

# Applying for and Complying with Air Permits

Tom Petersen and Allison Stalker

Environmental and Engineering Solutions Inc.

---

**Environmental permitting can be a confusing and time-consuming process for many facilities. Air permitting is no exception. Various types of industries and facilities, including hospitals, universities, manufacturing plants, and commercial buildings, may require air permits. This article will provide some tips and tools on applying for and complying with air permits.**

---

**R**eading and understanding federal, state, and local regulations that are relevant to your facility is the best way to determine if your facility is required to have an air permit. Federal regulations can be found on the EPA website ([www.epa.gov](http://www.epa.gov)) and the Federal Register. State and local regulations usually can be found on your state and city's environmental protection department website. For example, in New Jersey, regulations are found on the N.J. Department of Environmental Protection website under the "Division of Air Quality" section. This website and the EPA website offer a number of guides and fact sheets to help determine which regulations apply for your facility. Most regulatory agencies also provide contact information for people in the agency who can help determine what your facility needs to do to comply with air regulations at a federal, state, and local level.

At times, however, these regulations can become extremely confusing. It is advisable to contact someone who is knowledgeable on the variety and complexity of regulations involving air quality and air permit-

ting. Environmental consulting firms and engineering firms are a good place to start. One way to find a competent and knowledgeable consultant is to find reviews and testimonials for firms in your geographic area. Some local and state agencies also will have recommendations for firms or for people to contact who can provide reliable recommendations.

Certain states offer a Request for Determination (RFD) program, or something similar. This is an application that your facility can submit to the appropriate regulatory agency, which then will make a final determination on the air permitting requirements for your facility. In Pennsylvania, for example, this requires an online application in which you provide a description of the project or facility, the equipment being used, air emissions estimates, and any other pertinent information. The application is submitted online and a response, which details any further necessary action, is sent within about 30 days.

## The Next Step

Once you have determined if your facility needs an air permit, the next step is to determine what type. There are many types of permits and the right one for your facility depends on a few factors, such as whether the equipment at your facility — or your facility itself — is "existing" or "proposed." If the equipment is proposed, often a pre-construction air permit will be needed prior to equipment purchase and installation, and an operating permit would be necessary later.

Another important factor is the type, size, and quantity of equipment located at your facility. Larger op-

erations with a number of pieces of equipment and a high Potential to Emit (PTE) may need a Title V Operating Permit. This is a facility-wide, federally enforceable permit and — using Pennsylvania as an example — is necessary if the facility exceeds the following PTE thresholds:

- 10 tons per year or more of a specific hazardous air pollutant or 25 tons per year of a combination of hazardous air pollutants
- 100 tons per year of any other criteria contaminant. Fugitive emissions need not be included in the calculation to determine applicability unless the facility is one of the categories listed in Paragraph (ii) of the definition of “Title V facility in 25 Pa. Code Section 121.1”
- 50 tons per year of VOCs (in all areas but southeast Pennsylvania)
- 25 tons per year of VOCs and NO<sub>x</sub> in southeast Pennsylvania, which consists of the counties of Bucks, Chester, Delaware, Montgomery, and Philadelphia

Smaller facilities usually are required to have a natural or synthetic minor operating permit, typically issued and regulated by the state. The requirements necessary to comply with these types of permits vary greatly, so applying for the correct permit is essential. Title V permit holders will have increased record-keeping, reporting, and monitoring requirements, all of which can take more time and resources. It frequently is advantageous for the facility to consider staying out of Title V by accepting federally enforceable permit conditions limiting the facility’s air contaminant emissions.

Requirements for both Title V and minor permits can vary from state to state and city to city. In Philadelphia, for instance, certain facilities with a minor operating permit must complete nitric oxide and nitrogen dioxide reports during the ozone season (May through September), while other municipalities in the state do not require this.

Typically, the most time-consuming part of the permitting process is gathering the information necessary to complete the permit. The applications can be involved and require a great deal of specific information on your facility, the existing or proposed equipment, potential emissions calculations, and

methods of complying with restrictions. Gathering this information requires close coordination between the facility and the equipment suppliers. Finding correct and accurate information — especially regarding equipment specifications — often can be difficult. Consequently, make sure to allow an ample amount of time to complete the application and receive a response. The overall process can take from several months to more than a year for larger facilities or more highly regulated areas of the country, so planning ahead is essential.

Some state and local agencies offer pre-application meetings where representatives from your facility can meet with agency personnel to help determine all the information required for your permit application. The forms can be somewhat generic, since they have to pertain to a wide variety of industries. Scheduling a pre-application meeting can provide you with more specific information on the application for your facility. These meetings, if offered, are highly recommended. The more accurate and complete the application is, the easier the reviewing agency’s process for issuing the permit will be.

### Carefully Read the Permit

So, now you’ve applied for and received a draft version of the permit from the regulatory agency. The permit is based on the information in your application and the rules and regulations that will apply to your type of facility and equipment. At this point, thoroughly reading and examining the permit, taking notes on all restrictions, limitations, and compliance requirements, is crucial. These may include annual, monthly, or weekly monitoring, testing, recordkeeping, and reporting. Additionally, there may be limitations on hours of usage, type of fuel, amount of fuel, and monthly and annual emissions. If your facility has a concern about meeting any of the proposed permit conditions, you may contact the issuing agency and discuss any changes you desire. These comments or proposed changes must be provided to the regulatory agency while the permit is in draft form or a more complicated process ensues. There’s no guarantee that your facility will be granted the changes, but it is generally best to put your concerns on the record.

Fully understanding the proposed permit conditions and how your facility will be able to comply

with them is extremely important. Creating a list or spreadsheet that includes all tasks required for your facility is a great way to ensure compliance. Another idea is to enter all due dates and required tasks into an online calendar that has the capability of sending you an email a few weeks before requirements are due. Most email programs, including Gmail and Outlook, offer these types of services.

### **Besides the Permit**

While submitting all of the correct reports and documents is important, equally as important is making sure — on an ongoing basis — that your facility is meeting all limitations and restrictions set in the permit. For example, completing monthly calculations of the amount of pollutants that are being emitted into the atmosphere, as required by a permit, can help assure that the plant stays in compliance. By keeping track of these values, you won't be surprised at the end of the year by exceeding a limitation. You also will avoid violations and fines.

Sometimes ensuring compliance with your permit can become extremely time-consuming. In cases like this, consultants can help provide and track all permitting compliance reports, documents, and records. For instance, they might provide or help you set up an environmental binder or file in which to keep all records and reports required by the permit. Every time a record is completed, a report submitted, or another task related to the facility performed, a copy goes into the file so that all information is in one location. If there's ever an inspection, records are easily accessed, up-to-date, and understandable.

The final thing to keep in mind is to keep current with ever-changing environmental regulations.

Changes in federal, state, or local air regulations may alter the requirements necessary for your facility to stay in compliance with your air permit. At times, you will be notified of these changes by the regulatory agency in charge of your permit; however, you cannot and should not count on this. Staying aware of regulatory changes applicable to your facility is your responsibility. Consultants can help keep you informed of these changes, ensuring that your facility stays in compliance.

While becoming permitted and remaining in compliance requires much work, time, and energy, the avoidance of the headaches created by being out of compliance is well worth it. **APC**

---

*Tom Petersen has engineering degrees from Cornell University and Clemson University and more than 30 years of environmental engineering experience in air quality compliance, environmental permitting, strategic planning, and environmental control system design. Allison Stalker has a master's in environmental engineering from Drexel University, a bachelor's in acoustical engineering from Purdue, and several years of air permitting experience. Founded in 1996, Environmental and Engineering Solutions Inc. (EES) offers a range of environmental consulting and engineering services to clients in healthcare, higher education, chemical, pharmaceutical, printing/surface coating, food, and metals. For information, go to [www.eesolutions.net](http://www.eesolutions.net) or call 215-881-9401.*