




# Overview of the Clean Air Act

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# Outline

- ▶ Goals of the Act
- ▶ Legislative Timeline
- ▶ Air Pollution
- ▶ Organizational Structure
  - ▶ Cooperative Federalism
  - ▶ Direct Implementation
- ▶ Permitting
- ▶ Enforcement, Judicial Review, Role of Courts
- ▶ Pollution Trends

# General Goals of the Act

- ▶ To protect human health and welfare from air pollution
  - ▶ Through health-, welfare-, and/or risk-based standards (e.g., NAAQS, HAPs)
  - ▶ Through technology-based standards (e.g., NSPS, BACT, mobile-source standards)
- ▶ To provide federal oversight while giving states flexibility in implementing programs to achieve healthy air quality
- ▶ To continuously improve the scientific understanding of air pollution
- ▶ To promote through grants and other forms of assistance measures and programs to reduce air pollution and promote lower- and zero-emitting technologies

# Legislative Timeline

- ▶ Pre-1970
- ▶ 1970 Clean Air Act – Basic structure of modern Act
- ▶ 1977 Amendments (PSD, mobile standards, regional haze)
- ▶ 1990 Amendments
  - ▶ Expanded Section 112 for hazardous air pollutants
  - ▶ Expanded nonattainment planning requirements
  - ▶ Acid Rain Program (Title IV) & other market-based programs
  - ▶ Operating Permits (Title V)
  - ▶ Stratospheric Ozone (Title VI) (AIM Act of 2020)
- ▶ 2005 and 2007 – Renewable Fuel Standard (RFS)
- ▶ 2022 Inflation Reduction Act – GHG programs

# What Is Air Pollution?

- ▶ Act contains a very broad definition of air pollutant (302(g))
- ▶ Criteria Air Pollutants (NAAQS) and their precursors (108-109)
- ▶ Hazardous Air Pollutants (HAPs) (112)
- ▶ Stratospheric Pollutants (CFCs, etc.) (Title VI)
- ▶ Other Pollutants (including GHGs) (111, 165, Title II)

# Organizational Structure – Cooperative Federalism

- ▶ EPA sets the NAAQS to protect public health and welfare
- ▶ NAAQS implementation: SIPs and FIPs under Section 110, etc.
  - ▶ States design state implementation plans (SIP) to attain and maintain healthy air quality and submit them to EPA
  - ▶ EPA approves or disapproves the plans. If a state does not submit a plan, EPA makes a “finding of failure to submit.”
  - ▶ If approved, the requirements in the SIP become enforceable federal law under Sections 113 and 304.
  - ▶ If EPA disapproves a SIP, then EPA must promulgate a FIP.
- ▶ A similar framework applies for “regional haze” (visibility program for Class I areas), permitting programs, and section 111(d).
- ▶ Tribes can obtain “treatment as state” or EPA can directly regulate in areas of tribal jurisdiction

# Organizational Structure – Direct EPA Implementation

- ▶ New Source Performance Standards for new and modified stationary sources (111(b)) & Solid Waste Combustion (129)
  - ▶ Best System of Emissions Reduction (considering cost and other factors)
  - ▶ NAAQS and non-HAP pollutants (111(d) excludes HAPs and NAAQS)
- ▶ Air Toxics or NESHAPs (112)
  - ▶ Maximum Achievable Control Technology (MACT) w/ residual-risk review
  - ▶ New and existing sources; major sources and area sources
- ▶ Mobile Source Standards (Title II)
  - ▶ Technology-based standards for engines and vehicles
  - ▶ Standards for fuels and fuel additives & RFS programs
- ▶ Stratospheric Ozone (Title VI)



# Permitting Programs

- ▶ Construction Permits - New Source Review (NSR) (Title I, Part D)
  - ▶ Nonattainment NSR – Lowest Achievable Emissions Rate + Offsets
  - ▶ Prevention of Significant Deterioration (PSD) – Best Available Control Technology
  - ▶ Permits must address all pollutants under the Act
- ▶ Title V Operating Permits
  - ▶ Compiles all applicable requirements into a single permit for each facility
  - ▶ Provides for compliance assurance, transparency, and practical enforceability
  - ▶ Public can petition EPA for review of permits
- ▶ States generally run these programs, following approval by EPA.

# Enforcement, Judicial Review, Role of Courts

- ▶ Virtually every duty in the Act is subject to a deadline
- ▶ EPA and states share enforcement responsibility (113)
- ▶ The public can enforce the Act through “citizen suits” (304)
  - ▶ Deadline or unreasonable delay suits against EPA
  - ▶ Other violations
- ▶ Federal appellate courts directly review EPA actions under the Act (307(b))
- ▶ Rulemaking procedures and legal standards for review (307(d))

# Air Pollution Trends

- ▶ The Clean Air Act and its Amendments have been successful in reducing air pollutant emissions
- ▶ Significant reductions in:
  - ▶ Nitrogen oxides (NOx)
  - ▶ Sulfur dioxide (SO<sub>2</sub>)
  - ▶ Carbon monoxide (CO)
  - ▶ Particulate matter (PM)
  - ▶ Volatile Organic Compounds (VOCs)

Source: Dan Loughlin (EPA ORD)

## Percent change in US emissions of air pollutants

