

**CHAPTER 145. INTERSTATE POLLUTION
TRANSPORT REDUCTION**

**Subchapter B. EMISSIONS OF NO_x FROM
STATIONARY INTERNAL COMBUSTION ENGINES**

Sec.

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§ 145.111. Applicability.

(a) An owner or operator of an engine described in subsection (c) that emitted 153 tons or more of NO_x from May 1 through September 30 in any year from 1995 through 2004 shall comply with this subchapter by May 1, 2005, and each year thereafter.

(b) An owner or operator of an engine described in subsection (c) that emits 153 tons or more of NO_x from May 1 through September 30 in any year after 2004 shall comply with this subchapter by May 1 of the following calendar year and each year thereafter.

(c) Subsections (a) and (b) apply to the following engines:

(1) A rich burn or lean burn stationary internal combustion engine with an engine rating equal to or greater than 2,400 brake horsepower.

(2) A diesel stationary internal combustion engine with an engine rating equal to or greater than 3,000 brake horsepower.

(3) A dual-fuel stationary internal combustion engine with an engine rating equal to or greater than 4,400 brake horsepower.

§ 145.112. Definitions.

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise:

CEMS—Continuous Emission Monitoring System—The equipment required under this subchapter or Chapter 139 (relating to sampling and testing) to sample, analyze, measure and provide, by readings taken at least every 15 minutes of the measured parameters, a permanent record of NO_x emissions.

Diesel stationary internal combustion engine—A compression-ignited two- or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

Dual-fuel stationary internal combustion engine—A compression-ignited stationary internal combustion engine that is burning liquid fuel and gaseous fuel simultaneously.

Engine rating—The output of an engine as determined by the engine manufacturer and listed on the nameplate of the unit, regardless of any derating.

Lean-burn stationary internal combustion engine—Any two- or four-stroke spark-ignited engine that is not a rich-burn stationary internal combustion engine.

Rich-burn stationary internal combustion engine—A two- or four-stroke spark-ignited engine where the manufacturer's original recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio is less than or equal to 1.1.

Stationary internal combustion engine—For the purposes of this subchapter, an internal combustion engine of the reciprocating type that is either attached to a foundation at a facility or is designed to be capable of being carried or moved from one location to another and is not a mobile air contamination source.

Stoichiometric air/fuel ratio—The air/fuel ratio where all fuel and all oxygen in the air/fuel mixture will be consumed.

Unit—An engine subject to this subchapter.

§ 145.113. Standard requirements.

(a) The owner or operator of a unit subject to this subchapter shall calculate the difference between the unit's actual emissions from May 1 through September 30 and the allowable emissions for that period by the following dates:

(1) For a unit described in § 145.111(a) (relating to applicability), by October 31, 2005, and each year thereafter.

(2) For a unit described in § 145.111(b), by October 31 of the calendar year following the year that this subchapter becomes applicable to the unit and each year thereafter.

(b) The owner or operator shall calculate allowable emissions by multiplying the unit's cumulative hours of operation for the period by the unit's horsepower rating and the unit's applicable emission rate set forth in paragraph (1), (2) or (3).

(1) The emission rate for a rich burn stationary internal combustion engine with an engine rating equal to or greater than 2,400 brake horsepower shall be 1.5 grams per brake horsepower-hour.

(2) The emission rate for a lean burn stationary internal combustion engine with an engine rating equal to or greater than 2,400 brake horsepower shall be 3.0 grams per brake horsepower-hour.

(3) The emission rate for a diesel stationary internal combustion engine with an engine rating equal to or greater than 3,000 brake horsepower, or a dual-fuel stationary internal combustion engine with an engine rating equal to or greater than 4,400 brake horsepower shall be 2.3 grams per brake horsepower-hour.

(c) The owner or operator shall determine actual emissions by using one of the following:

(1) If the owner or operator of the unit is required to monitor NO_x emissions with a CEMS operated and maintained in accordance with a permit or State or Federal regulation, data reported to the Department to comply with the monitoring and reporting requirements of this article. Any data invalidated under Chapter 139 (relating to sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

(2) If the owner or operator of the unit is not required to monitor NO_x emissions with a CEMS, one of the following shall be used to determine actual emissions of NO_x:

(i) CEMS data, if the owner or operator elects to monitor NO_x emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

(ii) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

(iii) The average emission rate calculated from test data from NO_x emission tests conducted from May 1 through September 30 of that year. The emissions tests must be conducted in accordance with the permit emission limit compliance monitoring procedures. Tests must be conducted at least once every 735 hours of operation. The Department may reduce the frequency of the emission testing for a unit based on the consistency of the data gathered from the testing. At least one test is required during the period of May 1 through September 30.

(d) The owner or operator of a unit subject to this section shall surrender to the Department one CAIR NO_x allowance and one CAIR NO_x Ozone Season allowance, as defined in 40 CFR 96.102 and 96.302 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purposes of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(e) If the combined allowable emissions from units subject to this subchapter at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this subchapter at the facility during the same period, the owner or operator may deduct the difference or any portion of it from the amount of actual emissions from units subject to this subchapter at the owner or operator's other facilities located in this Commonwealth for that same period.

(f) By November 1 of each year, an owner or operator of a unit subject to this subchapter shall surrender the required NO_x allowances to the Department's designated NO_x allowance tracking system account, as defined in § 121.1 (relating to definitions), and shall provide in writing to the Department the following:

(1) The serial number of each NO_x allowance surrendered.

(2) The calculations used to determine the quantity of NO_x allowances required to be surrendered.

(g) If an owner or operator fails to comply with subsection (f), the owner or operator shall by December 31 surrender three NO_x allowances of the current or later year vintage for each NO_x allowance that was required to be surrendered by November 1.

(h) The surrender of NO_x allowances under subsection (g) does not affect the liability of the owner or operator of units for any fine, penalty or assessment, or other obligation to comply with any other remedy for the same violation, under the CAA or the act.

(1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.

(2) Each ton of excess emissions is a separate violation.