DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

AIR POLLUTION CONTROL

Filed with the Secretary of State on

This rule becomes effective immediately upon filing with the Secretary of State unless adopted under sections 33, 44, 45a(6), or 48 of 1969 PA 306. Rules adopted under these sections become effective 7 days after filing with the Secretary of State.

(By authority conferred on the director of the department of **natural resources and** environmental quality by sections 5503 and 5512 of 1994 PA 451, MCL 324.5503 and 324.5512, and Executive Reorganization Order Nos. 1995-18 **and 2009-31**, MCL 324.99903 **and MCL 324.99919**)

R 336. 2801 and R 336.2816 of the Michigan Administrative Code are amended as follows:

PART 18. PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

R 336.2801 Definitions.

Rule 1801. The following definitions apply to terms used in this part. If a term defined in this part is also defined elsewhere in the rules, then the definition contained here applies for this part only.

- (a) "Actual emissions" means the actual rate of emissions of a regulated new source review pollutant from an emissions unit, as determined under R 336.1101(b), except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a plantwide applicability limit under R 336.2823. Instead, the terms "projected actual emissions" and "baseline actual emissions" shall apply for those purposes.
- (b) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source review pollutant, as determined by the following:
- (i) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. All of the following provisions apply:
- (A) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
- (B) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

- (C) For a regulated new source review pollutant, if a project involves multiple emissions units, then only 1 consecutive 24-month period shall be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated new source review pollutant.
- (D) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph (i)(B) of this subdivision.
- (ii) For an existing emissions unit, other than an electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the department for a permit required by R 336.1201, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990. All of the following provisions apply:
- (A) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
- (B) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.
- (C) The average rate shall be adjusted downward to exclude emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the United States environmental protection agency proposed or promulgated under 40 C.F.R. part 63, then the baseline actual emissions need only be adjusted if the state has taken credit for such emissions reductions in an attainment demonstration or maintenance plan submitted to the U.S. environmental protection agency. The provisions of 40 C.F.R. part 63 are adopted by reference in R 336.2801a.
- (D) For a regulated new source review pollutant, if a project involves multiple emissions units, then only 1 consecutive 24-month period shall be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period may be used for each regulated new source review pollutant.
- (E) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subparagraphs (B) and (C) of this paragraph.
- (iii) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

- (iv) For a plantwide applicability limit for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units under paragraph (i) of this subdivision, for other existing emissions units under paragraph (ii) of this subdivision, and for a new emissions unit under paragraph (iii) of this subdivision.
 - (c) "Baseline area" means all of the following:
- (i) Any intrastate area, and every part thereof, designated as attainment or unclassifiable under section 107(d)(1) (D) or (E) of the clean air act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 1 microgram per cubic meter (annual average) of the pollutant for which the minor source baseline date is established.
- (ii) Area redesignations under section 107(d)(1) (D) or (E) of the clean air act shall not intersect or be smaller than the area of impact of any major stationary source or major modification which does either of the following:
 - (A) Establishes a minor source baseline date.
- (B) Is subject to PSD regulations or new source review for major sources in nonattainment areas regulations.
- (iii) Any baseline area established originally for the total suspended particulates increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that the baseline area shall not remain in effect if the department rescinds the corresponding minor source baseline date under subdivision (bb)(iv) of this rule.
- (d) "Baseline concentration" means the value derived using the following procedures:
- (i) The ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include both of the following:
- (A) The actual emissions representative of sources in existence on the applicable minor source baseline date.
- (B) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
- (ii) The following shall not be included in the baseline concentration and shall affect the applicable maximum allowable increase:
- (A) Actual emissions from any major stationary source on which construction commenced after the major source baseline date.
- (B) Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.
- (e) "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. "A change in method of operation" refers to those on-site activities, other than preparatory activities, which mark the initiation of the change.

- (f) "Best available control technology" or "BACT" means an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each regulated new source review pollutant, which would be emitted from any proposed major stationary source or major modification which the department -- on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs -- determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combination techniques for control of the pollutant. Application of best available control technology shall not result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 C.F.R. parts 60 and 61, adopted by reference in R 336.2801a. If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, then a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. The standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of the design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.
- (g) "Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on 1 or more contiguous or adjacent properties, and are under the control of the same person, or persons under common control, except the activities of any vessel. Pollutant-emitting activities are part of the same industrial grouping if they have the same 2-digit major group code associated with their primary activity. Major group codes and primary activities are described in the standard industrial classification manual, 1987. For assistance in converting north American industrial classification system codes to standard industrial classification codes see http://www.census.gov/epcd/naics02/.
- (h) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post-combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.
- (i) "Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy -- Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the United States Environmental Protection Agency. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.
 - (i) [Reserved]
- (k) "Commence," as applied to construction of a major stationary source or major modification, means that the owner or operator has all necessary preconstruction approvals or permits and has done either of the following:

- (i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time.
- (ii) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- (I) "Complete" means, in reference to an application for a permit, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the department from requesting or accepting additional information.
- (m) "Construction" means any physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emissions unit, that would result in a change in emissions.
- (n) "Continuous emissions monitoring system" or "CEMS" means all of the equipment that may be required to meet the data acquisition and availability requirements of these rules, to sample, condition if applicable, analyze, and provide a record of emissions on a continuous basis.
- (o) "Continuous emissions rate monitoring system" or "CERMS" means the total equipment required for the determination and recording of the pollutant mass emissions rate in terms of mass per unit of time.
- (p) "Continuous parameter monitoring system" or "CPMS" means all of the equipment necessary to meet the data acquisition and availability requirements of these rules, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, oxygen or carbon dioxide concentrations), and to record average operational parameter value or values on a continuous basis.
- (q) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for supplying more than 1/3 of its potential electric output capacity and more than 25 megawatt electrical output to any utility power distribution system for sale. Steam supplied to a steam distribution system for providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
- (r) "Emissions unit" means any part of a stationary source that emits or would have the potential to emit any regulated new source review pollutant and includes an electric utility steam generating unit. Both of the following are types of emissions units:
- (i) A new emissions unit is any emissions unit that is, or will be, newly constructed and that has existed for less than 2 years from the date the emissions unit first operated.
- (ii) An existing emissions unit is any emissions unit that does not meet the definition of a new emissions unit. A replacement unit is an existing emissions unit and no creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced. A replacement unit shall meet all of the following criteria:

- (A) The emissions unit is a reconstructed unit if the replacement of components of an existing facility is to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new facility or the emissions unit completely takes the place of an existing emissions unit.
- (B) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- (C) The replacement does not alter the basic design parameters of the process unit.
- (D) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.
- (s) "Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.
- (t) "High terrain" means an area having an elevation 900 feet or more above the base of the stack of a source.
- (u) "Hydrocarbon combustion flare" means either a flare used to comply with an applicable new source performance standard or maximum achievable control technology standard, including uses of flares during startup, shutdown, or malfunction permitted under such a standard, or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing not more than 230 milligrams per dry standard cubic meter hydrogen sulfide.
- (v) "Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of congress.
- (w) "Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
- (x) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but may have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.
 - (y) "Low terrain" means any area other than high terrain.
- (z) "Lowest achievable emission rate" or "LAER", for any source, means the more stringent rate of emissions based on R 336.1112(f).
 - (aa) "Major modification" means any of the following:
- (i) Physical change in or change in the method of operation of a major stationary source that would result in both of the following:
 - (A) A significant emissions increase of a regulated new source review pollutant.
- (B) A significant net emissions increase of that pollutant from the major stationary source.

- (ii) A significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.
- (iii) Physical change or change in the method of operation shall not include any of the following:
 - (A) Routine maintenance, repair, and replacement.
- (B) Use of an alternative fuel or raw material by reason of any order under section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or by reason of a natural gas curtailment plan under the Federal Power Act.
- (C) Use of an alternative fuel by reason of an order or rule under section 125 of the clean air act.
- (D) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- (E) Use of an alternative fuel or raw material by a stationary source which meets either of the following:
- (1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, under PSD regulations or R 336.1201(1)(a).
- (2) The source is approved to use under any permit issued under PSD regulations or under R 336.1201(1)(a).
- (F) An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, under PSD regulations or R 336.1201(1)(a).
 - (G) Any change in ownership at a stationary source.
 - (H) [Reserved]
- (I) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with both of the following:
 - (1) The state implementation plan.
- (2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after the project is terminated.
- (J) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
 - (K) The reactivation of a very clean coal-fired electric utility steam generating unit.
- (iv) This definition shall not apply with respect to a particular regulated new source review pollutant when the major stationary source is complying with the requirements for an actuals PAL for that pollutant. Instead, the definition of PAL major modification in R 336.2823 shall apply.
 - (bb) All of the following apply to major and minor source baseline dates:
 - (i) "Major source baseline date" means both of the following:
 - (A) January 6, 1975, for particulate matter and sulfur dioxide.
 - (B) February 8, 1988, for nitrogen dioxide.

- (ii) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to PSD regulations submits a complete application under the relevant regulations. The trigger date is both of the following:
 - (A) August 7, 1977, for particulate matter and sulfur dioxide.
 - (B) February 8, 1988, for nitrogen dioxide.
- (iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if both of the following occur:
- (A) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(i) (D) or (E) of the clean air act for the pollutant on the date of its complete application under R 336.1201 and PSD regulations.
- (B) If a major stationary source, the pollutant would be emitted in significant amounts, or, if a major modification, there would be a significant net emissions increase of the pollutant.
- (iv) Any minor source baseline date established originally for the total suspended particulates increments shall remain in effect and shall apply for determining the amount of available PM-10 increments, except that the department may rescind any minor source baseline date where it can be shown, to the satisfaction of the department, that the emissions increase from the major stationary source, or the net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM-10 emissions.
 - (cc) "Major stationary source" means any of the following:
- (i) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of a regulated new source review pollutant:
- (A) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.
 - (B) Coal cleaning plants with thermal dryers.
 - (C) Kraft pulp mills.
 - (D) Portland cement plants.
 - (E) Primary zinc smelters.
 - (F) Iron and steel mill plants.
 - (G) Primary aluminum ore reduction plants.
 - (H) Primary copper smelters.
- (I) Municipal incinerators capable of charging more than 250 tons of refuse per day.
 - (J) Hydrofluoric, sulfuric, and nitric acid plants.
 - (K) Petroleum refineries.
 - (L) Lime plants.
 - (M) Phosphate rock processing plants.
 - (N) Coke oven batteries.
 - (O) Sulfur recovery plants.
 - (P) Carbon black plants (furnace process).
 - (Q) Primary lead smelters.
 - (R) Fuel conversion plants.

- (S) Sintering plants.
- (T) Secondary metal production plants.
- (U) Chemical process plants.
- (V) Fossil fuel boilers, or combinations thereof, totaling more than 250 million British thermal units per hour heat input.
- (W) Petroleum storage and transfer units with a total storage capacity exceeding 300.000 barrels.
 - (X) Taconite ore processing plants.
 - (Y) Glass fiber processing plants.
 - (Z) Charcoal production plants.
- (ii) Any stationary source not listed in the previous subdivision which emits, or has the potential to emit, 250 tons per year or more of a regulated new source review pollutant.
- (iii) Any physical change that would occur at a stationary source not otherwise qualifying under subdivision (cc) of this subrule, as a major stationary source if the change would constitute a major stationary source by itself.
- (iv) A major source that is major for volatile organic compounds shall be considered major for ozone.
- (v) The fugitive emissions of a stationary source shall not be included in determining, for any of the purposes of this rule, whether it is a major stationary source, unless the source belongs to 1 of the categories of stationary sources listed is paragraph (i) of this subdivision.
- (dd) "Necessary preconstruction approvals or permits" means a permit issued under R 336.1201(1)(a) that is required by R 336.2801 to R 336.2819, R 336.2823, and R 336.2830 or R 336.1220.
 - (ee) "Net emissions increase" means all of the following:
- (i) For any regulated new source review pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
- (A) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated under R 336.2802(4).
- (B) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph shall be determined as provided in the definition of baseline actual emissions, except that paragraphs (b)(i)(C) and (b)(ii)(D) of this rule shall not apply.
- (ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the following:
 - (A) The date 5 years before construction on the particular change commences.
 - (B) The date that the increase from the particular change occurs.
- (iii) An increase or decrease in actual emissions is creditable only if the department has not relied on it in issuing a permit under R 336.1201(1)(a) or R 336.1214a, which permit is in effect when the increase in actual emissions from the particular change occurs.
- (iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or oxides of nitrogen that occurs before the applicable minor source baseline

date is creditable only if it is required in calculating the amount of maximum allowable increases remaining available.

- (v) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (vi) A decrease in actual emissions is creditable only to the extent that it meets all of the following criteria:
- (A) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.
- (B) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
- (C) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (vii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. A replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- (viii) The definition of actual emissions in R 336.1101(b) shall not apply for determining creditable increases and decreases after a change, instead the definitions of the terms "projected actual emissions" and "baseline emissions" shall be used.
 - (ff) [Reserved]
- (gg) "Pollution prevention" means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants, including fugitive emissions, and other pollutants to the environment before recycling, treatment, or disposal. Pollution prevention does not mean recycling, other than certain "in-process recycling" practices, energy recovery, treatment, or disposal.
- (hh) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. A physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is legally enforceable and enforceable as a practical matter by the state, local air pollution control agency, or United States environmental protection agency. Secondary emissions do not count in determining the potential to emit of a stationary source.
- (ii) "Predictive emissions monitoring system" or "PEMS" means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, oxygen or carbon dioxide concentrations), and calculate and record the mass emissions rate (for example, pounds per hour) on a continuous basis.
- (jj) "Prevention of significant deterioration" or "PSD" program means the major source preconstruction permit program required by 40 C.F.R. §52.21, adopted by reference in R 336.2801a, or R 336.2801 to R 336.2819, R 336.2823 and R 336.2830. A permit issued under this program is a major NSR permit.

- (kk) "Project" means a physical change in, or change in method of operation of, an existing major stationary source.
 - (II) "Projected actual emissions" means all of the following:
- (i) The maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated new source review pollutant in any 1 of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any 1 of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that regulated new source review pollutant, and full utilization of the unit would result in a significant emissions increase, or a significant net emissions increase at the major stationary source.
- (ii) In determining the projected actual emissions, before beginning actual construction, the owner or operator of the major stationary source shall do all of the following:
- (A) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the state or federal regulatory authorities, and compliance plans under the state implementation plan.
- (B) Include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions.
- (C) Exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth.
- (iii) The owner or operator of a major stationary source may use the emissions unit's potential to emit, in tons per year, instead of calculating projected actual emissions.
- (mm) "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit meets all of the following criteria:
- (i) The unit was not in operation for the 2-year period before the enactment of the clean air act amendments of 1990, and the emissions from the unit continue to be carried in the department's emissions inventory at the time of enactment.
- (ii) The unit was equipped before shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of not less than 85% and a removal efficiency for particulates of not less than 98%.
- (iii) The unit was equipped with low-oxides of nitrogen burners before the time of commencement of operations following reactivation.
 - (iv) The unit otherwise complies with the requirements of the clean air act.
- (nn) "Regulated new source review pollutant," for purposes of this rule, means all of the following:
- (i) A pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for the pollutants identified by the

United States environmental protection agency. For example, volatile organic compounds are precursors for ozone.

- (ii) A pollutant that is subject to any standard promulgated under section 111 of the clean air act.
- (iii) A class I or II substance subject to a standard promulgated under or established by title VI of the clean air act.
- (iv) A pollutant that otherwise is subject to regulation under the clean air act; except that any or all hazardous air pollutants either listed in section 112 of the clean air act or added to the list under section 112(b)(2) of the clean air act, which have not been delisted under section 112(b)(3) of the clean air act, are not regulated new source review pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the clean air act.
 - (oo) "Repowering" means all of the following:
- (i) Replacement of an existing coal-fired boiler with 1 of the following clean coal technologies:
 - (A) Atmospheric or pressurized fluidized bed combustion.
 - (B) Integrated gasification combined cycle.
 - (C) Magneto hydrodynamics.
 - (D) Direct and indirect coal-fired turbines.
 - (E) Integrated gasification fuel cells.
- (F) A derivative of 1 or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990, as determined by the United States environmental protection agency, in consultation with the Secretary of Energy.
- (ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the United States Department of Energy.
- (iii) The department shall give expedited consideration to permit applications for any source that satisfies the definition of repowering and is granted an extension under section 409 of the clean air act.
- (pp) "Secondary emissions" means emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For this rule, secondary emissions shall be specific, well defined, quantifiable, and impact the same general areas the stationary source modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.
 - (qq) "Significant" means:

- (i) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following pollutant emission rates:
 - (A) Carbon monoxide: 100 tons per year.
 - (B) Oxides of nitrogen: 40 tons per year.
 - (C) Sulfur dioxide: 40 tons per year.
- (D) Particulate matter: 25 tons per year of particulate matter emissions; 15 tons per year of PM-10 emissions; **10 tons per year of PM 2.5 emissions**.
 - (E) Ozone: 40 tons per year of volatile organic compounds.
 - (F) Lead: 0.6 tons per year.
 - (G) Fluorides: 3 tons per year.
 - (H) Sulfuric acid mist: 7 tons per year.
 - (I) Hydrogen sulfide: 10 tons per year.
 - (J) Total reduced sulfur, including hydrogen sulfide: 10 tons per year.
 - (K) Reduced sulfur compounds, including hydrogen sulfide: 10 tons per year.
- (L) Municipal waste combustor organics, measured as total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans: $3.2 \times 10-6$ megagrams per year or $3.5 \times 10-6$ tons per year.
- (M) Municipal waste combustor metals, measured as particulate matter: 14 megagrams per year or 15 tons per year.
- (N) Municipal waste combustor acid gases, measured as sulfur dioxide and hydrogen chloride: 36 megagrams per year or 40 tons per year.
- (O) Municipal solid waste landfill emissions, measured as nonmethane organic compounds: 45 megagrams per year or 50 tons per year.
- (ii) In reference to a net emissions increase or the potential of a source to emit a regulated new source review pollutant not listed in this definition, any emissions rate.
- (iii) Any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a class I area, and have an impact on such area equal to or greater than 1 microgram per cubic meter (24-hour average).
- (rr) "Significant emissions increase" means, for a regulated new source review pollutant, an increase in emissions that is significant for that pollutant.
- (ss) "Stationary source" means any building, structure, facility, or installation which emits or may emit a regulated new source review pollutant.
- (tt) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the state implementation plan and other requirements necessary to attain and maintain the national ambient air quality standards during and after the project is terminated.

R 336.2816 Sources impacting federal class I areas; additional requirements. Rule 1816. (1) The department shall transmit to the United States environmental protection agency a copy of each permit application relating to a major stationary source or major modification and provide notice to the United States environmental protection agency of every action related to the consideration of the permit.

- (2) If the proposed major stationary source or major modification affects a federal class 1 area, the department shall not approve the permit application if the department concurs with a demonstration provided by the federal land manager that the emissions from the proposed major source or major modification would have an adverse impact on the air quality related values of class I lands, including visibility, notwithstanding that the change in air quality resulting from emissions from a major source or major modification would not cause or contribute to concentrations that would exceed the maximum allowable increases for a class I area.
- (3) If the department determines that the emissions from a proposed major source or major modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a class I area, the department shall not approve a permit application unless the applicable requirements of Michigan's state implementation plan are otherwise met and 1 of the following occurs:
- (a) The applicant submits a written certification that the applicant has demonstrated to the federal land manager that the emissions from the proposed major source or major modification would have no adverse impact on the air quality related values of class I lands, including visibility, notwithstanding that the change in air quality resulting from emissions from a major source or major modification would cause or contribute to concentrations that would exceed the maximum allowable increases for a class I area. The department may then, provided that applicable requirements are otherwise met, issue the permit with emission limitations to assure that emissions of sulfur dioxide, particulate matter, and oxides of nitrogen would not exceed the following maximum allowable increases over minor source baseline concentration for the pollutants:

Table 183

Maximum allowable increases over minor source baseline concentrations

Pollutant	Maximum allowable increase (micrograms per cubic meter)	
Particulate matter:		
PM-10, annual arithmetic mean	17	
PM-10, 24-hour maximum	30	
Sulfur dioxide:		
Annual arithmetic mean	20	
24-hour maximum	91	
3-hour maximum	325	
Nitrogen dioxide:		
Annual arithmetic mean	25	

(b) If the department cannot approve the permit application under R 336.2816(3)(a) due to sulfur dioxide emissions resulting in increases greater than those specified in Table 183 for periods of 24 hours or less, the applicant may obtain approval by providing a written certification that the applicant has demonstrated to the federal land manager that the emissions from the proposed major source or major modification would have no adverse impact on the air quality related values of class I lands, including visibility, and that both the governor and the federal land

manager have granted a sulfur dioxide variance for the federal class I area on which variance the public has received notice and opportunity for public hearing.

- (c) If the department cannot approve the permit application under R 336.2816(3)(a) due to sulfur dioxide emissions resulting in increases greater than those specified in Table 183 for periods of 24 hours or less, and the department cannot approve the permit application under R 336.2816(3)(b) because the federal land manager does not concur with the governor's issuance of a sulfur dioxide variance that is otherwise consistent with R 336.2816(3)(b), the applicant may obtain approval by providing a written certification that the applicant has demonstrated to the president that a sulfur dioxide variance is in the national interest and the president concurs with the issuance of the sulfur dioxide variance by the governor. The applicant shall transfer the recommendations of the governor and the federal land manager to the president in any case where the governor recommends a variance in which the federal land manager does not concur.
- (4) The department will not issue a permit affecting a class I area in which a sulfur dioxide variance was granted under R 336.2816(3)(b) or (c), unless the permit includes emission limitations necessary to assure that emissions of sulfur dioxide from the major source or major modification would not, during any day on which the otherwise applicable maximum allowable increases are exceeded, cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period.

Table 184

Maximum allowable sulfur dioxide increments

Period of exposure	Maximum allowable increase (micrograms per cubic meter)		
	Terrain areas		
	Low	High	
24-hour maximum	36	62	
3-hour maximum	130	221	