



Air Permits

GECAP of the Georgia Tech Research Institute is a voluntary, non-regulatory environmental compliance program funded by the Georgia Legislature through the University System of Georgia.

How do I know if I need to get an air permit?

There are several parts to the air permitting process. The Rules of Air Quality Control, Chapter 391-3-1-.03, state that you need to apply for a permit if:

- you operate a facility that emits air contaminants,
- if you are constructing a new facility, or
- if you are modifying a facility that may emit air contaminants.

What is an air contaminant?

In Chapter 391-3-1-.01, an air contaminant is defined as a solid or liquid particulate matter, dust, fumes, gas, mist, smoke, or vapor, or any matter or substance either physical, chemical biological, or radioactive (including source material, special nuclear material, and by-product material) or any combination of any of the above.

When do I need a construction air permit?

You will need to acquire this construction permit from the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources if you are going to construct or modify any facility which may result in air pollution. You must obtain this permit before you begin construction. You must obtain this permit if your new or modified system can generate air pollution.

When do I need an operating permit?

If your facility may emit air contaminants (as defined above), you must obtain an air permit to operate that facility. Typical operations at small- to medium-sized facilities which release air contaminants use boilers for industrial process heat and painting and coating operations.

Are there any exemptions to these requirements?

Yes, there are some exemptions that apply. A detailed list of these exemptions can be found under Chapter 391-3-1-.03(6) of the Georgia Rules for Air Quality Control. A summary of exemptions follows:

- other exempted facilities include those having combined emissions from all source activities below the following thresholds for all pollutants:
 - 50 tons of carbon monoxide per year;
 - 300 pounds of lead per year;
 - 20 tons of particulate matter, PM10, or sulfur dioxide per year;
 - 20 tons per year of nitrogen oxides or volatile organic compounds (VOCs), except in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, or Rockdale where less than 5 tons per year of nitrogen oxides or VOCs is exempted; and
 - 2 tons of any single hazardous air pollutant (HAP) per year and less than 5 tons of any combination of hazardous air pollutants per year.
- mobile sources as defined in the rules;
- combustion equipment;
 - fuel-burning equipment that has a total heat input capacity of less than 10 million BTUs per hour and burns only gas and/or distillate fuel oil containing 0.5% sulfur by weight or less;

- any heating system rated at less than 5 million BTUs per hour that burns a wood or fossil fuel;
- any fuel-burning equipment with a rated input capacity of 2.5 million BTUs per hour or less;
- fuel burning equipment that burns waste oil or used oil fuels, which are generated on the geographical site, and has a rated heat input capacity of not more than 500,000 BTUs per hour;
- equipment used for cooking food for immediate human consumption;
- blacksmith forges;
- clean steam condensate and steam relief vents;
- funeral homes and crematories of any size;
- air curtain destructor that is used for land clearing at a construction site;
- open burning;
- small incinerators that incinerate types 0, 1, 2, and/or 3 wastes and are rated less than 8 million BTUs per hour or that incinerate type 4 waste and are rated less than 4 million BTUs per hour;
- stationary reciprocating engines that burn natural gas, gasoline, or diesel fuel which: are used exclusively for emergency power generation; are used for peaking power service not to exceed 500 hours per year; or are used for other purposes provided that the engines are less than 1500 horsepower;

- some storage tanks;
- laboratories and testing facilities;
- some pollution control equipment;
- agricultural operations;
- maintenance, cleaning, and housekeeping
 - cold-storage refrigeration equipment
 - non-perchloroethylene dry-cleaning equipment with a capacity of 100 pounds of clothes or less per hour; and
 - vehicle repair shops, brazing, soldering and welding equipment.

What should I do if my facility exceeds any of these thresholds?

Contact the Air Protection Branch of the EPD at the Department of Natural Resources at 404-363-7000 and request an application for an air permit.

What is the new Title V air permitting program?

This permitting program bases a facility's permit on its potential to emit (PTE) VOCs, hazardous air pollutants (HAPs), and other pollutants. The PTE requires that the facility must assume that it operates 8,760 hours per year (i.e., 24 hours per day, 7 days per week, and 52 weeks per year) unless there is a bottleneck that prevents this operation. The facility must always assume worst-case operating conditions. For example, if the facility paints both large and small earth-moving equipment, the PTE requires the facility to assume that all of the painting is based on large equipment since more VOCs would be released.

Likewise, if paint A has more volatiles than paint B, the facility must assume that only paint A is used. As another example, if a boiler usually burns natural gas, but can burn No. 2 fuel oil as a backup, it must be assumed that No. 2 fuel is burned all year. If the backup fuel could also be No. 6 fuel oil, it must be assumed that No. 6 is burned since it will produce more emissions than No. 2. A facility will exceed a major source threshold if the PTE computation determines that the emissions are more than the following limits:

- more than 100 tons of any listed pollutant such as SO₂, NO_x, or VOC except in the Atlanta non-attainment area consisting of the following counties: Fulton, DeKalb, Cobb, Gwinnett, Clayton, Cherokee, Henry, Coweta, Douglas, Fayette, Forsyth, Paulding, or Rockdale where the limit for NO_x and VOC drops to 25 tons per year;
- more than 10 tons of any single HAP per year; or
- more than 25 tons of any combination of HAPs.

Many HAPs, such as xylene, are also a VOC. If a company exceeds a major source threshold, the company must obtain a Title V major source air

permit (also called a Part 70 permit) or the facility must reduce emissions to below the major source thresholds and obtain a synthetic minor permit.

A facility can obtain a synthetic permit if the facility imposes certain restrictions, for instance, operating hours. While the PTE computation requires that a facility assumes operation of 8,760 hours per year, the actual operation might be 8 hours per day, 5 days per week, and 50 weeks per year (2,000 hours). The synthetic permit would simply require that the facility maintain a log of the plant's hours of operations. Other restrictions might include the number of gallons of paint used per year, the number of hours that No. 2 fuel oil can be burned, or the installing of pollution control equipment such as a catalytic converter with a record of the operating temperature of the system.

If you need a major source air permit, you may need to hire a consultant.

What other issues related to air emissions do I need to be aware of?

Keep in mind the SARA Title III Emergency Planning and Community Right-to-Know (EPCRA) regulations. This reporting involves many of the same chemicals such as VOCs and HAPs. The following GECAP Tech Guides describe various requirements under SARA Title III: [*EPCRA Sections 302-303–Emergency Planning; EPCRA Section 304 & CERCLA–Emergency Release Notification; EPCRA Sections 311 & 312–Hazardous Chemical Inventory; and SARA Title III Section 313–Toxic Chemical Release: Reporting Requirements*](#) (includes the requirements for reporting Form R).

For more information

For more information contact the EPD Air Protection Branch at 404-363-7000 or visit <http://www.georgiaair.org/>.

The Georgia Air Regulations can be viewed at: http://www.georgiaair.org/airpermit/downloads/aqrules/airrules090513_final.pdf.

Or, you may contact GECAP personnel at 404-407-8082 or send an email to Paige Rohrig at paige.rohrig@gtri.gatech.edu.

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