

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

**RULE 2012 - REQUIREMENTS FOR MONITORING, REPORTING, AND RECORDKEEPING FOR OXIDES OF NITROGEN (NO<sub>x</sub>) EMISSIONS**

*(Adopted October 15, 1993) (Amended March 10, 1995)(Amended September 8, 1995)  
(Amended December 7, 1995)(Amended July 12, 1996)(Amended February 14, 1997)  
(Amended April 11, 1997)(Amended April 9, 1999)(Amended March 16, 2001)  
(Amended May 11, 2001)(Amended December 5, 2003)*

(a) Purpose

The purpose of this rule is to establish the monitoring, reporting and recordkeeping requirements for NO<sub>x</sub> emissions under the RECLAIM program.

(b) Applicability

The provisions of this rule shall apply to any RECLAIM NO<sub>x</sub> source or NO<sub>x</sub> process unit. The NO<sub>x</sub> sources and process units regulated by this rule include, but are not limited to:

Boilers	Fluid Catalytic Cracking Units
Internal Combustion Engines	Dryers
Heaters	Fume Incinerators/Afterburners
Gas Turbines	Test Cells
Furnaces	Tail Gas Units
Kilns and Calciners	Sulfuric Acid Production
Ovens	Waste Incinerators

(c) Major NO<sub>x</sub> Source

(1) Major NO<sub>x</sub> Source means any of the following NO<sub>x</sub> sources, except for such NO<sub>x</sub> sources reclassified as large NO<sub>x</sub> sources at approved Super Compliant Facilities as specified in paragraph (c)(4):

(A) any boiler, furnace, oven, dryer, heater, incinerator, test cell and any solid, liquid or gaseous fueled equipment with a maximum rated capacity:

(i) greater than or equal to 40 but less than 500 million Btu per hour and an annual heat input greater than 90 billion Btu per year; or

(ii) 500 million Btu per hour or more irrespective of annual heat input;

- (B) any internal combustion engine with rated brake horsepower (bhp) greater than or equal to 1,000 bhp and operating more than 2,190 hours per year;
  - (C) any gas turbine rated greater than or equal to 2.9 megawatts excluding any emergency standby equipment or peaking unit;
  - (D) any petroleum refinery fluid catalytic cracking unit;
  - (E) any petroleum refinery tail gas unit;
  - (F) any kiln or calciner with a rated process weight greater than or equal to 10 tons per hour and processing more than 21,900 tons per year, except brick kilns;
  - (G) any equipment burning or incinerating solid fuels or materials;
  - (H) any existing equipment using NO<sub>x</sub> CEMS or that is required to install CEMS under District rules to be implemented as of October 15, 1993;
  - (I) any NO<sub>x</sub> source or process unit elected by the Facility Permit holder or required by the Executive Officer or designee to be monitored and to report emissions with a CEMS meeting the requirements of paragraphs (c)(2) and (c)(3);
  - (J) any NO<sub>x</sub> source or process unit for which NO<sub>x</sub> emissions reported pursuant to Rule 301 - Permit Fees, were equal to or greater than 10 tons per year for any calendar year between 1987 to 1991, inclusive, excluding NO<sub>x</sub> sources or process units listed under subparagraphs (d)(1)(A) through (d)(1)(E), and (e)(1)(A) through (e)(1)(D) and excluding any NO<sub>x</sub> source or process unit which has reduced NO<sub>x</sub> emissions to below 10 tons per year prior to January 1, 1994.
- (2) The Facility Permit holder of a major NO<sub>x</sub> source shall:
- (A) install, maintain and operate a direct monitoring device for each major NO<sub>x</sub> source to continuously measure the concentration of NO<sub>x</sub> emissions and all other applicable variables specified in Table 2012-1 and Appendix A, Chapter 2, Table 2-A; or
  - (B) install, maintain, and operate an alternative monitoring device which has been determined by the Executive Officer or designee to be equivalent to CEMS in relative accuracy, reliability, reproducibility and timeliness according to the requirements set forth in Appendix A, Chapter 2.

- (C) The operating requirements specified in subparagraph (c)(2)(A) or (c)(2)(B) shall not apply during any time period not to exceed 96 hours provided that all of the following are met:
- (i) the Facility Permit holder reports emissions as specified in Appendix A;
  - (ii) the direct monitoring device has been either:
    - (I) shut down for maintenance performed pursuant to the facility's Quality Assurance and Quality Control Program or
    - (II) damaged in a fire or mechanical or electrical failure caused by circumstances beyond the Facility Permit holder's control; and
  - (iii) Whenever the monitoring device is non-operational for more than 24 hours, the Facility Permit holder shall submit a report to the Executive Officer within 96 hours after the device becomes non-operational. Such report shall include information as prescribed by the Executive Officer including at a minimum the cause of the shutdown, the time the monitoring device became non-operational, the time or estimated time the monitoring device returned to normal operation, and the maintenance performed or corrective and preventative actions taken to prevent future non-operational conditions.

If the source for which the CEMS is certified to monitor is not operating when the CEMS is in maintenance or being repaired, and either the flow or concentration monitor is properly operating, and clauses (c)(2)(C)(i) and (c)(2)(C)(ii) are met, then the above time period shall be extended for an additional 96 hours.

- (3) The Facility Permit holder of a major NO<sub>x</sub> source shall:
- (A) install, maintain and operate a reporting device to electronically report total daily mass emissions of NO<sub>x</sub> and daily status codes to the District Central NO<sub>x</sub> Station for each major NO<sub>x</sub> source. Such data shall be reported by 5:00 p.m., of the following day. If the facility experiences a power, computer, or other system failure that prohibits the reporting of total daily mass emissions of NO<sub>x</sub> and daily status codes, the Facility Permit holder shall be granted 24 hours to submit the required report. Between July 1, 1995 and December 31, 1995, NO<sub>x</sub> emissions after the 24-hour extension, shall be calculated using interim reporting procedures set forth in Appendix A, Chapter 2. Starting January 1, 1996 and thereafter, NO<sub>x</sub> emissions after the 24-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2. For each major NO<sub>x</sub> source opting to comply with subparagraph (c)(9), reports of NO<sub>x</sub> mass emissions shall be electronically filed on a monthly instead of daily basis; and
  - (B) submit Monthly Emissions Reports aggregating NO<sub>x</sub> emissions from all major sources within 15 days following the end of each calendar month. In its Monthly Emissions Report the Facility Permit holder may correct daily transmitted data for that month provided such corrections are clearly identified and justified.
  - (C) Notwithstanding subparagraph (c)(3)(A), starting May 11, 2001 if a power, computer, or other system failure precludes the Facility Permit holder from reporting total daily mass emissions of NO<sub>x</sub> and daily status codes by 5:00 p.m., the Facility Permit holder shall be granted 96 hours to submit the required report provided that the raw data as obtained by the direct monitoring device is stored at the facility. NO<sub>x</sub> emissions reported after the 96-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2. The provisions of this subparagraph shall be limited to no more than three non-consecutive occurrences per compliance year.
  - (D) The requirement of calculating emissions using Missing Data Procedures under subparagraph (c)(3)(A) shall not apply if the

failure to report the total daily mass emissions of NO<sub>x</sub> and daily status codes is due to a demonstrated failure at the District's Central Station preventing it from receiving the data. The Facility Permit holder shall submit the report within 48 hours of the problem being corrected, provided that the raw data as obtained by the direct monitoring device is stored at the facility. NO<sub>x</sub> emissions reported after the 48-hour extension shall be calculated pursuant to the missing data requirements set forth in Appendix A, Chapter 2.

(4) Super Compliant Facilities

(A) Facilities operating at or below their adjusted 2003 Allocation as of their 1994 compliance year.

(i) The Facility Permit holder of major NO<sub>x</sub> sources may reclassify its major NO<sub>x</sub> sources to large NO<sub>x</sub> sources provided that (1) the facility's annual NO<sub>x</sub> emissions as properly reported in its 1994 compliance year APEP report are already at or below the level of its adjusted compliance year 2003 NO<sub>x</sub> Allocation. The adjusted compliance year 2003 NO<sub>x</sub> Allocation shall be the compliance year 2003 NO<sub>x</sub> Allocation as calculated pursuant to Rule 2002 subdivision (e) plus any compliance year 2003 NO<sub>x</sub> RTCs resulting from conversion of ERCs which the Facility Permit holder had applied to own by July 1, 1994 and has continuously owned, unless such RTCs have already been accounted for in the compliance year 2003 Allocation as established pursuant to Rule 2002 subdivision (e) and (2) it submits a complete application for NO<sub>x</sub> Super Compliant status on or before December 2, 1996. The Executive Officer will provisionally approve for purposes of paragraph (c)(5) such application if the Facility Permit holder has retired all NO<sub>x</sub> RTCs in excess of the facility's adjusted compliance year 2003 Allocation for each of the compliance years from the year of application submittal through the 2010 compliance year. The Facility Permit holder need not retire any RTCs (excluding converted ERCs) which are held by transfer pursuant to Rule 2007

paragraph (e)(2); however, such non-retired RTCs must be converted into RTC certificates pursuant to Rule 2007 subdivision (g), transferred to a different holder, or retired. For the purposes of this rule, converted ERCs shall mean NO<sub>x</sub> RTCs resulting from conversion of ERCs which the Facility Permit holder had applied to own by July 1, 1994 and has continuously owned.

- (ii) Final approval of NO<sub>x</sub> Super Compliant status shall be granted if the Executive Officer or designee approves the initial source test required by subparagraph (c)(4)(C) and the facility's total annual NO<sub>x</sub> emissions has not exceeded its adjusted compliance year 2003 Allocation.
- (B) Facilities not operating at or below their adjusted 2003 Allocation as of their 1994 compliance year.
- (i) On or before December 2, 1996 the facility Permit holder of major NO<sub>x</sub> sources may submit a complete application for NO<sub>x</sub> Super Compliant status. Such application must also include a complete application for permit modifications to install NO<sub>x</sub> emission reduction equipment or to make any other physical modifications to substantially reduce emissions from each major NO<sub>x</sub> source to be reclassified as a large NO<sub>x</sub> source. The Executive Officer shall deny the application for Super Compliant status unless the applicant demonstrates the proposed modifications would comply with all applicable District rules and would permanently reduce the facility's total annual NO<sub>x</sub> emissions to a level not to exceed its adjusted compliance year 2003 NO<sub>x</sub> Allocation as defined in clause (c)(4)(A)(i), would not result in any increases in the mass emissions of any other air contaminant or in emissions to any other media, and would not result in any increases in receptor concentrations of any air contaminant in excess of the values identified in Table A-2 of Rule 1303;

- (ii) Upon issuance of the permit to construct for the modification specified in clause (c)(4)(B)(i), the Executive Officer shall also issue a provisional approval of the facility's application for NO<sub>x</sub> Super Compliant status for purposes of paragraph (c)(5).
- (iii) Final approval of NO<sub>x</sub> Super Compliant status shall be granted if the following provisions are met:
  - (I) An approved permit to operate has been issued for the modification specified in clause (c)(4)(B)(i);
  - (II) The facility's total annual NO<sub>x</sub> emissions as reported in its APEP report are at a level at or below the facility's adjusted compliance year 2003 NO<sub>x</sub> Allocation on a permanent basis no later than the facility's 1998 compliance year;
  - (III) The Facility Permit holder has retired all NO<sub>x</sub> RTCs in excess of the facility's adjusted compliance year 2003 Allocation for each of the compliance years from the earlier of the facility's 1998 compliance year or the facility's first full compliance year with NO<sub>x</sub> Super Compliant Facility status through the facility's 2010 compliance year. The Facility Permit holder need not retire any RTCs (excluding converted ERCs as defined in clause (c)(4)(A)(i) which are held by transfer pursuant to Rule 2007 paragraph (e)(2); however, such non-retired RTCs must be converted into RTC certificates pursuant to Rule 2007 subdivision (g), transferred to a different holder, or retired; and
  - (IV) The facility Permit holder has an approved initial source test as required under subparagraph (c)(4)(C).
- (C) The Facility Permit holder shall have initial NO<sub>x</sub> source tests conducted for each major NO<sub>x</sub> source to be reclassified as a large

NO<sub>x</sub> source. The initial source tests shall be conducted pursuant to Appendix A, Chapter 5, Subdivisions A and D and shall be completed prior to January 1, 1998 for Cycle 1 facilities and prior to July 1, 1998 for Cycle 2 facilities. Additionally, the Facility Permit holder shall select an equipment-specific concentration limit for each major source which will be reclassified as a large NO<sub>x</sub> source. For each major source which will be reclassified as a large NO<sub>x</sub> source that operates at two or more separate and significantly distinct operating loads, the Facility Permit holder may select no more than two equipment specific concentration limits, and assign one for each different operating load. The concentration limits selected shall be consistent with the source test results and at a level adequate to allow continuous compliance and shall be enforceable through permit conditions.

(D) Requirements to maintain Super Compliant status

Super Compliant status is contingent upon the Facility Permit holder meeting at all times the following provisions:

- (i) Every major NO<sub>x</sub> source at a Super Compliant NO<sub>x</sub> facility which is reclassified as a large NO<sub>x</sub> source shall be source tested a minimum of once every six months in order to verify compliance with the equipment-specific concentration limit. The source test shall be conducted pursuant to Appendix A, Chapter 5, Subdivisions A, B, and D and shall constitute the basis for assigning concentration limits. These source tests shall be conducted every two calendar quarters after the initial source test. If a source test is not conducted within three months after the required date, the facility shall no longer be considered Super Compliant, unless upon good cause the Executive Officer has granted a written extension of time. If the results of a source test indicate non-compliance with the concentration limit then the Facility Permit holder shall select a new concentration limit which is consistent with the source test results unless the Facility Permit holder demonstrates to the satisfaction of the Executive Officer or designee that no change is warranted.



If all tests conducted pursuant to this paragraph over a two-year period comply with the equipment-specific concentration limit then the facility shall have the option of reducing the source test frequency to once every four quarters. If any test conducted on a four quarter cycle exceeds the concentration limit then the facility shall return to conducting source tests every two quarters.

- (ii) The facility's total annual NO<sub>x</sub> emissions, as reported in its APEP report, shall not exceed the facility's adjusted compliance year 2003 NO<sub>x</sub> Allocation. If there are such exceedances for two consecutive years or any three years, the facility shall no longer be considered Super Compliant. NO<sub>x</sub> emissions from portable equipment used in the manufacturing of asphalt rubber binder, which is owned and operated by a person other than the Facility Permit holder and used at a Super Compliant facility for not more than 1,500 hours in any one compliance year, need not be included in the APEP report.
- (5) The Facility Permit holder of a facility which is provisionally approved for NO<sub>x</sub> Super Compliant status shall have the option for each major NO<sub>x</sub> source to be reclassified as a large NO<sub>x</sub> source, in lieu of following the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii) of Appendix A Chapter 2, to monitor and report emissions pursuant to paragraph (d)(2). This option shall be available to the Facility Permit holder retroactively from July 1, 1995 if the complete application for NO<sub>x</sub> Super Compliant status is submitted on or before January 2, 1996, or retroactively from the date of application submittal if the complete application is submitted after January 2 and before December 3, 1996. If the facility is unsuccessful at obtaining designation as a NO<sub>x</sub> Super Compliant Facility then the procedures specified in clauses E(1)(d)(i), E(1)(d)(ii), and E(1)(d)(iii) of Appendix A Chapter 2 shall apply retroactively to each major NO<sub>x</sub> source reclassified as a large NO<sub>x</sub> source for which NO<sub>x</sub> emissions had been calculated pursuant to paragraph (d)(2) from the date the facility began monitoring and reporting major NO<sub>x</sub> source emissions as large NO<sub>x</sub> source emissions to the date a CEMS is installed and certified.

- (6) After final approval of Super Compliant status, a Facility Permit holder may elect to discontinue its Super Compliant status and increase its annual Allocations above the level of its adjusted compliance year 2003 Allocation provided it first meets all of the following requirements:
- (A) The Facility Permit holder submits an application to discontinue NO<sub>x</sub> Super Compliant status and to have all sources at the facility that were reclassified from major NO<sub>x</sub> sources to large NO<sub>x</sub> sources pursuant to paragraph (c)(4) permanently revert back to major NO<sub>x</sub> sources;
  - (B) The Facility Permit holder installs, operates, and certifies in compliance with Rule 2012 paragraphs (c)(2) and (c)(3) monitoring and reporting systems on each source at the facility that was reclassified from a major NO<sub>x</sub> source to a large NO<sub>x</sub> source pursuant to paragraph (c)(4); and
  - (C) The Facility Permit holder acquires, pursuant to Rule 2007, sufficient RTCs to ensure that the facility continuously operates in compliance with Rule 2004 subdivision (d).
- (7) If a facility designated as a NO<sub>x</sub> Super Compliant Facility pursuant to paragraph (c)(4) exceeds its adjusted compliance year 2003 NO<sub>x</sub> Allocation, then the facility shall acquire, pursuant to Rule 2007, sufficient RTCs to cover such exceedance and shall be considered in violation of Rule 2004(d)(1).
- (8) If the Executive Officer determines that a facility designated as a NO<sub>x</sub> Super Compliant Facility exceeds its adjusted compliance year 2003 NO<sub>x</sub> Allocation for two consecutive years or any three years, then that facility shall no longer be considered Super Compliant. If a facility loses its Super Compliant status pursuant to this paragraph or subparagraph (c)(4)(D), all sources at the facility that were reclassified from major NO<sub>x</sub> sources to large NO<sub>x</sub> sources pursuant to paragraph (c)(4) shall permanently revert back to major NO<sub>x</sub> sources and shall become subject to the monitoring and reporting requirements of paragraphs (c)(2) and (c)(3) according to the following schedule:
- (A) Within one month from the end of the compliance year, submit a monitoring, reporting, and recordkeeping plan specifying the use of CEMS;

- (B) During the shorter of the first twelve months from the end of the compliance year or until the facility complies with paragraphs (c)(2) and (c)(3), the Facility Permit holder shall comply with the monitoring requirements of paragraph (h)(3) of this rule; and
- (C) Within one year from the end of the compliance year, comply with paragraphs (c)(2) and (c)(3) and have appropriate direct monitoring equipment installed and certified pursuant to Appendix A.

(9) Non-Operated Major NOx Source

Subparagraphs (c)(2)(A) and (c)(2)(B) shall not apply to a major NOx source if the Facility Permit holder complies with the following requirements.

- (A) The Facility Permit holder submits an application for each major NOx source to classify such source to be a non-operated major NOx source, demonstrating to the satisfaction of the Executive Officer that such source will not be operated in the current or next compliance year, and receives written approval from the Executive Officer. The Executive Officer shall further not approve an application to classify a major source to be a non-operated major NOx source if such source had previously been classified as a non-operated source for any time during the 18 calendar months prior to the filing date of the application.
- (B) The Facility Permit holder accepts and complies with all permit conditions imposed to ensure compliance with subparagraph (c)(9)(C) and (c)(9)(D).
- (C) The Facility Permit holder shall comply with the requirements under either subclause (i) or (ii):
  - (i) The Facility Permit holder shall:
    - (I) disconnect fuel feed lines and place flanges at both ends of the disconnected lines, and
    - (II) render the source non-operational by either disconnecting the process feed lines and place flanges at both ends of the disconnected lines or removing a major component of the source necessary for its operation.

- (ii) The Facility Permit holder shall monitor the source with an operating CEMS that was certified to monitor emissions from that source in accordance with District Rule 218 - Stack Monitoring, Rule 1135 - Emissions of Oxides of Nitrogen from Electric Power Generating Systems, or Rule 2012 and Appendix A and maintain records demonstrating the source's non-operational status as required by the applicable rule.
- (D) A source, which has been approved as a non-operated source pursuant to paragraph (c)(9), shall not be operated until the following requirements are met:
  - (i) The Facility Permit holder shall provide written notification to the Executive Officer that the source will be operated. The notification shall be made no less than 30 days prior to starting operation of the source.
  - (ii) The source meets the requirements of subparagraph (c)(2)(A) or (c)(2)(B) no later than 30 days after the start of operation except as provided under paragraph (c)(10). Until the source meets the requirements of subparagraph (c)(2)(A) or (c)(2)(B), emissions shall be determined pursuant to the Missing Data Procedures as specified under Rule 2012, Appendix A, Chapter 2, Subdivision E.
- (10) A non-operated major NOx source qualifies for a one-time only CEMS certification period if:
  - (A) the source has never been monitored by a RECLAIM certified CEMS since October 15, 1993, and
  - (B) the source has been in compliance with paragraph (c)(9) during the 12 months prior to the date the source was operated.

This one-time only CEMS certification period shall commence on the first day of any operation in any compliance year and ends on the date the CEMS is certified or 12 calendar months from the first day of operation, whichever date is earlier. By the end of this CEMS certification period, the Facility Permit holder shall install, operate, and maintain all required monitoring, reporting, and recordkeeping systems. During this CEMS certification period, the Facility Permit holder shall comply with the

monitoring, reporting, and recordkeeping requirements of paragraphs (h)(2) and (h)(3).

- (11) If an approved non-operated major NO<sub>x</sub> source fails to meet the requirements of the paragraph (c)(9) that source shall no longer be considered a non-operated major NO<sub>x</sub> source, and the facility permit holder of the source shall be considered in violation for each day from the start of the compliance year and emissions shall be determined as if the source had been operating from the start of the compliance year according to Missing Data Procedures as specified under Rule 2012, Appendix A, Chapter 2, clause (E)(1)(d)(iii), except for those days in which the Facility Permit holder can conclusively prove that the source has not been operated.

(d) Large NO<sub>x</sub> Source

- (1) Large NO<sub>x</sub> Source is any one of the following NO<sub>x</sub> emitting equipment:
- (A) any boiler, furnace, oven, dryer, heater, incinerator, test cell and any liquid or gaseous fueled equipment with a maximum rated capacity:
    - (i) greater than or equal to 40 but less than 500 million Btu per hour and an annual heat input of 90 billion Btu per year or less; or
    - (ii) greater than or equal to 10 but less than 40 million Btu per hour and an annual heat input greater than 23 billion Btu per year.
  - (B) any internal combustion engine with rated brake horsepower:
    - (i) greater than or equal to 1,000 bhp and operating 2,190 hours per year or less; or
    - (ii) greater than or equal to 200 but less than 1,000 bhp and operating more than 2,190 hours per year;
  - (C) any gas turbine rated greater than or equal to 0.2 but less than 2.9 megawatts, excluding any emergency standby equipment or peaking unit;
  - (D) any kiln or calciner with rated process weight less than 10 tons per hour or processing less than 21,900 tons per year;
  - (E) any sulfuric acid production unit;

- (F) any source at a Super Compliant Facility subject to, and meeting, the requirements of paragraph (c)(4) and which would otherwise be a major NO<sub>x</sub> source.;
  - (G) any NO<sub>x</sub> source or process unit elected by the Facility Permit holder or required by the Executive Officer to be monitored with a CPMS;
  - (H) any NO<sub>x</sub> source or process unit for which NO<sub>x</sub> emissions reported pursuant to Rule 301 - Permit Fees, were equal to or greater than 4 tons per year but less than 10 tons per year for any calendar year from 1987 to 1991, inclusive, excluding NO<sub>x</sub> sources or process units listed under subparagraphs (c)(1)(A) through (c)(1)(H), and (e)(1)(A) through (e)(1)(D).
- (2) The Facility Permit holder of a large NO<sub>x</sub> source shall comply with either paragraphs (c)(2) and (c)(3); or (c)(2), (d)(2)(B) and Appendix A, Chapter 3, Subdivision K for any large source; or elect to comply with the following:
- (A) install, maintain and operate a totalizing fuel meter and any other device specified by the Executive Officer or designee as necessary to determine monthly fuel usage, and all other applicable variables specified in Appendix A, Chapter 3, Table 3-A; and
  - (B) install, maintain and operate a modem or any reporting device approved by the Executive Officer or designee to be equivalent in accuracy, reliability, and timeliness, to report total monthly mass emissions of NO<sub>x</sub> to the District Central NO<sub>x</sub> Station for each large NO<sub>x</sub> source. Such data shall be reported within 15 days following the end of each calendar month; and
  - (C) accept the emission factor, equipment-specific emission rate or concentration limit, as specified pursuant to subdivision (f) in the Facility Permit, as the sole method for determining mass emissions for all purposes, including, but not limited to, determining:
    - (i) compliance with the annual Allocations;
    - (ii) excess emissions;
    - (iii) the amount of penalties; and
    - (iv) fees; and

- (D) monitor one or more measured variables as specified in Appendix A in order to ensure the applicability and accuracy of any equipment-specific emission rate specified in the Facility Permit; and
  - (E) comply with all applicable provisions of subdivision (f).
- (e) **NO<sub>x</sub> Process Unit**
- (1) **NO<sub>x</sub> Process Unit** means any piece of the following NO<sub>x</sub> emitting equipment:
    - (A) any boiler, furnace, oven, dryer, heater, incinerator, test cell and any liquid- or gaseous-fueled equipment with maximum rated capacity:
      - (i) greater than or equal to 10 but less than 40 million Btu per hour and an annual heat input of 23 billion Btu per year or less;
      - (ii) greater than 2 but less than 10 million Btu per hour; or
      - (iii) less than or equal to 2 million BTU per hour if the equipment is subject to permit requirements.
    - (B) any internal combustion engine with rated brake horsepower:
      - (i) greater than or equal to 200 but less than 1,000 bhp and operating 2,190 hours per year or less;
      - (ii) greater than 50 but less than 200 bhp; or
      - (iii) less than or equal to 50 bhp if the equipment is subject to permit requirements.
    - (C) any portable combustion equipment which is not a major or large source;
    - (D) any emergency standby equipment or peaking unit ;
    - (E) any other NO<sub>x</sub> source that is not a large or major NO<sub>x</sub> source or equipment designated in Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II.
  - (2) The Facility Permit holder of a NO<sub>x</sub> process unit shall comply with paragraph (c)(2), and (c)(3), or paragraph (d)(2), for any process unit, or elect to comply with the following:
    - (A) install, maintain and operate a totalizing fuel meter and/or timer or any device approved by the Executive Officer or designee to be equivalent in accuracy, reliability, reproducibility, and timeliness

for the NO<sub>x</sub> process unit, to measure quarterly fuel usage or other applicable variables specified in Table 2012-1, and Appendix A, Chapter 4, Table 4-A; and

- (B) report quarterly mass emissions of NO<sub>x</sub> to the District Central Station 30 days after the end of each of the first three quarters and 60 days after the last quarter of a compliance year for each process unit using a modem or any reporting device approved by the Executive Officer to be equivalent in accuracy, reliability, and timeliness; and
- (C) accept the emission factor, concentration limit, or equipment-specific or category-specific emission rate, as specified pursuant to subdivision (f) of this Rule and in the Facility Permit, as the sole method for determining mass emissions for all purposes, including, but not limited to, determining:
  - (i) compliance with the annual Allocations;
  - (ii) excess emissions;
  - (iii) the amount of penalties; and
  - (iv) fees; and
- (D) comply with all applicable provisions of subdivision (f).
- (E) Facility Permit holders that opt for a concentration limit in Subparagraph (e)(2)(C) for a process unit shall comply at all times with that NO<sub>x</sub> concentration limit in ppm measured over any continuous 60 minutes as specified in the Facility Permit for that source.

(f) Permit Conditions for Large Sources and Process Units

- (1) Starting January 1, 1994 for Cycle 1 facilities and starting July 1, 1994 for Cycle 2 facilities, calculations of mass emissions from each large source or process unit shall be based upon the emission factor specified in Rule 2002 - Allocations for Oxides of Nitrogen (NO<sub>x</sub>) and Oxides of Sulfur (SO<sub>x</sub>). The emission factor for each large source or process unit will be specified in the Facility Permit, and will remain valid unless amended by the Executive Officer pursuant to paragraphs (f)(2), (f)(3) or (f)(4).
- (2) On and after January 1, 1995 for Cycle 1 facilities and July 1, 1995 for Cycle 2 facilities, the Facility Permit holder of a large source shall:



- (A) comply at all times with an equipment-specific NO<sub>x</sub> concentration limit in ppm measured over any continuous 60 minutes as specified in the Facility Permit for that source; according to the requirements specified in Appendix A, Chapter 3 (large sources); or
  - (B) establish an equipment-specific emission rate that is reliable, accurate and representative of that source's emissions, according to the requirements specified in Appendix A, Chapter 5.
- (3) A Facility Permit holder may apply to the Executive Officer or designee to amend the concentration limit or equipment-specific emission rate for a large source, or to amend the emission factor to a concentration limit, equipment-specific emission rate, or category-specific emission rate for a process unit, in the Facility Permit, at any time. If the applicant demonstrates to the Executive Officer or designee that the equipment-specific or category-specific emission rate is reliable, accurate and representative for the purpose of calculating NO<sub>x</sub> emissions, the Executive Officer or designee will amend the Facility Permit to incorporate the equipment-specific or category-specific emission rate. No demonstration will be required to amend the Facility Permit to incorporate the alternative concentration limit, provided the large source or process unit complies with that limit in ppm over any continuous 60 minutes. The alternative concentration limit or equipment-specific emission rate for a large source, and the concentration limit, equipment-specific emission rate, or category-specific emission rate for a process unit, shall take effect prospectively from the date the Facility Permit is amended.
- (4) The Executive Officer or designee may amend the Facility Permit at any time to specify a concentration limit or an equipment-specific emission rate for a large source, or a concentration limit, equipment-specific emission rate, or category-specific emission rate for a process unit, if the concentration limit, equipment-specific emission rate, or category-specific emission rate is determined to be more reliable, accurate, or representative of that source's or unit's emissions than the previous emission factor, or concentration limit or emission rate specified in the Facility Permit. The alternative concentration limit or equipment-specific emission rate for a large source, or concentration limit, equipment-

specific emission rate or category-specific emission rate for a process unit shall take effect prospectively from the date the Facility Permit is amended.

(g) General Requirements

- (1) A Facility Permit holder shall at all times comply with all requirements specified in subdivisions (c), (d), (e), (f), (g), (h), and (i) for monitoring, reporting and recordkeeping, including but not limited to, measuring, reporting, time-sharing, determining mass emissions, and installing, maintaining or operating monitoring, measuring and reporting devices, in accordance with the applicable requirements set forth in Appendix A.
- (2) The monitoring system and the applicable method for determination of mass emissions for each NO<sub>x</sub> source or process unit will be specified in the Facility Permit, in accordance with the applicable requirements set forth in Appendix A.
- (3) The time-sharing of CEMS among NO<sub>x</sub> sources may be allowed by the Executive Officer or designee in accordance with the requirements for time-sharing specified in Appendix A. In such cases, the Executive Officer or designee will specify conditions in the Facility Permit upon which time-sharing may occur.
- (4) Any monitoring system certified prior to October 15, 1993 requiring a change to its full scale span range in order to meet the certification requirements set forth in Appendix A, shall be recertified by the Executive Officer or designee in accordance with the recertification requirements specified in Chapter 2, Section B.15, in Appendix A.
- (5) The Executive Officer or designee may at any time require a Facility Permit holder to use a specific monitoring and reporting system if it is determined that the elected system is inadequate to accurately determine mass emissions.
- (6) The sharing of totalizing fuel meters may be allowed by the Executive Officer or designee if the fuel meter serves large sources or process units which have the same emission factor or concentration limit or emission rate. The sharing of totalizing fuel meters shall not be allowed:
  - (A) if the fuel meters measure annual heat input as specified in clauses (d)(1)(A)(i) and (e)(1)(A)(i); or
  - (B) between large sources and process units.

- (7) A Facility Permit holder of any NO<sub>x</sub> source, process unit, or piece of equipment which is exempt from permit requirements pursuant to Rule 219 - Equipment Not Requiring A Written Permit Pursuant to Regulation II, shall determine NO<sub>x</sub> emissions according to the methodology specified in Appendix A. Process units or equipment exempt from permit requirements pursuant to Rule 219 shall report such NO<sub>x</sub> emissions in the Quarterly Certification of Emissions required by Rule 2004 - Requirements.
- (h) Compliance Schedule
- (1) Facilities with existing CEMS and fuel meters as of October 15, 1993 shall continue to follow recording and reporting procedures required by District rules and regulations in effect immediately prior to October 15, 1993, until December 31, 1994 for Cycle 1 facilities and June 30, 1995 for Cycle 2 facilities.
  - (2) Between January 1, 1994 and December 31, 1994 for Cycle 1 facilities and between July 1, 1994 and June 30, 1995 for Cycle 2 facilities, interim emission reports shall be submitted to the District by the Facility Permit holder. The interim reports shall comply with all of the requirements of this rule and Appendix A, except that the reporting frequency shall be monthly for major and large sources and quarterly for process units. Such reports shall be submitted by the tenth day of each month for major and large sources and as specified in paragraph (b)(2) of Rule 2004 - Requirements, for process units.
  - (3) A Facility Permit holder shall install, maintain and operate a totalizing fuel meter for each major source and a totalizing fuel meter and/or timer or any device approved by the Executive Officer or designee to be equivalent in accuracy, reliability, reproducibility, and timeliness for each large source or process unit by January 1, 1994 for Cycle 1 facilities and July 1, 1994 for Cycle 2 facilities, except that sharing of such devices may be allowed pursuant to paragraph (g)(6).
  - (4) All required or elected monitoring and reporting systems specified in subdivisions (c), (d), (e), (f), and (g) shall be installed no later than December 31, 1994 for Cycle 1 facilities and June 30, 1995 for Cycle 2 facilities. Monitoring, Reporting, and Recordkeeping (MRR) Forms will be provided by the Executive Officer or designee by November 15, 1993

for Cycle 1 facilities and April 15, 1994 for Cycle 2 facilities. The information required on such MRR forms shall be submitted no later than December 31, 1993 for Cycle 1 facilities and June 30, 1994 for Cycle 2 facilities.

- (5) The Facility Permit holder of an existing or new facility which elects to enter RECLAIM or a facility which is required to enter RECLAIM shall install all required or elected monitoring, reporting and recordkeeping systems no later than 12 months after entry into RECLAIM. During the 12 months prior to the installation of the required or elected monitoring, reporting and recordkeeping systems the Facility Permit holder shall comply with the monitoring reporting, and recordkeeping requirements of paragraphs (h)(2) and (h)(3) of this rule.
- (6) The Facility Permit holder which installs a new major NO<sub>x</sub> source at an existing facility shall install, operate, and maintain all required or elected monitoring, reporting and recordkeeping systems no later than 12 months after the initial start up of the major NO<sub>x</sub> source. During the interim period between the initial start up of the major NO<sub>x</sub> source and the provisional certification date of the CEMS, the Facility Permit holder shall comply with the monitoring requirements of paragraph (h)(2) and (h)(3) of this rule.

(i) Recordkeeping

The Facility Permit holder of a major or large NO<sub>x</sub> source or NO<sub>x</sub> process unit shall maintain all data required to be gathered, computed or reported pursuant to this rule and Appendix A for three years after each APEP report is submitted to the District except that all data gathered or computed for intervals of less than 15 minutes shall be maintained for a minimum of 48 hours. The Facility Permit holder of a major NO<sub>x</sub> source which is required to comply with 40 CFR Part 75 may instead opt to comply with the applicable recordkeeping requirements under 40 CFR Part 75. All records shall be made available to the District staff upon request.

(j) Source Testing

- (1) All required source testing shall comply with applicable District Source Test Methods 1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 4.1, 7.1, 100.1, and EPA Method 19.

- (2) Every large NO<sub>x</sub> source shall be source tested no later than December 31, 1996 for Cycle 1 facilities and June 30, 1997 for Cycle 2 facilities, and subsequently tested within every three-year period thereafter. Any source test conducted to satisfy this requirement must be conducted at least 12 months following the tests submitted to satisfy the previous three-year period. Such source test results shall be submitted to the District within 60 days of the date the source test was conducted. In lieu of submitting the first source test report, the Facility Permit holder may submit the results of a source test not more than three years old which meets applicable requirements of this rule when conducted. If a large source has not been operated within the same quarter of the date a source test is required, the source test may be conducted by the end of seven consecutive days or 15 cumulative days of resumed operation. The Facility Permit holder shall keep daily records to demonstrate that the large source had not been operated for the three month period and upon resumption of operation the Facility Permit holder shall keep records of each day operated until the required test. The source testing requirement does not apply to large sources which comply with paragraphs (c)(2) and (c)(3), or paragraphs (c)(2), (d)(2)(B), and Appendix A, Chapter 3, Subdivision K.
- (3) An equipment-specific emission rate or category-specific emission rate for process units shall comply with source testing guidelines to be established by the Executive Officer or designee by March 31, 1994.
- (4) Every process unit that is approved by the Executive Officer to use a concentration limit for emission reporting shall be source tested every five-year period, with the first five-year period ending on December 31, 2004 for Cycle 1 facilities and June 30, 2005 for Cycle 2 facilities. The compliance date for the first source test shall be within 12 months of the approval of the concentration limit by the Executive Officer but, no later than the last day of the five-year period in which the use of a concentration limit is approved by the Executive Officer. Any source test conducted to satisfy this requirement must be conducted at least 12 months following the tests submitted to satisfy the previous five-year period. Such source test results shall be submitted to the District within 60 days of the date the source test was conducted. If a process unit has not been operated within the prior quarter of the date a source test is

required, the source test may be conducted by the end of either seven consecutive days or 15 cumulative days of resumed operation. The Facility Permit holder shall keep daily records to demonstrate that the process unit had not been operated for the three month period and upon resumption of operation the Facility Permit holder shall keep records of each day operated until the required test. Test firings of emergency standby equipment, which are less than 60 minutes in duration, are not considered operation for the purposes of these source test requirements so long as such test firings are done to verify availability of the unit for their intended use and once such test firings are completed the units are shutdown. Records of the date and duration when the unit is test fired shall be maintained for a period of three years, and shall be made accessible to the Executive Officer upon request.

(k) Exemption

The provisions of this rule shall not apply to gas flares.

(l) Appeals

The Facility Permit holder of a facility which has established Super Compliant status shall have a maximum of ten calendar days from the receipt of notification that the facility is no longer Super Compliant in which to file an appeal of such finding to the District Hearing Board in accordance with the requirements of Rule 216.

(m) Appendix A

All provisions of Appendix A are incorporated herein by reference.

**Attachment:** Appendix A - "Protocol for Monitoring, Reporting and Recordkeeping for Oxides of Nitrogen (NO<sub>x</sub>) Emissions."

**Table 2012-1**

**MEASURED VARIABLES AND REPORTED DATA FOR NO<sub>x</sub> SOURCES**

<b>NO<sub>x</sub> SOURCES</b>	<b>MEASURED VARIABLES</b>	<b>RECORDING FREQUENCY</b>	<b>REPORTED DATA</b>	<b>TRANSMITTING/ REPORTING FREQUENCY</b>
All sources subject to Paragraphs (c)(2) and (c)(3)	Stack NO <sub>x</sub> concentration, Exhaust flow rate, and Status codes  OR  Stack NO <sub>x</sub> concentration, Stack O <sub>2</sub> concentration, Fuel flow rate, and Status codes	Once every 15 minutes	Total daily mass emissions from each source    Daily status codes	Once a day for transmitting/ once a month for reporting
Large sources subject to Paragraph (d)(2)	Fuel usage	Monthly	Total Monthly mass emissions from each source	Once a month for reporting
NO <sub>x</sub> Process units subject to Paragraph (e)(2)	Fuel usage  OR  Operating time and Production/ Processing/Feed rate	Quarterly	Total quarterly mass emissions	Once a quarter for reporting