

OFFICIAL COMPILATION OF CODES, RULES AND REGULATIONS OF THE STATE OF NEW YORK  
TITLE 6. DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
CHAPTER III. AIR RESOURCES  
SUBCHAPTER A. PREVENTION AND CONTROL OF AIR CONTAMINATION AND AIR POLLUTION  
SUBPART 220-2: GLASS PLANTS

(Statutory authority: Environmental Conservation Law §§ 1-0101, 3-0301, 19-0103, 19-0105, 19-0301, 19-0305, 19-0311)

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**§220-2.1 Applicability.**

The requirements of this Subpart apply to any glass plant that is a major facility of oxides of nitrogen (NO<sub>x</sub>).

**§220-2.2 Definitions.**

(a) For the purpose of this Subpart, the definitions of Parts 200 and 201 of this Title apply.

(b) For the purpose of this Subpart, the following definitions also apply:

(1) *Glass melting furnace.* A refractory vessel in which raw materials are charged, melted at high temperature, refined, and conditioned to produce molten glass. The furnace includes foundations, superstructure and retaining walls, raw material charger systems, heat exchangers, melter cooling system, exhaust system, refractory brick work, fuel supply and electrical boosting equipment, integral control systems and instrumentation, and appendages for conditioning and distributing molten glass to forming apparatuses. The forming apparatuses, including the float bath used in flat glass manufacturing and flow channels in wool fiberglass and textile fiberglass manufacturing, are not considered part of the glass melting furnace.

(2) *Glass plant.* Any facility using a glass melting furnace to manufacture glass.

(3) *Glass produced or glass production.* The weight of glass removed from a glass melting furnace.

**§220-2.3 Gaseous emissions from glass melting furnaces.**

(a) The owner or operator of a glass melting furnace located at a glass plant that meets the applicability requirements of section 220-2.1 of this Subpart must submit a reasonably available control technology (RACT) analysis to the department for emissions of oxides of nitrogen (NO<sub>x</sub>) from the furnace that proposes a RACT emission limit(s), and identifies the procedures and monitoring equipment to be used to demonstrate compliance with the proposed RACT emission limit(s). The RACT emissions limit(s) shall be expressed in pounds of NO<sub>x</sub> per ton of glass produced.

(1) By December 1, 2010 the owner or operator of a glass melting furnace that was in operation prior to the effective date of this Subpart must submit a RACT analysis, and an application for a permit modification in accordance with the provisions of Subpart 201-6 of this Title unless the existing NO<sub>x</sub> control equipment and emission limit(s) are determined to be RACT. RACT, as approved by the department, must be implemented by July 1, 2012.

(2) The owner or operator of a glass melting furnace that was not in operation prior to the effective date of this Subpart must submit a RACT analysis prior to start up of the furnace. RACT, as approved by the department, must be implemented upon start up.

(3) RACT analyses must include the available NO<sub>x</sub> control technologies, the projected effectiveness of the technologies considered, the costs for installation and operation for each of the technologies, and the technology and the appropriate emission limit(s) selected as RACT considering the costs for installation and operation of the technology. For a glass melting furnace that was in operation prior to the effective date of this Subpart and for which the existing NO<sub>x</sub> control equipment has been determined to not be RACT, the RACT analysis must also include a schedule for installation of control equipment.

(4) Approved RACT determinations will be submitted by the department to the United States Environmental Protection Agency for approval as separate State Implementation Plan revisions.

(b) The owner or operator of a glass melting furnace may opt to comply with subdivision (a) of this section and section 220-2.5(b) of this Subpart by shutting down the furnace. An owner or operator choosing this option shall submit an application for a federally enforceable permit modification by December 1st, 2010 wherein the owner or operator commits to permanently shut down the furnace by July 1st, 2012.

#### **§220-2.4 Source monitoring, recordkeeping, and reporting.**

(a) The owner or operator of a glass melting furnace located at a glass plant that meets the applicability requirements of section 220-2.1 of this Subpart must maintain a file of daily glass production rates. The production rates must be summarized monthly. Glass production records must be retained for at least five years following the date of such records and must be made available for inspection by the department during normal business hours.

(b) The owner or operator of glass melting furnace shall demonstrate compliance with the NO<sub>x</sub> RACT emission limit(s) established in section 220-2.3(a) of this Subpart by measuring NO<sub>x</sub> emissions with a CEMS. The CEMS shall comply with the requirements of subdivision (c) of this section or with equivalent requirements approved by the department. Any approved equivalent CEMS requirements will be submitted by the department to the United States Environmental Protection Agency for approval as separate State Implementation Plan revisions.

(c) *CEMS requirements.*

(1) The owner or operator of a glass melting furnace shall install, calibrate, evaluate, operate, and maintain a CEMS, in accordance with the provisions of 40 CFR part 60, appendices A, B and F, for measuring NO<sub>x</sub> at locations approved in the CEMS certification protocol under paragraph (3) of this subdivision, and shall record the output of the system.

(2) As part of its application for a permit or permit modification, the owner or operator of a glass melting furnace shall submit for department approval a CEMS plan.

(3) The owner or operator of a glass melting furnace shall submit for department approval a CEMS certification protocol at least 60 days prior to CEMS certification testing. The certification protocol shall include the location of and specifications for each instrument or device, as well as procedures for calibration, operation, data evaluation, and data reporting.

(4) The procedures in subparagraphs (i) through (v) of this paragraph shall be used for determining compliance with the NO<sub>x</sub> RACT emission limit established under section 220-2.3(a) of this Subpart.

(i) The owner or operator of a glass melting furnace shall determine compliance daily on a 30 day rolling average basis. The 30 day rolling averages shall be calculated by dividing 30 day total NO<sub>x</sub> emissions by 30 day total glass production. Only days when the furnace operates shall be included in the 30 day rolling averages.

(ii) At a minimum, valid CEMS data shall be obtained for 90 percent of the operating hours in each calendar quarter that the subject facility is operating.

(iii) All valid CEMS data shall be used in calculating emission rates even if the minimum data requirements of subparagraph (ii) of this paragraph are not met.

(iv) Along with any specific additional data requirements mandated by the department for a particular glass melting furnace, annual recertifications, quarterly accuracy, and daily calibration drift tests shall be performed in accordance with 40 CFR part 60, appendix F.

(v) When NO<sub>x</sub> emissions data are not obtained because of CEMS downtime, or for periods when no valid CEMS data is available, emission data shall be obtained by using the 90th percentile value of all CEMS NO<sub>x</sub> emission data collected over the last 180 days.

(5) In addition to the requirements of subparagraphs (i) through (iii) of this paragraph, the owner or operator of a glass melting furnace shall comply with the CEMS recordkeeping and reporting requirements of 40 CFR part 60, subpart A and appendix F.

(i) The owner or operator of a glass melting furnace shall notify the department of the planned initial start-up date of any new CEMS.

(ii) Emissions, monitoring, and operating parameter records or measurements required by this Subpart and any additional parameters required by the department shall be maintained for at least five years and made available to the department upon request.

(iii) On a semi-annual basis, the owner or operator of a glass melting furnace shall tabulate and summarize applicable emissions, monitoring, and operating parameter measurements recorded during the preceding six months, and submit these records to the department. These records shall be submitted in a format acceptable to the department and shall include:

(a) the 30 day rolling average NO<sub>x</sub> emissions as specified under paragraph (4) of this subdivision;

(b) identification of the operating hours when NO<sub>x</sub> emissions data are not included in a calculation of the 30 day rolling average emissions and the reasons for not including that data;

(c) a comparison of the NO<sub>x</sub> emissions to the NO<sub>x</sub> RACT emissions limit(s);

(d) type and amount of fuel burned on a daily basis and the as burned heat content of the fuel;

(e) the total daily NO<sub>x</sub> emissions and total daily glass production; and

(f) the results of CEMS accuracy assessments as required by 40 CFR part 60, appendix F and any additional data quality information required by the department.

(d) Protocols, reports, summaries, schedules, and any other information required to be submitted to the department under provisions of this Subpart must be sent (in either hardcopy or electronically) as follows:

(1) one copy to the Division of Air Resources, New York State Department of Environmental Conservation, 625 Broadway, Albany, New York 12233; and

(2) one copy to the regional air pollution control engineer at the appropriate regional office of the department.