

Using NYS Air Permit Limits to Avoid Reasonably Available Control Technology (RACT) for Oxides of Nitrogen (NOx)

June 1997

New York State's air regulation Part 227-2, Reasonably Available Control Technology (RACT) for Oxides of Nitrogen (NOx), applies to boilers (furnaces) and internal combustion engines. The requirements of Part 227-2 include emission limits, stack testing, and annual tune-ups, among others. Many facilities whose potential to emit (PTE) air pollutants would make them susceptible to NOx RACT requirements can limit, or "cap," their emissions using the limits within the New York State Department of Environmental Conservation's (DEC) Air Emissions Permits.

This fact sheet summarizes the ways in which combustion sources can cap their emissions below the NOx RACT applicability thresholds to avoid this regulation. Additional technical information is available by calling the Small Business Assistance Program (SBAP) at the toll-free number below for free and confidential help. Fact sheets about NOx RACT requirements and New York State's General Permit for combustion sources are also available.

Applicability of NOx RACT Requirements

The state has two different applicability levels for NOx RACT. Downstate (in New York City and Nassau, Suffolk, Westchester, Rockland, and Lower Orange Counties) the requirements apply to facilities with a PTE of 25 tons/yr or more of NOx. For the rest of the state, the threshold is a PTE of 100 tons/yr or more of NOx. Table 1, below, indicates the annual fuel usages that correlate to the NOx RACT applicability thresholds.

Table 1. Annual Fuel Usages Associated With NOx RACT Thresholds*

Location	Residual Oil (gal/yr)	Distillate Oil (gal/yr)	Natural Gas** (cubic ft/yr)
New York City and Nassau, Rockland, Westchester, Suffolk, and Lower Orange Counties***	666,000	2,499,000	357,000,000
Rest of New York State	2,664,000	9,996,000	1,428,000,000

* In some areas of the state, a facility's fuel usage can be below the NOx RACT thresholds in Table 1, so they are not subject to NOx RACT, but the facility's emissions are still high enough to make it a Major (Title V) source of sulfur dioxide (SO₂) emissions. The facility would then need to apply for a Title V permit as a result of its SO₂ emissions. Refer to Table 4 for the fuel usage limits that would trigger a Title V application.

**The natural gas usages are based on facilities whose boilers have a maximum heat input less than 40.9 million Btu/hr (mmBtu/hr) downstate, and less than 163.9 mmBtu/hr upstate.

***Lower Orange County includes the towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, and Woodbury.

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Need more facts?

For technical assistance and for help with permitting, call the Small Business Assistance Program (SBAP) of the New York State Environmental Facilities Corporation
(800) 780-7227

For information about regulations, compliance financing assistance, and assistance resolving regulatory difficulties, contact the Environmental Ombudsman Unit of Empire State Development
(800) 782-8369

Both offer free and confidential assistance to small businesses.

The New York State
Small Business
Stationary Source
Technical
and
Environmental
Compliance
Assistance
Program

Compliance Options

If the furnaces at your facility exceed the applicability levels or if the PTE at your facility would classify it as a Major NO_x source, you can do one of the following:

- Develop a NO_x RACT compliance plan (contact the SBAP for technical assistance) and apply for a Title V permit by June 9, 1997. However, Part 227-2 required sources with applicable emissions to implement the RACT requirements by June 1, 1995. If you missed this deadline, contact the SBAP immediately for information about achieving compliance.
- Limit your emissions to remain under the applicability levels by applying for one of two New York State Air Emissions permits, depending on how low you can limit your emissions.

The next section discusses the permitting options for facilities that wish to limit their emissions by establishing appropriate permit conditions.

Limiting Emissions With a Permit or Registration

DEC's Air Emissions permits offer two ways to limit, or "cap," your emissions:

- *Part 201, "Permits and Registrations," includes a provision that allows a facility to Register if its emissions are less than 50% of the applicability thresholds (less than 12.5 tons/yr downstate and less than 50 tons/yr upstate).* These emission limits translate into various annual fuel usage limits, depending on fuel type. Tables 2 and 3, below, list the fuel usage limits for facilities that can obtain a Minor Facility Registration. Note that the values in Table 3 are applicable only for facilities whose maximum heat input is less than 40.9 million Btu/hr (mmBtu/hr) downstate and less than 163.9 mmBtu/hr upstate. Larger natural gas combustion facilities must exercise the "cap by rule" option of Registration, which requires lower annual fuel usage limits, or apply for a State Facility Permit (below).

Table 2. Minor Facility Registration for Combustion Sources: Maximum Annual Fuel Usage for Furnaces Using Either Residual or Distillate Oil Exclusively

Location	Residual Oil Usage (gal/yr)	Distillate Oil Usage (gal/yr)
New York City and Nassau, Rockland, and Westchester Counties	333,000	1,250,000
Suffolk County, towns of Babylon, Brookhaven, Huntington, Islip, and Smithtown	333,000	704,000
Erie County, city of Lackawana and South Buffalo	579,000	640,000
Rest of New York State	424,000	469,000

Table 3. Minor Facility Registration for Combustion Sources: Maximum Annual Fuel Usage for Certain Furnaces Using Natural Gas Exclusively

Location	Maximum Heat Input Rating (mmBtu/hr)	Natural Gas Usage (cubic ft/yr)
New York City and Nassau, Suffolk, Westchester, Rockland and Lower Orange Counties	<40.9	178,500,000
Rest of New York State	<163.9	714,000,000

- *Part 201 also includes a provision that allows a facility to limit its emissions by obtaining a State Facility Permit, if its emissions are above the 50% level but below the applicability level (between 12.5 and 25 tons/yr downstate and between 50 and 100 tons/yr upstate).* Table 4, opposite, lists the fuel usage limits for facilities that can obtain a State Facility Permit. Note that these limits also prevent a furnace from becoming a Major (Title V) source of SO₂ emissions. DEC has developed a General Permit that many combustion sources can use to obtain a State Facility Permit. Refer to the fact sheet on the General Permit for more information.

Table 4. State Facility Permit for Combustion Sources: Maximum Annual Fuel Usage*

Location	Residual Oil (gal/yr)	Distillate Oil (gal/yr)	Natural Gas (cubic ft/yr)
New York City and Nassau, Rockland, and Westchester Counties	666,000	2,499,000	357,000,000
Suffolk County	666,000	1,408,000	357,000,000
City of Lackawana; South Buffalo	1,158,000	1,280,000	1,428,000,000
Rest of New York State	849,000	938,000	1,428,000,000

*Exceeding these limits means that a facility must obtain a Title V permit.

Other Requirements

If you cap your emissions with a permit, you must maintain records to demonstrate that your fuel usage has remained below the limits specified on your permit or the limits in the capping-by-rule provision in Part 201, whichever applies. You will also be required to certify that you have complied with the limits specified on your permit. Facilities with Registrations need only notify DEC if the cap is going to be exceeded and apply for a State Facility Permit prior to exceeding the cap. State Facility Permit holders must send an annual certification statement to DEC.

Unable to Cap Your NOx Emissions Below the Applicability Levels?

You should **immediately** develop a NOx RACT compliance plan. This plan should contain the necessary steps (purchase of equipment, installation of equipment, source testing, submittal of permit application, etc.) and projected completion dates required to bring the facility into compliance. This plan should be submitted to the appropriate DEC Regional Office as soon as possible. Contact the SBAP for assistance developing a compliance plan.

If you are unable to cap your NOx emissions below the applicability levels, you are also, then, subject to Title V and must apply for a Title V air permit by June 9, 1997, unless your business has a Standard Industrial Classification (SIC) code with a later Title V deadline.