Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

SUBPART C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES

CHAPTER 121. GENERAL PROVISIONS

§ 121.1. Definitions.

The definitions in section 3 of the act (35 P. S. § 4003) apply to this article. In addition, the following words and terms, when used in this article, have the following meanings, unless the context clearly indicates otherwise:

* * * * *

[~~*100% Air-fuel fired*—Operation of a glass melting furnace where the oxidant is exclusively ambient air.~~]

* * * * *

[~~*Air-fuel firing*—Operation of a glass melting furnace where greater than 50% of the oxidant for the fuel comes from ambient air.~~]

* * * * *

***Blown glass*—Glassware shaped by blowing air into a molten glass gather.**

* * * * *

[~~*Complete reconstruction*—For purposes of §§ 129.301-129.310 (relating to control of NO_x emissions from glass melting furnaces), the replacement of components of an existing glass melting furnace to the extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new glass melting furnace.~~]

* * * * *

***COLD SHUTDOWN*—A COLD REPAIR OR REPLACEMENT OF DAMAGED OR WORN REFRACTORY PARTS OF A GLASS MELTING FURNACE WHILE THE FURNACE DOES NOT CONTAIN MOLTEN GLASS.**

* * * * *

***Container glass*—Glass manufactured by pressing, blowing in molds, drawing, rolling or casting which is used as a container.**

* * * * *

Fiberglass—[~~Material~~] FOR PURPOSES OF §§ 129.301-129.310, MATERIAL consisting of fine filaments of glass that are combined into yarn and woven or spun into fabrics, or that are used as reinforcement in other materials or in masses as thermal or as acoustical insulating products[~~ for the construction industry~~]. (Editor's note: A definition of this term was published for comment in the *Pennsylvania Bulletin* on April 4, 2009, in a proposed amendment to Chapter 129 (relating to standards for sources) concerning control of emissions from the use or application of adhesives, sealants, primers and solvents and Chapter 130 (relating to standards for products) concerning adhesives, sealants, primers and solvents. The later of these two rulemakings to be published as a final rulemaking will include both definitions.)

* * * * *

Flat glass—Glass produced by the float, sheet, rolled or plate glass process which is used in windows, windshields, tabletops or similar products.

* * * * *

[~~*Furnace battery*—Two or more glass melting furnaces at a single facility that exhaust to a common stack.~~

~~*Furnace rebuild*—A complete reconstruction which is commenced after the end of a furnace campaign period or expected life cycle of a furnace. For the purpose of the compliance deadline in § 129.304 (relating to emission requirements), the effective date of a furnace rebuild is the date of the start of the furnace shutdown.~~]

* * * * *

Glass melting furnace —A unit comprising a refractory-LINED vessel in which raw materials are charged[~~,~~] AND melted at high temperature[~~, refined and conditioned~~] to produce molten glass. [~~The unit 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. As specified in 40 CFR §60.291 (relating to definitions), 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.~~]

* * * * *

Idling—For purposes of §§ 129.301-129.310, the operation of a glass melting furnace at less than 25% of the permitted production capacity or fuel use capacity as stated in the plan approval or operating permit.

* * * * *

[~~*Multiple furnaces*—Two or more glass melting furnaces at a single facility that do not exhaust to a common stack.~~]

* * * * *

[*~~Oxyfuel fired~~*—~~Operation of a glass melting furnace where greater than 50% of the oxidant for the fuel is provided from enriched oxygen streams.~~]

* * * * *

[*~~Oxygen-assisted combustion~~*—~~Operation of a glass melting furnace where the oxygen content in the oxidant is greater than the oxygen content in ambient air or greater than 20.9% oxygen.~~]

* * * * *

***Permitted production capacity*—The maximum pull rate as stated in the plan approval, operating permit or Title V permit.**

* * * * *

***Pressed glass*—Glassware formed by placing a blob of molten glass in a metal mold, then pressing it with a metal plunger or "follower" to form the inside shape. The resultant piece, termed "mold-pressed," has an interior form independent of the exterior, in contrast to mold-blown glass, whose interior corresponds to the outer form.**

* * * * *

***Primary furnace combustion system*—The burners in a glass melting furnace that are used during production of glass.**

* * * * *

***Pull rate*—The amount of glass withdrawn from a glass melting furnace, expressed in short tons per day.**

* * * * *

***Shutdown*—For purposes of [~~§ 129.303 (relating to exemptions)~~] §§ 129.301 - 129.310 (RELATING TO CONTROL OF NOx EMISSIONS FROM GLASS MELTING FURNACES), the period of time during which a glass melting furnace is [~~purposely allowed~~] TAKEN FROM AN OPERATIONAL TO A NON-OPERATIONAL STATUS BY ALLOWING IT to cool DOWN from ITS operating temperature [~~and molten glass is removed from the tank for the purpose of a furnace rebuild~~] TO A COLD OR AMBIENT TEMPERATURE AS THE FUEL SUPPLY IS TURNED OFF.**

* * * * *

***Start-up*—For purposes of [~~§ 129.303~~] §§ 129.301 -129.310, the period of time, after initial construction, SHUTDOWN or [~~a furnace rebuild~~] COLD SHUTDOWN, during which a glass melting furnace is heated to stable operating temperature by the primary furnace combustion system, AND SYSTEMS AND INSTRUMENTATION ARE BROUGHT TO STABILIZATION.**

* * * * *

CHAPTER 129. STANDARDS FOR SOURCES

CONTROL OF NO_x EMISSIONS FROM GLASS MELTING FURNACES

§ 129.301. Purpose.

The purpose of this section and §§ 129.302-129.310 is to ANNUALLY limit THE emissions of NOx from glass melting furnaces.

§ 129.302. Applicability.

This section, § 129.301 (relating to purpose) and §§ 129.303-129.310 apply to an owner or operator of a glass melting furnace IN THIS COMMONWEALTH, INCLUDING THOSE WITHIN THE JURISDICTION OF LOCAL AIR POLLUTION CONTROL AGENCIES IN PHILADELPHIA AND ALLEGHENY COUNTIES APPROVED UNDER SECTION 12 OF THE ACT (35 P.S. § 4012), that emits or has the potential to emit NOx at a rate greater than 50 tons per year [~~or 20 pounds per hour. Beginning May 1, 2009, and for each year thereafter, an owner or operator of a glass melting furnace shall comply with this section, §§ 129.301 and 129.303-129.310~~].

§ 129.303. Exemptions.

(a) [~~This section, §§ 129.301 and 129.302 (relating to purpose; and applicability) and 129.304-129.310 do not apply to glass melting furnaces where the heat is supplied solely by an electric current from electrodes submerged in the molten glass, except that heat may be supplied by other fuels for start-up when the furnace contains no molten glass.~~

~~(b)~~] The emission requirements in § 129.304 (relating to emission requirements) do not apply during periods of start-up, [~~or~~] shutdown, OR IDLING as defined in § 121.1 (relating to definitions), if the owner or operator complies with the requirements of §§ 129.305 [~~and~~], 129.306 AND 129.307 (relating to start-up requirements; [~~and~~] shutdown requirements; AND IDLING REQUIREMENTS).

[~~(c)~~] (b) The owner or operator of a glass melting furnace claiming an exemption under subsection [~~(b)~~] (a) shall notify the Department OR THE APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY in writing [~~at least~~] WITHIN 24 hours [~~prior to initiating shutdown or start-up~~] AFTER INITIATION OF THE OPERATION FOR WHICH THE EXEMPTION IS CLAIMED. The methods for submitting the written notice may include e-mail, hand or courier delivery, CERTIFIED mail or facsimile transmissions to the appropriate regional office described in § 121.4 (relating to regional organization of the Department) OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY. The notification must include:

(1) The date and time of the start of the exempt operation.

(2) The reason for performing the operation and an estimated completion date.

(3) IDENTIFICATION OF THE EMISSION CONTROL SYSTEM OPERATING DURING THE EXEMPTION PERIOD.

[~~(d)~~] (c) The owner or operator of a glass melting furnace granted an exemption under this section shall maintain operating records or documentation, or both, necessary to support the claim for the exemption. The records shall be maintained for 5 years onsite and made available or submitted to the Department OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY, upon request.

[~~(e)~~] (d) The owner or operator of a glass melting furnace shall notify the Department OR THE APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCIES in writing within 24 hours after completion of the operation for which the exemption is claimed.

§ 129.304. Emission requirements.

(a) [~~During the interval from May 1 through September 30, 2009, and each year thereafter, except~~] EXCEPT as specified in §§ 129.303, 129.304(c), 129.305 [~~and~~], 129.306 AND 129.307 [~~(relating to exemptions; start-up requirements; and shutdown requirements)~~], the owner or operator of a glass melting furnace may not operate the glass melting furnace in a manner that results in NOx emissions in excess of the FOLLOWING allowable limits [~~specified in subsection (b).~~

~~(b) The owner or operator of a glass melting furnace shall determine allowable NOx emissions during the interval from May 1 through September 30, 2009, and each year thereafter, by multiplying the tons of glass pulled by each furnace by~~] OR NOx EMISSION LIMITS CONTAINED IN THE PLAN APPROVAL OR OPERATING PERMIT, WHICHEVER ARE LOWER:

(1) 4.0 pounds of NOx per ton of glass pulled for container glass furnaces.

(2) 7.0 pounds of NOx per ton of glass pulled for pressed or blown glass furnaces.

(3) 4.0 pounds of NOx per ton of glass pulled for fiberglass furnaces.

(4) 7.0 pounds of NOx per ton of glass pulled for flat glass furnaces.

(5) 6.0 POUNDS OF NOx PER TON OF GLASS PULLED FOR ALL OTHER GLASS MELTING FURNACES.

(b) THE OWNER OR OPERATOR OF A GLASS MELTING FURNACE SHALL COMPLY WITH SUBSECTION (a) BY JANUARY 1, 2012, UNLESS A

COMPLIANCE SCHEDULE IS SUBMITTED, IN WRITING, TO THE DEPARTMENT AND APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY BY JANUARY 1, 2012, IN ACCORDANCE WITH SUBSECTION (c) AND SUBSEQUENTLY APPROVED, IN WRITING, BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY.

(c) AN OWNER OR OPERATOR OF A GLASS MELTING FURNACE THAT DOES NOT MEET THE NOx EMISSION LIMITS SPECIFIED UNDER SUBSECTION (a) BY JANUARY 1, 2012, MAY PETITION THE DEPARTMENT AND APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY FOR AN ALTERNATIVE EMISSION LIMITATION OR COMPLIANCE SCHEDULE AS FOLLOWS:

(1) THE OWNER OR OPERATOR OF A GLASS MELTING FURNACE SUBJECT TO SUBSECTION (a)(5) MAY SUBMIT, IN WRITING, A PETITION REQUESTING AN ALTERNATIVE EMISSION LIMITATION. THE PETITION MUST DEMONSTRATE TO THE SATISFACTION OF THE DEPARTMENT AND APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY THAT IT IS ECONOMICALLY OR TECHNOLOGICALLY INFEASIBLE TO MEET THE EMISSION LIMITATION UNDER SUBSECTION (a)(5). THE ALTERNATIVE EMISSION LIMITATION MUST BE INCLUDED IN EITHER A PLAN APPROVAL OR AN OPERATING PERMIT ISSUED BY THE DEPARTMENT OR A PERMIT ISSUED BY THE APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY.

(2) THE OWNER OR OPERATOR OF A GLASS MELTING FURNACE FOR WHICH THE SCHEDULE FOR COLD SHUTDOWN DOES NOT ALLOW COMPLIANCE WITH SUBSECTION (b) MAY SUBMIT A PETITION, IN WRITING, REQUESTING AN ALTERNATIVE COMPLIANCE DEADLINE. THE ALTERNATIVE COMPLIANCE DEADLINE FOR A SCHEDULED COLD SHUTDOWN WHICH OCCURS AFTER THE EFFECTIVE DATE OF THIS REGULATION MAY NOT BE EXTENDED BEYOND 180 DAYS FROM THE SHUTDOWN.

(3) A PETITION MUST INCLUDE THE FOLLOWING:

(i) A BRIEF DESCRIPTION, INCLUDING MAKE, MODEL AND LOCATION, OF EACH AFFECTED GLASS MELTING FURNACE.

(ii) A LIST OF ALL AIR POLLUTION CONTROL TECHNOLOGIES AND MEASURES THAT HAVE BEEN INSTALLED ON EACH AFFECTED GLASS MELTING FURNACE AND ARE OPERATING TO CONTROL EMISSIONS OF NOx.

(iii) FOR EACH OF THE TECHNOLOGIES AND MEASURES LISTED IN ACCORDANCE WITH SUBPARAGRAPH (ii), THE DATE OF INSTALLATION AND ORIGINAL COMMENCEMENT OF OPERATION.

(iv) FOR EACH OF THE TECHNOLOGIES AND MEASURES LISTED IN ACCORDANCE WITH SUBPARAGRAPH (ii), AN EXPLANATION OF HOW THE NOx CONTROL TECHNOLOGY OR MEASURE INSTALLED HAS BEEN OPTIMIZED FOR THE MAXIMUM NOx EMISSION REDUCTION.

(v) THE RESULTS OF EACH STACK TEST AND OTHER EMISSIONS MEASUREMENTS FOR THE AFFECTED GLASS MELTING FURNACE FOLLOWING THE INSTALLATION AND COMMENCEMENT OF OPERATION OF THE AIR POLLUTION CONTROL TECHNOLOGIES AND MEASURES LISTED IN ACCORDANCE WITH SUBPARAGRAPH (ii).

(vi) THE DATE OF LAST SCHEDULED COLD SHUTDOWN FOR EACH AFFECTED FURNACE.

(vii) THE DATE OF NEXT SCHEDULED COLD SHUTDOWN OF EACH AFFECTED FURNACE.

(viii) IF AN ALTERNATIVE COMPLIANCE SCHEDULE IS SOUGHT TO MEET THE REQUIREMENTS OF SUBSECTION (A)(5), THE OWNER OR OPERATOR SHALL SUBMIT A PROPOSED SCHEDULE CONTAINING INTERIM MILESTONE DATES FOR COMPLETING EACH PHASE OF THE REQUIRED WORK AND A FINAL COMPLIANCE DATE. THE PETITION SHALL ALSO INCLUDE AN INTERIM EMISSION LIMITATION UNTIL COMPLIANCE IS ACHIEVED WITH THE REQUIREMENTS SPECIFIED UNDER SUBSECTION (a)(1)-(4).

(ix) IF AN ALTERNATIVE EMISSION LIMITATION IS SOUGHT TO MEET THE REQUIREMENTS OF SUBSECTION (A)(5), THE CONDITIONS OR SPECIAL CIRCUMSTANCES WHICH DEMONSTRATE THAT THE APPLICABLE REQUIREMENTS ARE TECHNOLOGICALLY OR ECONOMICALLY INFEASIBLE.

(x) IF AN ALTERNATIVE EMISSION LIMITATION IS SOUGHT TO MEET THE REQUIREMENTS OF SUBSECTION (A)(5), THE OWNER OR OPERATOR SHALL PROPOSE EMISSION LIMITATIONS IN THE PETITION.

(xi) OTHER RELEVANT INFORMATION REQUESTED, IN WRITING, BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY.

(4) APPROVED INTERIM MILESTONE DATES OR EMISSION LIMITATIONS DETERMINED TO BE NECESSARY FOR EFFECTIVE MONITORING OF PROGRESS TOWARD FULL COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION AND §§ 129.301-129.303 AND 129.305-129.310 SHALL BE SPECIFIED IN A PLAN APPROVAL OR OPERATING PERMIT ISSUED BY THE DEPARTMENT OR A PERMIT ISSUED BY THE APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY.

(d) DURING ROUTINE MAINTENANCE OF AN ADD-ON EMISSION CONTROL SYSTEM OR SYSTEMS, OR MAINTENANCE OR REPAIR MEASURES ON FURNACE COMPONENTS, THE OWNER OR OPERATOR OF A GLASS MELTING FURNACE SUBJECT TO THE EMISSION LIMITS SPECIFIED UNDER SUBSECTION (a) IS EXEMPT FROM THESE LIMITS IF:

(1) ALL ROUTINE MAINTENANCE OF AN ADD-ON EMISSION CONTROL SYSTEM OR MAINTENANCE OR REPAIR MEASURES ON FURNACE COMPONENTS, OR BOTH, COMBINED, IN EACH CALENDAR YEAR DOES NOT EXCEED 144 HOURS TOTAL.

(2) THE ROUTINE MAINTENANCE OR MAINTENANCE OR REPAIR MEASURE, OR BOTH, IS CONDUCTED IN A MANNER CONSISTENT WITH GOOD AIR POLLUTION CONTROL PRACTICES FOR MINIMIZING EMISSIONS.

§ 129.305. Start-up requirements.

(a) The [~~plan approval issued for the construction of a new glass melting furnace or furnace rebuild must include terms and conditions consistent with the requirements of § 127.12b (relating to plan approval terms and conditions). At least no later than 30 days prior to the anticipated date of start-up, the~~] owner or operator of the glass melting furnace shall submit, in writing, to the Department OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY, NO LATER THAN 30 DAYS PRIOR TO THE ANTICIPATED DATE OF START-UP, information requested by the Department OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY to assure proper operation of the furnace. The information must include the following:

(1) A detailed list of activities to be performed during start-up and an explanation for the length of time needed to complete each activity.

(2) A description of the material process flow rates and system operating parameters and other information that the owner or operator plans to evaluate during the process optimization.

(b) The owner or operator of a glass melting furnace may submit a request for a start-up exemption in conjunction with the plan approval application [~~for the construction of a new furnace or furnace rebuild~~] IF REQUIRED. The actual length of the start-up exemption, if any, will be determined by the Department OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY at the time of the issuance of the plan approval [~~for the furnace rebuild~~] OR OPERATING PERMIT.

(c) The length of the start-up exemption following activation of the primary furnace combustion system may not exceed:

(1) [~~One hundred and four days for a flat glass furnace.~~

~~(2)~~] Seventy days for a container, pressed or blown glass furnace.

[~~(3)~~] (2) Forty days for a fiberglass furnace.

(3) ONE HUNDRED AND FOUR DAYS FOR A FLAT GLASS FURNACE AND FOR ALL OTHER GLASS MELTING FURNACES NOT COVERED UNDER PARAGRAPHS (1) AND (2).

(d) THE REQUIREMENTS OF SUBSECTION (c) NOTWITHSTANDING, IF THE NOx CONTROL SYSTEM IS NOT IN COMMON USE OR IS NOT READILY AVAILABLE FROM A COMMERCIAL SUPPLIER, THE LENGTH OF THE MAXIMUM START-UP EXEMPTION FOLLOWING ACTIVATION OF THE PRIMARY FURNACE COMBUSTION SYSTEM IS AS FOLLOWS:

(1) ONE HUNDRED DAYS FOR A CONTAINER, PRESSED OR BLOWN GLASS FURNACE.

(2) ONE HUNDRED AND FIVE DAYS FOR A FIBERGLASS FURNACE.

(3) TWO HUNDRED AND EIGHT DAYS FOR A FLAT GLASS FURNACE AND FOR ALL OTHER GLASS MELTING FURNACES NOT COVERED UNDER PARAGRAPHS (1) AND (2).

(e) The Department OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY may approve start-up exemptions, AS APPROPRIATE, to the extent that the submittal clearly:

(1) Identifies the control technologies or strategies to be used.

(2) Describes the physical conditions that prevail during start-up periods that prevent the controls from being effective.

(3) Provides a reasonably precise estimate as to when physical conditions will have reached a state that allows for the effective control of emissions.

[~~(e)~~] (f) During the start-up period, the owner or operator of a glass melting furnace shall maintain the stoichiometric ratio of the primary furnace combustion system so as not to exceed 5% excess oxygen, as calculated from the actual fuel and oxidant flow measurements for combustion in the glass melting furnace.

[~~(f)~~] (g) The owner or operator shall place the emission control system in operation as soon as technologically feasible during start-up to minimize emissions.

§ 129.306. Shutdown requirements.

(a) The duration of a glass melting furnace shutdown, as measured from the time the furnace operations drop below 25% of the permitted production capacity or fuel use capacity to when all emissions from the furnace cease, may not exceed 20 days.

(b) The owner or operator of a glass melting furnace shall operate the emission control system whenever technologically feasible, AS APPROVED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY, during shutdown to minimize emissions.

§ 129.307. Idling requirements.

(a) The owner or operator of a glass melting furnace shall operate the emission control system whenever technologically feasible, AS APPROVED BY THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY, during idling to minimize emissions.

(b) The NO_x emissions during idling may not exceed the amount calculated using the following equation:

> **Pounds per day emission limit of NO_x = (Applicable NO_x emission limit specified in § 129.304(a) (relating to emission requirements) expressed in pounds per ton of glass produced) x (Furnace permitted production capacity in tons of glass produced per day)**

§ 129.308. Compliance determination.

(a) [~~By May 1, 2009~~] NOT LATER THAN 14 DAYS PRIOR TO THE APPLICABLE COMPLIANCE DATE UNDER SUBSECTIONS 129.304(b) OR (c), the owner or operator of a glass melting furnace subject to this section, §§ 129.301-129.307, 129.309 and 129.310 shall install, operate and maintain continuous emissions monitoring systems (CEMS, as defined in § 121.1 (relating to

reporting units in compliance with Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and calculate actual emissions using the CEMS data reported to the Department. The owner or operator of a glass melting furnace may install [~~and~~] OR operate, OR BOTH, an alternate NOx emissions monitoring system or method, approved in writing[~~,~~] by the Department OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY.

(b) Data invalidated under Chapter 139, Subchapter C, shall be substituted with [~~data calculated using the potential emission rate for the furnace, or~~] THE FOLLOWING if approved[~~,~~] in writing[~~,~~] by the Department [~~as follows~~] OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY:

(1) The highest valid 1-hour emission value that occurred UNDER SIMILAR SOURCE OPERATING CONDITIONS during the reporting quarter.

(2) If no valid data were collected during the reporting quarter, [~~the most recent quarter for which valid data were collected~~] ONE OF THE FOLLOWING shall be reported to the Department [~~unless an alternative reporting period is approved in writing by the Department.~~] OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY:

(i) THE HIGHEST VALID 1-HOUR EMISSION VALUE THAT OCCURRED UNDER SIMILAR SOURCE OPERATING CONDITIONS DURING THE MOST RECENT QUARTER FOR WHICH VALID DATA WERE COLLECTED.

(ii) THE HIGHEST VALID 1-HOUR EMISSION VALUE THAT OCCURRED UNDER SIMILAR SOURCE OPERATING CONDITIONS DURING AN ALTERNATIVE REPORTING PERIOD.

(3) AN ALTERNATIVE METHOD OF DATA SUBSTITUTION.

(c) INSTEAD OF DATA SUBSTITUTION, THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY MAY APPROVE AN ALTERNATIVE PROCEDURE TO QUANTIFY NOx EMISSIONS AND GLASS PRODUCTION.

(d) The owner or operator of a glass furnace subject to this section shall submit to the Department OR THE APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCIES quarterly reports of CEMS monitoring DATA in pounds of NOx emitted per hour, in a format approved by the Department and in compliance with Chapter 139,

Subchapter C, OR A FORMAT APPROVED BY THE APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCIES.

[~~(d)~~] (e) The CEMS or approved monitoring system or method for NOx installed under this section must meet the minimum data availability requirements in Chapter 139, Subchapter C.

[~~(e) The owner or operator of a furnace battery may use a single CEMS to determine the total NOx emissions from all the furnaces if the emission measurements are made at the common stack.~~]

§ 129.309. Compliance demonstration.

(a) [~~By October 31, 2009, and each year thereafter, the owner or operator of a glass melting furnace shall calculate and report to the Department the difference between the actual NOx emissions from the glass melting furnace during the interval from May 1 through September 30 and the allowable NOx emissions for that period. The calculations used to determine the difference in NOx emissions, including the CEMS data and glass production data used to show compliance with the allowable NOx emission limits specified in § 129.304 (relating to emission requirements), shall be included in the report submitted to the Department. The glass production data must consist of the quantity of glass, in tons, pulled per day for each furnace. Compliance with § 129.304 shall be demonstrated by averaging the NOx emissions during the interval from May 1 through September 30.~~] THE OWNER OR OPERATOR OF A GLASS MELTING FURNACE SHALL CALCULATE AND REPORT TO THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY ON A QUARTERLY BASIS, NO LATER THAN 30 DAYS AFTER THE END OF THE QUARTER, THE CEMS DATA AND GLASS PRODUCTION DATA USED TO SHOW COMPLIANCE WITH THE ALLOWABLE NOx EMISSION LIMITATION SPECIFIED IN § 129.304 (RELATING TO EMISSION REQUIREMENTS). THE GLASS PRODUCTION DATA MUST CONSIST OF THE QUANTITY OF GLASS, IN TONS, PULLED PER DAY FOR EACH FURNACE.

(b) The owner or operator of a glass melting furnace[~~, multiple glass melting furnaces or furnace battery~~] shall demonstrate compliance with the EMISSION requirements of [~~§ 129.304~~] SUBSECTION 129.304(a) using one of the following methods:

(1) On a furnace-by-furnace basis.

(2) Facility-wide emissions averaging.

(3) System-wide emissions averaging among glass melting furnaces under common control of the same owner or operator in this Commonwealth.

(c) The owner or operator of a glass melting furnace[~~, multiple glass melting furnaces or furnace battery may~~] FOR WHICH THE DEPARTMENT OR THE APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY HAS GRANTED APPROVAL TO VOLUNTARILY OPT INTO A MARKET-BASED PROGRAM MAY NOT DEMONSTRATE COMPLIANCE ON AN EMISSIONS AVERAGING BASIS UNDER SUBSECTION (b). AN EMISSION REDUCTION OBTAINED BY EMISSIONS AVERAGING TO DEMONSTRATE COMPLIANCE WITH THE EMISSION REQUIREMENTS OF SUBSECTION 129.304(a) WILL NOT BE CONSIDERED SURPLUS FOR EMISSION REDUCTION CREDIT PURPOSES. THE OWNER OR OPERATOR OF A GLASS MELTING FURNACE SHALL demonstrate compliance with the EMISSION requirements of [~~§ 129.304~~] SUBSECTION 129.304(a) in accordance with [~~the following:~~

~~(1) For the period from May 1 through September 30, 2009, the owner or operator of a glass melting furnace, multiple glass melting furnaces or furnace battery shall surrender to the Department 0.25 CAIR NOx Ozone Season allowance, as defined in § 145.202 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the glass melting furnaces subject to this section.~~

~~(2) For the period from May 1 through September 30, 2010, the owner or operator of a glass melting furnace, multiple glass melting furnaces or furnace battery shall surrender to the Department 0.50 CAIR NOx Ozone Season allowance for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the glass melting furnaces subject to this section.~~

~~(3) For the period from May 1 through September 30, 2011, the owner or operator of a glass melting furnace, multiple glass melting furnaces or furnace battery shall surrender to the Department 0.75 CAIR NOx Ozone Season allowance for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the glass melting furnaces subject to this section.~~

~~(4) For the period from May 1 through September 30, 2012, and each ozone season thereafter, the owner or operator of a glass melting furnace, multiple glass melting furnaces or furnace battery shall surrender to the Department one CAIR NOx Ozone Season allowance for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the glass melting furnaces subject to this section.~~

~~(5) The surrendered CAIR NOx Ozone Season allowances shall be of current year vintage. For the purpose of determining the amount of allowances to be surrendered, a remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and a fraction of a ton less than 0.50 ton is deemed to equal zero tons.~~

~~(6) By November 1, 2009, and by November 1 of each year thereafter, an owner or operator of a glass melting furnace, multiple glass melting furnaces or furnace battery subject to this section shall surrender the required CAIR NOx Ozone Season allowances to the Department's designated NATS-NOx allowance tracking system account as defined in § 121.1 (relating to definitions) and shall provide to the Department, in writing, the following:~~

~~(i) The serial number of each NOx allowance surrendered.~~

~~(ii) The calculations used to determine the quantity of NOx allowances required to be surrendered.~~

~~(7) If an owner or operator fails to comply with paragraph (6), the owner or operator shall by December 31 surrender three CAIR NOx Ozone Season allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year~~] SUBSECTION (d).

(d) [~~The surrender of CAIR NOx Ozone Season allowances under subsection (c)(7) does not affect the liability of the owner or operator of the unit for a fine, penalty or assessment, or an obligation to comply with another remedy for the same violation, under the Clean Air Act 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 which have not been reconciled with CAIR NO_x Ozone Season allowances, 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.~~

~~(e) If the combined allowable emissions from glass melting furnaces at a facility from May 1 through September 30 exceed the combined actual emissions from glass melting furnaces at the facility subject to this section during the same period, the owner or operator may deduct the difference or a portion of the difference from the amount of actual emissions from glass melting furnaces at the owner or operator's other facilities located in this Commonwealth for that period~~] COMPLIANCE WITH THE EMISSION REQUIREMENTS OF SUBSECTION 129.304(a) SHALL BE DETERMINED ON A 30-DAY ROLLING AVERAGE BASIS.

§ 129.310. Recordkeeping.

(a) The owner or operator of a glass melting furnace subject to this section and §§ 129.301-129.309 shall maintain records to demonstrate compliance. The records must include an operating log maintained for each glass melting furnace that includes, on a [~~monthly~~] DAILY basis:

(1) The total hours of operation.

(2) The type and quantity of fuel used.

(3) The quantity of glass pulled.

(b) The owner or operator of a glass melting furnace shall maintain records of:

(1) Source tests and operating parameters established during the initial source test.

(2) Maintenance, repairs, malfunctions, idling, start-up and shutdown.

(c) THE OWNER OR OPERATOR CLAIMING THAT A GLASS MELTING FURNACE IS EXEMPT FROM THE REQUIREMENTS OF §§ 129.301-129.309 BASED ON THE FURNACE'S POTENTIAL TO EMIT SHALL MAINTAIN RECORDS THAT CLEARLY DEMONSTRATE TO THE DEPARTMENT OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY THAT THE FURNACE IS NOT SUBJECT TO §§ 129.301-129.309.

(d) The records required under this section shall be maintained onsite for 5 years. The records shall be made available or submitted to the Department OR APPROPRIATE APPROVED LOCAL AIR POLLUTION CONTROL AGENCY upon request.