

Quick Reference: Clean Air Act (CAA)

Codified: 42 U.S.C. §7401 *et seq.*

Regulations: 40 C.F.R. pts. 50-96

Date Enacted: The original Clean Air Act was passed in 1970.

Amendments: The 1977 Amendments provided for the prevention of significant deterioration of areas with clean air and imposed tougher standards for those areas that remained out of compliance. Point source standards, however remained largely inapplicable to existing facilities. The last series of amendments to the CAA were enacted in 1990, which expanded the number of facilities subject to point source regulation by exerting control over existing sources as well as new sources.

Implementing Agency: EPA

Purpose: To control air pollution by instituting point source controls and establishing maximum pollutant levels for the ambient air.

Scope of Application: The CAA focuses on the regulation of stationary sources of air pollution but also provides some regulation for mobile sources.

Permit Required: Every source regulated under the Act must have a permit. Regulated sources include major stationary sources, any hazardous air pollution source, sources subject to new source performance standards, and any other source that the EPA determines via rulemaking procedures to be included in the permit program. Permits are issued for a maximum of five years at a time.

State Implementation: As required by the 1970 Clean Air Act, the EPA must establish national ambient air quality standards (NAAQS) for pollutants that may endanger public health or welfare and that result from numerous and diverse sources. The pollutants regulated by NAAQS standards are referred to as criteria pollutants. Currently there are six criteria pollutants: total suspended particulates, sulfur dioxide, nitrogen oxides (NO_x), carbon monoxide, ozone, and lead. Once NAAQS are developed by the EPA, each state is required to determine how to attain and maintain NAAQS by developing a State Implementation Plan (SIP). SIPs are submitted to the EPA for approval. The control measures included in a SIP depend on whether or not the state areas are in attainment (whether the areas meet NAAQS).

The 1977 Amendments further required that states implement a program to prevent the significant deterioration of air quality in those areas that exceed the NAAQS.

Enforcement: Violation of the CAA can result in civil penalties, criminal penalties, bounties, or field citations for minor violations. The EPA may assess civil penalties up to \$25,000 per day for certain specified violations of the Act. In addition to penalties assessed under section 113(b), penalties may be assessed under section 120 to remove any economic benefit that an operator may receive from noncompliance. The CAA is enforced through the EPA or through the Act's citizen suit provision.

Prepared by: Sanne Knudsen, College of Engineering, University of Michigan



Published by: Center for Sustainable Systems, 430 E. University, Ann Arbor, MI, 48109-1115
Phone: 734-764-1412, Fax: 734-647-5841, <http://css.snre.umich.edu>

Summary of the major provisions: As noted, the Clean Air Act requires the EPA to set NAAQS for pollutants that threaten the health of the public and the environment. Currently, there are NAAQS for six criteria pollutants. Each individual state develops a State Implementation Plan (SIP) that specifies a plan for meeting attain the NAAQS within the state.

In addition to regulating air pollution through ambient air quality standards, the CAA regulates stationary sources through a permitting program in Title V. Different standards are imposed on existing versus new or modified facilities. New or modified sources are subject to new source performance standards (NSPSs) and must obtain preconstruction permits. NSPSs are developed by the EPA for classes of facilities that the EPA determines cause or contribute significantly to air pollution. The requirements of a preconstruction permit depend on the area in which the new or modified facility is located. If the new or modified source will be located in an attainment area, then the source must obtain a prevention of significant deterioration (PSD) permit, which requires the emitting facility to show that it will not cause the area to fall out of attainment. If the new or modified source is located in a nonattainment area, the source must obtain a non-attainment area permit and offset emissions so that the nonattainment can further its progress toward becoming an attainment area.

The CAA also regulates hazardous air pollutants. The 1990 amendments list 189 hazardous air pollutants. The EPA may add a pollutant to this list if it threatens adverse human health effects or adverse environmental effects. For each pollutant, the EPA promulgates standards that require the installation of technology that will result in the maximum achievable reductions.

With the enactment of the 1990 Amendments, Title VI of the CAA implements the *Montreal Protocol* by phasing out substances like CFCs, halons, carbon tetrachloride, methyl chloroform.

