



Air Pollution Operating Permit Program Update

Key Features and Benefits

A collage of three overlapping, semi-transparent images of industrial facilities. The top image shows a large plant with multiple smokestacks emitting white plumes of smoke. The middle image shows a closer view of industrial structures and piping. The bottom image shows a large industrial building with a complex roof structure.

*Title V
Operating Permit*





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Key Features and Benefits



What Is the Operating Permit Program?

Each year in the United States, industrial operations emit nearly 100 million tons of pollutants into the air. These include pollutants that make breathing difficult, form urban smog, impair visibility, and attack ecosystems. Some of these pollutants also cause cancer or other serious health effects. Among the many pollutants emitted into the air each year are sulfur dioxide, nitrogen dioxides, carbon monoxide, benzene, mercury, and dioxin. Many of the sources of this air pollution are large facilities, such as petroleum refineries and chemical plants, that can have literally thousands of potential emission points. Finding common-sense solutions to reduce this air pollution is a constant challenge to local communities and federal, state, and tribal governments.

In 1990, Congress established one such innovative program under Title V of the Clean Air Act Amendments. The operating permit program

streamlines the way federal, state, tribal, and local authorities regulate air pollution by consolidating all air pollution control requirements into a single, comprehensive “operating permit” that covers all aspects of a source’s year-to-year air pollution activities. The program is designed to make it easier for sources to understand and comply with control requirements, and results in improved air quality. Over the past several years, EPA worked with state and local governments to establish operating permit programs in every state, including 60 local programs, as well as programs in the District of Columbia and other territories. EPA, working with industry, state and local governments, and others, also initiated efforts to streamline and substantially simplify the permit program requirements, which resulted in increased flexibility to industry and states. Through these efforts, state and local agencies have already issued thousands of permits nationwide.

Why Is the Program Necessary?

Congress created the operating permit program to ensure better compliance and to allow for more thorough air pollution control. Prior to 1990, the federal Clean Air Act required permits only for new construction. It required that states issue air pollution permits to businesses that build new pollution sources or modify existing pollution sources. In creating these permit programs—known as “preconstruction” or “new source review” permit programs—some states also chose to establish enhanced programs for regulating air pollution emissions from sources already in operation. These “operating permit programs,” though not uniform in requirements or other characteristics, proved to be effective tools for air pollution control. With Title V of the 1990 Clean Air Act Amendments, Congress adopted measures that require *all* states to develop and implement

operating permit programs. In doing so, Congress hoped to eliminate any potential confusion associated with the various air pollution emission reduction programs required by the federal Clean Air Act and different state and local regulations. Under Title V, EPA must establish minimum elements to be included in all state and local operating permit programs, and then assist the state and local governments in developing their programs. EPA modeled its air pollution operating permit program after pre-existing state and local operating permit programs and after a similar program which has proven successful

The operating permit program is an innovative national permitting system that streamlines the regulation of air emissions.

under the Clean Water Act for permitting the discharge of water pollutants. EPA officially launched the operating permit effort in 1992 with regulations for implementing such programs.

The goals of the permit program include:

- Develop a comprehensive permit system that identifies and implements the Clean Air Act requirements for air pollution sources.
- Provide an opportunity for citizens to be involved in the permit review process.

- Improve compliance with emissions control requirements.

The operating permit program is meeting these goals and is achieving enhanced compliance with air pollution requirements for industrial and commercial sources. Nationally, an estimated 22,000 sources of air pollution are required to obtain permits under operating permit programs administered by 113 state, territory, and local permitting authorities.

How Does the Program Work?

The Clean Air Act requires all states to develop and implement an operating permit program that meets minimum federal requirements. Most of the significant air pollution sources throughout the country must obtain a permit from their respective state, tribal, or local permitting authority.

All “major” stationary sources (primarily industrial facilities and large commercial operations) emitting certain air pollutants are required to obtain operating permits. Whether a source

meets the definition of “major” depends on the type and amount of air pollutants it emits and, to some degree, on the overall air quality in its vicinity. Generally, major sources include those stationary facilities that emit 100 tons or more per year of a regulated air pollutant. Regulated pollutants include compounds such as carbon monoxide, particulates,

volatile organics, sulfur dioxide, and nitrogen oxides. Smaller sources are considered “major” in areas that are not meeting the national air quality standards for a particular pollutant. For example, certain sources releasing 25 or even

10 tons of pollutant emissions per year are considered “major” in areas with extreme ozone (urban smog) problems.

The operating permit program also covers a variety of other significant operations, including:

- Large coal-burning utility boilers and industrial boilers subject to control requirements under the acid rain provisions of the Clean Air Act.
- Sources that are subject to requirements under New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants.
- Sources of toxic air pollutants (i.e., any source that emits more than 10 tons per year of an individual toxic air pollutant or more than 25 tons per year of any combination of toxic air pollutants).
- Sources required to have pre-construction or new source permits (under New Source Review or Prevention of Significant Deterioration requirements).

Often these facilities can be very large with a wide variety of process operations and hundreds of emission sources. Examples include chemical plants, petroleum refineries, and large manufacturing facilities.

Each state and local government can tailor its permit program to its individual needs, while meeting minimum federal requirements.



The operating permit program covers most significant sources of air pollution in the United States. The more complex sources, such as large petroleum refineries and chemical production plants, can have hundreds or even thousands of emission points.

Photo: S.C. Delaney/EPA

Other key provisions of the operating permit program are as follows:

- Sources are required to provide emissions reports to their permitting authorities at least semiannually and must certify their compliance status annually.
- Sources must periodically renew their operating permit, generally every 5 years.
- To fund their programs, permitting authorities are required to collect permit fees from sources subject to the operating permit program. Fees are most frequently based on the amount of air pollutants that a source may emit.
- Public notification and opportunity for comment must be provided during the

permit review process for every new permit and when permits are renewed or significantly revised.

- EPA is responsible for overseeing the implementation of permit programs and may object to a permit that fails to comply with program requirements.
- EPA is also required to establish a federal permit program in any area where the permitting authority fails to develop and maintain an adequate program of its own.

It is also important to note that state and local governments can and do implement separate requirements that are appropriate for their unique local conditions.

Who Benefits From the Program?

The operating permit program is a dynamic program that offers significant benefits for the public, state and local governments, and industry.

The Public

Members of the public benefit from improved air quality, increased access to information about pollution control equipment, and enhanced opportunities for active participation in the permitting process:

- While developing permit applications for the operating permit program, a number of companies discovered control requirements of which they were unaware and subsequently took steps to comply with these requirements.
- Improved air quality is expected to result from improved compliance with emissions requirements.
- Permits and compliance monitoring records are available for public review.
- Before a permit is issued, renewed, or significantly revised, the public is provided an opportunity for review and input during a notification and comment period, which may include a public hearing.

State and Local Governments

State and local governments benefit from the operating permit program in several ways:



The operating permit program provides many opportunities for public input during the permitting process.

- The operating permit program provides a uniform and efficient mechanism that state and local agencies can use to consolidate and administer provisions of the Clean Air Act, as well as their own laws.
- The program provides all state and local permitting agencies with the authority to sustain their operations using direct permit fees, rather than general tax revenues.
- Improved industrial compliance with emission standards is expected to help state and local governments meet the national ambient air quality standards and possibly even avoid additional local emission controls.

Industry

Industrial facilities subject to the operating permit program also enjoy a number of important benefits:

- The permitting process resolves questions about what state, local, or federal requirements apply at a given emission point, enables industrial facilities to understand fully their compliance obligations, and assures that issued permits cover all applicable Clean Air Act requirements.
- The program reduces the waste and confusion inherent in redundant and/or contradictory requirements issued by state, local, and federal authorities. The operating permit consolidates multiple permit requirements into a single document to minimize duplicative requirements.
- The operating permit program can make it easier to incorporate flexible approaches to operations and to foster use of market-based emissions trading programs as a compliance tool. This reduces the burden of time-consuming permit amendments for facilities needing to make changes quickly or wishing to make emissions allowance trades.

How Is the Program Doing?

Since the official launch of the operating permit program in 1992, substantial progress exists on many fronts:

- EPA has approved permit programs for all 113 state, territorial, and local permitting authorities in the nation. EPA is also working with tribal governments to develop tribal permit programs. In the next few years, EPA expects several tribes to submit program plans for approval.
- As of January 1998, state and local permitting authorities received nearly 14,000 applications for operating permits—representing more than 60 percent of the estimated 22,000 sources subject to the program nationwide.
- State and local permitting authorities have issued nearly 3,000 Title V operating permits and hundreds of draft permits.
- Several thousand companies that would otherwise qualify as “major” sources have agreed to comply with air pollution emissions limits to maintain operations below levels that would trigger the operating permit program requirements. Some of these companies downsized and re-engineered their operations to reduce their emissions levels.

How Is EPA Improving the Program?

EPA, state, and local authorities continue to work closely with industry to improve the operating permit program. EPA is committed to achieving the following:

- Simplify the permit application process and permit content requirements.
- Streamline permit revision requirements.
- Increase the operational flexibility available to regulated businesses via flexible, facility-wide permitting.
- The first document outlined minimum federal requirements governing the permitting process. It streamlined the permitting process and enabled permitting authorities to quickly implement adjustments that reduced the complexity and cost of permit applications.
- A second document provided guidance on ways to reconcile and eliminate redundant and conflicting permit requirements. This helped clarify which permit requirements applied to a given facility. It also reduced industry’s burden of documentation and reporting without reducing the level of environmental protection attained.

Simplify Permit Applications and Content

Soon after the state and local permitting authorities began to implement their operating permit programs, EPA found that many of the first permit applications filed by industry were far more complex than intended. To address this problem, EPA worked with industry and state and local officials to develop two guidance documents that clarify the scope and intent of the operating permit program:

Both guidance documents are available on the World Wide Web at the address provided on page 6.

The permit program reduces industry’s reporting burden without reducing environmental protection.

Streamline Permit Revisions

No matter how well designed a permit might be, the potential always remains for unexpected operational changes within the permitted facility that might, for example, increase the facility's regulated emissions beyond its permitted allowances, or add new units that are not covered in the permit. In streamlining the permit revisions process, EPA's goals are to minimize the costs and administrative delays associated with permit revisions and to create incentives favoring pollution prevention techniques over source control. EPA expects to issue final procedures for permit revisions in 1998. These procedures will continue to provide for appropriate public review of permit changes without placing an unnecessary burden on a permittee.

Flexible, Facility-Wide Permitting

One company estimates that the added operational flexibility of its pilot permit can help save up to \$1 million a day.

Flexible, facility-wide permitting represents the frontline of innovation in the operating permit program. The concept involves developing permits that allow certain classes of pre-approved operational changes to occur without further regulatory review, provided that:

- Emissions from the facility do not exceed those allowed by a total emissions cap.
- The facility uses pre-approved pollution prevention technologies to reduce emissions when possible.

Under flexible, facility-wide permitting, companies benefit from enhanced operational autonomy and competitiveness; state and local permitting authorities benefit from reduced auditing and paperwork requirements; and the public benefits from cleaner air.

To develop the flexible, facility-wide permitting concept, EPA initiated the pollution prevention permitting pilot (P4) program. Based on the success of the first pilot permit issued to a computer chip manufacturing facility, other companies are participating in the pilot program. It promises to significantly enhance the efficiency and effectiveness of the operating permit program.

A Commitment to Continuous Improvement

The success of the operating permit program must finally be measured in terms of improved compliance with air pollution regulations and, ultimately, improved air quality. EPA is committed to continue working with state, tribal, and local governments and with industries to implement innovative advancements that will help industries meet their requirements as efficiently and flexibly as possible.

For More Information

For more information about the operating permit program, visit the EPA Web site at <http://www.epa.gov/oar/oaqps/permits> or contact your state or local air pollution control agency.

