



FOCUS

WASTE MINIMIZATION

Air quality permitting in North Carolina

The most recent change to the 1970 Clean Air Act was the 1990 Clean Air Act Amendments. These amendments created a comprehensive Title V operating permit program for the major sources of air pollutants, created an acid rain program to control sulfur dioxide and nitrogen oxides emissions from power plants, and identified 189 new hazardous air pollutants for future standards development.

Generally, all facilities in North Carolina that generate air pollution are required to have an air quality permit unless specifically exempted by the regulations. In North Carolina, air pollution control requirements and air quality permit requirements for stationary (paint spray booths, metal degreasers, boilers, etc.) and mobile sources (cars, trucks, aircraft) are codified in Title 15A, Subchapters 2D, 2H, and 2Q of the North Carolina Administrative Code. This also includes the Title V operating permit rule in 2Q.0500. The North Carolina Division of Air Quality (DAQ) issues one type of permit that addresses both the construction and operation requirements (2Q.0300). [To download specific regulations, visit the Division of Air Quality's web site at <http://www.ehnr.state.nc.us/EHNR/AQ/>]. However, there are three different categories of permitted facilities



based upon emission thresholds.

1. Title V: A facility has the *potential to emit* 100 tons or more per year of a common regulated pollutant, 10 tons or more per year of any hazardous air pollutant, or 25 tons or more per year of combined hazardous air pollutants.

2. Synthetic Minor: A facility takes action to ensure emissions remain below Title V thresholds. The facility's permit obligates it to maintain these lower levels of emissions.

3. Small: A facility has no potential for exceeding Title V emission thresholds.

Common questions about permitting

1. Who needs an air permit?

Any source, operation, or process that has a potential emission, be-

fore control, of more than five tons of any air pollutant (namely, total suspended particulate, PM-10, sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, and lead) will require a permit to construct and operate, provided the source in question is not specifically excluded from the permit requirements, as specified in 2Q.0102.

If a facility is a major source under the Title V operating permit program, then it must apply for a Title V operating permit. Upon issuance, the existing construction and operation permit becomes void (i.e. the Title V permit supercedes the construction and operation permit for major sources).

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Permits

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2. Are there any exemptions to the permit requirement?

Yes. Some exemptions are for specific activities — a storage tank used solely to store fuel oils, kerosene, crude oil, used motor oil, lubricants, cooling oils, natural gas, or liquefied petroleum gas. Some activities are exempt because of size or production rate — above-ground storage tanks with a storage capacity maximum of 1,100 gallons, organic liquids stored with a true vapor pressure maximum of 10.8 pounds per square inch absolute at 70° F. Refer to 2Q.0102.

For a Title V facility, exemptions given in 2Q.0102, due to size or production rate, *shall* be included in the Title V permit application. However, exemptions given for specific activities *should not* be included.

3. What does a construction and operation permit application include?

- completed applicable forms
- appropriate fees
- zoning consistency determination
- process flow diagram
- detailed calculations
- supporting documentation showing the use of emission factors
- material balances
- control efficiencies
- Professional Engineering seal, if required

For Title V permit application content, please call Laura Butler, DAQ, (919) 715-6236.

4. What is the application fee?

Fees range from \$50 (small facility) to \$23,026 (Title V facility). Facilities also must pay annual fees.

5. How can a zoning consistency determination be obtained?

Contact the clerk of the local government where the equipment is proposed to be constructed.

6. Where can emission factors be obtained?

U.S. EPA publication AP-42, Air Pollutant Emission Factors.

7. Does the application need to be signed and sealed by a North Carolina registered professional engineer (PE)?

Yes. A PE signature is needed if the new sources and modifications of existing sources involve design, determination of applicability and appropriateness, or determination and interpretation of performance of the air pollution control device. A permit renewal without any modification to the control equipment does not trigger the PE requirement. Refer to

2Q.0112 for further details and additional exemptions.

8. Where can application forms be obtained?

Contact the applicable Air Quality Regional Office (See DENR Regional Office Map, page 3).

9. How many copies of the application are required?

Three copies each:

- Construction and operation permit
- Transportation facility permit

Six copies each:

- Prevention of significant deterioration (PSD)
- National Emissions Standards for Hazardous Air Pollutant (NESHAP) permits
- Air toxic permits

Two copies:

- Name change and renewals

Six copies plus one each for affected states:

- Title V permit involving PSD, NESHAP's, and air toxic issues

Four copies plus one each for affected states:

- Title V permit not involving PSD, NESHAP's, and air toxic issues

10. Can operations continue while the permit is pending?

Equipment can be purchased, but cannot be constructed or operated until the permit is issued.

11. When will the permit be issued?

The construction and operation permit generally is issued within 90 days from the receipt of the complete application.

12. What is the duration of the permit?

Five years.

13. Can equipment operation continue after the permit has expired?

Yes, if the permit renewal was filed at least 90 days prior to the expiration date.

14. If a piece of new equipment is purchased, do I need to modify the current permit issued for the other existing sources?

If the equipment is not specifically exempted from the permit requirement, as per the 2Q.0102 requirements, then the current permit may need to be revised to include the new piece of equipment. See question 1. ♦

See DENR regional offices map, page 3, and Common violations found during an inspection, page 6.