

Texas Chapter 117 - Control of Air Pollution From Nitrogen Compounds

SUBCHAPTER F: ACID MANUFACTURING

DIVISION 2: NITRIC ACID MANUFACTURING — OZONE NONATTAINMENT AREAS

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Outline:

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§§117.4100, 117.4105, 117.4125, 117.4135, 117.4140, 117.4145, 117.4150

STATUTORY AUTHORITY

The new sections are adopted under Texas Water Code, §5.102, concerning General Powers, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code. In addition, the sections are adopted under Texas Health and Safety Code, §382.002, concerning Policy and Purpose, which states the policy and purpose of the State of Texas and the Texas Clean Air Act; §382.011, concerning General Powers and Duties, which provides the commission with the authority to establish the level of quality to be maintained in the state's air and the authority to control the quality of the state's air; §382.012, concerning State Air Control Plan, which requires the commission to develop plans for protection of the state's air; §382.014, concerning Emission Inventory, which authorizes the commission to require submission information relating to emissions of air contaminants; §382.016, concerning Monitoring Requirements; Examination of Records, which authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; §382.017, concerning Rules, which provides the commission the authority to adopt rules consistent with the policy and purposes of the Texas Clean Air Act; §382.021, concerning Sampling Methods and Procedures, which authorizes the commission to prescribe the sampling methods and procedures; and §382.051(d), concerning Permitting Authority of Commission Rules, which authorizes the commission to adopt rules as necessary to comply with changes in federal law or regulations applicable to permits under Chapter 382. In addition, the new sections are adopted under federal mandates contained in 42 United States Code, §§7401 *et seq.*, which require states to adopt pollution control measures in order to reach specific air quality standards in particular areas of the state.

The adopted sections implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, 382.014, 382.016, 382.017, 382.021, and 382.051(d).

§117.4100. Applicability.

The provisions of this division (relating to Nitric Acid Manufacturing - Ozone Nonattainment Areas) apply only in the Beaumont-Port Arthur and Houston-Galveston-Brazoria ozone nonattainment areas. These provisions apply to each nitric acid production unit that is the affected facility.

§117.4105. Emission Specifications.

No person may allow emissions of nitrogen oxides, calculated as nitrogen dioxide, from the absorber of any nitric acid production unit to exceed 2.0 pounds per ton of nitric acid produced, the production being expressed as 100% nitric acid, on a 24-hour rolling average.

§117.4125. Alternative Case Specific Specifications.

Where a person can demonstrate that an affected unit cannot attain the requirements of §117.4105 of this title (relating to Emission Specifications), as applicable, the executive director, on a case-by-case basis after considering the technological and economic circumstances of the individual unit, may approve emission specifications different from §117.4105 of this title for that unit based on the determination that such specifications are the result of the lowest emission limitation the unit is capable of meeting after the application of controls to meet the nitrogen oxides emission specifications of §117.4105 of this title. Any owner or operator affected by the decision of the executive director may file a motion to overturn the executive director's decision. The requirements of §50.139 of this title (relating to Motion to Overturn Executive Director's Decision) apply. Executive director approval does not necessarily constitute satisfaction of all federal requirements nor eliminate the need for approval by the United States Environmental Protection Agency in cases where specified criteria for determining equivalency have not been clearly identified in applicable sections of this division (relating to Nitric Acid Manufacturing - Ozone Nonattainment Areas).

§117.4135. Initial Demonstration of Compliance.

(a) Compliance with the nitrogen oxides emission specifications in §117.4105 of this title (relating to Emission Specifications) must be determined by the performance testing procedures specified in 40 Code of Federal Regulations (CFR) Part 60, Appendix A, Method 7, or an equivalent

method approved by the executive director. Method 7A, 7B, 7C, or 7D may be used in place of Method 7. If Method 7C or 7D is used, the sampling time must be at least one hour.

(b) Performance testing must be conducted in accordance with the procedures specified in 40 CFR §60.8.

(c) Any continuous emissions monitoring systems (CEMS) or predictive emissions monitoring systems (PEMS) required by §117.4140 of this title (relating to Continuous Demonstration of Compliance) must be installed and operational prior to conducting performance testing under subsections (a) and (b) of this section. Verification of operational status must, at a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device or system.

(d) Testing conducted before June 23, 1994, may be used to demonstrate compliance with the standard specified in §117.4105 of this title if the owner or operator of an affected facility demonstrates to the executive director that the prior performance testing, at a minimum, meets the requirements of subsections (a) - (c) of this section. The executive director reserves the right to request performance testing or CEMS or PEMS performance evaluation at any time.

§117.4140. Continuous Demonstration of Compliance.

(a) The owner or operator of any facility subject to the provisions of this division (relating to Nitric Acid Manufacturing - Ozone Nonattainment Areas) shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring nitrogen oxides (NO_x) from the absorber.

(b) Any CEMS installed subject to subsection (a) of this section must meet all requirements of 40 Code of Federal Regulations (CFR) §60.13; 40 CFR Part 60, Appendix B, Performance Specification 2; and quality assurance procedures of 40 CFR Part 60, Appendix F, except that a cylinder gas audit may be performed in lieu of the annual relative accuracy test audit required in Section 5.1.1.

(c) As an alternative to CEMS, the owner or operator of units subject to continuous monitoring requirements under this division may, with the approval of the executive director, elect to install, calibrate, maintain, and operate a predictive emissions monitoring system (PEMS). The required PEMS must be used to measure NO_x emissions for each affected unit and must be used to demonstrate continuous compliance with the emission limitations of §117.4105 of this title (relating to Emission Specifications). Any PEMS must meet the requirements of §117.4145 and §117.8100(b) of this title (relating to Notification, Recordkeeping, and Reporting Requirements; and Emission Monitoring System Requirements for Industrial, Commercial, and Institutional Sources).

(d) The owner or operator of an affected facility shall establish a conversion factor for the purpose of converting monitoring data into units of the NO_x emission standard (in pounds per ton of acid produced, expressed as 100% nitric acid) as specified in 40 CFR §60.73(b). NO_x emissions data recorded by the CEMS or PEMS must be represented in terms of both parts per million by volume and pounds per ton of acid produced, expressed as 100% nitric acid.

(e) After the initial demonstration of compliance required by §117.4135 of this title (relating to Initial Demonstration of Compliance), compliance with §117.4105 of this title must be determined by the methods required in this section. Compliance with the emission specifications may also be determined at the discretion of the executive director using any commission compliance method.

§117.4145. Notification, Recordkeeping, and Reporting Requirements.

(a) The owner or operator of an affected facility shall submit notification to the executive director, as follows:

(1) verbal notification of the date of any continuous emissions monitoring systems (CEMS) or predictive emissions monitoring systems (PEMS) performance evaluation conducted under §117.4140(b) of this title (relating to Continuous Demonstration of Compliance) at least 15 days prior to such date followed by written notification within 15 days after testing is completed; and

(2) verbal notification of the date of any initial demonstration of compliance testing conducted under §117.4135 of this title (relating to Initial Demonstration of Compliance) at least 15 days prior to such date followed by written notification within 15 days after testing is completed.

(b) The owner or operator of an affected facility shall furnish the executive director and any local air pollution control agency having jurisdiction a copy of any CEMS or PEMS performance evaluation conducted under §117.4140 of this title, or any initial demonstration of compliance testing conducted under §117.4135 of this title, within 60 days after completion of such evaluation or testing. For purposes of demonstrating compliance with §117.9500 of this title (relating to Compliance Schedule for Nitric Acid and Adipic Acid Manufacturing Sources), such results must be submitted no later than 30 days before the final compliance date specified in §117.9500 of this title.

(c) The owner or operator of an affected facility shall report in writing to the executive director on a quarterly basis all periods of excess emissions, defined as any 24-hour period that the average nitrogen oxides emissions (arithmetic average of 24 contiguous one-hour periods), as measured by a CEMS or PEMS, exceed the emission specification in §117.4105 of this title (relating to Emission Specifications) and the monitoring system performance. All reports must be postmarked or received by the 30th day following the end of each calendar quarter. Written reports must include the following information:

(1) the magnitude of excess emissions computed in accordance with 40 Code of Federal Regulations §60.13(h), any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period;

(2) specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected unit. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted;

(3) the date and time identifying each period that the CEMS or PEMS was inoperative, except for zero and span checks and the nature of the system repairs or adjustments;

(4) when no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report; and

(5) if the total duration of excess emissions for the reporting period is less than 1.0% of the total operating time for the reporting period and the CEMS or PEMS downtime for the reporting period is less than 5.0% of the total operating time for the reporting period, only a summary report form (as outlined in the latest edition of the commission's *Guidance for Preparation of Summary, Excess Emission, and Continuous Monitoring System Reports*) must be submitted, unless otherwise requested by the executive director. If the total duration of excess emissions for the reporting period is greater than or equal to 1.0% of the total operating time for the reporting period or the CEMS or PEMS downtime for the reporting period is greater than or equal to 5.0% of the total operating time for the reporting period, a summary report and an excess emission report must both be submitted.

(d) The owner or operator of an affected facility shall maintain written records of all continuous emissions monitoring and performance test results, hours of operation, and daily production rates. Such records must be kept for a period of at least five years and must be made available upon request by authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control agency having jurisdiction.

§117.4150. Control Plan Procedures.

Any person affected by this division (relating to Nitric Acid Manufacturing - Ozone Nonattainment Areas) shall submit a control plan to the executive director on the compliance status of all required emission controls and monitoring systems by April 1, 1994. The executive director shall approve the plan if it contains all the information specified in this section. Revisions to the control plan must be submitted to the executive director for approval. The control plan must provide a detailed description of the method to be followed to achieve compliance, specifying the anticipated dates that the following steps will be taken:

(1) dates that contracts for emission control and monitoring systems will be awarded or dates that orders will be issued for the purchase of component parts to accomplish emission control or process modification;

(2) date of initiation of on-site construction or installation of emission control equipment or process modification;

(3) date that on-site construction or installation of emission control equipment or process modification is to be completed; and

(4) date that final compliance is to be achieved.