indiana, Cleveland, Pittsburgh, and Birmingham became large steel producing areas with coke ovens
- Another key event was the 1948 Donora smog which was a historic air inversion that resulted in a wall of smog that killed 20 people and sickened 7,000 in Donora, Pennsylvania, a mill town on the Monongahela River, 39 km southeast of Pittsburgh.
- Another trigger event was the London Fog of December 1952. Originally estimated to have caused 4,000 deaths but more recent estimates put the number at 12,000



Industrial Development

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- The last trigger event was the London Fog of December 1952. Originally estimated to have caused 4,000 deaths but more recent estimates put the number at 12,000



Los Angeles Smog January 6, 1948



Donora, PA 1948





Beginnings of Air Pollution Control

- The adverse air quality events put cities and States on the front lines for studying the problem and designing answers.
- Science on air pollution and its effects was also just beginning but it was lacking resources, focus, and clear leadership.
- Cities were on the front lines because of the lack of a defined Federal role.
- The emergence of great factories and consumption of immense quantities of coal gave rise to unprecedented air pollution and the large volume of industrial chemical discharges added to the growing load of untreated human waste.
- Chicago and Cincinnati were the first two American cities to enact laws ensuring cleaner air in 1881.



U.S. Federal Air Quality Management Legislation

Date	Legislation	Authorization
1955	Air Pollution Control Act	Provided funds to State and local agencies for research and training
1960	Motor Vehicle Exhaust Study	Authorized the Public Health Service to study auto emissions and health
1963	Clean Air Act	<ol style="list-style-type: none">1. Research at the Federal Level2. Money to States for Training3. Federal Authority to abate interstate pollution



U.S. Federal Air Quality Management Legislation

Date	Legislation	Authorization
1965	Motor Vehicle Air Pollution Control Act	National standards for auto emissions Coordinated pollution control between U.S., Canada, and Mexico
1967	Air Quality Act	<ol style="list-style-type: none"><li data-bbox="1319 758 1789 861">1. Air Quality Control Regions<li data-bbox="1319 872 1789 918">2. Air Quality Criteria<li data-bbox="1319 929 1808 1032">3. Control Technology Documents<li data-bbox="1319 1043 1850 1146">4. State Implementation Plans<li data-bbox="1319 1158 1702 1318">5. Separate Auto Standards for California



U.S. Federal Air Quality Management Legislation

Date	Legislation	Authorization
1970	Clean Air Act Amendments (continued)	<ol style="list-style-type: none"><li data-bbox="1257 629 1760 729">1. National Ambient Air Quality Standards<li data-bbox="1257 743 1760 901">2. State Plans to achieve NAAQS by 1975<li data-bbox="1257 915 1760 1072">3. New Source Performance Standards<li data-bbox="1257 1086 1760 1243">4. National Standards for Hazardous Air Pollutants



U.S. Federal Air Quality Management Legislation

Date	Legislation	Authorization
1970	Clean Air Act Amendments (continued)	Aircraft Emission Standards
		Auto Standards for Hydrocarbons and CO for 1975 models and for NOx for 1976 models
		Motor Vehicle Emission Inspection and Maintenance Program
		States allowed to adopt air quality standards more stringent than Federal Standards
		Citizens allowed to sue for air pollution violations



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Date	Legislation	Authorization
1977	Clean Air Act Amendments	Prevention of Significant Deterioration (PSD) for new and modified stationary sources in “clean areas”
		New Source Review for new and modified stationary sources in areas violating U.S. Air Quality Standards
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		Citizens allowed to sue for air pollution violations



U.S. Federal Air Quality Management Legislation

Date	Legislation	Authorization
1990	Clean Air Act Amendments	Created Acid Deposition Reduction Program
		Maximum Achievable Control Standards and Risk Standards for sources of 187 hazardous air pollutants
		Motor Vehicle Emission Inspection and Maintenance Program
		Expanded and modified provisions concerning National Ambient Air Quality Standards
		Expanded and modified Federal enforcement authority



Roles of Local, States and Federal Governments

- **Federal Role**
 - Track implementation of CAA in States and local areas
 - Provide oversight on State and local implementation
 - Issue Federal Rules as required under the Clean Act or as needed to address problems that involve multiple States.
 - Set national standards for new motor vehicles as needed.
- **State Role**
 - After changes in NAAQS, develop plans to reduce emissions in their state to achieve the NAAQS in all areas of the State.
 - In some States this authority is shared with their cities where they have the capability and authority to implement some of the CAA programs.
 - Can be sharing authority through delegation agreements or legislation with local areas
 - Also work with other nearby states on interstate pollution issues.
- **Local Role**
 - Varies by State and City. Some cities like New York and Los Angeles have the technical capacity to implement and enforce the Clean Air Act in their city. Other smaller cities rely more on the State.



Federal/State Oversight and Interactions

- EPA has 10 regional offices which do most of the oversight and interactions with the 50 states. Areas related to air pollution covered include:
 - Oversight on NSR and Title V Operation Permits for industrial facilities issued by the State
 - Oversight of State Plans to achieve National Ambient Air Quality Standards for CO, Lead, Ozone, NOx , PM10 and PM2.5, and SO2.
- EPA Headquarters provides oversight for National consistency related to all programs and consistency with the Clean Air Act