MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

PART 8. EMISSION LIMITATIONS AND PROHIBITIONS—OXIDES OF NITROGEN

R 336.1801 Emission of oxides of nitrogen from non-sip call stationary sources.

Rule 801. (1) As used in this rule:

(a) "Capacity factor" means either of the following:

(i) The ratio of a unit's actual annual electric output, expressed in megawatt hour, to the unit's nameplate capacity times 8,760 hours.

(ii) The ratio of a unit's annual heat input, expressed in million British thermal units or equivalent units of measure, to the unit's maximum design heat input, expressed in million British thermal units per hour or equivalent units of measure, times 8,760 hours.

(b) "Fossil fuel-fired" means the combustion of fossil fuel, alone or in combination with any other fuel, where the fossil fuel actually combusted comprises more than 50% of the fuel mass or annual heat input on a British thermal unit basis. Coke oven gas is a fossil fuel.

(c) "Low-NOx burners" means 1 of several developing combustion technologies used to minimize the formation of emissions of nitrogen oxides. As applicable to cement kilns, low-NOx burners means a type of cement kiln burner system designed to minimize NOx formation by controlling flame turbulence, delaying fuel/air mixing, and establishing fuel-rich zones for initial combusting, that for firing of solid fuel in the burning end zone of a kiln's main burner includes an indirect firing system or comparable technique for the main burner in the burning end zone of the kiln to minimize the amount of primary air supplied through the burner. In an indirect firing system, 1 air stream is used to convey pulverized fuel from the grinding equipment and at least 1 or more other air streams are used to supply primary air to the burning end zone kiln burner of the kiln with the pulverized fuel, with intermediate storage of the fuel, and necessary safety and explosion prevention systems associated with the intermediate storage of fuel.

(d) "Mid-kiln system firing" means the secondary firing in a kiln system by injecting solid fuel at an intermediate point in the kiln system using a specially designed heat injection mechanism for the purpose of decreasing NOx emissions through coal burning part of the fuel at lower temperatures and reducing conditions at the fuel injection point that may destroy some of the NOx.

(e) "Non-sip call source" means any stationary source of oxides of nitrogen emissions that is not defined as an oxide of nitrogen budget source in R 336.1803.

(f) "Ozone control period" means the period of May 31, 2004, through September 30, 2004, and the period of May 1 through September 30 each subsequent and prior year.

(g) "Peaking unit" means a unit that has an average capacity factor of not more than 10% during the previous 3 calendar years and a capacity factor of not more than 20% in each of those calendar years.

(h) "Process heater" means any combustion equipment which is fired by a liquid fuel or a gaseous fuel, or both, and which is used to transfer heat from the combustion gases to a process fluid, superheated steam, or water.

(i) "Unit" means a fossil fuel-fired combustion device.

(j) "Utility system" means all interconnected units and generators which are subject to subrule

(2) of this rule and which are operated by the same utility operating company or by common ownership and control.

(2) An owner or operator of a fossil fuel-fired, electricity-generating utility unit which has the potential to emit more than 25 tons each ozone control period of oxides of nitrogen and which serves a generator that has a nameplate capacity of 25 megawatts or more shall comply with the emission limits during the ozone control period as follows:

(a) By May 31, 2004, meet the least stringent of a utility system-wide average oxides of nitrogen emission rate of 0.25 pounds per million British thermal units heat input or an emission rate based on a 65% reduction of oxides of nitrogen from 1990 levels.

(b) The date listed in subdivision (a) of this subrule may be extended by up to 2 years if an owner or operator makes an acceptable demonstration to the department that the additional time is necessary to avoid disruption of the energy supply in the state or if the additional time is necessary to comply with the provisions of this rule.

(3) An owner or operator shall demonstrate compliance with the emission limits in subrule (2) of this rule as follows:

(a) To demonstrate compliance with a utility system-wide average emission rate, the owner or operator shall show that the sum of the mass emissions from all units owned or operated by a utility that is subject to subrule (2) of this rule which occurred during the ozone control period, divided by the sum of the heat input from all units owned or operated by a utility that is subject to subrule (2) of this rule which occurred during the ozone control period is less than or equal to the limits in subrule (2) of this rule.

(b) To demonstrate compliance with the percent reduction requirements of subrule (2) of this rule, the owner or operator shall provide calculations showing that the utility system average emission rate during each compliance ozone control period has been reduced below the 1990 ozone control period average emission rate by the applicable percent reduction listed in subrule (2) of this rule. The 1990 ozone control period average emission rate is the sum of the mass emissions from all units owned or operated by a utility that is subject to subrule (2) of this rule which occurred during the 1990 ozone control period divided by the sum of the heat input from all units owned or operated by a utility that is subject to subrule (2) of this rule which occurred during the 1990 ozone control period.

(4) By May 31, 2004, an owner or operator of a fossil fuel-fired emission unit which has the potential to emit more than 25 tons of oxides of nitrogen each ozone control period, except for an emission unit that is subject to subrule (2) of this rule, and which has a maximum rated heat input capacity of more than 250 million British thermal units per hour shall comply with the following provisions, as applicable:

(a) An owner or operator of a fossil fuel-fired, electricity-generating utility unit which serves a generator that has a nameplate capacity of less than 25 megawatts which has a maximum rated heat input capacity of more than 250 million British thermal units per hour shall comply with the appropriate oxides of nitrogen emission limit in table 81 of this rule.

(b) An owner or operator of a fossil fuel-fired boiler or process heater shall meet the emission limits contained in table 81 of this rule.

(c) An owner or operator of a gas-fired boiler or process heater that fires gaseous fuel which contains more than 50% hydrogen by volume shall comply with an oxide of nitrogen emission limit of 0.25 pounds per million Btu heat input.

(d) An owner or operator of a stationary internal combustion engine which is subject to the provisions of this rule and which has a maximum rated heat input capacity that is the heat input at

80 degrees Fahrenheit at sea level and takes into account inlet and exhaust losses shall comply with the following oxides of nitrogen emission limits, as applicable:

(i) For a natural gas-fired stationary internal combustion engine - 14 grams of oxides of nitrogen per brake horsepower hour at rated output.

(ii) For a diesel-fired stationary internal combustion engine - 10 grams of oxides of nitrogen per brake horsepower hour at rated output.

(e) An owner or operator of a cement kiln that is subject to the provisions of this rule shall reduce kiln oxides of nitrogen emissions by any of the following methods:

(i) Low oxides of nitrogen burners.

(ii) Mid-kiln system firing.

(iii) A 25% rate-based reduction of oxides of nitrogen from 1995 levels. Compliance with this paragraph shall be based on calculations showing that the emission rate, on a pounds of oxides of nitrogen per ton of clinker produced basis, during each compliance ozone control period, has been reduced below the 1995 ozone control period emission rate by 25%.

(f) An owner or operator of a stationary gas turbine which is subject to the provisions of this rule and which has a maximum rated heat input capacity that is the heat input at 80 degrees Fahrenheit at sea level and takes into account inlet and exhaust losses shall comply with an emission limit of 75 parts per million, dry volume, corrected to 15% oxygen, at rated capacity. The provisions of this rule do not apply to a stationary gas turbine that is subject to a new source performance standard contained in 40 C.F.R. part 60, subpart gg, which is adopted by reference in R 336.1802a.

(g) An owner or operator of an emission unit which is subject to this rule and which is not otherwise subject to the provisions of subdivisions (a) to (f) of this subrule shall submit a proposal for oxides of nitrogen control by November 17, 2000. An owner or operator shall implement the control program by May 31, 2004, or by an alternate date approved by the department. The owner or operator shall obtain department approval of the proposed control program. The proposal for oxides of nitrogen control shall include all of the following information:

(i) A listing of reasonably available oxides of nitrogen control technologies, including the costs of installation and operation, cost of control per ton of oxides of nitrogen reduced, and the projected effectiveness of the proposed control technologies. The owner or operator shall use costing methodologies acceptable to the department.

(ii) The technology selected for controlling oxides of nitrogen emissions from the emission unit, considering technological and economic feasibility.

(iii) A proposal for testing, monitoring, and reporting oxides of nitrogen emissions.

(h) The compliance date listed in this subrule may be extended by up to 2 years if an owner or operator makes an acceptable demonstration to the department that the additional time is necessary to comply with the provisions of this rule. The owner or operator of a unit subject to subrules (2) and 4(a) to (f) of this rule may request an alternate emission limit or control requirement if there is an acceptable demonstration made to the department that compliance with the limits in table 81, or other limits or control requirements, is not reasonable. The request for an alternate emission limit or control requirement shall be submitted to the department within 60 days of the effective date of this amendatory rule and shall include all of the information listed in subdivision (g)(i) to (iii) of this subrule.

(5) The method for determining compliance with the emission limits in subrule (4) of this rule is as follows:

(a) If the emission limit is in the form of pounds of oxides of nitrogen per million British

thermal unit, then the unit is in compliance if the sum of the mass emissions from the unit that occurred during the ozone control period, divided by the sum of the heat input from the unit that occurred during the ozone control period, is less than or equal to the limit in subrule (4) of this rule.

(b) For an emission unit not subject to subdivision (a) of this subrule, the method for determining compliance shall be a method acceptable to the department.

(6) An owner or operator of a source of oxides of nitrogen that is subject to the provisions of this rule may participate in Michigan's emission trading program, being R 336. 2201 to R 336.2218.

(7) The owner or operator of an emission unit subject to subrule (2) of this rule shall measure oxides of nitrogen emissions with a continuous emission monitoring system; an alternate method as described in 40 C.F.R. part 60 or 75 and acceptable to the department; or a method currently in use and acceptable to the department, including methods contained in existing permit conditions. The provisions of 40 C.F.R. parts 60 and 75 are adopted by reference in R 336.1802a.

(8) The owner or operator of a boiler, process heater, stationary internal combustion engine, stationary gas turbine, cement kiln, or any other stationary emission unit that is subject to the provisions of subrule (4) of this rule shall measure oxides of nitrogen emissions by any of the following:

(a) Performance tests described in subrule (9) of this rule.

(b) Through the use of a continuous emission monitor in accordance with the provisions of subrule (11) of this rule.

(c) According to a schedule and using a method acceptable to the department.

(9) An owner or operator of an emission unit that measures oxides of nitrogen emissions by performance tests as specified in subrule (8) of this rule shall do all of the following:

(a) Conduct an initial performance test not later than 90 days after the compliance deadline. For an emission unit that is not in service on or after the compliance deadline, the owner or operator shall contact the department and schedule an alternate initial performance test as agreed to by the department.

(b) After the initial performance test, conduct a compliance performance test each ozone control period or according to the following schedule:

(i) After 2 consecutive ozone control periods in which the emission unit demonstrates compliance, an owner or operator shall conduct performance tests at least once every 2 years during the ozone control period.

(ii) After a total of 4 consecutive ozone control periods in which the emission unit has remained in compliance, an owner or operator shall conduct performance tests at least once every 5 years during the ozone control period.

(c) If an emission unit is not in compliance at the end of an ozone control period, then the owner or operator shall conduct a compliance performance test each ozone control period, but can again elect to use the alternative schedule specified in subdivision (b) of this subrule.

(d) An owner or operator shall submit 2 copies of each compliance performance test to the department within 60 days of completion of the testing. The test results shall be presented and include data as requested in the department format for submittal of source emission test plans and reports. All performance test reports shall be kept on file at the plant and made available to the department upon request.

(10) An owner or operator of an emission unit who is required to conduct performance testing under subrule (8) of this rule shall submit a test plan to the department, not less than 30 days

before the scheduled test date. To ensure proper testing, the plan shall supply the information in the department format for submittal of source emission test plans and reports. The owner or operator shall give the department a reasonable opportunity to witness the tests.

(11) An owner or operator of an emission unit that measures oxides of nitrogen emissions by a continuous emission monitoring system or an alternate method, as specified in subrule (7) or (8) of this rule, shall do either of the following:

(a) Use procedures set forth in 40 C.F.R., part 60, subpart A and appendix B, and comply with the quality assurance procedures in appendix F, or 40 C.F.R., part 75, and associated appendices, as applicable and acceptable to the department. Title 40 C.F.R., parts 60 and 75, are adopted by reference in R 336.1802a.

(b) An owner or operator of an emission unit who uses a continuous emission monitoring system to demonstrate compliance with this rule and who has already installed a continuous emission monitoring system for oxides of nitrogen pursuant to other applicable federal, state, or local rules shall meet the installation, testing, operation, calibration, and reporting requirements specified by federal, state, or local rules.

(12) The owner or operator of an emission unit that is subject to this rule shall submit a summary report, in an acceptable format, to the department within 60 days after the end of each ozone control period. The report shall include all of the following information:

(a) The date, time, magnitude of emissions, and emission rates where applicable, of the specified emission unit or utility system.

(b) If emissions or emission rates exceed the emissions or rates allowed for in the ozone control period by the applicable emission limit, the cause, if known, and any corrective action taken.

(c) The total operating time of the emission unit during the ozone control period.

(d) For continuous emission monitoring systems, system performance information shall include the date and time of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments. When the continuous monitoring system has not been inoperative, repaired, or adjusted, the information shall be stated in the report.

(13) Table 81 reads as follows:

Table 81

Boilers and process heaters with heat input capacity of 250 million Btu or more oxides of nitrogen (NOx) emission limitations (pounds NOx per million Btu of heat input averaged over the ozone control period)	
Fuel type	Emission limit
Natural gas	0.20
Distillate oil	0.30
Residual oil	0.40
Coal (1) Coal spreader stoker (2) Pulverized coal fired	 0.40 0.40
Gas (other than natural gas)[1]	0.25

For units operating with a combination of gas, oil, or coal, a variable emission limit calculated as the heat input weighted average of the applicable emission limits shall be used. The emission limit shall be determined as follows:

Emission limit = a(0.20) + b(applicable oil limit) + c(applicable coal limit) + d(0.25)

Where:
a = Is the percentage of total heat input from natural gas
b = Is the percentage of total heat input from oil
c = Is the percentage of total heat input from coal
d = Is the percentage of total heat input from gas (other than natural gas)

[1]This may include a mixture of gases. In this case, natural gas may be part of the mixture.

(14) The provisions of this rule do not apply to the following emission unit or units:

(a) A unit that is subject to oxides of nitrogen standards, which have been promulgated in a federal implementation plan under section 110(c) of the clean air act, required under section 126 of the clean air act, or promulgated in a federal regulation under 40 C.F.R. part 51 or part 60 and which are equally stringent or more stringent than this rule.

(b) A unit that is subject to any other rule included in this part.

(c) A peaking unit. The owner or operator shall retain records of capacity for a period of 5 years demonstrating that the unit meets the definition of a peaking unit. The unit shall become subject to the provisions of this rule on January 1 of the year following failure to meet the peaking unit definition.

History: 2000 MR 7, Eff. May 17, 2000; 2002 MR 22m Eff. Dec. 4, 2002; 2009 MR 10, Eff. May 28, 2009.

R 336.1802 Applicability under oxides of nitrogen budget trading program.

Rule 802. (1) This rule establishes an oxides of nitrogen emissions budget and oxides of nitrogen trading program for electricity-generating units and large affected units as described in these rules. The following units in the Michigan fine grid zone and the unit at Detroit Edison Company's Harbor Beach facility in Huron county shall be oxides of nitrogen budget units, and any source that includes 1 or more units shall be an oxides of nitrogen budget source and shall be subject to the requirements of this rule:

(a) An electricity-generating unit as defined in R 336.1803.

(b) A large affected unit as defined in R 336.1803.

(2) A unit described in subrule (1) of this rule shall not be an oxides of nitrogen budget unit, if the unit has a federally enforceable permit that meets any of the following requirements:

(a) The federally enforceable permit includes terms and conditions that restrict the unit to burning only natural gas or fuel oil during ozone control periods beginning in 2004 and each ozone control period thereafter.

(b) The federally enforceable permit includes terms and conditions that restrict the unit's operation during each ozone control period by 1 of the following methods such that the unit's potential oxides of nitrogen mass emissions for the ozone control period are limited to 25 tons or less:

(i) Restrict the mass emissions to 25 tons or less of oxides of nitrogen as measured by a certified continuous emission monitoring system in accordance with 40 C.F.R. §75, subpart H, which is adopted by reference in R 336.1801(7).

(ii) Restrict the unit's operating hours to no more than the number calculated by dividing 25 tons of potential oxides of nitrogen mass emissions by the unit's maximum potential hourly oxides of nitrogen mass emissions. The maximum potential hourly oxides of nitrogen mass emissions shall be determined by multiplying a rate in either subparagraph (A) or (B) of this paragraph by the value in subparagraph (C) of this paragraph:

(A) The default oxides of nitrogen emission rate in 40 C.F.R. §75.19, table LM-2, that would otherwise be applicable assuming that the unit burns only the type of fuel, for example, only natural gas or fuel oil, that has the highest default oxides of nitrogen emission factor of any type of fuel that the unit is allowed to burn under the fuel use restriction in subdivision (a) of this subrule. Title 40 C.F.R., part 75, is adopted by reference in R 336.1801.

(B) The maximum oxides of nitrogen emission rate established in accordance with 40 C.F.R. §75.19(c)(iv), which is adopted by reference in R 336.1801(7).

(C) The unit's maximum rated hourly heat input. The owner or operator of the unit may petition the department to use a lower value for the unit's maximum rated hourly heat input than the value as defined in 40 C.F.R. §96.2, which is adopted by reference in R 336.1803. The department may approve the lower value if the owner or operator demonstrates that the maximum hourly heat input specified by the manufacturer or the highest observed hourly heat input, or both, are not representative, and that the lower value is representative of the unit's current capabilities because modifications have been made to the unit limiting its capacity permanently.

(iii) Restrict the amount of fuel that can be used based on total heat input by dividing 25 tons by an oxides of nitrogen mass emission rate in either subparagraph (A) or (B) of paragraph (ii) of this subdivision and multiplying by the fuel heat content using the highest default gross calorific value under §75.19, table LM-5, and using a billing fuel flow meter to determine the quantity of fuel being used. Title 40 C.F.R. Part 75 is adopted by reference in R 336.1801.

(c) The federally enforceable permit includes all of the following requirements:

(i) The owner or operator of the unit shall retain records on site for a period of 5 years. The records shall show hours of operation for units with the operating hours restriction, volumes of fuel burned and maximum default gross calorific values for units with the heat input restriction, continuous emission monitoring data for units with the continuous emission monitoring exemption, and all other information necessary to demonstrate that requirements of the permit related to these restrictions were met.

(ii) The owner or operator of the unit shall report the unit's hours of operation, heat input, or continuous emission monitoring systems measured oxides of nitrogen emissions to the department by November 1 of each year for which the unit is subject to the federally enforceable permit. If the hours of operation are required to be reported, the owner or operator shall treat any partial hour of operation as a whole hour of operation. The unit shall be subject only to the requirements of this subrule, throughout the effective period of the federally enforceable permit under this subrule.

(iii) The owners and operators of the unit shall establish or specify a general account.

(iv) After recording an oxides of nitrogen allowance allocation under R 336.1810, the United States environmental protection agency shall deduct from the general account under paragraph (iii) of this subdivision oxides of nitrogen allowances that are allocated for the same or a prior ozone season control period as the recorded oxides of nitrogen allowances allocation and that

equal the oxides of nitrogen emission limitation, in tons of oxides of nitrogen, on which the unit's exemption under this subdivision is based. The NOx authorized account representative shall ensure that the general account contains the oxides of nitrogen allowances necessary for completion of the deduction.

(3) The department shall notify the United States environmental protection agency, in writing, within 30 days of either of the following scenarios:

(a) A unit is issued a federally enforceable permit under subrule (2) of this rule.

(b) Any of the following provisions apply to a unit's federally enforceable permit previously issued by the department under subrule (2) of this rule:

(i) The permit is revised to remove any restriction.

(ii) The permit includes any restriction that is no longer applicable.

(iii) The permit conditions do not comply with any restriction.

(4) A unit shall be treated as commencing operation, and for a unit under subrule (1)(a) of this rule commencing commercial operation, on September 30 of the ozone control period in which either of the following conditions apply:

(a) The fuel use restriction, operating hours, or emissions restriction is no longer applicable.

(b) The unit does not comply with the fuel use restriction, operating hours, or emissions restriction.

History: 2002 MR 22, Eff. Dec. 4, 2002; 2004 MR 10, Eff. May 20, 2004.

R 336.1802a Adoption by reference.

Rule 802a. The following documents are adopted by reference in these rules. Copies are available for inspection and purchase at the Air Quality Division, Department of Environmental Quality, 525 West Allegan Street, P.O. Box 30260, Lansing, Michigan 48909-7760, at the cost at the time of adoption of these rules (AQD price). Copies may be obtained from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania, 15250 7954, at the cost at the time of adoption of these rules (GPO price), or on the United States government printing office internet web site at http://www.gpoaccess.gov:

(a) Title 40 C.F.R., part 60, "Standards of Performance for New Stationary Sources" (2007), AQD price $68.00, appendices $67.00; GPO price $58.00, appendices $57.00.

(b) Title 40 C.F.R., §72.2 definitions under the "Acid Rain Program General Provisions" (January 24, 2008), AQD price $72.00; GPO price $62.00.

(c) Title 40 C.F.R. §72.8, "Retired Units Exemption" (January 24, 2008), AQD price $72.00; GPO price $62.00

(d) Title 40 C.F.R., part 75, "Continuous Emission Monitoring" (January 24, 2008), AQD price $72.00; GPO price $62.00.

(e) Title 40 C.F.R., §96.54, "Compliance" (2006), AQD price $70.00; GPO price $60.00.

(f) Title 40 C.F.R., §97.2, 97.102, 97.103, 97.302 and 97.303, definitions under the "Federal Oxides of Nitrogen (NOx) Budget Trading Program and CAIR NOx and Sulfur Dioxide (SO2) Trading Programs" (October 17, 2007), AQD price $70.00; GPO price $60.00.

(g) Title 40 C.F.R., §97.104, "Applicability" (October 17, 2007), AQD price $70.00; GPO price $60.00.

(h) Title 40 C.F.R., §§97.180 to 97.188 and §§97.380 to 97.388, opt-in provisions under the "Federal Oxides of Nitrogen (NOx) Budget Trading Program and CAIR NOx and Sulfur Dioxide

(SO2) Trading Programs" (October 17, 2007), AQD price $70.00; GPO price $60.00.

(i) Title 40 C.F.R., §97.304, Applicability (October 17, 2007), AQD price $70.00; GPO price $60.00.

History: 2007 MR 12, Eff. June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1803 Definitions.

Rule 803. (1) The provisions of 40 C.F.R. §96.2 are adopted by reference in this rule. The definitions for the oxides of nitrogen budget trading program in 40 C.F.R. §96.2 are applicable to R 336.1802 to R 336.1816. In addition, all of the following definitions apply as indicated, including a modification to the "NOx budget trading program" definition:

(a) "Electric-generating unit (EGU)" means the following:

(i) For units that commenced operation before January 1, 1997, a unit serving a generator during 1995 or 1996 that had a nameplate capacity of more than 25 megawatts and produced electricity for sale.

(ii) For units that commenced operation on or after January 1, 1997, and before January 1, 1999, a unit serving a generator during 1997 or 1998 that had a nameplate capacity of more than 25 megawatts and produced electricity for sale.

(iii) For units that commence operation on or after January 1, 1999, a unit serving a generator at any time that has a nameplate capacity of more than 25 megawatts and produces electricity for sale.

(b) "Large affected unit" means the following:

(i) For units that commenced operation before January 1, 1997, a unit that has a maximum design heat input of more than 250,000,000 Btu's per hour and that did not serve during 1995 or 1996 a generator producing electricity for sale.

(ii) For units that commenced operation on or after January 1, 1997, and before January 1, 1999, a unit that has a maximum design heat input of more than 250,000,000 Btu's per hour and that did not serve during 1997 or 1998 a generator producing electricity for sale.

(iii) For units that commence operation on or after January 1, 1999, a unit that has a maximum design heat input of more than 250,000,000 Btu's per hour and to which either of the following provisions applies:

(A) The unit at no time serves a generator producing electricity for sale.

(B) The unit at any time serves a generator producing electricity for sale, if any such generator has a nameplate capacity of 25 megawatts or less and has the potential to use not more than 50% of the potential electrical output capacity of the unit.

(c) "Michigan fine grid zone" means the geographical area that includes all of the following counties:

(i) Allegan.

(ii) Barry.

(iii) Bay.

(iv) Berrien.

(v) Branch.

(vi) Calhoun.

(vii) Cass.

(viii) Clinton.

(ix) Eaton.
(x) Genesee.
(xi) Gratiot.
(xii) Hillsdale.
(xiii) Ingham.
(xiv) Ionia.
(xv) Isabella.
(xvi) Jackson.
(xvii) Kalamazoo.
(xviii) Kent.
(xix) Lapeer.
(xx) Lenawee.
(xxi) Livingston.
(xxii) Macomb.
(xxiii) Mecosta.
(xxiv) Midland.
(xxv) Monroe.
(xxvi) Montcalm.
(xxvii) Muskegon.
(xxviii) Newaygo.
(xxix) Oakland.
(xxx)) Oceana.
(xxxi) Ottawa.
(xxxii) Saginaw.
(xxxiii) Saint Clair.
(xxxiv) Saint Joseph.
(xxxv) Sanilac.
(xxxvi) Shiawassee.
(xxxvii) Tuscola.
(xxxviii) Vanburen.
(xxxix) Washtenaw.
(xl) Wayne.

(d) “NOx budget trading program” means a multi-state nitrogen oxides air pollution control and emission reduction program established pursuant to 40 C.F.R. part 96 and part 97. The provisions of 40 C.F.R. part 96 and part 97 are adopted by reference in subrule (2) of this rule.

(e) “Ozone control period” means the period of May 31, 2004, through September 30, 2004, and the period of May 1 to September 30 each subsequent and prior year. The term "ozone control period" replaces the term “control period.”

(2) For R 336.1803 to R 336.1816, the provisions of 40 C.F.R. part 96 and part 97 (2007) are adopted by reference, except as modified in R 336.1804, R 336.1805, R 336.1808, R 336.1811, R 336.1813, and R 336.1815. Copies may be inspected at the Lansing office of the air quality division of the department of environmental quality. Copies of the regulations may be obtained from the Department of Environmental Quality, Air Quality Division, 525 West Allegan Street, P.O. Box 30260, Lansing, Michigan 48909-7760, at a cost as of the time of adoption of this rule of $70.00. A copy may also be obtained from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost as of the time

of adoption of this rule of $60.00; or on the United States government printing office internet web site at www.access.gpo.gov.

(3) Definitions under the clean air interstate rule NOx ozone season and annual trading programs in 40 C.F.R. §97.102 and §97.302 are applicable to R 336.1821 to R 336.1834. In addition, all of the following definitions apply as indicated:

(a) "Biomass" means the same as defined in 40 C.F.R §97.102 and §97.302.

(b) "CAIR" means clean air interstate rule.

(c) "Cogeneration unit" means the same as defined in 40 C.F.R §97.102 and §97.302.

(d) "Commence commercial operation" means the same as defined in 40 C.F.R §97.102 and §97.302.

(e) "Commence operation" means the same as defined in 40 C.F.R §97.102 and §97.302.

(f) Electric generating unit or "EGU" means any of the following:

(i) For the purposes of the CAIR NOx ozone season trading program; a CAIR NOx ozone season unit as defined under 40C.F.R. §97.304,

(ii) For the purposes of the CAIR NOx ozone season trading program, electric generating units required to be in Michigan's NOx SIP budget trading program that are not already included under 40 C.F.R. §96.304, which are defined as the following units located in Michigan's fine grid zone:

(A) For units that commenced operation before January 1, 1997, a unit serving a generator during 1995 or 1996 that had a nameplate capacity of more than 25 megawatts and produced electricity for sale.

(B) For units that commenced operation on or after January 1, 1997, and before January 1, 1999, a unit serving a generator during 1997 or 1998 that had a nameplate capacity of more than 25 megawatts and produced electricity for sale.

(C) For units that commence operation on or after January 1, 1999, a unit serving a generator at any time that has a nameplate capacity of more than 25 megawatts and produces electricity for sale.

(iii) For purposes of the CAIR NOx annual trading program; a CAIR NOx unit as defined under 40 C.F.R. §97.104.

(g) "Equivalent," for the purpose of allocating allowances pursuant to Michigan's CAIR programs, is determined using equation F-5 or F-6 in 40 C.F.R. part 75, appendix F.

(h) "Existing EGUs" for allocation purposes under R 336.1821 to R 336.1834, means electric generating units that commenced operations prior to the most recent year of the 5-year period used to calculate the allocations pursuant to these rules.

(i) "Fossil fuel-fired," means as defined in 40 C.F.R. §97.2 for the purposes of determining applicability for units that are considered either of the following:

(i) EGUs as defined pursuant to R 336.1803(3)(f)(ii).

(ii) Non-EGUs as defined pursuant to R 336.1803(3)(p).

(j) "Fuel types," for the allocation of allowances under Michigan's CAIR programs only, means solid, liquid, and gaseous fuel. The following definitions apply to fuel:

(i) "Solid fuel" includes, but is not limited to coal, biomass, tire-derived fuels, and pet coke.

(ii) "Liquid fuel" includes, but is not limited to petroleum-based oils, glycerol, vegetable-based and animal waste-based liquids.

(iii) "Gaseous fuel" includes, but is not limited to coke oven gas, natural gas, propane, coal gas, blast furnace gas, and methane derived from animal wastes.

(k) "Maximum design heat input" means the same as defined in 40 C.F.R §97.102 and

§97.302.

(l) “Michigan fine grid zone” means the geographical area that includes all of the following counties:

(i) Allegan.
(ii) Barry.
(iii) Bay.
(iv) Berrien.
(v) Branch.
(vi) Calhoun.
(vii) Cass.
(viii) Clinton.
(ix) Eaton.
(x) Genesee.
(xi) Gratiot.
(xii) Hillsdale.
(xiii) Ingham.
(xiv) Ionia.
(xv) Isabella.
(xvi) Jackson.
(xvii) Kalamazoo.
(xviii) Kent.
(xix) Lapeer.
(xx)) Lenawee.
(xxi) Livingston.
(xxii) Macomb.
(xxiii) Mecosta.
(xxiv) Midland.
(xxv) Monroe.
(xxvi) Montcalm.
(xxvii) Muskegon.
(xxviii) Newaygo.
(xxix) Oakland.
(xxx)) Oceana.
(xxxi) Ottawa.
(xxxii) Saginaw.
(xxxiii) Saint Clair.
(xxxiv) Saint Joseph.
(xxxv) Sanilac.
(xxxvi) Shiawassee.
(xxxvii) Tuscola.
(xxxviii) Vanburen.
(xxxix) Washtenaw.
(xl) Wayne.

(m)) “Nameplate capacity” means the same as defined in 40 C.F.R §97.102 and §97.302.

(n) “New EGUs,” for allocation purposes under R 336.1821 to R 336.1834, means electric generating units that are commencing operation or projected to commence operation on or after

January 1 of the most recent year of the 5-year period used to calculate the allocations pursuant to these rules.

(o) "Newly-affected EGUs," for allocation purposes under R 336.1821 to R 336.1834, means existing EGUs located outside the Michigan fine grid zone or existing EGUs located within the Michigan fine grid zone which were exempt from the federal NOx budget program. This definition is applicable for the 2009 CAIR NOx ozone season program only and after that time the newly affected EGUs are considered existing EGUs. This definition excludes the Harbor Beach power plant which was previously included as an EGU in the NOx SIP Budget trading program and is considered existing for the purposes of CAIR NOx ozone season program.

(p) "Non-EGUs" means the following units located in Michigan's fine grid zone:

(i) For units that commenced operation before January 1, 1997, a unit that has a maximum design heat input of more than 250,000,000 Btu's per hour and that did not serve during 1995 or 1996 a generator producing electricity for sale.

(ii) For units that commenced operation on or after January 1, 1997, and before January 1, 1999, a unit that has a maximum design heat input of more than 250,000,000 Btu's per hour and that did not serve during 1997 or 1998 a generator producing electricity for sale.

(iii) For units that commence operation on or after January 1, 1999, a unit that has a maximum design heat input of more than 250,000,000 Btu's per hour and to which either of the following provisions applies:

(A) The unit at no time serves a generator producing electricity for sale.

(B) The unit at any time serves a generator producing electricity for sale, if any such generator has a nameplate capacity of 25 megawatts or less and has the potential to use not more than 50% of the potential electrical output capacity of the unit.

(q) "Ozone Season" means May 1 to September 30 of each calendar year.

(r) "Renewable energy source," for allocation purposes under R 336.1821 to R 336.1826, means a source, located in Michigan, that generates electricity by solar, wind, geothermal, or hydroelectric processes, excluding nuclear, that has commenced operation or is projected to commence operation on or after January 1 of the most recent year of the 5-year period used to calculate the allocations pursuant to these rules, which meets all of the following:

(i) Serves a generator at 25 megawatts or greater of electrical output.

(ii) Is not subject to R 336.1801(4)(a) or covered by any other definitions in this rule.

(iii) Captures energy from on-going natural processes.

(iv) Is considered a non-emitting, having zero emissions, source.

(s) "Renewable energy projects," for allocation purposes under R 336.1821 to R 336.1826, means renewable energy sources, located in Michigan and located within the same geographic area that when added together equal a generator greater than 25 megawatts of electrical output.

History: 2002 MR 22, Eff. Dec. 4, 2002; MR 12, Eff. June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1804 Retired unit exemption from oxides of nitrogen budget trading program.

Rule 804. The provisions in 40 C.F.R. §96.5 are adopted by reference in R 336.1803 and are applicable to this rule, with the following modifications:

(a) The date in (c)(2)(i) of "May 1, 2003" shall be revised to "May 31, 2004."

(b) The time period of "18 months" in (c)(2)(i) shall be revised to "270 days."

(c) The date in (c)(2)(ii) of “May 1, 2003” shall be revised to “May 31, 2004.”

(d) The “loss of exemption” provisions in (c)(6)(i)(B) shall be revised to replace the word “application” by the phrase “application; or” and to include a new paragraph (c)(6)(i)(C) as follows: “The date on which the unit resumes operation, if the unit is not required to submit an oxides of nitrogen permit application.”

History: 2002 MR 22, Eff. Dec. 4, 2002; 2004 MR 10, Eff. May 20, 2004.

R 336.1805 Standard requirements of oxides of nitrogen budget trading program.

Rule 805. The provisions in 40 C.F.R. §96.6 are adopted by reference in R 336.1803 and are applicable to this rule, with the following modification: The date in (c)(3) of "May 1, 2003" shall be revised to "May 31, 2004."

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1806 Computation of time under oxides of nitrogen budget trading program.

Rule 806. The provisions in 40 C.F.R. §96.7 are adopted by reference in R 336.1803 and are applicable to this rule.

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1807 Authorized account representative under oxides of nitrogen budget trading program.

Rule 807. The provisions in 40 C.F.R. §96.10 through 96.14 are adopted by reference in R 336.1803 and are applicable to this rule.

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1808 Permit requirements under oxides of nitrogen budget trading program.

Rule 808. The provisions in 40 C.F.R. §96.20 through 96.25 are adopted by reference in R 336.1803 and are applicable to this rule, with the following modifications:

(a) All dates in §96.20 through 96.25 of "January 1, 2000" shall be revised to "January 1, 2001," and of "May 1, 2003" to "May 31, 2004."

(b) The time period of "18 months" shall be revised to "270 days."

(c) The language following the term "effective" in §96.24 shall be replaced with the term "upon issuance."

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1809 Compliance certification under oxides of nitrogen budget trading program.

Rule 809. The provisions in 40 C.F.R. §96. 30 and 96.31 are adopted by reference in

R 336.1803 and are applicable to this rule.

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1810 Allowance allocations under oxides of nitrogen budget trading program.

Rule 810. (1) The trading program budget allocated by the department under subrule (3) of this rule for an ozone control period shall equal the total number of tons of oxides of nitrogen emissions apportioned to the oxides of nitrogen budget units under R 336.1802 for the ozone control period, as determined by the procedures in this rule. The total number of tons of oxides of nitrogen emissions that are available for allocation as oxides of nitrogen allowances under this rule is as follows:

(a) For electricity-generating units, 29,038 tons in 2004, 2005, and 2006, and 28,150 tons in each year thereafter.

(b) For large affected units, 2,209 tons, distributed as follows:

(i) For large affected units, 1,081 tons.

(ii) For hardship purposes described in subrule (4)(f) of this rule, 564 tons.

(iii) For new source set-aside purposes described in R 336.1811, 564 tons in 2004, 2005, and 2006, and 1,452 tons in each year thereafter.

(2) The department shall allocate oxides of nitrogen allowances to oxides of nitrogen budget units according to the following schedule:

(a) A 3-year allocation that is 3 years in advance of the ozone control period in which the allowances are to be used. the 3-year allocation shall be as follows:

(i) Within 60 days of the effective date of this rule, the department shall submit, to the United States environmental protection agency, the oxides of nitrogen allowance allocations, in accordance with subrules (3) and (4) of this rule, for the ozone control periods in 2004, 2005, and 2006.

(ii) By April 1, 2004, the department shall submit, to the United States environmental protection agency, the oxides of nitrogen allowance allocations, in accordance with subrules (3) and (4) of this rule, for the ozone control periods in 2007, 2008, and 2009.

(iii) By April 1, 2007, the department shall submit, to the United States environmental protection agency, the oxides of nitrogen allowance allocations, in accordance with subrules (3) and (4) of this rule, for the ozone control periods in 2010, 2011, and 2012.

(iv) By April 1, 2010, and thereafter April 1 of the year that is 3 years after the last year of allocations, the department shall submit, to the United States environmental protection agency, the oxides of nitrogen allowance allocations, in accordance with subrules (3) and (4) of this rule, for the ozone control periods 3, 4, and 5 years after the year of the allowance allocation.

(b) If the department fails to submit the oxides of nitrogen allowance allocations in accordance with this subdivision to the United States environmental protection agency, then the United States environmental protection agency will allocate, for the applicable ozone control period, the same number of oxides of nitrogen allowances as were allocated for the preceding ozone control period.

(c) By April 1, 2005, and April 1 of each year thereafter, the department shall submit, to the United States environmental protection agency, the oxides of nitrogen allowance allocations remaining in the allocation set-aside for the prior ozone control period, in accordance with R 336.1811.

(3) The heat input, in million Btu's, used for calculating oxides of nitrogen allowance allocations for each oxides of nitrogen budget unit under R 336.1805 shall be as follows:

(a) For an oxides of nitrogen allowance allocation under subrule (2)(a)(i) of this rule, the following provisions apply, as applicable:

(i) For an electric generating unit, the average of the 2 highest amounts of the unit's heat input for the ozone control periods in 1995 through 2000.

(ii) For a large affected unit, the average of the 2 highest amounts of the unit's heat input for the ozone control periods in 1995 through 2000.

(iii) For a unit that operated less than 2 ozone seasons in 1995 through 2000, the single highest heat input for 1 of these ozone seasons.

(b) For an oxides of nitrogen allowance allocation under subrule (2)(a)(ii) through of this rule, the unit's average of the 2 highest heat inputs for the ozone control period in the 5 years immediately preceding the year in which the department is required to submit the oxides of nitrogen allocations. If a unit operated less than 2 ozone seasons in 1 of the 5-year time periods, then the unit's single highest heat input shall be used.

(c) The unit's total heat input for the ozone control period in each year shall be determined in accordance with 40 C.F.R. part 75 if the oxides of nitrogen budget unit was otherwise subject to the requirements of 40 C.F.R. part 75 for the year, or shall be based on the best available data reported to the department for the unit if the unit was not otherwise subject to the requirements of 40 C.F.R. part 75 for the year. The owner or operator of an oxides of nitrogen budget unit shall submit heat input data within 30 days if requested by the department. Title 40 C.F.R. part 75 is adopted by reference in R 336.1801.

(4) For each ozone control period under subrule (2) of this rule, the department shall allocate to all oxides of nitrogen budget units that commenced operation before May 1 of the most recent year of the 5-year period used to calculate heat input under subrule (3) of this rule, a total of 29,038 tons of allowances for electric generating units in 2004, 2005, and 2006; 28,150 tons in each year thereafter; and 1,081 tons of allowances for large affected units, apportioned in accordance with the following procedures:

(a) The department shall allocate oxides of nitrogen allowances to each electricity- generating unit in an amount equaling 0.15 pound per million Btu's or the allowable emission rate, whichever is more stringent, multiplied by the heat input determined under subrule (3) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(b) If the initial total number of oxides of nitrogen allowances allocated to all electricity-generating units for an ozone control period under subdivision (a) of this subrule does not equal 29,038 tons in 2004, 2005, and 2006, and 28,150 tons in each year thereafter, then the department shall adjust up or down the total number of oxides of nitrogen allowances allocated to all oxides of nitrogen budget units for the ozone control period under subdivision (a) of this subrule so that the total number of oxides of nitrogen allowances allocated equals 29,038 tons in 2004, 2005, and 2006, and 28,150 tons in each year thereafter. The adjustment shall be made by multiplying each unit's allocation determined in subdivision (a) by a correction factor determined by dividing the total number of the budget tons being allocated by the sum of all units' allocations in subdivision (a).

(c) The department shall allocate oxides of nitrogen allowances to each large affected unit in an amount equaling 0.17 pound per million Btu's or the allowable emission rate, whichever is more stringent, multiplied by the heat input determined under subrule (3) of this rule, divided by

2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(d) If the initial total number of oxides of nitrogen allowances allocated to all large affected units for an ozone control period under subdivision (c) of this subrule does not equal 1,081 tons, then the department shall adjust the total number of oxides of nitrogen allowances allocated to all oxides of nitrogen budget units for the ozone control period under subdivision (c) of this subrule so that the total number of oxides of nitrogen allowances allocated equals 1,081 tons. The adjustment shall be made multiplying each unit's allocation determined in subdivision (c) by a correction factor determined by dividing the total number of the budget tons being allocated by the sum of all units' allocations in subdivision (c).

(e) The authorized account representative of an electric generating unit or a large affected unit that has not been capable of operating for 2 complete ozone control periods, because it recently received its air use permit, may elect to abandon its allowance allocation for the 3-year allocation period, be considered a new source, and obtain an oxides of nitrogen allowance allocation as provided for by R 336.1811. A written notification of the election shall be provided to the department 1 or more months before the allocation dates identified in subrule (2)(a) or (c) of this rule. The abandoned allocation returns to the appropriate oxides of nitrogen trading budget in subrule (1)(a) or (b) of this rule.

(f) After the provisions of subdivisions (a) through (d) of this subrule have been followed, an owner or operator may pursue the following:

(i) The allocation determined by subdivisions (a) through (d) of this subrule may be revised for a given budget source if the budget source is a large affected unit or a small business as defined in chapter 3 of 1969 pa 306, MCL 24.240 et seq. The owner or operator shall demonstrate to the department that the control level in subdivision (a) or of this subrule results in excessively costly or prohibitive compliance. The demonstration shall include all of the following:

(A) An engineering study analyzing all control options that are technically available for the unit, including control options that would achieve a level of control meeting, at a minimum, a 0.3 pound per million Btu emission rate.

(B) The annualized cost associated with each control option. An annualized cost of more than $4,000.00 per ton of oxide of nitrogen reduced will generally be considered to be an excessive cost for compliance with this rule.

(C) Other considerations contributing to prohibitive compliance.

(ii) Notwithstanding the available allocations of subrule (1)(b) of this rule, the total number of additional allocations available for all budget sources receiving department approval for paragraph (i) demonstrations shall not be more than 564 tons per ozone season.

(iii) The department shall determine how revised allocations are distributed among those budget sources meeting the criteria in paragraph of this subdivision.

(iv) Upon approval by the department, a source that undertakes an innovative control program for compliance with these rules may receive allocations under the provisions of this subdivision. The allocations shall be available for use during only 1 allocation period, as needed, and shall not be more than 75 tons.

(v) The provisions of this subdivision shall only apply for the time period beginning with the effective date of this rule and ending on September 30, 2012. Beginning with the 3-year allocation in 2010, 95% of the allocations listed in paragraph (ii) of this subdivision shall be added to the electric generating unit budget in subrule (1) of this rule and 5% shall be added to the large affected unit budget in subrule (1) of this rule and will, therefore, be available to all existing

sources beginning in the 2013 ozone season.

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1811 New source set-aside under oxides of nitrogen budget trading program.

Rule 811. (1) For oxides of nitrogen budget units that commenced operation, or are projected to commence operation, on or after May 1 of the most recent year of the 5 year period used to calculate heat input under R 336.1810(3) and units which have abandoned allocations under R 336.1810(4)(e), the department shall allocate oxides of nitrogen allowances in accordance with the following procedures:

(a) The department shall establish 1 allocation set-aside pool for each ozone control period for electric generating units and large affected units. The allocation set-aside pool shall be allocated 564 tons of oxides of nitrogen allowances in 2004, 2005, and 2006, and 1,452 tons in each year thereafter.

(b) The oxides of nitrogen authorized account representative of an oxides of nitrogen budget unit under this rule may submit to the department an annual request, in writing or in a format specified by the department, to be allocated oxides of nitrogen allowances, starting with the ozone control period during which the oxides of nitrogen budget unit commenced or is projected to commence operation and ending with the ozone control period preceding the ozone control period for which it shall receive an allocation under R 336.1810(4)(a) or (c). The oxides of nitrogen allowance allocation request shall be submitted before March 1 of the year of the first ozone control period for which the oxides of nitrogen allowance allocation is requested and after the date on which the department issues a permit to install the oxides of nitrogen budget unit, and each following year by March 1.

(c) In an oxides of nitrogen allowance allocation request under this subrule, the oxides of nitrogen authorized account representative may request an ozone control period oxides of nitrogen allowance in an amount that does not exceed the following:

(i) For an electricity-generating unit, all of the following:

(A) Fifteen one-hundredths (0.15) pound per million Btu's or the allowable emission rate, whichever is more stringent.

(B) Multiplied by the oxides of nitrogen budget unit's maximum design heat input, or the permit allowable heat input, whichever is more stringent, in million Btu's per hour, divided by 2,000 pounds per ton.

(C) Multiplied by the number of hours remaining in the ozone control period starting with the first day in the ozone control period on which the unit operated or is projected to operate.

(ii) For a large affected unit, all of the following:

(A) Seventeen one-hundredths (0.17) pound per million Btu's or the allowable emission rate, whichever is more stringent.

(B) Multiplied by the oxides of nitrogen budget unit's maximum design heat input, or the permit allowable heat input, whichever is more stringent, in million Btu's per hour, divided by 2,000 pounds per ton.

(C) Multiplied by the number of hours remaining in the ozone control period starting with the first day in the ozone control period on which the unit operated or is projected to operate.

(d) The department shall review, and allocate oxides of nitrogen allowances pursuant to, each oxides of nitrogen allowance allocation request on a pro rata basis as follows:

(i) Upon receipt of the oxides of nitrogen allowance allocation request, the department shall determine whether, and shall make any necessary adjustments to the request to ensure that, for electricity-generating units, the ozone control period and the number of allowances specified are consistent with the requirements of subdivision (c)(i) of this subrule and, for large affected units, the ozone control period and the number of allowances specified are consistent with the requirements of subdivision (c)(ii) of this subrule.

(ii) If the allocation set-aside pool for the ozone control period for which oxides of nitrogen allowances are requested has an amount of oxides of nitrogen allowances greater than or equal to the number requested, as adjusted under paragraph (i) of this subdivision, then the department shall allocate the amount of the oxides of nitrogen allowances requested, as adjusted under paragraph (i) of this subdivision, to the oxides of nitrogen budget unit. Those allowances remaining in the pool shall be retained in the set-aside pool and shall be available the following ozone season.

(iii) If the allocation set-aside pool for the ozone control period for which oxides of nitrogen allowances are requested has an amount of oxides of nitrogen allowances less than the number requested, as adjusted under paragraph (i) of this subrule, then the department shall proportionately reduce the number of oxides of nitrogen allowances allocated to each oxides of nitrogen budget unit for the ozone control period so that the total number of oxides of nitrogen allowances allocated equals 564 tons in 2004, 2005, and 2006, and 1,452 tons in each year thereafter.

(2) For an oxides of nitrogen budget unit that is allocated oxides of nitrogen allowances under subrule (1) of this rule for an ozone control period, the United States environmental protection agency will first deduct oxides of nitrogen allowances to account for the actual utilization of the unit during the ozone control period and then will deduct oxides of nitrogen allowances under 40 C.F.R. §§96.54(b)(1) or 96.54(e) to account for emissions. Title 40 C.F.R. part 96 is adopted by reference in R 336.1803. The United States environmental protection agency will calculate the number of oxides of nitrogen allowances to be deducted to account for the unit's actual utilization using either of the following formulas, rounding to the nearest whole oxides of nitrogen allowance, as appropriate, provided that the number of oxides of nitrogen allowances to be deducted shall be 0 if the number calculated is less than 0:

(a) Oxides of nitrogen allowances deducted for actual utilization for an electricity- generating unit equals unit's oxides of nitrogen allowances allocated for control period minus (unit's actual control period heat input x lesser of 0.15 pound per million Btu's or the allowable emission rate x 2,000 pounds per ton).

(b) Oxides of nitrogen allowances deducted for actual heat input for a large affected unit equals unit's oxides of nitrogen allowances allocated for control period minus (unit's actual control period heat input x lesser of 0.17 pound per million Btu's or the allowable emission rate x 2,000 pounds per ton).

(3) After making the deductions for compliance under 40 C.F.R.§96.54(b)(1) or (e) for an ozone control period, the United States environmental protection agency will notify the department whether any oxides of nitrogen allowances remain in the new source set-aside pool for the ozone control period. Oxides of nitrogen allowances remaining in the new source set-aside pool equal the amount of remaining oxides of nitrogen allowances after making allocations in accordance with subrule (1)(d) of this rule, plus the sum of the amounts of oxides of nitrogen allowances deducted for actual utilization in accordance with subrule (2). Any such allowances shall remain in the set- aside pool for use in the following ozone seasons. Title 40 C.F.R. part 96

is adopted by reference in R 336.1803.

History: 2002 MR 22, Eff. Dec. 4, 2002; 2004 MR 10, Eff. May 20, 2004.

R 336.1812 Allowance tracking system and transfers under oxides of nitrogen budget trading program.

Rule 812. The provisions in 40 C.F.R. §96.50 through 96.54, 96.56, 96.57, and 96.60 through 96.62 are adopted by reference in R 336.1803 and are applicable to this rule, with the following modification: In §96.53, the date of "2003" shall be revised to "2004."

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1813 Monitoring and reporting requirements under oxides of nitrogen budget trading program.

Rule 813. The provisions in 40 C.F.R. §96.70 through 96.76 are adopted by reference in R 336.1803 and are applicable to this rule, with the following modification: In §96.70, the date "May 1, 2002," shall be revised to "May 1, 2003."

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1814 Individual opt-ins under oxides of nitrogen budget trading program.

Rule 814. The provisions in 40 C.F.R. §96.80 through 96.88 are adopted by reference in R 336.1803 and are applicable to this rule.

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1815 Allowance banking under oxides of nitrogen budget trading program.

Rule 815. The provisions in 40 C.F.R. §96.55 are adopted by reference in R 336.1803 and are applicable to this rule, with the following modifications:

(a) In subpart (B) of §96.55, the date of "2004" shall be revised to "2005."

(b) In subpart (B)(3)(ii) of §96.55, the first sentence shall be revised to read, "the administrator will multiply the number of banked oxides of nitrogen allowances in each compliance account or overdraft account by the ratio determined under paragraph (b)(3)(i) of this section."

(c) Subpart (C) in §96.55 shall be deleted.

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1816 Compliance supplement pool under oxides of nitrogen budget trading program.

Rule 816. (1) The department may allow sources required to implement oxides of nitrogen emission control measures by May 31, 2004, and subject to this rule, to demonstrate compliance in the 2004 and 2005 ozone control periods using credit issued from a compliance supplement pool in accordance with this rule. A source shall not use credit from the compliance supplement pool to demonstrate compliance after the 2005 ozone control period.

(2) The department may distribute oxides of nitrogen allocations from the compliance supplement pool to oxides of nitrogen budget units that are required to implement control measures. The department may issue up to 95% of the compliance supplement pool to oxides of nitrogen budget units that are electricity-generating units and up to 5% of the compliance supplement pool to oxides of nitrogen budget units that are large affected units that implement emissions reductions beyond all applicable requirements during the ozone control period in years before the year 2004 according to the following provisions:

(a) The department shall complete the issuance process not later than May 31, 2004.

(b) The emissions reduction shall not be required by Michigan's state implementation plan, state law, or rule or be otherwise required by the clean air act.

(c) The emissions reduction shall be verified by the source as actually having occurred during an ozone control period between September 30, 2000, and September 30, 2003.

(d) Each oxides of nitrogen budget unit for which the owner or operator requests any early reduction credits under this rule shall monitor oxides of nitrogen emissions in accordance with 40 C.F.R. part 75, subpart H, starting at least 1 calendar year before the ozone control period for which the early reduction credits are requested. The unit's monitoring system availability shall be not less than 90% during the first ozone control period in which monitoring occurs for this purpose, and the unit shall be in compliance with any applicable state or federal emissions or emissions-related requirements.

(e) The emissions reduction shall be quantified according to procedures set forth in 40 C.F.R. part 75, subpart h, which are adopted by reference in R 336.1801.

(f) The oxides of nitrogen authorized account representative of an oxides of nitrogen budget unit that meets the requirements of subdivisions (b) through (d) of this subrule may submit to the department a request for early reduction credits for the unit based on oxides of nitrogen emission rate reductions made by the unit in the ozone control period for 2001 through 2003. The request shall include both of the following:

(i) In the early reduction credit request, the oxides of nitrogen authorized account representative may request early reduction credits for the ozone control period in an amount equal to the unit's heat input for the ozone control period, multiplied by the difference between the rates in both of the following provisions:

(A) The oxides of nitrogen emission limit required by Michigan's state implementation plan, otherwise required by the clean air act, or 0.25 pounds per million Btu per hour, whichever is most stringent.

(B) The unit's actual oxides of nitrogen emission rate for the ozone control period, which shall be lower than the rate used in subparagraph (A) of this paragraph and less than 80% of the actual 2000 ozone control period oxides of nitrogen emission rate, divided by 2,000 pounds per ton, and rounded to the nearest ton.

(ii) The early reduction credit request shall be submitted, in a format specified by the department, by February 15, 2003, for the 2001 and 2002 ozone control periods and by February

15, 2004, for the 2003 ozone control period.

(g) The department shall allocate oxides of nitrogen allowances to oxides of nitrogen budget units meeting the requirements of this subdivision and covered by early reduction requests meeting the requirements of subdivision (f)(ii) of this subrule, in accordance with all of the following procedures:

(i) Upon receipt of each early reduction credit request, the department shall accept the request only if the requirements of subdivisions (b) through (d) and (f)(ii) of this subrule are met and, if the request is accepted, shall make any necessary adjustments to the request to ensure that the amount of the early reduction credits requested meets the requirement of subdivisions (b) through (d) of this subrule.

(ii) If the compliance supplement pool has an amount of oxides of nitrogen allowances equal to or greater than the number of early reduction credits in all accepted early reduction credit requests for 2001 through 2003, as adjusted under paragraph (i) of this subdivision, then the department shall allocate to each oxides of nitrogen budget unit covered by the accepted requests 1 allowance for each early reduction credit requested, as adjusted under paragraph (i) of this subdivision.

(iii) If the compliance supplement pool has an amount of oxides of nitrogen allowances less than the number of early reduction credits in all accepted early reduction credit requests for 2001 through 2003, as adjusted under paragraph (i) of this subdivision, then the department shall allocate oxides of nitrogen allowances to each oxides of nitrogen budget unit covered by the accepted requests according to the following formula: A unit's allocated early reduction credits equals ((unit's adjusted early reduction credits) divided by (total adjusted early reduction credits requested by all units)) times (available oxides of nitrogen allowances from the compliance supplement pool), where:

(A) Unit's adjusted early reduction credits is the number of early reduction credits for the unit for 2001 through 2003 in accepted early reduction credit requests, as adjusted under paragraph (i) of this subdivision.

(B) Total adjusted early reduction credits requested by all units is the number of early reduction credits for all units for 2001 through 2003 in accepted early reduction credit requests, as adjusted under paragraph (i) of this subdivision.

(C) Available oxides of nitrogen allowances from the compliance supplement pool is the number of oxides of nitrogen allowances in the compliance supplement pool and available for early reduction credits for 2001 through 2003.

(h) By May 31, 2004, the department shall submit, to the United States environmental protection agency, the allocations of oxides of nitrogen allowances determined under subdivision (g) of this subrule. The United States environmental protection agency will record the allocations to the extent that they are consistent with the requirements of subdivisions (b) through (g) of this subrule.

(i) Oxides of nitrogen allowances recorded under subdivision (g) of this subrule may be deducted for compliance under 40 C.F.R. §96.54(b) through (f) for the ozone control periods in 2004 or 2005. Notwithstanding 40 C.F.R. §96.55(a), the United States environmental protection agency will deduct as retired any oxides of nitrogen allowance which is recorded under subdivision (g) of this subrule and which is not deducted for compliance in accordance with 40 C.F.R. §96.54(b) through (f) for the ozone control period in 2004 or 2005.

(j) Oxides of nitrogen allowances recorded under subdivision (g) of this subrule are treated as banked allowances in 2005 for the purposes of §96.55(a) and (b).

(k) Sources that receive credit according to the requirements of this rule may trade the credit to other sources or persons according to the provisions in the trading program. Title 40 C.F.R., part 96, is adopted by reference in R 336.1803.

(3) The total number of oxides of nitrogen allowances available from the compliance supplement pool shall not be more than 9,907 tons of oxides of nitrogen. Any oxides of nitrogen allowances that remain in the compliance supplement pool after the 2005 ozone control period shall be retired.

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1817 Emission limitations and restrictions for Portland cement kilns.

Rule 817. (1) As used in this rule:

(a) "Clinker" means the product of a Portland cement kiln from which finished cement is manufactured by milling and grinding.

(b) "Long dry kiln" means a Portland cement kiln that employs no preheating of the feed. The inlet feed to the kiln is dry.

(c) "Long wet kiln" means a Portland cement kiln that employs no preheating of the feed. The inlet feed to the kiln is a slurry.

(d) "Low oxides of nitrogen burners" means a type of cement kiln burner system designed to lower oxides of nitrogen formation by controlling flame turbulence, delaying fuel/air mixing and establishing fuel-rich zones for initial combusting, that for firing of solid fuel by a kiln's main burner includes an indirect firing system or comparable technique for the main burner to lower the amount of primary combustion air supplied with the pulverized fuel. In an indirect firing system, 1 air stream is used to convey pulverized fuel from the grinding equipment and another air stream is used to supply primary combustion air to the kiln burner with the pulverized fuel, with intermediate storage of the fuel.

(e) "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(f) "Mid-kiln firing" means the secondary firing in a kiln system by injecting solid fuel at an intermediate point in the kiln system using a specially designed feed injection mechanism for the purpose of decreasing oxides of nitrogen emissions through both of the following:

(i) Burning part of the fuel at a lower temperature.

(ii) Reducing conditions at the fuel injection point that may destroy some of the oxides of nitrogen formed upstream in the kiln system.

(g) "Ozone control period" means the period beginning May 31, 2004, and ending September 30, 2004, and May 1 through September 30 each subsequent year.

(h) "Portland cement" means a hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing 1 or more of the forms of calcium sulfate as an interground addition.

(i) "Portland cement kiln" means a system, including any solid, gaseous, or liquid fuel combustion equipment, used to calcine and fuse raw materials, including limestone and clay, to produce Portland cement clinker.

(j) "Precalciner kiln" means a kiln where the feed to the kiln system is preheated in cyclone

chambers and a second burner is used to calcine material in a separate vessel attached to the preheater before the final fusion in a kiln that forms clinker.

(k) “Preheater kiln” means a Portland cement kiln where the feed to the kiln system is preheated in cyclone chambers before the final fusion in a kiln that forms clinker.

(l) “Shutdown” means the cessation of operation of a Portland cement kiln for any purpose.

(m) “Start-up” means the setting in operation of a Portland cement kiln for any purpose.

(2) This rule applies to any Portland cement kiln located in the Michigan fine grid zone as defined in R 336.1803, with process rates equal to or greater than the following:

(a) Long dry kilns of 12 tons per hour.

(b) Long wet kilns of 10 tons per hour.

(c) Preheater kilns of 16 tons per hour.

(d) Precalciner and combined preheater and precalciner kilns of 22 tons per hour.

(3) A unit subject to this rule and a new source performance standard or a national emission standard for hazardous air pollutants shall comply with the limitations and requirements of this rule or the limitations and requirements of the new source performance standard or the national emission standard for hazardous air pollutants, whichever is more stringent.

(4) The requirements of this rule shall not apply to a unit that is participating in the oxides of nitrogen budget trading program under R 336.1802 through R 336.1816. The requirements of subrule (5) of this rule shall not apply during start-up, shutdown, and malfunction periods.

(5) After May 31, 2004, an owner or operator of a Portland cement kiln subject to the provisions of this rule shall not operate the kiln until September 30, 2004, and any subsequent year from May 1 through September 30, unless the owner or operator complies with 1 of the following requirements during the applicable May through September time period each year:

(a) Operation of the kiln with 1 of the following:

(i) Low oxides of nitrogen burners.

(ii) Mid-kiln firing.

(b) A limit on the amount of oxides of nitrogen emitted when averaged over the ozone control period as follows:

(i) For long wet kilns, 6 pounds of oxides of nitrogen per ton of clinker produced.

(ii) For long dry kilns, 5.1 pounds of oxides of nitrogen per ton of clinker produced.

(iii) For preheater kilns, 3.8 pounds of oxides of nitrogen per ton of clinker produced.

(iv) For precalciner and combined preheater and precalciner kilns, 2.8 pounds of oxides of nitrogen per ton of clinker produced.

(c) Installation and use of alternative control techniques that may include kiln system modifications, such as conversions to semi-drying processing, subject to department and United States environmental protection agency approval, that achieve a 30% emissions decrease from baseline ozone control period emissions. Baseline emissions shall be the average of the sum of ozone control period emissions for the 2 highest emitting years from 1995 through 2000.

(6) The owner or operator of any Portland cement kiln proposing to install and use an alternative control technique under subrule (5)(c) of this rule shall submit the proposed alternative control technique and calculation of baseline emissions with supporting documentation to the department and the United States environmental protection agency for approval by May 31, 2003. The department shall include the approved plan with emission limitations in the source's operating permit.

(7) Ozone control period emissions shall be determined using 1 of the following methods:

(a) The average of the emission factors for the type of kiln from the "Compilation of Air

Pollutant Emission Factors. Volume 1. Stationary Point and Area Sources," PB95 196028, and the "Alternative Control Techniques Document: NOx Emissions from Cement Manufacturing,"PB94 183522. These documents are adopted by reference in this rule. Copies may be inspected at the Lansing office of the air quality division of the department of environmental quality. Copies may be obtained from the Air Quality Division, Department of Environmental Quality, 525 West Allegan Street, P.O. Box 30260-7760, Lansing, Michigan 48909, or from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161, at a cost at the time of adoption of this rule of $278.00 and $41.00, respectively.

(b) The site-specific emission factor developed from representative emissions testing, pursuant to 40 C.F.R. part 60, appendix A, methods 7, 7A, 7C, 7D, or 7E, based on a range of typical operating conditions. The owner or operator shall establish that these operating conditions are representative, subject to approval by the department, and shall certify that the emissions testing is being conducted under representative conditions. The provisions of 40 C.F.R. Part 60 are adopted by reference in R 336.1801.

(c) An alternate method for establishing the emission factors, when submitted with supporting data to substantiate the emission factors and approved by the department and the United States environmental protection agency as set forth in subrule (5)(c) of this rule.

(8) Beginning May 31, 2004, and each ozone control period thereafter, any owner or operator of a Portland cement kiln subject to this rule shall do either of the following:

(a) Complete an initial performance test and subsequent annual testing during the ozone control period of each year consistent with the requirements of 40 C.F.R. part 60, appendix A, methods 7, 7A , 7C, 7D, or 7E or an alternate method approved pursuant to subrule (5)(c) of this rule.

(b) Monitor oxides of nitrogen emissions during the ozone control period of each year using a continuous emissions monitoring system in accordance with 40 C.F.R., part 60, subpart A, and 40 C.F.R., part 60, appendix B, and comply with the quality assurance procedures in appendix F, or 40 C.F.R., part 75, and associated appendices, as applicable, and in a manner acceptable to the department.

(9) Beginning May 31, 2004, and each ozone control period thereafter, any owner or operator of a Portland cement kiln subject to this rule shall comply with both of the following recordkeeping and reporting requirements:

(a) An owner or operator shall create and maintain records that include, but are not limited to, both of the following:

(i) All routine and nonroutine maintenance, repair, or replacement performed on the device or devices.

(ii) The date, time, and duration of any start-up, shutdown, or malfunction in the operation of a kiln or the device or devices.

(b) An owner or operator shall create and maintain records that include, but are not limited to, all of the following:

(i) The emissions, in pounds of oxides of nitrogen per ton of clinker produced from each affected Portland cement kiln.

(ii) The date, time, and duration of any start-up, shutdown, or malfunction in the operation of any of the cement kilns or the emissions monitoring equipment.

(iii) The results of any performance testing.

(iv) If a unit is equipped with a continuous emissions monitoring system, the following information:

(A) Identification of time periods during which oxides of nitrogen standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances.

(B) Identification of the time periods for which operating conditions and pollutant data were not obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

(v) All records required to be produced or maintained shall be retained on site for a period of 5 years. The records shall be made available to the department or the United States environmental protection agency upon request.

(10) Any owner or operator of a Portland cement kiln subject to this rule shall comply with both of the following reporting requirements:

(a) By May 31, 2004, submit to the department all of the following information:

(i) The identification number and type of each unit subject to this rule.

(ii) The name and address of the plant where the unit is located.

(iii) The name and telephone number of the person responsible for demonstrating compliance with this rule.

(iv) Anticipated control measures.

(b) Submit a report documenting for that unit the total oxides of nitrogen emissions and the average oxides of nitrogen emission rate for the ozone control period of each year to the department by October 31, beginning in 2004 and each year thereafter.

History: 2002 MR 22, Eff. Dec. 4, 2002.

R 336.1818 Emission limitations for stationary internal combustion engines.

Rule 818. (1) As used in this rule:

(a) "Affected engine" means a stationary internal combustion engine that is a large NOx SIP call engine, or any other stationary internal combustion engine that is subject to oxides of nitrogen control under a compliance plan established under subrule (3) of this rule.

(b) "Diesel engine" means a compression ignited 2- or 4-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air has been compressed to a temperature sufficiently high for auto-ignition.

(c) "Dual fuel engine" means any stationary reciprocating internal combustion engine in which a liquid fuel, typically diesel fuel, is used for compression ignition and gaseous fuel, typically natural gas, is used as the primary fuel.

(d) "Engine seasonal NOx 2007 tonnage reduction" means the year 2007 ozone control period oxides of nitrogen emissions reductions value (tons) for a large NOx SIP call engine, which is based on an oxides of nitrogen control efficiency of 82% for large gas-fired engines and 90% for diesel and dual-fuel engines.

(e) "Facility seasonal NOx 2007 tonnage reduction" means the total of the engine ozone control period NOx 2007 tonnage reductions attributable to all of an owner or operator's large NOx SIP call engines.

(f) "Large NOx SIP call engine" means a stationary internal combustion engine emitting more than 1 ton of oxides of nitrogen per average ozone control period day in 1995.

(g) "Lean-burn engine" means any 2- or 4-stroke spark-ignited engine that is not a rich-burn engine.

(h) “Ozone control period” means the period of May 1 to September 30.

(i) “Past NOx emission rate” means the emission rate of an affected engine in grams per brake horsepower-hour as determined by performance testing consistent with the requirements of 40 C.F.R., part 60, appendix A, as adopted by reference in R 336.1801. Where the performance test data are not available, the past NOx emission rate may be determined by the department on a case-by-case basis using, for example, appropriate emission factors. For large NOx SIP call engines, the past NOx emission rate is the uncontrolled emission rate.

(j) “Projected operating hours” means the projected actual number of hours of operation per ozone control period for an affected engine.

(k) “Projected NOx emission rate” means the projected emission rate in grams per brake horsepower-hour after installation of controls on an affected engine.

(l) “Rich-burn engine” means a spark-ignited stationary internal combustion engine in which the concentration of oxygen in the exhaust stream before any dilution is 1% or less measured on a dry basis.

(m) “Stationary internal combustion engine” means an internal combustion engine of the reciprocating type that is either attached to a foundation at a facility or is designed to be capable of being carried or moved from 1 location to another and remains at a single site at a building, structure, facility, or installation for more than 12 consecutive months. An engine, or engines, that replaces an engine at a site that is intended to perform the same or similar function as the engine replaced is included in calculating the consecutive time period.

(2) Applicability. The requirements of this rule apply to the owner or operator of a large NOx SIP call engine located in the Michigan fine grid zone defined in R 336.1803(1).

(3) Standards. After May 1, 2007, an owner or operator of a large NOx SIP call engine shall not operate the engine in the ozone control period unless the owner or operator complies with either the requirements of a compliance plan which meets the following provisions listed in subdivision (a) of this subrule or the emission rate limitations expressed as oxides of nitrogen listed in subdivision (b) of this subrule:

(a) Compliance plan includes the following:

(i) Shall be approved by the department.

(ii) Shall demonstrate enforceable emission reductions from 1 or more stationary internal combustion engines equal to or higher than the facility seasonal NOx 2007 tonnage reduction.

(iii) May cover some or all engines at an individual facility or at several facilities or at all facilities in the Michigan fine grid zone that are under control of the same owner or operator.

(iv) Shall be submitted to the department by October 1, 2006.

(v) Shall include the following items:

(A) A list of affected engines, including the engine's manufacturer, model, facility location address, and facility state registration number.

(B) The projected ozone control period hours of operation for each affected engine and supporting documentation.

(C) A description of the oxides of nitrogen emissions control installed, or to be installed, on each affected engine and documentation to support the projected NOx emission rates.

(D) The past and projected NOx emission rates for each affected engine in grams per brake horsepower-hour.

(E) A numerical demonstration that the emission reductions obtained from all affected engines will be equivalent to or greater than the owner or operator's facility seasonal NOx 2007 tonnage reduction, based on the difference between the past NOx emission rate and the projected NOx

emission rate multiplied by the projected operating hours for each affected engine.

(F) Provisions for monitoring, reporting, and recordkeeping for each affected engine.

(vi) The projected NOx emission rate in grams per brake horsepower-hour for each affected engine shall be included in a federally enforceable permit.

(b) The following are NOx emission rate limitations:

(i) Rich-burn, 1.5 grams per brake horsepower per hour.

(ii) Lean-burn, 3.0 grams per brake horsepower per hour.

(iii) Diesel, 2.3 grams per brake horsepower per hour.

(iv) Dual fuel, 1.5 grams per brake horsepower per hour.

(4) Reporting, monitoring, and recordkeeping. An owner or operator subject to the requirements of subrule (3) of this rule shall comply with the following requirements:

(a) Monitoring requirements. Each affected engine subject to this rule shall comply with the following requirements:

(i) Complete an initial performance test not later than 90 days after May 1, 2007, consistent with the requirements of 40 C.F.R., part 60, appendix A, as adopted by reference in R 336.1801, following installation of emission controls required to achieve the projected NOx emission rate in subrule (3)(a) of this rule or the emission rate limit specified in subrule (3)(b) of this rule. For this and any subsequent performance test, an owner or operator of an affected engine shall submit a test plan to the department not less than 30 days before the scheduled test date. To ensure proper testing, the plan shall supply the information in the department format for submittal of source emission test plans and reports. The owner or operator shall give the department a reasonable opportunity to witness the tests. An owner or operator shall submit 2 copies of each compliance performance test to the department within 60 days of completion of the testing. The test results shall be presented and include data as requested in the department format for submittal of source emission test plans and reports.

(ii) Perform monitoring sufficient to yield reliable data for each ozone control period that is representative of a source's compliance with the projected NOx emission rate in subrule (3)(a) of this rule or the emission rate limit specified in subrule (3)(b) of this rule. The monitoring may include 1 of the following:

(A) Performance tests consistent with either of the following adopted standards:

(1) The provisions of 40 C.F.R. part 60, subpart A and appendices A, B, and F, and part 75 (2005) are adopted by reference in these rules. Copies of the 40 C.F.R. parts 60 and 75 may be inspected at the Lansing office of the air quality division of the department of environmental quality. Copies of 40 C.F.R. parts 60 and 75 (2005) are available for inspection and purchase at the Department of Environmental Quality, Air Quality Division, 525 West Allegan Street, P.O. Box 30260, Lansing, Michigan 48909- 7760, at a cost at the time of adoption of these rules of $58.00 for part 60.1-end, $57.00 for part 60 appendices, and $62.00 for part 75. Copies may be obtained from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost at the time of adoption of these rules of $58.00 for part 60.1-end, $57.00 for part 60 appendices, and $62.00 for part 75, or on the United States government printing office internet web site at www.gpoaccess.gov.

(2) The provisions of ASTM D6522-00 (2005), "Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions From Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers," are adopted by reference in these rules. Copies of ASTM D6522-00 (2005) are available for inspection and purchase at the Department of Environmental Quality, Air Quality

Division, 525 West Allegan Street, P.O. Box 30260, Lansing, Michigan 48909-7760, at a cost at the time of adoption of these rules of $34.00.Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959; Phone: (610) 832-9585; website www.astm.org, at a cost at the time of adoption of these rules of $34.00.

(B) A parametric monitoring program that specifies operating parameters, and their ranges, that shall provide reasonable assurance that each engine's emissions are consistent with the requirements of subrule (3) of this rule.

(C) A predictive emissions measurement system that relies on automated data collection from instruments.

(D) A continuous emission monitoring system that complies with the procedures set forth in 40 C.F.R., part 60, subpart A and appendix B, and with the quality assurance procedures in appendix F; or 40 C.F.R., part 75, and associated appendices, as applicable and acceptable to the department. Title 40 C.F.R. parts 60 and 75 are adopted by reference in R 336.1801. An owner or operator of an emission unit which elects this option shall submit a monitoring plan to the department not less than 30 days before installation. The owner or operator shall provide the department with a 30-day notice before a relative accuracy test audit.

(b) Recordkeeping requirements are as follows:

(i) Maintain all records necessary to demonstrate compliance with the requirements of this rule for a period of 5 calendar years at the plant at which the affected engine is located. The records shall be made available to the department and the U.S. environmental protection agency upon request.

(ii) For each engine subject to the requirements of this rule, the owner or operator shall maintain records of all of the following:

(A) Identification and location of each engine subject to the requirements of this subrule.

(B) Calendar date of record.

(C) The number of hours the unit is operated during each ozone control period compared to the projected operating hours.

(D) Type and quantity of fuel used.

(E) The results of all compliance tests.

(c) Reporting requirements. An owner or operator subject to the requirements of this rule shall submit the results of all compliance tests to the department within 60 days of completion of the testing.

History: 2006 MR 22, Eff. Nov. 20, 2006.

R 336.1821 CAIR NOx ozone season and annual trading programs; applicability determinations.

Rule 821. (1) This rule establishes Michigan's CAIR ozone season and annual emission budgets and trading programs for all of the following units:

(a) CAIR NOx units as defined pursuant to 40 C.F.R. §97.104, adopted by reference in R 336.1802a.

(b) CAIR NOx ozone season units as defined pursuant to 40 C.F.R §97.304, adopted by reference in R 336.1802a.

(c) All units required to be in the state's NOx SIP call trading program that are not already included under 40 C.F.R. §96.304 and are defined in R 336.1803(3)(f)(ii) and (p).

(d) For purposes of allocating allowances under R 336.1821 to R 336.1826, the following units which

are not addressed in subparagraphs (a), (b) and (c) of this subrule are CAIR NOx ozone season units:

(i) Renewable energy sources.

(ii) Renewable energy projects.

(2) An EGU located in Michigan and subject to the requirements pursuant to R 336.1821(a), (b) or (c) shall apply for and receive an annual or ozone season CAIR NOx permit. In addition, non-EGUs as defined in R 336.1803(3)(p) shall apply for and receive an ozone season CAIR NOx permit. This permit shall be administered under R 336.1214 and shall be incorporated into the source's renewable operating permit as an attachment. A federally enforceable NOx budget permit issued under the federal NOx budget program pursuant to R 336.1808 shall remain in effect until the CAIR NOx ozone season permit has been approved by the department.

(3) The fuel type adjusted allocations for each existing EGU shall be determined by multiplying the appropriate NOx emission rate and heat input as determined in accordance with R 336.1822 and R 336.1830 with an appropriate fuel adjustment factor coefficient as follows:

(a) For a solid fuel-fired EGU, the allocation calculations shall be adjusted by multiplying the allocation values by 100%, i.e. 1.0.

(b) For a liquid fuel-fired EGU, the allocation calculations shall be adjusted by multiplying the allocation values by 60%, i.e. 0.60.

(c) For a gaseous fuel-fired EGU, the allocation calculations shall be adjusted by multiplying the allocation values by 40%, i.e. 0.40.

(d) For a multi-fueled EGU, the allocation adjustment calculation shall be a weighted average based on the percentage heat input from each type of fuel burned in the unit, unless the source can demonstrate that certain types of fuel used in the process provided less than 10% of the annual heat input. If so, then the allocation adjustment is calculated based on only those fuel types which contributed 10% or more of the annual heat input.

(4) The owner or operator of any CAIR NOx ozone season or annual unit shall submit both of the following data within 30 days upon request by the department:

(a) A unit's ozone season and annual heat input values or megawatt energy produced, which shall be the same data reported in accordance with 40 C.F.R. part 75 to the extent the unit is subject to 40 C.F.R. part 75 for the period involved.

(b) A unit's total tons of oxides of nitrogen emissions during specified calendar years or ozone seasons as determined under 40 C.F.R. part 75, adopted by reference in R 336.1802a.

(5) Effective January 1, 2009, the provisions of R 336.1802, R 336.1803(1) and R 336.1803(2), R 336.1804, R 336.1805, R 336.1806, R 336.1807, R 336.1808, R 336.1809, R 336.1810, R 336.1811, R 336.1812, R 336.1813, R 336.1814, R 336.1815, and R 336.1816 shall not apply to the control period beginning in 2009 or any control period thereafter.

(6) Pursuant to the provisions in 40 C.F.R. 96.54 and for the 2009 control period only, if the U.S. environmental protection agency determines that there were excess emissions during the 2008 control period, deductions for excessive emission penalties shall be taken from the 2009 CAIR NOx ozone season allowances. Title 40 C.F.R. §96.54 is adopted by reference in R 336.1802a.

(7) Pursuant to any NOx SIP unused set-aside allowances through 2008 that are accumulated within the state account, the department shall allocate these allowances according to R 336.1823.

(8) Permitted NOx emission rates, for the purposes of allocating allowances pursuant to R 336.1822 and R 336.1830, shall be in a legally enforceable permit to install or renewable operating permit issued on or before August 1, 2008, for the October 2008 allocating time period; on or before August 1, 2011, for the October 2011 allocating time period and thereafter each August 1 of the year that is 3 years after the last year of allocation submittal time period.

History: 2007 MR 12, June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1822 CAIR NOx ozone season and annual trading programs; allowance allocations.

Rule 822. (1) The CAIR NOx ozone season trading program budget allocated by the department under subrule (3) of this rule for the CAIR NOx ozone season control periods to the EGUs, non-EGUs, and renewable energy sources shall annually equal the total number of tons of oxides of nitrogen emissions as indicated in the following manner:

(a) The total CAIR NOx ozone season budget for the ozone season time period of 2010 to 2014 is 31,180 tons. These allocations shall be distributed as follows:

(i) The CAIR NOx ozone season budget available to existing and newly-affected EGUs. The following applies:

(A) For 2010 and 2011 ozone season control periods equals 28,321 tons.

(B) For 2012 to 2014 ozone season control periods equals 28,021 tons.

(ii) The CAIR NOx ozone season budget available to existing non-EGUs for the 2010 to 2014 ozone season control periods is 1,309 tons.

(iii) The CAIR NOx ozone season budget available to new non-EGUs and EGUs. The following applies:

(A) For 2010 and 2011 ozone season control periods is 700 tons.

(B) For 2012 to 2014 ozone season control periods is 1,000 tons.

(iv) The CAIR NOx ozone season budget available to renewable energy sources and projects in the 2010 to 2014 ozone season control periods is 200 tons.

(v) The CAIR NOx ozone season budget available to all existing EGUs and non- EGUs that have submitted an acceptable demonstration of a hardship to the department, in the 2010 to 2014 ozone season control periods is 650 tons.

(b) The total CAIR NOx ozone season budget for the ozone season time period of 2015 and thereafter is 26,351 tons. These allocations shall be distributed as follows:

(i) The CAIR NOx ozone season budget available to existing EGUs in the 2015 and thereafter ozone season control periods is 22,792 tons.

(ii) The CAIR NOx ozone season budget available to existing ozone season non- EGUs for the 2015 and thereafter ozone season control periods is 1,309 tons.

(iii) The CAIR NOx ozone season budget available to new non-EGUs and EGUs in the 2015 and thereafter ozone season control periods is 1,400 tons.

(iv) The CAIR NOx ozone season budget available to renewable energy sources and projects in the 2015 and thereafter ozone season control periods is 200 tons.

(v) The CAIR NOx ozone season budget available to all existing EGUs and non- EGUs that have submitted an acceptable demonstration of hardship to the department, in the 2015 and thereafter ozone season control periods is 650 tons.

(2) CAIR NOx allowances for the 2009 ozone season control period shall be the same allowances as were allocated under the NOx budget trading program. For newly- affected EGUs which were not subject to the federal NOx budget program, these units are eligible to apply for allowances from the CAIR NOx ozone season new source set- aside pool for the 2009 ozone season, pursuant to R 336.1823.

(3) The department shall allocate CAIR NOx ozone season allowances to existing EGUs and non-EGU ozone season units for calendar years 2010 and thereafter according to the following schedule:

(a) A 3-year allocation that is 3 years in advance of the 2010 ozone season and 4 years in advance of each subsequent ozone season control period. The 3-year allocation shall be as follows:

(i) By 60 days after the effective date of this rule or April 30, 2007, whichever is earlier, the department shall submit to the U.S. environmental protection agency the CAIR NOx ozone season allowance allocations, under this subrule, for the ozone season control periods in 2010 and 2011.

(ii) By October 31, 2008, the department shall submit to the U.S. Environmental protection agency the CAIR NOx ozone season allowance allocations, under this subrule, for the ozone season control periods in 2012, 2013, and 2014.

(iii) By October 31, 2011, and thereafter each October 31 of the year that is 3 years after the last year of allocation submittal, the department shall submit to the U.S. environmental protection agency the CAIR NOx ozone season allowance allocations as indicated under this subrule.

(4) For the CAIR NOx ozone season control periods under subrule (3) of this rule, the department shall allocate allowances to existing EGU and non-EGU ozone season units that commenced operation before January 1 of the most recent year of the 5-year period used to calculate heat input as follows:

(a) The department shall allocate allowances to each existing EGU ozone season unit as follows:

(i) During calendar years 2010 to 2014 as follows:

(A) Existing EGUs with a permitted NOx emission rate equal to or less than 0.10 pounds per million Btu shall receive an initial unadjusted allocation of allowances determined by calculating the arithmetic average of the CAIR target emission rate multiplied by the appropriate fuel adjustment factor plus the unit's permitted NOx emission rate, which is then multiplied by the heat input as determined under subrule (6) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

$$Allocation = \left[\frac{\left\{\frac{(CTER \times FAF) + PER}{2}\right\} \times HI}{2000\ lb/tom}\right]$$

Where:

Allocation =	The initial unadjusted NO_X allowance allocation, in tons.
CTER =	The CAIR target emission rate for 2009 to 2014 of 0.15 pounds per mm Btu.
FAF =	Fuel adjustment factor as defined in R 336.1821.
PER =	The unit’s permitted NO_X emission rate as defined in R 336.1821.
HI =	Average of the unit’s 2 highest heat inputs in mm Btu for the appropriate 5 control periods.

(B) All other existing EGUs shall receive an initial unadjusted allocation of allowances in an amount equaling 0.15 pounds per million Btu multiplied by the appropriate fuel adjustment factor and multiplied by the heat input as determined under subrule (6) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(ii) During calendar years 2015 and thereafter as follows:

(A) Existing EGUs with a permitted NOx emission rate equal to or less than 0.10 pounds per million Btu shall receive an initial unadjusted allocation of allowances determined by calculating the arithmetic average of the CAIR target emission rate multiplied by the appropriate fuel adjustment factor plus the unit's permitted NOx emission rate, which is then multiplied by the heat input as determined under subrule (6) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

$$Allocation = \left[\frac{\left\{\frac{(CTER \times FAF) + PER}{2}\right\} \times HI}{2000\ lb/tom}\right]$$

Where:

Allocation =	The initial unadjusted NO_X allowance allocation, in tons.
CTER =	The CAIR target emission rate for 2015 and thereafter of 0.125 pounds per mm Btu.
FAF =	Fuel adjustment factor as defined in R 336.1821.

PER = The unit’s permitted NO_X emission rate as defined in R 336.1821.
HI = Average of the unit’s 2 highest heat inputs in mm Btu for the appropriate 5 control periods.

(B) All other existing EGUs shall receive an initial unadjusted allocation of allowances in an amount equaling 0.125 pounds per million Btu multiplied by the appropriate fuel adjustment factor and multiplied by the heat input as determined under subrule (6) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(b) The department shall allocate allowances to each existing non-EGU ozone season unit for calendar years 2010 to 2015 and thereafter in an amount equaling 0.17 pounds per million Btu or the permitted NOx emission rate, as defined in R 336.1821, whichever is more stringent, multiplied by the heat input as determined under subrule (6) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(5) If the initial total number of CAIR NOx ozone season budget allowances allocated to either all existing EGU or all existing non-EGU ozone season units for the years under subrule (4) of this rule does not equal the budgeted tons for such units as specified in subrule (1) of this rule, then the department shall adjust up or down the total number of CAIR NOx ozone season budget allowances allocated to each existing EGU or non-EGU, as appropriate, so that the total number of CAIR NOx ozone season budget allowances allocated to the entire group of EGUs or non-EGUs equals the appropriate values in subrule (1) of this rule. The adjustment shall be made by multiplying each unit's unadjusted initial allocation by a correction factor determined by dividing the appropriate existing EGU or non-EGU total budget tons from subrule (1) of this rule by the sum of all existing EGU or non-EGU units' initial unadjusted allocations, and rounding to the nearest whole number, as appropriate.

(6) The heat input, in million Btu's, used for calculating oxides of nitrogen allowance allocations for each subject unit under this rule shall be the unit's average of the 2 highest heat inputs for the ozone season control period in the 5 years immediately preceding the year in which the department is required to submit the oxide of nitrogen allocations. If the unit operated less than 2 full ozone seasons of the 5-year time period, then the unit's single highest ozone season heat input shall be used.

History: 2007 MR 12, Eff. June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1823 New EGUs, new non-EGUs, and newly-affected EGUs under CAIR NOx ozone season trading program; allowance allocations.

Rule 823. (1) The department shall establish a set-aside pool for each CAIR NOx ozone season control allocation year for new EGUs and non-EGUs. This set-aside pool shall be allocated on a yearly basis as follows:

(a) For 2009, a total of 1,385 tons of CAIR NOx ozone season allowances, which have been carried over from the federal NOx budget program, for any new and newly- affected EGUs or new non-EGUs.

(b) For years 2010 and 2011, a total of 700 tons of CAIR NOx ozone season allowances for any new EGUs or new non-EGUs.

(c) For years 2012 to 2014 ozone season control periods, a total of 1,000 tons of CAIR NOx ozone season allowances for any new EGUs or new non-EGUs.

(d) For years 2015 and thereafter, a total of 1,400 tons of CAIR NOx ozone season allowances for any new EGUs or new non-EGUs.

(2) The CAIR authorized account representative of a newly-affected CAIR NOx ozone season EGU under this rule may submit to the department a request, in a format specified by the department, to receive CAIR NOx ozone season allowances for the 2009 CAIR NOx ozone season control period. All of the following apply:

(a) The oxides of nitrogen allowance allocation request shall be submitted before March 1 of the 2009

ozone season control period.

(b) The CAIR authorized account representative of any newly-affected EGU may request 2009 CAIR NOx ozone season allowances, based on an amount equaling 0.15 pounds per million Btu multiplied by the unit's ozone season heat input, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(c) The heat input, in million Btu's, used for calculating oxides of nitrogen allowance allocations for each subject unit under this rule shall be the unit's average of the 2 highest heat inputs for the ozone season control period in the 5 years immediately preceding the year in which the department is required to submit the oxide of nitrogen allocations. If the unit operated less than 2 full ozone seasons of the 5-year time period, then the unit's single highest heat input shall be used.

(3) The CAIR authorized account representative of a new CAIR NOx ozone season non-EGU under this rule may submit to the department a request, in a format specified by the department, to receive CAIR NOx ozone season allowances starting with the ozone season control period during which the CAIR NOx ozone season unit commenced or is projected to commence operation and ending with the control period preceding the control period for which it shall receive an allocation under R 336.1822. Both of the following apply:

(a) The CAIR NOx ozone season allowance allocation request shall be submitted before March 1 of the year of the first ozone control period for which the oxides of nitrogen allowance allocation is requested and after the date on which the department issues a permit to install for the non-EGU, if required, and each following year by March 1.

(b) The CAIR authorized account representative of any new non-EGU may request CAIR NOx ozone season allowances, based on an amount equaling 0.17 pounds per million Btu or the permitted NOx emission rate, whichever is more stringent, multiplied by the nameplate design heat input rate for the unit, in million Btu's per hour, multiplied by the predicted hours of operation for the control period, divided by 2,000 pounds per ton and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(4) The CAIR authorized account representative of a new EGU CAIR NOx ozone season unit under this rule may submit to the department a written request, in a format specified by the department, to receive CAIR NOx ozone season allowances, starting with the ozone season control period during which the CAIR NOx ozone season unit commenced or is projected to commence operation and ending with the control period preceding the control period for which it shall receive an allocation under R 336.1822. All of the following apply:

(a) The CAIR NOx ozone season allowance allocation request shall be submitted before March 1 of the year of the first ozone control period for which the oxides of nitrogen allowance allocation is requested and after the date on which the department issues a permit to install for the EGU, if required, and each following year by March 1.

(b) The allocation methodology used for the first ozone season for which each new EGU requests allowances shall be calculated using the following formula:

$$Allocation = \frac{1.0 lb\ NOx}{MWh} \times \frac{Size\ of\ unit\ in\ MW \times hours\ of\ operation}{2000\ lb/ton} \times 70\%$$

Where:

Allocation =	The initial unadjusted NO_X allowance allocation, in tons.
1.0 lb NOx/MWh =	The factor for allocating NO_X allowances based on gross electric generation.
Size of the unit =	The nameplate capacity, as defined in the CAIR NO_X program of the EGU in megawatts.
Hours of operation =	Predicted hours of operation per control period.
MWh =	Megawatt hours.

(c) The allocation methodology used for each consecutive ozone season for which each new EGU

requests allowances shall be calculated using the following formula:

$$Allocation = \frac{1.0 lb\ NOx}{MWh} \times \frac{Actual\ Megawatt\ hours}{2000\ lb/ton}$$

Where:

Allocation =	The unadjusted NOx allowance allocation, in tons.
1.0 lb NOx/MWh =	The factor for allocating NO_X allowances based on gross electric generation.
Actual megawatt hours =	The actual megawatt hours of electricity generated during the control period immediately preceding the request.
MWh =	Megawatt hours.

(d) When the new EGU has been placed in the existing pool, the calculation methods under R 336.1822 apply.

(5) The department shall review and allocate oxides of nitrogen allowances pursuant to each allocation request on a pro rata basis as follows:

(a) Upon receipt of the CAIR NOx unit's allowance allocation request, the department shall determine whether allowances are available and shall make necessary adjustments to the request to ensure that for the CAIR NOx ozone season control period, the number of allowances specified, are consistent with the requirements of subrule (1) of this rule.

(b) If the allocation set-aside pool for the CAIR NOx ozone season control period for which CAIR NOx ozone season allowances are requested has an amount greater than or equal to the number requested, as adjusted under subdivision (a) of this subrule, then the department shall allocate the amount of the CAIR NOx ozone season allowances requested.

(c) If the allocation set-aside pool for the CAIR NOx ozone season control period for which CAIR NOx ozone season allowances are requested has an amount of oxides of nitrogen allowances less than the number requested, as adjusted under subdivision (a) of this subrule, then the department shall proportionately reduce the number of CAIR NOx ozone season allowances allocated to each CAIR NOx ozone season unit so that the total number of CAIR NOx ozone season allowances allocated are equal to the amounts referenced in subrule (1)(a), (b), (c), or (d) of this rule.

(6) CAIR NOx ozone season allowances not allocated or requested that remain in the new source set-aside pool for any allocation year shall be re-allocated to the existing EGU and non-EGU source pools, using the allocation methodologies as outlined in R 336.1822 and based on a ratio of the number of allowances remaining in the pool and the number of allowances in the EGU's and non-EGU's budget.

(7) Not later than July 31 of the year for which the allowances are allocated, the department shall submit to the U.S. environmental protection agency the CAIR NOx ozone season allowance allocations, as determined under this rule.

History: 2007 MR 12, Eff. June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1824 CAIR NOx ozone season trading program; hardship set-aside.

Rule 824. (1) After the provisions of R 336.1822 have been followed, the authorized account representative may pursue a request for hardship allowances. These requests must be submitted not later than 30 days prior to the deadline for department submittals to the U.S. environmental protection agency as described in R 336.1822.

(2) For existing EGUs and non-EGUs subject to the CAIR NOx ozone season budget, the department shall allocate CAIR NOx hardship allowances under the following procedures:

(a) The department shall establish a hardship allocation set-aside pool for each CAIR NOx ozone

season allocation year starting in 2010. This hardship set-aside pool shall be allocated on an ozone season basis and contains a total of 650 tons per allocation year of CAIR NOx ozone season allowances, for any qualifying EGUs or non-EGUs.

(b) Hardship allowances may be allocated to an EGU or non-EGU, if the requesting authorized account representative demonstrates both of the following:

(i) The owner or operator of the EGU or a non-EGU has less than 250 employees within its company or its electric generating division or department.

(ii) The controls required for the EGU or non-EGU under this part result in excessive or prohibitive costs for compliance, pursuant to the procedures in subrule (3) of this rule.

(c) The CAIR authorized account representative of a CAIR NOx ozone season unit under this rule may submit to the department a written request, in a format specified by the department, to receive CAIR NOx ozone season hardship allowances. The authorized account representative shall submit the request for the amount of estimated hardship allowances they need, using historical ozone season heat input utilization levels multiplied by historical oxides of nitrogen emission rates as follows:

(i) Historical heat input utilization levels shall be based on the unit's average of the 2 highest heat input utilization levels for the ozone season in the 5 years immediately preceding the year in which the department is required to submit the oxides of nitrogen allocations to the U.S. environmental protection agency. If the unit operated less than 2 full ozone seasons during the 5-year time period, then the unit's single highest ozone season heat input level shall be used.

(ii) Historic oxides of nitrogen rates shall be based on the oxides of nitrogen rate reported by the authorized account representative in its 40 C.F.R. part 75 reports to the U.S. environmental protection agency in the calendar year immediately preceding the year in which the department is required to submit the oxides of nitrogen allocation.

(iii) Units receiving hardship allowances shall receive a 3-year allocation that is 3 years in advance of the 2010 ozone season. The 3-year allocation shall be the same as provided in R 336.1822(3).

(d) The department shall allocate the allowances from the hardship set-aside pool based on the requests received as follows:

(i) If the allocation hardship set-aside pool for the CAIR NOx ozone season control period for which CAIR NOx ozone season allowances are requested has an amount of oxides of nitrogen allowances greater than or equal to the number requested, then the department shall allocate the amount of the CAIR NOx ozone season allowances requested.

(ii) If the allocation hardship set-aside pool for the CAIR NOx ozone season control period for which CAIR NOx ozone season allowances are requested has an amount of oxides of nitrogen allowances less than the number requested, then the department shall proportionately reduce the number of CAIR NOx ozone season allowances allocated to each CAIR NOx ozone season unit so that the total number of CAIR NOx ozone season allowances allocated are equal to the amounts in R 336.1822(1)(a)(v) or (b)(v).

(3) The department shall allocate CAIR NOx ozone season hardship allowances to existing EGUs and existing non-EGUs which have submitted an engineering analysis as described in the following procedures:

(a) The authorized account representative shall demonstrate to the department that the control level required pursuant to this rule results in excessive or prohibitive cost for compliance. The demonstration shall include all of the following:

(i) An engineering study analyzing all control options that are technically available for the unit, including control options that would achieve a level of control meeting, at a minimum, the levels as specified in subparagraphs (A), (B), and (C) of this paragraph. Sources that previously submitted an engineering analysis and received hardship allowances pursuant to R 336.1810(4)(f) for the oxides of nitrogen budget program may submit written updates to their previous plan.

(A) A NOx emission rate of 0.15 pound per million Btu for EGUs during the 2010 through 2014 time period.

(B) A NOx emission rate of 0.125 pound per million Btu for EGUs from 2015 and beyond.

(C) A NOx emission rate of 0.17 pound per million Btu for non-EGUs.

(ii) The annualized cost associated with each control option. An annualized cost of more than $2,400 per ton of oxide of nitrogen reduced shall generally be considered to be an excessive cost for compliance with this rule.

(iii) Other considerations that contribute to prohibitive cost of compliance.

(b) For a source to remain eligible for hardship allowances under this rule after the initial 3-year allocation period, ending on September 30, 2011, the state may require a revised engineering analysis and demonstration as referenced in subrule (3)(a) of this rule, at a minimum of once every 3 years.

History: 2007 MR 12, Eff. June 25, 2007.

R 336.1825 CAIR NOx ozone season trading program; hardship set-aside.

Rule 825. (1) The department shall establish a renewable allocation set-aside pool for each CAIR NOx ozone season control period for applicable units starting in 2010. This renewable set-aside pool shall be allocated on a yearly basis and contain a total of 200 tons of oxides of nitrogen allowances per allocation year.

(2) An authorized account representative of a renewable energy source or renewable energy project, as defined under R 336.1803(3), may request a CAIR NOx ozone season allowance allocation under this rule.

(3) Once an authorized account representative of a renewable energy source or renewable energy project has requested allowances from the CAIR NOx ozone season budget, the department shall allocate CAIR NOx ozone season renewable allowances under the following procedures:

(a) The oxides of nitrogen allowance allocation request shall be submitted before March 1 of the year of the first ozone control period for which the oxides of nitrogen allowance allocation is requested and after the date on which the department issues a permit to install for the unit, if required, and each following year by March 1.

(b) The allocation methodology used for the first ozone season for which each renewable energy source or renewable energy project requests allowances shall be calculated using the following formula:

$$Allocation = \frac{1.0 lb\ NOx}{MWh} \times \frac{Size\ of\ unit\ in\ MW \times hours\ of\ operation}{2000\ lb/ton} \times 70\%$$

Where:

Allocation =	The unadjusted NO_X allowance allocation, in tons.
1.0 lb NOx/MWh =	The factor for allocating NO_X allowances based on gross electric generation.
Size of the unit =	The nameplate capacity, as defined in the CAIR NOx program, of the renewable energy source or renewable energy project in megawatts.
Hours of operation =	Predicted hours of operation per control period.
MWh =	Megawatt hours.

(c) The allocation methodology used for the each consecutive ozone season for which the renewable energy source or renewable energy project requests allowances shall be calculated using the following formula:

$$Allocation = \frac{1.0 lb\ NOx}{MWh} \times \frac{Actual\ Megawatt\ hours}{2000\ lb/ton}$$

Where:

Allocation =	The unadjusted NOx allowance allocation, in tons.
1.0 lb NOx/MWh =	The factor for allocating NO_X allowances based on electric generation.
Actual megawatt hours =	The actual megawatt hours of electricity generated during the control period immediately preceding the request.
MWh =	Megawatt hours.

(4) The renewable energy source or renewable energy project's eligibility for allowances shall begin not sooner than the calendar year 2005.

(5) An individual renewable energy source alone or as part of a renewable energy project may only receive allowances for 3 consecutive ozone seasons.

(6) CAIR NOx ozone season allowances not allocated or requested that remain in the renewable allocation set-aside pool for any allocation year shall be re-allocated to the existing EGU and non-EGU source pools, using the allocation methodologies as outlined in Rule 822 and based on a ratio of the number of allowances remaining in the pool and the number of allowances in the EGU's and non-EGU's budget.

(7) If the renewable allocation set-aside pool for the CAIR NOx ozone season control period for which CAIR NOx ozone season allowances are requested has an amount of oxides of nitrogen allowances less than the number requested, then the department shall proportionately reduce the number of CAIR NOx ozone season allowances allocated to each CAIR NOx ozone season unit requesting such allowances, so that the total number of CAIR NOx ozone season allowances allocated are equal to the amounts in R 336.1822(1)(a)(iv) or (b)(iv).

History: 2007 MR 12, Eff. June 25, 2007.

R 336.1826 CAIR NOx ozone season trading program; opt-in provisions.

Rule 826. The opt-in provisions in 40 C.F.R. §§97.380 to 97.388 are adopted by reference in R 336.1802a and are applicable to this rule.

History: 2007 MR 12, Eff. June 25, 2007.

R 336.1830 CAIR NOx annual trading program; allowance allocations.

Rule 830. (1) The CAIR NOx annual trading program budget allocated by the department for the CAIR NOx annual control periods shall annually equal the total number of tons of oxides of nitrogen emissions as follows and apportioned to the CAIR NOx EGUs, as determined by the procedures in this rule. These allocations shall be distributed in the following manner:

(a) The total CAIR NOx annual budget for the annual control periods of 2009 to 2014 is 65,304 tons. These allocations shall be distributed in the following manner:

(i) The CAIR NOx annual budget available to existing EGUs as follows:

(A) For the 2009 through 2011 annual control periods is 63,104.

(B) For the 2012 through 2014 annual control periods is 62,704.

(ii) The CAIR NOx annual budget available to new EGUs as follows:

(A) For the 2009 through 2011 annual control periods is 1,000 tons.

(B) For the 2012 through 2014 annual control periods is 1,400 tons.

(iii) The CAIR NOx annual budget available to all existing EGUs that have submitted an acceptable demonstration of a hardship to the department, in the 2009 to 2014 annual control

periods is 1,200 tons.

(b) The total CAIR NOx annual budget for the annual control periods of 2015 and thereafter is 54,420 tons. These allocations shall be distributed as follows:

(i) The CAIR NOx annual budget available for existing EGUs in the 2015 and thereafter annual control periods is 51,820 tons.

(ii) The CAIR NOx annual budget available for new EGUs in the 2015 and thereafter annual control periods is 1,400 tons.

(iii) The CAIR NOx annual budget available to all existing EGUs that have submitted an acceptable demonstration of a hardship to the department, in the 2015 and thereafter annual control periods is 1,200 tons.

(2) The department shall allocate CAIR NOx annual budget allowances to existing EGUs. A 3-year allocation is 2 and 3 years in advance of the 2009 and 2010 annual control period, respectively, and 4 years in advance of each subsequent annual control period. The 3-year allocation shall be as follows:

(a) By 60 days after the effective date of this rule or April 30, 2007, whichever is earlier, the department shall submit to the U.S. environmental protection agency the CAIR NOx annual allowance allocations, under subrule (3) of this rule, for the annual control periods in 2009, 2010, and 2011.

(b) By October 31, 2008, the department shall submit to the U.S. environmental protection agency the CAIR NOx annual allowance allocations, under subrule (3) of this rule, for the annual control periods in 2012, 2013, and 2014.

(c) By October 31, 2011, and thereafter each October 31 of the year that is 3 years after the last year of allocation submittal, the department shall submit to the U.S. environmental protection agency the CAIR NOx annual allowance allocations as indicated under subrule (3) of this rule.

(3) For the CAIR NOx annual control periods under subrules (1)(a) and (b) of this rule, the department shall allocate allowances to existing EGU units that commenced operation before January 1 of the most recent year of the 5-year period used to calculate heat input. The department shall allocate the following allowances to each existing EGU:

(a) During calendar years 2009 to 2014, the following:

(i) Existing EGUs with a permitted NOx emission rate equal to or less than 0.10 pounds per million Btu shall receive an initial unadjusted allocation of allowances determined by calculating the arithmetic average of the CAIR target emission rate multiplied by the appropriate fuel adjustment factor plus the unit's permitted NOx emission rate, which is then multiplied by the heat input as determined under subrule (4) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

$$Allocation = \left[\frac{\left\{ \frac{(CTER \times FAF) + PER}{2} \right\} \times HI}{2000\ lb/tom} \right]$$

Where:

Allocation =	The initial unadjusted NO_X allowance allocation, in tons.
CTER =	The CAIR target emission rate of 0.15 pounds per mm Btu for 2009 through 2014.

FAF = Fuel adjustment factor as defined.
PER = The unit's permitted NO_X emission rate as defined in R 336.1821.
HI = Average of the unit's 2 highest heat inputs in mm Btu for the appropriate 5 control periods.

(ii) All other existing EGUs shall receive an initial unadjusted allocation of allowances in an amount equaling 0.15 pounds per million Btu multiplied by the appropriate fuel adjustment factor and multiplied by the heat input as determined under subrule (4) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(b) During calendar years 2015 and thereafter, the following apply:

(i) Existing EGUs with a permitted NOx emission rate equal to or less than 0.10 pounds per million BTUs shall receive allowances determined by calculating the arithmetic average of the CAIR target emission rate multiplied by the appropriate fuel adjustment factor plus the unit's permitted NOx emission rate, which is then multiplied by the heat input as determined under subrule (4) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

$$Allocation = \left[\frac{\left\{\frac{(CTER \times FAF) + PER}{2}\right\} \times HI}{2000\ lb/tom}\right]$$

Where:
Allocation = The initial unadjusted NO_X allowance allocation, in tons.
CTER = The CAIR target emission rate of 0.125 pounds per mm Btu for 2015 and thereafter.
FAF = Fuel adjustment factor as defined in R 336.1821.
PER = The unit's permitted NO_X emission rate.
HI = Average of the unit's 2 highest heat inputs in mm Btu for the appropriate 5 control periods.

(ii) All other existing EGUs shall receive an initial unadjusted allocation of allowances in an amount equaling 0.125 pounds per million Btu multiplied by the appropriate fuel adjustment factor and multiplied by the heat input as determined under subrule (4) of this rule, divided by 2,000 pounds per ton, and rounded to the nearest whole oxides of nitrogen allowance, as appropriate.

(4) The heat input, in million Btu's, used for calculating oxides of nitrogen allowance allocations for each subject unit under this rule shall be the unit's average of the 2 highest heat inputs for the annual control period in the 5 years immediately preceding the year in which the department is required to submit the oxide of nitrogen allocations. If the unit operated less than 2 years of the 5-year time period, then the unit's single highest heat input shall be used.

(5) If the initial total number of CAIR NOx annual budget allowances allocated to all existing EGUs for the years under subrule (3) of this rule does not equal the budgeted tons for such units as specified in subrule (1) of this rule, then the department shall adjust up or down the total number of CAIR NOx annual budget allowances allocated to each existing EGU so that the total number of CAIR NOx annual budget allowances allocated to the entire group of EGUs

equals the appropriate value in subrule (1) of this rule. The adjustment shall be made by multiplying each unit's unadjusted initial allocation by a correction factor determined by dividing the appropriate existing EGU total annual budget tons from subrule (1) of this rule by the sum of all existing EGU's initial unadjusted allocations, and rounding to the nearest whole ton, as appropriate.

History: 2007 MR 12, Eff. June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1831 New EGUs under CAIR NOx annual trading program; allowance allocations.

Rule 831. (1) The department shall establish a set-aside pool for each CAIR NOx annual control allocation year. This set- aside pool shall be allocated on a yearly basis as follows:

(a) For years 2009 to 2011, a total of 1,000 tons of CAIR NOx annual budget allowances available for new EGUs.

(b) For years 2012 and thereafter, a total of 1,400 tons of CAIR NOx annual budget allowances available for new EGUs.

(2) The CAIR authorized account representative of a new EGU under this rule may submit to the department a written request, in a format specified by the department, to receive CAIR NOx annual allowances, starting with the annual control period during which the EGU commenced or is projected to commence operation and ending with the control period preceding the control period for which it shall receive an allocation under R 336.1830.

(a) The oxides of nitrogen allowance allocation request shall be submitted before September 1 of the year of the first annual control period for which the allowance allocation is requested and after the date on which the department issues a permit to install for the new EGU, if required, and each following year by September 1.

(b) The allocation methodology used for the first annual control period for which each new EGU requests allowances shall be calculated using the following formula:

$$Allocation = \frac{1.0 lb\ NOx}{MWh} \times \frac{Size\ of\ unit\ in\ MW \times hours\ of\ operation}{2000\ lb/ton} \times 70\%$$

Where:

Allocation =	The unadjusted NO_X allowance allocation, in tons.
1.0 lb NOx/MWh =	The factor for allocating NO_X allowances based on gross electric generation.
Size of the unit =	The nameplate capacity, as defined in the CAIR NOx program, of the EGU in megawatts.
Hours of operation =	Predicted hours of operation per control period.
MWh =	Megawatt hours.

(c) The allocation methodology used for each consecutive annual control period for which each new EGU requests allowances shall be calculated using the following formula:

$$Allocation = \frac{1.0 lb\ NOx}{MWh} \times \frac{Actual\ Megawatt\ hours}{2000\ lb/ton}$$

Where:

Allocation =	The unadjusted NOx allowance allocation, in tons.
1.0 lb NOx/MWh =	The factor for allocating NO_X allowances based on gross electric generation.
Actual megawatt hours =	The actual megawatt hours of electricity generated during the control period immediately preceding the request.
MWh =	Megawatt hours.

(d) Once the new EGU has been placed in the existing pool, the calculation methods under R 336.1830 apply.

(3) The department shall review and allocate oxides of nitrogen allowances pursuant to each allocation request on a pro rata basis as follows:

(a) Upon receipt of the CAIR NOx unit's allowance allocation request, the department shall determine whether allowances are available and shall make necessary adjustments to the request to ensure that for the CAIR NOx annual control period, the numbers of allowances specified are consistent with the requirements of subrule (1) of this rule.

(b) If the allocation set-aside pool for the CAIR NOx annual control period for which CAIR NOx annual budget allowances are requested has an amount greater than or equal to the number requested, as adjusted under subdivision (a) of this subrule, then the department shall allocate the amount of the CAIR NOx annual budget allowances requested.

(c) If the allocation set-aside pool for the CAIR NOx annual control period for which CAIR NOx annual budget allowances are requested has an amount of oxides of nitrogen allowances less than the number requested, as adjusted under subdivision (a) of this subrule, then the department shall proportionately reduce the number of CAIR NOx annual budget allowances allocated to each CAIR NOx unit so that the total number of CAIR NOx annual budget allowances allocated are equal to the amounts referenced in subrule (1)(a) or (b) of this rule.

(4) CAIR NOx annual allowances not allocated or requested that remain in the new source set-aside pool for any allocation year shall be re-allocated to the existing EGU source pool, using the allocation methodologies as outlined in R 336.1830.

History: 2007 MR 12, Eff. June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1832 CAIR NOx annual trading program; hardship set-aside.

Rule 832. (1) After the provisions of R 336.1830 have been followed, an owner or operator may pursue a request for hardship allowances. These requests must be submitted not later than 30 days prior to the deadline for department submittals to the U.S. environmental protection agency as described in R 336.1830.

(2) For existing EGUs subject to the CAIR NOx annual budget, the department shall allocate CAIR NOx hardship allowances under the following procedures:

(a) The department shall establish a hardship allocation set-aside pool for each CAIR NOx annual allocation year for existing EGUs. This hardship set-aside pool shall be allocated on a yearly basis and contains 1,200 tons of CAIR NOx annual allowances per allocation year.

(b) Hardship allowances may be allocated to an EGU if the requesting authorized account representative demonstrates both of the following:

(i) The owner or operator of the EGU has less than 250 employees within its company or its electric generating division or department.

(ii) The controls required for the EGU under this part result in excessive or prohibitive costs for compliance, pursuant to the procedures in subrule (3) of this rule.

(c) The CAIR authorized account representative of a CAIR NOx unit under this rule may submit to the department a written request, in a format specified by the department, to receive CAIR NOx annual hardship allowances. The authorized account representative shall submit the request for the amount of estimated hardship allowances they need, using historical annual heat input utilization levels multiplied by historical oxides of nitrogen emission rates, in the following manner:

(i) Historical heat input utilization levels shall be based on the unit's average of the 2 highest heat input utilization levels for the annual control period in the 5 years immediately preceding the year in which the department is required to submit the oxides of nitrogen allocations to the U.S. environmental protection agency. If the unit operated less than 2 years during the 5-year time period, then the unit's single highest heat input level shall be used.

(ii) Historic oxides of nitrogen rates shall be based on the oxides of nitrogen rate reported by the authorized account representative in its 40 C.F.R. part 75 reports to the U.S. environmental protection agency in the calendar year immediately preceding the year in which the department is required to submit the oxides of nitrogen allocation.

(iii) Units receiving hardship allowances shall receive a 3-year allocation that is 2 and 3 years in advance of the 2009 and 2010 annual control periods, respectively, and 4 years in advance of each subsequent annual control period. The 3-year allocation shall be the same as provided in R 336.1830(2).

(d) The department shall allocate the allowances based on the requests received as follows:

(i) If the allocation hardship set-aside pool for the CAIR NOx annual control period for which CAIR NOx annual allowances are requested has an amount of oxides of nitrogen allowances greater than or equal to the number requested, then the department shall allocate the amount of the CAIR NOx annual budget allowances requested.

(ii) If the allocation hardship set-aside pool for the CAIR NOx annual control period for which CAIR NOx annual allowances are requested has an amount of oxides of nitrogen allowances less than the number requested, then the department shall proportionately reduce the number of CAIR NOx annual allowances allocated to each CAIR NOx annual unit so that the total number of CAIR NOx annual allowances allocated are equal to the amounts referenced in subdivision (a) of this subrule.

(3) The department shall allocate CAIR NOx annual hardship allowances to existing EGUs which have submitted an engineering analysis as described as follows:

(a) The authorized account representative shall demonstrate to the department that the control level required pursuant to this rule results in excessive or prohibitive cost for compliance. The demonstration shall include all of the following:

(i) An engineering study analyzing all control options that are technically available for the unit, including control options that would achieve a level of control meeting, at a minimum, a 0.15 pound per million Btu emission rate.

(ii) The annualized cost associated with each control option. An annualized cost of more than $2,400 per ton of oxides of nitrogen reduced shall generally be considered to be an excessive cost for compliance with this rule.

(iii) Other considerations that contribute to prohibitive cost of compliance.

(b) For a source to remain eligible for hardship allowances under this rule after the initial 3-year allocation period, ending on December 31, 2011, the state may require a revised engineering analysis and demonstration as detailed under subrule (3)(a) of this rule, at a minimum of once every 3 years.

History: 2007 MR 12, Eff. June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1833 CAIR NOx annual trading program; compliance supplement pool.

Rule 833. (1) The department shall allow sources required to implement CAIR NOx control measures by January 1, 2009, and subject to this rule to demonstrate compliance using allowances issued from the compliance supplement pool under this rule, as follows:

(a) The total number of CAIR NOx allowances available to existing EGUs, for early reduction purposes from the compliance supplement pool, shall not be more than 6,491 tons of oxides of nitrogen.

(b) The total number of CAIR NOx allowances available for the newly-affected EGUs, for hardship purposes from the compliance supplement pool, shall not be more than 1,856 tons of oxides of nitrogen.

(c) Any CAIR NOx allowances that remain in the compliance supplement pool after the 2009 control period shall be retired.

(d) Sources that receive allowances according to the requirements of this rule may trade the allowance to other sources or persons according to the provisions in the CAIR NOx annual trading program.

(2) The department shall issue early reduction allowances to existing EGUs as follows:

(a) The emissions reduction shall not be required by Michigan's state implementation plan, state law, or rule, or be otherwise required by federal law.

(b) The emissions reduction shall be verified by the source as actually having occurred during the calendar years of 2007 and 2008.

(c) Each CAIR NOx unit for which the owner or operator requests any early reduction allowances under this rule shall monitor oxides of nitrogen emissions under 40 C.F.R. part 75, subpart H, which are adopted by reference in R 336.1802a, starting not less than 1 calendar year before the annual control period for which the early reduction allowances are requested. The unit's monitoring system availability shall be not less than 90 percent during the control period in which monitoring occurs for this purpose and the unit shall be in compliance with any applicable state or federal emissions or emissions-related requirements.

(d) The emissions reduction shall be quantified according to procedures set forth in 40 C.F.R. part 75, subpart H.

(e) The emissions reduction request shall include both of the following:

(i) The CAIR NOx authorized account representative may request early reduction allowances for the annual control period in an amount equal to the unit's heat input for the year, multiplied by the difference between the rates in both of the following provisions, divided by 2,000 pounds per ton, and rounded to the nearest ton:

(A) The oxides of nitrogen emission limit required by Michigan's state implementation plan, otherwise required by the clean air act, or 0.25 pound per million Btu heat input, whichever is most stringent.

(B) The unit's actual oxides of nitrogen emission rate for the 2007 and 2008 calendar years, which shall be lower than the rate used in subparagraph (A) of this paragraph and less than 80% of the actual 2005 annual oxides of nitrogen emission rate, expressed as pound per million Btu heat input.

(ii) The early reduction allowance request shall be submitted in writing, in a format specified by the department, not later than July 1, 2009, for the 2007 and 2008 control periods.

(f) The department shall allocate CAIR NOx allowances to CAIR NOx units meeting the requirements of this subdivision and requesting early reduction allocations, in the following manner:

(i) Upon receipt of each early reduction allowance request, the department shall accept the request only if the requirements of subdivisions (a) to (e) of this subrule are met and, if the request is accepted, shall make any necessary adjustments to the request to ensure that the amount of the early reduction allowances requested meets the requirement of subdivisions (a) to

(e) of this subrule.

(ii) If the compliance supplement pool has an amount of CAIR NOx allowances equal to or greater than the number of early reduction allowances in all accepted early reduction allowance requests for 2007 and 2008, as adjusted under paragraph (i) of this subdivision, the department shall allocate to each CAIR NOx unit covered by the accepted requests 1 allowance for each early reduction allowance requested, as adjusted under paragraph (i) of this subdivision.

(iii) If the compliance supplement pool has an amount of CAIR NOx allowances less than the number of early reduction allowances in all accepted early reduction allowance requests for 2007 and 2008, as adjusted under paragraph (i) of this subdivision, the department shall allocate CAIR NOx allowances to each CAIR NOx unit covered by the accepted requests according to the following formula and rounding to the nearest whole allowance as appropriate:

$$Allocated\ ERC = \frac{Units\ ERC\ requested}{Total\ requested\ ERC} \times Available\ CAIR\ NOx\ Allowances$$

Where:

ERC =	Early reduction allowances.
Allocated ERCs =	Each unit's allocated early reduction allowances.
Total requested ERCs =	The total amount of ERCs requested by all units from the compliance supplement pool.
Available CAIR NOx Allowances =	The total amount of allowances available from the early reduction portion of the compliance supplement pool.

(3) The department shall issue hardship allowances to newly-affected EGUs for which compliance with the CAIR NOx emissions limitations would create an undue risk to the reliability of electricity supply during the 2009 control period. The CAIR NOx authorized account representative of the newly-affected EGU may request the allocation of CAIR NOx allowances from the compliance supplement pool under subrule (1)(b) of this rule, pursuant to the following:

(a) The CAIR NOx authorized account representative shall submit to the department by July 1, 2009, a written request, in a format specified by the department, for allocation of an amount of CAIR NOx allowances from the compliance supplement pool not exceeding the minimum amount of CAIR NOx allowances necessary to remove the undue risk to the reliability of electricity supply.

(b) The CAIR NOx authorized account representative shall demonstrate that, in the absence of allocation of the amount of CAIR NOx allowances requested, the unit's compliance with the CAIR NOx emissions limitation for the 2009 control period would create an undue risk to the reliability of electricity supply during the 2009 control period. This demonstration shall include both of the following:

(i) A showing that it would not be possible for the owners and operators of the unit to obtain sufficient amounts of electricity from other electric generation facilities during the installation of control technology at the unit for compliance with the CAIR NOx emission limitation to prevent such undue risk.

(ii) A showing that it would not be possible for the owners and operators of the unit to obtain sufficient amounts of allowances under subrule (2) or from other sources or persons to prevent such undue risk.

(c) The department shall review each request submitted by July 1, 2009, and allocate CAIR NOx allowances for the 2009 control period to requesting EGUs as follows:

(i) Upon receipt of each hardship request, the department shall accept the request only if the requirements of subdivisions (a) and (b) of this subrule are met and, if the request is accepted, shall make any necessary adjustments to the request to ensure that the amount of the CAIR NOx hardship allowances requested meets the requirements of subdivisions (a) and (b) of this subrule.

(ii) If the compliance supplement pool has an amount of CAIR NOx hardship allowances equal to or greater than the number of CAIR NOx allowances in the hardship requests, the department shall allocate to each CAIR NOx unit the amount of CAIR NOx allowances requested, as adjusted under paragraph (i) of this subdivision.

(iii) If the compliance supplement pool has an amount of CAIR NOx allowances less than the number of hardship allowances in all accepted hardship requests, as adjusted under paragraph (i) of this subdivision, the department shall allocate CAIR NOx allowances to each CAIR NOx unit covered by the accepted requests according to the following formula and rounding to the nearest whole allowance as appropriate:

$$Adjusted\ Allocation = Requested\ Allocation \times \left(\frac{Available\ Pool\ Allocations}{Total\ adjusted\ allocation\ for\ all\ units}\right)$$

Where:

Adjusted allocation =	The number of CAIR NOx hardship allowances allocated to the unit from the state's compliance supplement pool.
Requested allocation =	The amount of CAIR NOx hardship allowances requested for the unit.
Available pool allocations =	The amount of CAIR NOx hardship allowances in the state's compliance supplement pool.
Total adjusted allocations for all units =	The sum of the amounts of hardship allocations requested for all units, as adjusted.

(4) The department shall complete its review process not later than September 1, 2009. By November 30, 2009, the department shall determine, and submit to the U.S. environmental protection agency, the allocations under subrules (2) or (3) of this rule.

History: 2007 MR 12, Eff. June 25, 2007; 2009 MR 10, Eff. May 28, 2009.

R 336.1834 Opt-in provisions under the CAIR NOx annual trading program.

Rule 834. The opt-in provisions in 40 C.F.R. §§97.180 through 97.188 are adopted by reference in R 336.1802a and are applicable to this rule.

History: 2007 MR 12, Eff. June 25, 2007.