

Chapter 2

The Clean Air Act

Roadmap

- Understand the role of common law approaches to air pollution control.
 - Learn what criteria pollutants are.
 - Comprehend how National Ambient Air Quality Standards are established.
 - Understand how State Implementation Plans are devised as a means of regulating criteria pollutants.
 - Learn the Clean Air Act's approach to limiting emissions of hazardous air pollutants.
 - Grasp the requirements that apply to new and modified sources of air pollution in clean air (attainment areas) and dirty air (nonattainment areas).
 - Comprehend Clean Air Act requirements that pertain to air pollution from motor vehicles.
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I. Introduction and Overview

Air pollution presents serious problems for public health, property, and the natural environment. It has been linked to increases in premature deaths and in rates of illness—particularly among babies and infants, the elderly, and people with preexisting respiratory or cardiac conditions. It also may inflict extensive and costly damage on buildings, materials, and food crops and other plants, and it may dim visibility.

In this chapter, we will examine the United States' legal response to the air pollution problem. After considering the private common law of air pollution, we will focus on key facets of the Clean Air Act, an important, comprehensive federal statute that was passed (in its modern form) in 1970, and amended by Congress in 1977 and 1990.

We will look first at the Act's scheme for regulating "criteria pollutants," the most common types of air pollution, through the establishment of national standards of outdoor air purity (the so-called "National Ambient Air

Quality Standards” or “NAAQS”), and State Implementation Plans (“SIPs”), i.e., state-by-state requirements intended to attain (or maintain) NAAQS by establishing enforceable air pollution control requirements. We will then turn to the controls on hazardous air pollutants mandated by the Act. From there, we will focus on the Clean Air Act’s treatment of new sources of air pollution, both in dirty air areas in which NAAQS have not been attained and in clean air regions where those ambient air quality standards are being attained. Finally, we will consider the way in which this legislation imposes controls on air pollution emitted by motor vehicles.

II. Common Law Approaches to Air Pollution Control

While most modern law of air pollution control is based upon federal legislation, the common law doctrines of nuisance and trespass have retained vitality as sources of law regarding air pollution problems. Along with local smoke ordinances, these doctrines were the foundations of the Clean Air Act. The earliest smoke abatement legislation was enacted in London in the thirteenth century, and private common law actions regarding air pollution have their roots in early English common law.

One issue that has arisen in modern air pollution nuisance cases involves the remedy to be awarded to a prevailing plaintiff. In *Boomer v. Atlantic Cement Co.*, 257 N.E.2d 870 (1970), the New York Court of Appeals declined to enjoin the operation of a cement plant that was damaging adjoining properties by emitting smoke and vibrations onto them. Although the plant’s activities were creating a private nuisance, the court took note of the fact that the total damage to the plaintiff’s properties was relatively small in comparison with the value of the defendant’s operation and the consequences of issuing an injunction. As a result, over a vigorous dissent, the court required the defendant to instead pay permanent damages to the plaintiffs to compensate them for their present and future property losses.

The U.S. Supreme Court took a different approach in a public nuisance case, *Georgia v. Tennessee Copper Co.*, 237 U.S. 474 (1915). There, air pollutants from a copper smelter were harming some nearby small farms. The Court granted an injunction but allowed the defendant smelting company time to devise a technological solution to its emission problem. In the meanwhile, the Court established a claims process to compensate the plaintiff farmers. This judicial approach presaged the “technology forcing” policy of the Clean Air Act discussed below.

Another remedial approach in air pollution nuisance matters, adopted by the Supreme Court of Arizona, is the “compensated injunction.” In most states, no recovery is permitted in a nuisance case where the plaintiff has “come to the nuisance,” i.e., located its development in a community after a nuisance was already in place. In *Spur Industries, Inc. v. Del Webb Development Co.*, 494 P.2d 700 (Ariz. 1972), however, the court created an exception to that doctrine. It enjoined the operation of a smelly cattle feedlot that had been present in a rural part of Arizona before a retirement community was built close to it. However, it also required the plaintiff retirement community developer to reimburse the feedlot owner for the expense of moving or closing.

Although state common law claims generally remain available to redress air pollution problems, federal common law claims have been displaced where the Clean Air Act empowers EPA to regulate the pollutant in question. This is the case with respect to both claims for damages and requests for injunctive relief. See *Native Village of Kivalina v. Exxon-Mobil Corp.*, 639 F.3d 849 (9th Cir. 2012); and *American Electric Power Co., Inc. v. Connecticut*, 564 U.S. 410 (2011).

III. The Clean Air Act

A. National Ambient Air Quality Standards and State Implementation Plans

1. Setting National Ambient Air Quality Standards

The Clean Air Act creates several distinct sets of requirements for the control of air pollution from stationary sources (like factory smokestacks) and mobile sources (such as cars and trucks). A central part of the Act calls for the regulation of “criteria pollutants,” i.e., air pollutants from different sources that may reasonably be anticipated to endanger public health or welfare. Clean Air Act § 108, 42 U.S.C. § 7408. The U.S. Environmental Protection Agency (“EPA” or “the Agency”) was initially required to identify such pollutants, and to prepare “air quality criteria” documents for each of them that indicate their effects on public health and welfare, and the techniques available to prevent or control their emissions. *Id.* EPA has done this with respect to six commonly emitted air pollutants: sulfur dioxide, nitrogen oxide, carbon monoxide, ozone, suspended particulate matter, and lead.

After identifying criteria pollutants, and reporting on their impacts and possible controls, EPA must establish National Ambient Air Quality Standards

(NAAQS) for each criteria pollutant. These standards are to reflect the levels of outdoor air purity that are neither necessary to protect public health and public welfare. Health-based standards are referred to as “primary standards.” Welfare-protective standards are known as “secondary standards.” Clean Air Act § 109, 42 U.S.C. § 7904.

In contrast to other parts of the Clean Air Act, and other environmental statutes, it has been firmly established that considerations of economic cost may play no part in the promulgation of NAAQS. The protection of public health “with an adequate margin of safety” is the only pertinent factor to be used in setting those standards. *Lead Industries Association, Inc. v. EPA*, 647 F.2d 1130 (D.C. Cir. 1980); *Whitman v. American Trucking Association, Inc.*, 531 U.S. 457 (2001).

Although they are often controversial, and frequently challenged in lawsuits, EPA’s NAAQS have generally fared well under judicial review. A paradigmatic illustration of this is *Lead Industries Association, Inc. v. EPA*, 647 F.2d 1130 (D.C. Cir. 1980), in which the D.C. Circuit upheld the health-and-welfare-based standards the Agency had established for lead. Rejecting the industry challengers’ contentions, the court declared that “requiring EPA to wait until it can conclusively demonstrate that a particular effect is adverse to health before it acts is inconsistent with both the Act’s precautionary and preventative orientation and the nature of the [EPA] Administrator’s statutory responsibilities.” *Id.* The court went on to review the agency’s lead NAAQS and supporting data in considerable detail, concluding that the standards were based on sound decisions regarding the health effects of lead, and did not exceed the adequate margin of safety required by the statute. The court also accepted EPA’s conclusion that a secondary standard for lead more stringent than the primary standard was necessary. *Id.*

2. What Must a State Implementation Plan Contain?

Once EPA has established NAAQS for criteria pollutants, individual states are required to identify air quality control regions within their borders that do and do not meet the standards. Clean Air Act, § 110, 42 U.S.C. § 7410. Regions whose air quality meets the NAAQS for a pollutant are considered “attainment areas” for the pollutant in question. Areas where the standards are not being met are referred to as “nonattainment areas.”

Each state must then adopt a State Implementation Plan (“SIP”) containing enforceable emissions limitations that will result in the attainment and maintenance of NAAQS in all air quality control regions within the state. *Id.* SIPs must meet a detailed list of conditions set forth in the statute; and they

must be the subject of a public hearing prior to their adoption. Clean Air Act § 110(a)(2), 42 U.S.C. § 7410(a)(2).

Once a state has adopted a SIP, it must submit its plan to EPA for approval (in whole or part), conditional approval, or disapproval. Where the Agency determines that a state's plan is not consistent with the Act's requirements—or a state entirely fails to submit a plan—EPA is authorized to adopt a binding Federal Implementation Plan ("FIP") for the state.

SIPs and FIPs generally contain specific and detailed substantive requirements governing the types and amounts of air pollutants that pollution sources are permitted to emit under both federal and state law. They are the source of many of the provisions incorporated in permits issued to individual emitting facilities, and they may be enforced by EPA (through the U.S. Department of Justice), state officials, and private citizens. *See* Clean Air Act § 110(a)(1), 42 U.S.C. § 7410(a)(1); Clean Air Act § 110(c)(1), 42 U.S.C. § 7410(c)(1); and Clean Air Act § 304, U.S.C. § 7604.

In nonattainment areas, SIPs must require already-existing stationary sources of air pollution to make use of "reasonably available control technology" ("RACT"), which is generally defined through the application of "Control Techniques Guidelines" ("CTGs") prepared by EPA. The latter describe RACT for particular kinds of sources, and the levels of controls that the technology in question may be expected to achieve. Moreover, nonattainment area SIPs must also contain any additional control measures for existing sources (such as fees, marketable permits, and auctions of emission rights) that are necessary to attain NAAQS. Clean Air Act §§ 172(c)(1), (2), and (3), 42 U.S.C. §§ 7502(c)(1), (2), and (3).

The Clean Air Act reflects an underlying theory of "technology-forcing," i.e., the legislation is designed to force regulated sources to develop and make use of pollution control devices that appear to be economically or technologically infeasible at the time applicable standards are established. As a result, the U.S. Supreme Court has held that claims of economic and technology infeasibility must be "wholly foreign" to EPA's review of a state-proposed SIP, and such claims may not be raised on judicial review. *Union Electric Co. v. EPA*, 427 U.S. 246 (1976).

The statute also contains a provision, commonly known as the "Good Neighbor Provision," that is intended to tackle the complex problem of efficiently and equitably controlling air pollution that is emitted in one state and causes harm in one or more other states. The Act mandates that upwind states design their SIPs to prohibit in-state sources "from emitting any air pollutant in amounts which will . . . contribute significantly" to downwind

states’ “nonattainment . . . or interfere with maintenance” of any NAAQS. See Clean Air Act § 110(a)(2)(D)(i), 42 U.S.C. § 7410(a)(2)(D)(i). In response to this provision, EPA devised a rule (“the Transport Rule”) to define what constitutes a “significant contribution” to downwind state nonattainment. First, an upwind state must produce one percent or more of an NAAQS in at least one downwind state. And second, to constitute a significant contribution, the upwind state’s cross-border air pollution must be capable of “cost-effective” elimination (as determined by EPA). This rule was upheld by the U.S. Supreme Court in *Environmental Protection Agency v. EME Homer Generation*, 134 S. Ct. 1584 (2014). The Court pronounced the rule both efficient and equitable since it achieves the required emission reductions at a lower overall cost while also subjecting states that have done relatively less in the past to control their pollution to stricter regulation. *Id.*

B. Regulation of Hazardous Air Pollutants

The initial approach to the control of hazardous air pollutants—also sometimes called “air toxins” or “HAPs”—required EPA to establish health-based standards for individual pollutants from specific sources. These regulations were referred to as National Emission Standards for Hazardous Air Pollutants (“NESHAPS”), and some of those standards remain in force today. See 40 C.F.R. pt. 61. Perhaps the most significant of the NESHAPS is the standard for asbestos demolition and renovation, which requires that asbestos be handled using specific workplace techniques. See 40 C.F.R. § 61.1145(c)(2). This regulation has been the basis for a significant number of federal criminal enforcement cases.

When the Clean Air Act was amended in 1990, however, Congress established a new, more comprehensive approach to the regulation of HAPs. The amended Act included a list of 189 specific toxic substances that were presumed to require strict control. See Clean Air Act § 112(b)(1), 42 U.S.C. § 7412(b)(1). EPA was required to publish a list of all categories and sub-categories of “major sources” of the toxic substances listed in the statute, and to establish technology-based emissions standards for each such category or sub-category for both new and hazardous pollutant sources. Clean Air Act §§ 112(c)(1) and (2), 42 U.S.C. §§ 7412(c)(1) and (2). The Agency must also periodically review Congress’ list of air toxins and add to that list when an unlisted pollutant is found to threaten adverse effects on human health or the environment. Clean Air Act § 112(b)(2), 42 U.S.C. § 7412(b)(2). In addition, “any person” is permitted to petition EPA for the addition or deletion of any substance from the statutory air toxins list; and the Agency may add or

delete a substance from the list upon a persuasive showing that the substance may or may not reasonably be anticipated to cause “any adverse effects to the human health or adverse environmental effects.” Clean Air Act § 112(b)(3), 42 U.S.C. § 7412(b)(3).

The amended Clean Air Act set forth a timetable for EPA to adhere to in establishing standards for HAPs. *See* Clean Air Act § 112(e), 42 U.S.C. § 7412(e). For major sources, those standards were to be based upon the maximum available control technology (“MACT”). With regard to new major sources, MACT standards must reflect the level of emission control achieved in practice by the best controlled similar sources. Clean Air Act § 112(d)(3), 42 U.S.C. § 7412(d)(3). MACT standards for existing sources of air toxins may be less stringent than new source MACT requirements, but they must nonetheless be within specific statutorily prescribed limitations. *Id.* And EPA is authorized to promulgate less demanding standards, based upon “generally available control technologies or management practices” (“GACT”) for smaller sources—known as “area sources”—that are too small to be classified as major sources of HAPs. Clean Air Act § 112(d)(5), 42 U.S.C. § 7412(d)(5).

The statute also requires EPA to study and report to Congress on any public health risks that will remain after MACT standards have been implemented and on “the technologically and commercially available methods and costs of reducing such risks.” Clean Air Act § 112(f), 42 U.S.C. § 7412(f). Where Congress fails to act on any recommendation contained in this EPA report, the Agency may then set additional standards regarding air toxin emissions that will further protect public health “with an ample margin of safety.” Clean Air Act § 112(f)(2), 42 U.S.C. § 7412(f)(2).

EPA’s definitions of “major sources” within particular industrial categories and sub-categories have been the subject of litigation. For example, in *National Mining Association v. United States Environmental Protection Agency*, 59 F.3d 1351 (D.C. Cir. 1995) industry petitioners challenged an EPA decision to determine whether a site is a major source by taking account of all emissions from the site that are on a contiguous plant site under common control. The court rejected the petitioners’ contentions, concluding that “EPA’s definition of major source . . . is faithful to the language of [Clean Air Act] § 112(a)(1). . . .” *Id.* On the other hand, a divided U.S. Supreme Court remanded EPA’s regulations regarding hazardous air pollutants from power plants on the basis that the Agency had failed to find that such regulations were “appropriate and necessary” when it did not consider cost in its initial decision to develop those regulations. *See Michigan v. Environmental Protection Agency*, 135 S. Ct. 2699 (2015).

C. Requirements Applying to New Sources of Air Pollution

1. *Limitations on New Sources in “Nonattainment Areas”*

New and modified stationary sources of air pollution in designated non-attainment areas must meet two sets of Clean Air Act requirements: New Source Performance Standards (“NSPS”) and New Source Review (NSR). To establish an NSPS, EPA is required to publish (and from time to time revise) a list of categories of stationary sources that cause or contribute significantly to air pollution “which may reasonably be anticipated to endanger public health or welfare.” Clean Air Act § 111(b)(1)(A), 42 U.S.C. § 7411(b)(1)(A). EPA must then propose and promulgate “standards of performance” for the listed categories. These standards must reflect “the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health or environmental impact and energy requirements) the [EPA] Administrator determines has been adequately demonstrated.” Clean Air Act § 111(a)(1), 42 U.S.C. § 7411(a)(1). The Agency carried out this mandate by promulgating NSPS to be specifically applied to designated source categories (e.g., iron and steel mills, pulp and paper plants, and electroplating facilities).

Parties who wish to construct major new air polluting sources in dirty air regions are also subject to a more stringent set of requirements, generically referred to as “New Source Review.” These sources must first comply with technology-based standards based upon the “lowest achievable emission rate” (“LAER”), i.e., the most stringent achievable emission standard contained in the implementation plan of any state for the class or category of source in question, or any more stringent emission limitation that is achieved in practice for that source or category. Clean Air Act § 173(a)(2), 42 U.S.C. § 7503(a)(2) and Clean Air Act § 171(3), 42 U.S.C. § 7501(3).

Second, new and modified stationary sources in nonattainment areas must comply with “emission offset requirements,” i.e., legally enforceable reductions from existing sources in the same nonattainment area above and beyond any reductions that would otherwise be required for those other sources. Clean Air Act § 173(a)(1)(A), 42 U.S.C. § 7503(a)(1)(A).

Third, the owner or operator of any proposed new or modified source within a nonattainment area must demonstrate that all major stationary sources it owns or operates in the same state are in compliance or on a schedule for compliance with all applicable Clean Air Act emission limitations and standards. Clean Air Act § 173(a)(3), 42 U.S.C. § 7503(a)(3). And finally, proposed

new or modified nonattainment area source owners or operators must demonstrate that the benefits of their proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification. Clean Air Act § 173(a)(5), 42 U.S.C. § 7503(a)(5).

Proposals to approve new sources in nonattainment areas are sometimes challenged on the basis that the proposed offset emission reductions are contrary to the Act's requirements. *Citizens Against the Refinery's Effects, Inc. v. United States Environmental Protection Agency*, 643 F.2d 183 (4th Cir. 1981) was such a case. There a company wished to build a new refinery in a nonattainment area for ozone. It proposed to offset its hydrocarbon emissions by arranging with the Virginia Highway Department to decrease the Department's usage of a certain type of asphalt. The Virginia State Air Pollution Control Board approved this plan, as did EPA. In a challenge by a citizens group to the state and federal decisions that attempted to prevent the new refinery's construction, the Fourth Circuit rejected the plaintiff's arguments that EPA had used the wrong base year to compare usage of cutback asphalt, and that other aspects of its rationale for ratifying the state's approval of the new refinery had been arbitrary and capricious. The court reasoned that Congress had intended that the states and EPA be given flexibility in designing SIPs and the terms of permits, and that the governments' actions were neither arbitrary nor capricious. *Id.*

2. New Source Limitations in Attainment Areas

Major new or modified sources of criteria pollutants in (mainly rural) areas, where existing air quality is cleaner than the NAAQS, are also required to meet two sets of requirements: New Source Performance Standards (NSPS), as described above, and separate standards to prevent the "significant deterioration" of air quality ("PSD"). Beyond preventing adverse effects on public health, PSD rules are intended to promote economic growth in a manner consistent with preserving clean-air resources, and to protect air quality in and around national parks and other areas of natural or scenic value. Clean Air Act § 160, 42 U.S.C. § 7470.

PSD requirements apply to "major emitting facilities." This term is defined in the Act as a stationary source of any air pollutant(s) that appears on a statutory list of types of sources and emits (or has the potential to emit) 100 tons per year or more of a criteria pollutant. The term also includes any non-listed source with the potential to emit 250 tons per year or more of any air pollutant. Clean Air Act § 169(1), 42 U.S.C. § 7479(1).

Under the statute, states are required to classify their attainment areas into Classes I, II, or III, based on how pristine their outdoor air is measured

to be. These classifications differ in the maximum amounts of air pollutant increases that are allowed in them. Class I areas, the cleanest, receive the strictest protections. Class III areas, where air quality is already more degraded, are permitted the highest maximum allowable increases in pollution. *See* Clean Air Act §§ 162 and 163(b), 42 U.S.C. §§ 7472 and 7473(b). The attainment area classifications may be re-designated by individual states, under limited conditions, as long as those states follow a specified procedure that includes an analysis of the impacts of re-designation, public hearings, consultation with federal land managers, and approval by EPA. Clean Air Act § 164, 42 U.S.C. § 7474.

Entities that wish to construct or modify major emitting facilities in attainment areas must meet several requirements to satisfy the statute. They must apply for “preconstruction permits” from EPA or state officials. They must also do a number of other things, including: (i) demonstrating that emissions from their proposed facility will not cause or contribute to air pollution in excess of the NAAQS or any maximum allowable pollutant concentration for the class of nonattainment area in which they are located, (ii) preparing an air quality impact analysis on any growth that will be associated with their proposed facility, (iii) showing that their facility will utilize the best available control technology (“BACT”) for every regulated pollutant it will emit, and (iv) agreeing to conduct emissions self-monitoring to determine the impact of their facility’s emissions on air quality. Clean Air Act § 165(1), 42 U.S.C. § 7475.

The statute generally defines BACT as “an emissions limitation based on the maximum degree of [pollutant] reduction . . . which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is available for [the] facility.” Clean Air Act § 169(1), 42 U.S.C. § 7479(1). In most instances, the “permitting authority” that makes case-by-case decisions as to what control measures constitute BACT is the state in which a new or modified facility in a clean air area is proposed. However, in an important decision, the U.S. Supreme Court has made clear that EPA has “supervisory authority” over the reasonableness of state permitting authorities’ BACT determinations; and the Agency may issue a stop construction order if a BACT selection is not reasonable. *See Alaska Department of Environmental Conservation v. Environmental Protection Agency*, 540 U.S. 461 (2004).

D. Air Pollution Controls on Motor Vehicles

Motor vehicles emit a substantial proportion of several designated criteria pollutants. In recognition of the hazards posed by motor vehicle pollution,

the Clean Air Act established standards limiting motor vehicle tailpipe emissions and regulating the contents of vehicle fuels and fuel additives.

The Act directed EPA to establish standards “applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in [EPA’s] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” Clean Air Act § 202(a)(1), 42 U.S.C. § 7521(a)(1). EPA’s new vehicle standards were required to “reflect the greatest degree of emission reduction achievable through the application of available technology . . . giving appropriate consideration to cost, energy, and safety factors associated with the application of such technology.” Clean Air Act § 202(a)(3)(A)(i), 42 U.S.C. § 7521(a)(3)(A)(i). These standards must apply during the “useful life” of a vehicle, as defined in the statute. Clean Air Act § 202(a)(1), 42 U.S.C. § 7521(a)(1). EPA adhered to Congress’ mandate. It promulgated separate sets of emission standards for light-duty passenger vehicles, light-duty trucks, motorcycles, and heavy-duty trucks. *See* 40 C.F.R. pt. 86. It also banned lead additives in gasoline, a measure that has been credited with the immense improvement in public health, particularly among children.

The Clean Air Act generally preempts state regulation of motor vehicle emissions. Clean Air Act § 209(a)(1), 42 U.S.C. § 7543. However, Congress created a special exception for the State of California because its state laws already regulated mobile sources prior to passage of the federal statute. Clean Air Act § 209(b), 42 U.S.C. § 7543(b). California is permitted to set its own vehicle standards up to two years before the commencement of any vehicle model year, and all other states may adopt standards of their own as long as they are identical to those adopted in California. Clean Air Act § 177, 42 U.S.C. § 7507.

EPA is also required to conduct a testing program on samples of new cars that must be provided by the manufacturer. Vehicles that pass Agency testing receive a “certificate of conformity,” which is legally required before any motor vehicle may be sold in the United States. Clean Air Act § 206, 42 U.S.C. § 7525. Parties who sell vehicles without a certificate of conformity are subject to steep civil penalties. The Act also creates penalties for persons who “remove or render inoperative” any automobile pollution control device, or who knowingly manufacture or sell any part or component that will “bypass, defeat or render inoperative” a vehicle pollution control device. Clean Air Act §§ 203(a)(3)(A) and (B), 42 U.S.C. §§ 7522(a)(3)(A) and (B).

Checkpoints

- The common law doctrines of nuisance and trespass have retained vitality as sources of law regarding air pollution problems.
- Courts vary in the approaches they have taken with respect to the remedy to be awarded successful plaintiffs in common law air pollution nuisance cases.
- “Criteria pollutants” are air pollutants from different sources that may reasonably be expected to endanger public health or welfare.
- The Clean Air Act requires EPA to identify criteria pollutants and to prepare “air quality criteria” documents for each identified criteria pollutant that indicate the effects on public health and welfare of those pollutants and techniques available to control their emission.
- EPA must also establish National Ambient Air Quality Standards for each criteria pollutant reflecting the level of air purity necessary to protect the public health (with an adequate margin of safety) and the public welfare. Areas that have air cleaner than the standards required are deemed “attainment areas.” Dirtier air regions are known as “nonattainment areas.”
- Considerations of economic costs may play no part in the setting of health-based National Ambient Air Quality Standards.
- Individual states are required to adopt State Implementation Plans containing enforceable emissions limitations that will result in the implementation and maintenance of National Ambient Air Quality Standards.
- State Implementation Plans must be submitted to EPA for review. Where the federal agency determines that a state’s plan is inconsistent with the Act, EPA may create a binding Federal Implementation Plan for the control of criteria pollutants in the state.
- The Clean Air Act is technology-forcing legislation, i.e., legislation designed to force regulated entities to develop and use new pollution control devices and techniques where such techniques are not technically or economically feasible.
- The current Clean Air Act contains an extensive list of hazardous air pollutants.
- EPA is required to publish a listing of all categories and subcategories of major sources of all listed hazardous air pollutants and to develop maximum available control technology standards for those sources.
- New and modified sources of air pollutants in nonattainment areas must meet New Source Performance Standards (requiring the use of best demonstrated control technology in each source category) and New Source Review (mandating use of air pollution control technology that will achieve the “lowest achievable emission rate” and “offsets” to any new pollution those new or modified sources will create through reductions of pollutant emissions from existing sources.)

- In attainment areas, new or modified sources must meet both New Source Performance Standards and Prevention of Significant Deterioration Standards.
- Under Prevention of Significant Deterioration requirements, states are required to classify their attainment areas based on how clean their air is.
- Entities that wish to construct new or modified sources in attainment areas must obtain preconstruction permits requiring, among other things, the use of the best available control technology.
- As directed by Congress, EPA has created new motor vehicle emissions standards that reflect the greatest degree of emission reduction achievable throughout the useful life of the vehicle.
- EPA is required to test samples of new cars, which must be supplied by auto manufacturers, for compliance with applicable standards.
- Passing EPA's tests is a prerequisite to obtain the "Certificate of Conformity" that is required before a vehicle may legally be sold in the United States.