

**SOUTH CAROLINA
DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**

AIR POLLUTION CONTROL REGULATIONS AND STANDARDS

**REGULATION 61-62.5
AIR POLLUTION CONTROL STANDARDS**

STANDARD NO. 5.1

**BEST AVAILABLE CONTROL TECHNOLOGY (BACT)/
LOWEST ACHIEVABLE EMISSION RATE (“LAER”)
APPLICABLE TO VOLATILE ORGANIC COMPOUNDS**

SECTION I - DEFINITIONS

A. “Net VOC Emissions Increase” means the amount by which the sum of the following exceeds zero:

1. Any actual increase in the emissions of VOCs from a particular physical change or change in method of operation at a plant; and

2. Any other increases and decreases in the actual VOC emissions at the plant that occurred at the plant since July 1, 1979, and are otherwise creditable. An increase or decrease is creditable only if the Department has not relied on it in issuing a permit for the plant under this Standard, which permit is in effect when the increase from the particular change occurs.

3. “Actual emissions” means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs (a) through (c) below.

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which preceded the particular date and which is representative of normal source operation. The Department may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit’s actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) The Department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(c) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

B. Lowest Achievable Emission Rate (LAER) means that rate of emissions based on the following, whichever is more stringent:

1. The most stringent emission limitation which is contained in the State Implementation Plan of any state for such class or category of source, unless the owner or operator of the proposed source

demonstrates that such limitations are not achievable; or

2. The most stringent emission limitation which has been achieved in practice by such class or category of source.

In no event shall the application of LAER permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under New Source Performance Standards if applicable.

C. Best Available Control Technology (BACT) means an emissions limitation based on the maximum degree of reduction for VOC which would be emitted from any proposed physical change or change in method of operation which the Department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the Department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the impositions of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means, which achieve equivalent results.

SECTION II - GENERAL APPLICABILITY

A. This standard shall apply to all new, modified, or altered sources that would increase emissions of Volatile Organic Compounds (VOC). Lowest Achievable Emission Rate shall be applied to construction or modifications permitted before June 25, 2004, when the net VOC emissions increase exceeds 100 tons per year. Best Available Control Technology shall be applied to any new construction permit issued on or after June 25, 2004, when the net VOC emissions increase exceeds 100 tons per year.

B. The Department may allow a lesser degree of control, provided that such a determination does not supersede any other State or Federal requirements, if the Department determines that the application of BACT/LAER controls would result in the emission of pollutants which might cause or significantly contribute to an exceedance of an ambient air quality standard.

SECTION III - VOLATILE ORGANIC COMPOUND COMPLIANCE TESTING

The owner or operator of any volatile organic compound source required to comply with this Standard shall, at his own expense, conduct source tests in accordance with the provisions of R.61-62.1, Section IV, Source Tests, to demonstrate compliance unless the Department determines that the compliance status of the source can be monitored as described in Section IV, below.

If tests are required, the following conditions shall apply:

A. Test frequencies for VOC abatement equipment will be as follows:

1. every four (4) years for sources utilizing solvent recovery emission control devices (e.g. carbon

adsorption, refrigeration). However, if fouling of the carbon bed is suspected in the case of carbon adsorption, more frequent test schedules can be required.

2. every two (2) years for sources utilizing catalytic incineration/destruction.

3. every four (4) years for sources utilizing flame incineration provided the source operates, calibrates, and maintains a recorder for each incinerator which continuously records the combustion zone temperature and such temperature is maintained at a value no less than that recorded during the last source test during which compliance was verified.

B. Testing of VOC capture systems will be performed annually. However, only an initial test will be required provided:

1. capture system flow rate indicators (e.g. magnehelic gauges, manometers) are operated, calibrated, and maintained, and

2. the indicated values are maintained at a level no less than that recorded during the last source test during which compliance was verified, and

3. the type and location of the flow rate indicators are approved by this Department, and

4. no process, capture system, or VOC abatement equipment modifications have been made.

C. Other sources will be placed on a two (2) year test cycle.

SECTION IV - RECORDKEEPING, REPORTING, MONITORING

A. The owner or operator of any VOC emission source or control equipment shall maintain, as a minimum: records of all compliance testing conducted under Section III above, and records of all monitoring conducted under paragraphs C.1. and C.2. below.

B. The owner or operator of any applicable VOC emission source or control equipment shall, on request, make available to the Department, or U.S. EPA, reports detailing the nature, specific sources, and total quantities of all VOC emissions for any specified period. Records must be kept which are consistent with the compliance time frames for each source subject to this standard.

C. The owner or operator of any VOC emission source or control equipment shall:

1. install, operate, calibrate and maintain process and/or control equipment, monitoring instruments, or procedures as required to comply with paragraphs A. and B. above; and,

2. maintain, in writing, data and/or reports relating to monitoring instruments or procedures which shall, upon review, document the compliance status of the VOC emission source or control equipment to the satisfaction of the Department.

D. Copies of all records and reports under paragraphs A., B., and C. above, shall be retained by the owner or operator for two years after the date on which the record was made or the reports submitted.

E. Copies of all records and reports required under this Section shall be available for inspection during normal working hours and furthermore, copies of the required records and reports shall be furnished within ten working days after receipt of a written request from the Department.

R. 61-62.5, Standard No. 5.1 History - State Register:

- Vol. 9, Issue No. 5, (Doc. No. 457), May 24, 1985;
- Vol. 13, Issue No. 2, (Doc. No. 868), February 24, 1989;
- Vol. 14, Issue No. 9, (Doc. No. 1310), August 24, 1990;
- Vol. 22, Issue 6, (Doc. No. 2244), June 26, 1998;
- Vol. 24, Issue 4, (Doc. No. 1310 - Errata), April 28, 2000.
- Vol. 28, Issue No. 6, (Doc. No. 2872), June 25, 2004.