MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

PART 19. NEW SOURCE REVIEW FOR MAJOR SOURCES IMPACTING NONATTAINMENT AREAS

(By authority conferred on the director of environmental quality by Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.5501 to 324.5542)

PART 19. NEW SOURCE REVIEW FOR MAJOR SOURCES IMPACTING NONATTAINMENT AREAS

R 336.2901 Definitions.

Rule 1901. The following definitions apply to terms used in this part. If a term defined here is also defined elsewhere in these rules, then the definition contained here supersedes 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 plant wide applicability limit under R 336.2907. 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. The following shall 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 non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
- (C) For a regulated new source review pollutant, when a project involves multiple emissions units, only one 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 under 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 shall 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 non-compliant 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 any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had the major stationary source been required to comply with the 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, adopted by reference in R 336.1902, then the baseline actual emissions need only be adjusted if the department has taken credit for such emissions reductions in an attainment demonstration or maintenance plan.
- (D) For a regulated new source review pollutant, when a project involves multiple emissions units, 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 plant wide applicability limit for a major 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) "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.
 - (d) "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 combustion techniques for control of such 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. part 60 or 61, adopted by reference in R 336.1902. 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 BACT. 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.

- (e) "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/.
- (f) "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.
- (g) "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.
 - (h) [Reserved]
- (i) "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 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.

- (j) "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.
- (k) "Continuous emissions monitoring system" or "CEMS" means all of the equipment that may be required to meet the data acquisition and availability requirements of this rule, to sample, condition, if applicable, analyze, and provide a record of emissions on a continuous basis.
- (l) "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.
- (m) "Continuous parameter monitoring system" or "CPMS" means all of the equipment necessary to meet the data acquisition and availability requirements of this rule, to monitor process and control device operational parameters and other information, and to record average operational parameter values on a continuous basis.
- (n) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than 1/3 of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of 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.
- (o) "Emissions unit" means any part of a stationary source that emits or would have the potential to emit any regulated new source review pollutant. The term emissions unit includes an electric steam generating unit. Each emissions unit can be classified as either new or existing based on the following:
- (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. Replacement unit means all of the following:
- (A) The emissions unit is a reconstructed unit as defined within R 336.1118(b) 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.
- (p) "Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.
- (q) 'Functionally equivalent component" means a component that serves the same purpose as the replaced component.
- (r) "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.

- (s) "Lowest achievable emission rate" or "LAER" means, for any source, the more stringent rate of emissions based on either of the following:
- (i) The most stringent emissions limitation that is contained in the implementation plan of any state for the same class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that the limitations are not achievable.
- (ii) The most stringent emissions limitation that is achieved in practice by the same class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within a stationary source. Application of the term shall not permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source performance standard.
 - (t) "Major modification" means the following:
- (i) Any 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) Any 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) A 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 an order under sections 2 (a) and (b) of the energy supply and environmental coordination act of 1974, 15 U.S.C. §792 et seq., or any superseding legislation, or by reason of a natural gas curtailment plan under the federal power act of 1995, 16 U.S.C. §791-828c et seq.
- (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 December 21, 1976, unless the change would be prohibited under any federally enforceable permit condition that was established after December 12, 1976, under prevention of significant deterioration of air quality regulations or new source review for major sources in nonattainment areas regulations.
 - (2) The source is approved to use under any permit issued under R 336.1201(1)(a).
- (F) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition that was

established after December 21, 1976, under 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 standard during the project and after it is terminated.
- (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 of R 336.2907 for a plant wide applicability limit for that pollutant. Instead, the definition in R 336.2907(1)(h) shall apply.
- (v) For the purposes of applying the requirements of R 336.2902(8) to modifications at major stationary sources of nitrogen oxides located in ozone nonattainment areas or in ozone transport regions, whether or not subject to subpart 2, part D, title 1 of the clean air act, any significant net emissions increase of nitrogen oxides is considered significant for ozone.
- (vi) Any physical change in, or change in the method of operation of, a major stationary source of volatile organic compounds that results in any increase in emissions of volatile organic compounds from any discrete operation, emissions unit, or other pollutant emitting activity at the source shall be considered a significant net emissions increase and a major modification for ozone, if the major stationary source is located in an extreme ozone nonattainment area that is subject to subpart 2, part D, title 1 of the clean air act.
 - (u) "Major stationary source" means all of the following:
 - (i) Any of the following:
- (A) Any stationary source of air pollutants that emits or has the potential to emit 100 tons per year or more of any regulated new source review pollutant, except that lower emissions thresholds shall apply in areas subject to subpart 2, subpart 3, or subpart 4 of part D, title 1 of the clean air act, according to the following:
- (1) In any serious ozone nonattainment area, 50 tons per year of volatile organic compounds.
- (2) In an area within ozone transport region except for any severe or extreme ozone nonattainment area, 50 tons per year of volatile organic compounds.
- (3) In any severe ozone nonattainment area, 25 tons per year of volatile organic compounds.
- (4) In any extreme ozone nonattainment area, 10 tons per year of volatile organic compounds.
- (5) In any serious nonattainment area for carbon monoxide, where the department has determined that stationary sources contribute significantly to carbon monoxide levels in the area, 50 tons per year of carbon monoxide.
 - (6) In any serious nonattainment area for PM-10, 70 tons per year of PM-10.
- (B) For the purposes of applying the requirements of R 336.2902(8) to stationary sources of nitrogen oxides located in an ozone nonattainment area or in an ozone transport region, any stationary source which emits, or has the potential to emit, 100 tons

per year or more of nitrogen oxide emissions, except that the following emission thresholds shall apply in areas subject to subpart 2 of part D, title 1 of the clean air act:

- (1) In any ozone nonattainment area classified as marginal or moderate, 100 tons per year or more of nitrogen oxides.
- (2) In any ozone nonattainment area classified as a transitional, submarginal, or incomplete or no data area, when such area is located in an ozone transport region, 100 tons per year or more of nitrogen oxides.
- (3) In any area designated under section 107(d) of the clean air act as attainment or unclassifiable for ozone that is located in an ozone transport region, 100 tons per year or more of nitrogen oxides.
- (4) In any serious nonattainment area for ozone, 50 tons per year or more of nitrogen oxides.
- (5) In any severe nonattainment area for ozone, 25 tons per year or more of nitrogen oxides.
- (6) In any extreme nonattainment area for ozone, 10 tons per year or more of nitrogen oxides.
- (C) Any physical change that would occur at a stationary source not qualifying under R 336.2901(u)(i)(A) or (B) as a major stationary source, if the change would constitute a major stationary source by itself.
- (ii) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- (iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this paragraph whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
 - (A) Coal cleaning plants, with thermal dryers.
 - (B) Kraft pulp mills.
 - (C) Portland cement plants.
 - (D) Primary zinc smelters.
 - (E) Iron and steel mills.
 - (F) Primary aluminum ore reduction plants.
 - (G) Primary copper smelters.
 - (H) Municipal incinerators capable of charging more than 250 tons of refuse per day.
 - (I) Hydrofluoric, sulfuric, or nitric acid plants.
 - (J) Petroleum refineries.
 - (K) Lime plants.
 - (L) Phosphate rock processing plants.
 - (M) Coke oven batteries.
 - (N) Sulfur recovery plants.
 - (O) Carbon black plants, furnace process.
 - (P) Primary lead smelters.
 - (Q) Fuel conversion plants.
 - (R) Sintering plants.
 - (S) Secondary metal production plants.
- (T) Chemical process plants. The term chemical process plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in

North American Industrial Classification System codes 325193 or 312140.

- (U) Fossil-fuel boilers, or combination thereof, totaling more than 250 million British thermal units per hour heat input.
- (V) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
 - (W) Taconite ore processing plants.
 - (X) Glass fiber processing plants.
 - (Y) Charcoal production plants.
- (Z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.
- (AA) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the clean air act.
 - (v) "Necessary preconstruction approvals or permits" mean a permit issued under R 336.1201(1)(a) that is required by R 336.2802 or R 336.2902.
 - (w) "Net emissions increase" means all of the following:
- (i) With respect to 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 336.2902(2).
- (B) Any other increases and decreases in actual emissions at the major stationary source that occur within the contemporaneous period and are otherwise creditable.
 - (ii) The contemporaneous period must meet all of the following:
- (A) Begins on the date 5 years before construction on the particular change commences.
 - (B) Ends on 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) The magnitude of a creditable, contemporaneous increase in actual emissions is determined by the amount that the allowable emissions following the increase exceed the emissions unit's baseline actual emissions prior to the increase. This means allowable emissions and baseline actual emissions are determined from the date of the contemporaneous increase. Baseline actual emissions shall be determined as provided in the definition of baseline actual emissions, except that subdivision (b)(i)(C) and (b)(ii)(D) of this rule shall not apply.
- (v) A contemporaneous decrease in actual emissions is creditable only to the extent that all of the following occur:
- (A) The magnitude of a creditable contemporaneous decrease is determined by the lower of the following:
- (1) The amount by which the emission unit's baseline actual emissions prior to the decrease exceed the level of allowable emissions following the decrease.
- (2) The amount by which the emission unit's allowable emissions prior to the decrease exceed the level of allowable emissions following the decrease.
- (3) In determining the magnitude of a creditable contemporaneous decrease, allowable emissions and baseline actual emissions are determined from the date of the

contemporaneous decrease. Baseline actual emissions shall be determined as provided in the definition of baseline actual emissions except that subdivision (b)(i)(C) and (b)(ii)(D) of this rule shall not apply.

- (B) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
- (C) The department has not relied on it in issuing any permit under R 336.1201(1)(a) or R 336.1214a.
- (D) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (vi) 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. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- (vii) 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 actual emissions" shall be used.
- (x) "Nonattainment major new source review" or "NSR" program means the requirements of this rule, R 336.1220, or R 336.1221. A permit issued under any of these rules is a major new source review permit.
 - (y) [Reserved]
- (z) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any 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 only if the limitation or the effect it would have on emissions is federally legally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.
- (aa) "Predictive emissions monitoring system" or "PEMS" means all of the equipment necessary to monitor process and control device operational parameters and other information and calculate and record the mass emissions rate on a continuous basis.
- (bb) "Prevention of significant deterioration" or "PSD" permit means any permit that is issued under R 336.2802 or the prevention of significant deterioration of air quality regulations under 40 C.F.R. §52.21, adopted by reference in R 336.1902.
- (cc) "Process Unit" means any collection of structures or equipment, or both that processes, assembles, applies, blends, or otherwise uses material inputs to produce or store an intermediate or a completed product. A single stationary source may contain more than one process unit, and a process unit may contain more than one emissions unit.
- (i) Pollution control equipment is not part of the process unit, unless it serves a dual function as both process and control equipment. Administrative and warehousing facilities are not part of the process unit.
- (ii) For replacement cost purposes, components shared between two or more process units are proportionately allocated based on capacity.
- (iii)The following list identifies process units at specific categories of stationary sources
 - (A) For a steam electric generating facility, the process unit consists of those portions

of the plant that contribute directly to the production of electricity. For example, at a pulverized coal-fired facility, the process unit would generally be the combination of those systems from the coal receiving equipment through the emission stack (excluding post-combustion pollution controls), including the coal handling equipment, pulverizers or coal crushers, feedwater heaters, ash handling, boiler, burners, turbine-generator set, condenser, cooling tower, water treatment system, air preheaters, and operating control systems. Each separate generating unit is a separate process unit.

- (B) For a petroleum refinery, there are several categories of process units: those that separate or distill, or both petroleum feedstocks; those that change molecular structures; petroleum treating processes; auxiliary facilities, such as steam generators and hydrogen production units; and those that load, unload, blend or store intermediate or completed products.
- (C) For an incinerator, the process unit would consist of components from the feed pit or refuse pit to the stack, including conveyors, combustion devices, heat exchangers and steam generators, quench tanks, and fans.
- (dd) "Project" means a physical change in, or change in the method of operation of, an existing major stationary source.
 - (ee) "Projected actual emissions" means 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 one of the 5 12-month periods following the date the unit resumes regular operation after the project, or in any 1 of the 10 12-month periods following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of 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 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 approved 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 of this rule and that are also unrelated to the particular project, including any increased utilization due to product demand growth.
- (D) Elect to use the emissions unit's potential to emit in tons per year instead of calculating projected actual emissions.
 - (ff) "Regulated new source review pollutant" means any of the following:
 - (i) Oxides of nitrogen or any volatile organic compounds.
- (ii) Any pollutant for which a national ambient air quality standard has been promulgated.
 - (iii) Any pollutant that is a constituent or precursor of a general pollutant listed under

paragraphs (i) or (ii) of this subdivision, provided that a constituent or precursor pollutant may only be regulated under new source review as part of regulation of the general pollutant.

- (gg) "Secondary emissions" means emissions that would 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 the purpose of this rule, secondary emissions shall be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any off-site support facility that 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 that come directly from a mobile source such as emissions from the tailpipe of a motor vehicle, from a train, or a vessel.
 - (hh) "Significant" means all of the following:
- (i) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants at a rate of emissions that would equal or exceed any of the following pollutant emission rates:
 - (A) Carbon monoxide: 100 tons per year.
 - (B) Nitrogen oxides: 40 tons per year.
 - (C) Sulfur dioxide: 40 tons per year.
 - (D) Ozone: 40 tons per year of volatile organic compounds or of nitrogen oxides.
 - (E) Lead: 0.6 tons per year.
 - (F) PM-10: 15 tons per year of PM-10.
- (G) PM 2.5: 10 tons per year of PM 2.5; 40 tons per year of sulfur dioxide emissions; 40 tons per year of nitrogen oxide emissions.
- (ii) Notwithstanding the significant emissions rate for ozone in R 336.2901(hh) (i)(D), significant means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of volatile organic compounds that would result from any physical change in, or change in the method of operation of, a major stationary source located in a serious or severe ozone nonattainment area that is subject to subpart 2, part D, title 1 of the clean air act, if such emissions increase of volatile organic compounds exceeds 25 tons per year.
- (iii) For the purposes of applying the requirements of R 336.2902(8) to modifications at major stationary sources of nitrogen oxides located in an ozone nonattainment area or in an ozone transport region, the significant emission rates and other requirements for volatile organic compounds in R 336.2901(hh)(i)(D), R 336.2901(hh)(ii) and R 336.2901(hh)(v) shall apply to nitrogen oxides emissions.
- (iv) Notwithstanding the significant emissions rate for carbon monoxide in R 336.2901(hh)(i)(A), significant means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of carbon monoxide that would result from any physical change in, or change in the method of operation of, a major stationary source in a serious nonattainment area for carbon monoxide if such increase equals or exceeds 50 tons per year, provided that the United States environmental protection agency has determined that the stationary sources contribute significantly to carbon monoxide levels in that area.
 - (v) Notwithstanding the significant emissions rates for ozone in

- R 336.2901(hh)(i)(D) and R 336.2901(hh)(ii), any increase in actual emissions of volatile organic compounds from any emissions unit at a major stationary source of volatile organic compounds located in an extreme ozone nonattainment area that is subject to subpart 2, part D, title 1 of the clean air act shall be considered a significant net emissions increase.
- (ii) "Significant emissions increase" means, for a regulated new source review pollutant, an increase in emissions that is significant for that pollutant.
- (jj) "Stationary source" means any building, structure, facility, or installation which emits or may emit a regulated new source review pollutant.
- (kk) "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 that complies with the state implementation plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

History: 2008 AACS; 2011 AACS; 2012 AACS; 2019 AACS.

Editor's Note: An obvious error in R 336.2901 was corrected at the request of the promulgating agency, pursuant to Section 56 of 1969 PA 306, as amended by 2000 PA 262, MCL 24.256. The rule containing the error was published in Michigan Register, 2019 MR 1. The memorandum requesting the correction was published in Michigan Register, 2019 MR 2.

R 336.2901a Rescinded.

History: 2008 AACS; 2019 AACS.

R 336.2902 Applicability.

Rule 1902. (1) This part applies to the construction of each new major stationary source or major modification that is both of the following:

- (a) Located in a nonattainment area.
- (b) Major for the pollutant for which the area is designated nonattainment.

For areas designated as nonattainment for ozone, this part shall apply only to any new major stationary source or major modification that is major for volatile organic compounds or nitrogen oxides.

- (2) This part applies to the construction of new major sources and major modifications to existing major sources as follows:
- (a) Except as otherwise provided in subrule (3) of this rule, and consistent with the definition of major modification, a project is a major modification for a regulated new source review pollutant if it causes both of the following emissions increases:
 - (i) A significant emissions increase.
- (ii) A significant net emissions increase. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

- (b) The procedure for calculating whether a significant emissions increase will occur depends upon the type of emissions units being modified. The procedure for calculating whether a significant net emissions increase will occur at the major stationary source is contained in the definition of net emissions increase. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.
- (c) The actual-to-projected-actual applicability test may be used for projects that only involve existing emissions units. A significant emissions increase of a regulated new source review pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions, for each existing emissions unit, equals or exceeds the significant amount for that pollutant.
- (d) The actual-to-potential test may be used for projects that involve construction of new emissions units or modification of existing emissions units. A significant emissions increase of a regulated new source review pollutant is projected to occur if the sum of the difference between the potential to emit from each new or modified emissions unit following completion of the project and the baseline actual emissions of these units before the project equals or exceeds the significant amount for that pollutant.
- (e) The hybrid test may be used for projects that involve multiple types of emissions units. A significant emissions increase of a regulated new source review pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the appropriate methods specified above in this subrule as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant.
- (3) Any major stationary source for a plant wide applicability limit for a regulated new source review pollutant shall comply with R 336.2907.
- (4) The provisions of this rule do not apply to a source or modification that would be a major stationary source or major modification only if fugitive emissions to the extent quantifiable are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:
 - (a) Coal cleaning plants, with thermal dryers.
 - (b) Kraft pulp mills.
 - (c) Portland cement plants.
 - (d) Primary zinc smelters.
 - (e) Iron and steel mills.
 - (f) Primary aluminum ore reduction plants.
 - (g) Primary copper smelters.
 - (h) Municipal incinerators capable of charging more than 250 tons of refuse per day.
 - (i) Hydrofluoric, sulfuric, or citric acid plants.
 - (i) Petroleum refineries.
 - (k) Lime plants.
 - (1) Phosphate rock processing plants.
 - (m) Coke oven batteries.
 - (n) Sulfur recovery plants.
 - (o) Carbon black plants, furnace process.
 - (p) Primary lead smelters.
 - (q) Fuel conversion plants.

- (r) Sintering plants.
- (s) Secondary metal production plants.
- (t) Chemical process plants.
- (u) Fossil-fuel boilers, or combination thereof, totaling more than 250 million British thermal units per hour heat input.
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
 - (w) Taconite ore processing plants.
 - (x) Glass fiber processing plants.
 - (y) Charcoal production plants.
- (z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.
- (aa) Any other stationary source category which, as of August 7, 1980, is regulated under section 111 or 112 of the clean air act.
 - (5) The following additional construction and permitting requirements apply:
- (a) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with any other applicable requirements and any other requirements under local, state, or federal law.
- (b) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforcement limitation that was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of R 336.2908 shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- (6) The following provisions apply to projects at existing emissions units at a major stationary source that is subject to either prevention of significant deterioration of air quality regulations or new source review for major sources in nonattainment areas regulations in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method in R 336.2901(dd) or R 336.2801(ll) for calculating projected actual emissions:
- (a) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
 - (i) A description of the project.
- (ii) Identification of the emissions units whose emissions of a regulated new source review pollutant may be affected by the project.
- (iii) A description of the applicability test used to determine that the project is not a major modification for any regulated new source review pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under R 336.2901(dd)(ii)(C) and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- (b) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information required by subdivision (a) of this subrule to the department. This subdivision does not require the owner or operator of such a unit to obtain any determination from the department before beginning actual construction.

- (c) The owner or operator shall monitor the emissions of any regulated new source review pollutant that could increase as a result of the project and that is emitted by any emissions units identified under subdivision (a)(ii) of this subrule and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated new source review pollutant at the emissions unit.
- (d) If the unit is an existing electric utility steam generating unit, then the owner or operator shall submit a report to the department within 60 days after the end of each year during which records shall be generated under subdivision (c) of this subrule setting out the unit's annual emissions during the year that preceded submission of the report.
- (e) If the unit is an existing unit other than an electric utility steam generating unit, then the owner or operator shall submit a report to the department if the annual emissions, in tons per year, from the project identified pursuant to this subrule, exceed the baseline actual emissions by a significant amount for that regulated new source review pollutant, and if such emissions differ from the preconstruction projection. The report shall be submitted to the department within 60 days after the end of such year. The report shall contain all of the following information:
 - (i) The name, address and telephone number of the major stationary source.
 - (ii) The annual emissions as calculated under subdivision (c) of this subrule.
- (iii) Any other information that the owner or operator wishes to include in the report, for example, an explanation as to why the emissions differ from the preconstruction projection.
- (f) A reasonable possibility that a project may result in a significant emissions increase occurs when the project is subject to R 336.1201(1)(a) and is not exempted from the requirement to obtain a permit to install by R 336.1278 to R 336.1290. If the owner or operator determines that the project is exempted by R 336.1278 to R 336.1290, then the owner or operator may proceed with the project without obtaining a permit to install. If an owner or operator develops calculations for the project pursuant to R 336.2901(dd) or R 336.2801(ll), the calculations may be used for the purpose of demonstrating compliance with R 336.1278a(1)(c).
- (7) The owner or operator of the source shall make the information required to be documented and maintained under this rule available for review upon a request for inspection by the department, or the general public under section 5516(2) of the act, MCL 324.5516(2).
- (8) The requirements of this part that apply to major stationary sources and major modifications of volatile organic compounds shall also apply to nitrogen oxides emissions from major stationary sources and major modifications of nitrogen oxides in an ozone transport region or in any ozone nonattainment area, except in ozone nonattainment areas or portions of an ozone transport region where the United States environmental protection agency has granted a NOx waiver applying the standards set forth under section 182(f) of the clean air act and the waiver continues to apply.

History: 2008 AACS; 2019 AACS.

R 336.2903 Additional permit requirements for sources impacting nonattainment areas.

Rule 1903. (1) No new major stationary source or major modification shall be constructed in an area designated as attainment or unclassifiable for any national ambient air quality standard under section 107 of the clean air act, without first applying for a permit to install under R 336.1201(1)(a). The department shall not approve any permit to install that would cause or contribute to a violation of any national ambient air quality standard.

(2) A major source or major modification shall be considered to cause or contribute to a violation of a national ambient air quality standard when the source or modification would, at a minimum, exceed the following significance levels in table 191 at any locality that does not or would not meet the applicable national standard:

TABLE 191Significance Levels

	Averaging Time				
Pollutant	Annual	24	8 hours	3	1 hour
		hours		hours	
Sulfur dioxide	1.0 ug/m^3	5 ug/m^3		25 ug/m^3	
PM-10	1.0 ug/m^3	5 ug/m^3			
PM 2.5	0.3 ug/m^3	1.2 ug/m^3			
Nitrogen dioxide	1.0 ug/m^3				
Carbon Monoxide			500 ug/m ³		2000 ug/m^3

- (3) The owner of a major stationary source or major modification subject to this rule may reduce the impact of its emissions upon air quality by obtaining sufficient emission reductions to, at a minimum, compensate for its adverse ambient impact where the major source or major modification would otherwise cause or contribute to a violation of any national ambient air quality standard. In the absence of such emission reductions, the department shall deny the proposed construction.
- (4) This rule shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in a nonattainment area.

History: 2008 AACS; 2012 AACS.

R 336.2907 Actuals plant wide applicability limits or PALs.

Rule 1907. (1) The following definitions apply to the use of actuals PALs. If a term is not defined in these paragraphs, then it shall have the meaning given in R 336.2901:

- (a) "Actuals PAL for a major stationary source" means a PAL based on the baseline actual emissions of all emissions units at the source that emit or have the potential to emit the PAL pollutant.
- (b) "Allowable emissions" means allowable emissions as defined in R 336.1101(k), except this definition is modified in the following manner:

- (i) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.
- (ii) An emissions unit's potential to emit shall be determined using the definition in R 336.2901(z), except that the words "or enforceable as a practical matter" shall be added after "legally enforceable."
- (c) "Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant.
 - (d) "Major emissions unit" means either of the following:
- (i) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area.
- (ii) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the clean air act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the clean air act, an emissions unit is a major emissions unit for volatile organic compounds if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of volatile organic compounds per year.
- (e) "Plant wide applicability limitation" or "PAL" means an emission limitation, expressed in tons per year, for a pollutant at a major stationary source that is enforceable as a practical matter and established source-wide in accordance with this rule.
- (f) "PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (g) "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.
- (h) "PAL major modification" means, notwithstanding R 336.2901(s) and (v), the definitions for major modification and net emissions increase, any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.
- (i) "PAL permit" means the permit to install that establishes a PAL for a major stationary source.
- (j) "PAL pollutant" means the pollutant for which a PAL is established at a major stationary source.
- (k) "Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit.
 - (2) The following requirements pertain to applicability:
- (a) The department may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements of this rule. "PAL" means "actuals PAL" in this rule.
- (b) The department shall not allow an actuals PAL for volatile organic compounds or nitrogen oxides for any major stationary source located in an extreme ozone nonattainment area.

- (c) For physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements of this rule, and complies with the PAL permit, all of the following shall apply:
 - (i) Is not a major modification for the PAL pollutant.
 - (ii) Does not have to be approved through the permitting requirements of this rule.
- (iii) Is not subject to the provisions in R 336.2902(5)(b), restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the nonattainment major new source review program.
- (d) Except as provided under subdivision (c)(iii) of this subrule, a major stationary source shall continue to comply with all applicable federal, state, or local requirements, emission limitations, and work practice requirements that were established before the effective date of the PAL.
- (3) As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit all of the following information to the department for approval:
- (a) A list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal, state, or local applicable requirements, emission limitations, or work practices apply to each unit.
- (b) Calculations of the baseline actual emissions with supporting documentation. Baseline actual emissions shall include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.
- (c) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subrule (13)(a) of this rule.
 - (4) The following general requirements apply for establishing PALs:
- (a) The department may establish a PAL at a major stationary source, provided that, at a minimum, all the following requirements are met:
- (i) The PAL shall impose an annual emission limitation in tons per year, which is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month total, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
- (ii) The PAL shall be established in a permit to install that meets the public participation requirements in subrule (5) of this rule.
- (iii) The PAL permit to install shall contain all the requirements of subrule (7) of this rule.
- (iv) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

- (v) Each PAL shall regulate emissions of only one pollutant.
- (vi) Each PAL shall have a PAL effective period of 10 years.
- (vii) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in subrules (12) to (14) of this rule for each emissions unit under the PAL through the PAL effective period.
- (b) At no time, during or after the PAL effective period, are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of offsets under R 336.2908(5) unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.
- (5) PALs for existing major stationary sources shall be established, renewed, or increased through a permit to install issued under R 336.1201(1)(a). The department shall provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The department shall address all material comments before taking final action on the permit.
 - (6) The following apply to setting the 10-year actuals PAL level.
- (a) Except as provided in subdivision (b) of this subrule, the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period shall be subtracted from the PAL level. The department shall specify a reduced PAL level, in tons per year, in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirements before issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 parts per million nitrogen oxides to a new rule limit of 30 parts per million, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit.
- (b) For newly constructed units, which do not include modifications to existing units, on which actual construction began after the 24-month period, instead of adding the baseline actual emissions as specified in subdivision (a) of this subrule, the emissions shall be added to the PAL level in an amount equal to the potential to emit of the units.
 - (7) The PAL permit shall contain, at a minimum, all of the following information:
- (a) The PAL pollutant and the applicable source-wide emission limitation in tons per year.
- (b) The PAL permit effective date and the expiration date of the PAL (PAL effective period).
- (c) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL under subrule (10) of this rule before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. The PAL shall remain in effect until a revised PAL permit is issued by the department.

- (d) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns, and malfunctions.
- (e) A requirement that, once the PAL expires, the major stationary source is subject to subrule (9) of this rule.
- (f) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subrule (13)(a) of this rule.
- (g) A requirement that the major stationary source owner or operator monitor all emissions units under subrule (12) of this rule.
- (h) A requirement to retain on-site the records required under subrule (13) of this rule. The records may be retained in an electronic format.
- (i) A requirement to submit the reports required under subrule (14) of this rule by the required deadlines.
- (j) Any other requirements that the department determines necessary to implement and enforce the PAL.
- (8) The following shall apply to the PAL effective period and reopening of the PAL permit:
 - (a) The department shall specify a PAL effective period of 10 years.
 - (b) The following shall apply to reopening of the PAL permit:
- (i) During the PAL effective period, the department shall reopen the PAL permit to do any of the following:
- (A) Correct typographical or calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL.
- (B) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under R 336.2908(5)(b) through (h).
- (C) Revise the PAL to reflect an increase in the PAL as provided under subrule (11) of this rule.
 - (ii) The department may reopen the PAL permit for any of the following:
- (A) Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date.
- (B) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the department may impose on the major stationary source under the state implementation plan.
- (C) Reduce the PAL if the department determines that a reduction is necessary to avoid causing or contributing to a national ambient air quality standard or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a federal class I area by a federal land manager and for which information is available to the general public.
- (iii) Except for a permit reopening for the correction of typographical or calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of subrule (5) of this rule.
- (9) Any PAL, which is not renewed in accordance with the procedures in subrule (10) of this rule, shall expire at the end of the PAL effective period, and the following requirements of this paragraph shall apply:

- (a) Each emissions unit, or each group of emissions units, that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures:
- (i) Within the time frame specified for PAL renewals in subrule (10)(b) of this rule, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit, or each group of emissions units, if such a distribution is more appropriate as determined by the department, by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under subrule (10)(e) of this rule, then the distribution shall be made as if the PAL had been adjusted.
- (ii) The department shall determine whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the department determines is appropriate.
- (b) Each emissions unit shall comply with the allowable emission limitation on a 12-month rolling basis. The department may approve the use of monitoring systems other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emission limitation.
- (c) Until the department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (d) Any physical change or change in the method of operation at the major stationary source shall be subject to the nonattainment major new source review requirements if the change meets the definition of major modification in R 336.2901(s).
- (e) The major stationary source owner or operator shall continue to comply with all state, federal, or local applicable requirements that may have applied either during the PAL effective period or before the PAL effective period, except for those emission limitations that were eliminated by the PAL under subrule (2)(c)(iii) of this rule.
 - (10) The following shall apply to renewal of a PAL:
- (a) The department shall follow the procedures specified in subrule (5) of this rule in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the department.
- (b) A major stationary source owner or operator shall submit a timely application to the department to request renewal of a PAL. A timely application is one that is submitted at least 6 months before, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.
- (c) The application to renew a PAL permit shall contain all of the following information:
 - (i) The information required in subrule (3) of this rule.

- (ii) A proposed PAL level.
- (iii) The sum of the potential to emit of all emissions units under the PAL with supporting documentation.
- (iv) Any other information the owner or operator wishes the department to consider in determining the appropriate level for renewing the PAL.
- (d) In determining whether and how to adjust the PAL, the department shall consider either of the options outlined in paragraphs (i) and (ii) of this subdivision. The adjustment shall comply with paragraph (iii) of this subdivision.
- (i) If the emissions level calculated in accordance with subrule (6) of this rule is equal to or greater than 80% of the PAL level, the department may renew the PAL at the same level without considering the factors in paragraph (ii) of this subdivision.
- (ii) The department may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the department in its written rationale.
- (iii) Notwithstanding paragraphs (i) and (ii) of this subdivision, both of the following shall apply:
- (A) If the potential to emit of the major stationary source is less than the PAL, then the department shall adjust the PAL to a level not greater than the potential to emit of the source.
- (B) The department shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with subrule (11) of this rule.
- (e) If the compliance date for a state, federal, or local requirement that applies to the PAL source occurs during the PAL effective period, and if the department has not already adjusted for such requirement, then the PAL shall be adjusted at the time of PAL permit renewal or renewable operating permit renewal, whichever occurs first.
 - (11) The following shall apply to increasing a PAL during the PAL effective period:
- (a) The department may increase a PAL emission limitation only if the major stationary source complies with the following provisions:
- (i) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. The application shall identify the emissions units contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
- (ii) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit shall currently comply.

- (iii) The owner or operator obtains a major new source review permit for all emissions units identified in paragraph (i) of this subdivision, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions units shall comply with any emissions requirements resulting from the nonattainment major new source review program process (for example, LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.
- (iv) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (b) The department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units, assuming application of BACT equivalent controls as determined in subdivision (a)(ii) of this subrule, plus the sum of the baseline actual emissions of the small emissions units.
- (c) The PAL permit shall be revised to reflect the increased PAL level under the public notice requirements of subrule (5) of this rule.
 - (12) The following shall apply to monitoring requirements for PALs:
 - (a) The following general requirements shall apply:
- (i) Each PAL permit shall contain enforceable requirements for the monitoring system that accurately determines plant wide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit shall be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by the system shall meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
- (ii) The PAL monitoring system shall employ one or more of the 4 general monitoring approaches meeting the minimum requirements set forth in subdivision (b) of this subrule and shall be approved by the department.
- (iii) Notwithstanding paragraph (ii) of this subdivision, an owner or operator may also employ an alternative monitoring approach that meets paragraph (i) of this subdivision if approved by the department.
- (iv) Failure to use a monitoring system that meets the requirements of this rule renders the PAL invalid.
- (b) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subdivisions (c) to (i) of this subrule:
 - (i) Mass balance calculations for activities using coatings or solvents.
 - (ii) CEMS.
 - (iii) CPMS or PEMS.
 - (iv) Emission factors.
- (c) An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet all of the following requirements:
- (i) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit.

- (ii) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process.
- (iii) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, then the owner or operator shall use the highest value of the range to calculate the PAL pollutant emissions unless the department determines there is site-specific data or a site-specific monitoring program to support another content within the range.
- (d) An owner or operator using CEMS to monitor PAL pollutant emissions shall meet both of the following requirements:
- (i) CEMS shall comply with applicable performance specifications found in 40 C.F.R. part 60, appendix B, adopted by reference in R 336.1902.
- (ii) CEMS shall sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.
- (e) An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet both of the following requirements:
- (i) The CPMS or the PEMS shall be based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit.
- (ii) Each CPMS or PEMS shall sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the department, while the emissions unit is operating.
- (f) An owner or operator using emission factors to monitor PAL pollutant emissions shall meet all of the following requirements:
- (i) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development.
- (ii) The emissions unit shall operate within the designated range of use for the emission factor, if applicable.
- (iii) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the department determines that testing is not required.
- (g) A source owner or operator shall record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
- (h) Notwithstanding the requirements in subdivision (c) to (g) of this subrule, if an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, then the department shall, at the time of permit issuance do either of the following:
- (i) Establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating points.
- (ii) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL.

- (i) All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the department. Testing shall occur at least once every 5 years after issuance of the PAL.
 - (13) All of the following recordkeeping requirements shall apply:
- (a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with this rule and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of the record.
- (b) The PAL permit shall require an owner or operator to retain a copy of all of the following records for the duration of the PAL effective period plus 5 years:
- (i) A copy of the PAL permit application and any applications for revisions to the PAL.
- (ii) Each annual certification of compliance pursuant to renewable operating permit and the data relied on in certifying the compliance.
- (14) The owner or operator shall submit semiannual monitoring reports and prompt deviation reports to the department in accordance with the source's renewable operating permit. The reports shall meet all of the following requirements:
- (a) The semiannual report shall be submitted to the department within 30 days of the end of each reporting period. This report shall contain all of the following information:
 - (i) The identification of owner and operator and the permit number.
- (ii) Total annual emissions, tons per year, based on a 12-month rolling total for each month in the reporting period recorded under subrule (13)(a) of this rule.
- (iii) All data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.
- (iv) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
- (v) The number, duration, and cause of any deviations or monitoring malfunctions, other than the time associated with zero and span calibration checks, and any corrective action taken.
- (vi) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by subrule (12)(g) of this rule.
- (vii) A signed statement by the responsible official, as defined by the applicable renewable operating permit, certifying the truth, accuracy, and completeness of the information provided in the report.
- (b) The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted under R 336.1213(3)(c)(ii) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the source's renewable operating permit. The reports shall contain all of the following information:
 - (i) The identification of owner and operator and the permit number.
 - (ii) The PAL requirement that experienced the deviation or that was exceeded.

- (iii) Emissions resulting from the deviation or the exceedance.
- (iv) A signed statement by the responsible official, as defined by the source's renewable operating permit, certifying the truth, accuracy, and completeness of the information provided in the report.
- (c) The owner or operator shall submit to the department the results of any revalidation test or method within 3 months after completion of the test or method.

History: 2008 AACS; 2019 AACS.

R 336.2908 Conditions for approval of a major new source review permit in a nonattainment area.

Rule 1908. (1) The department may only issue a permit approving the construction of a new major stationary source or major modification in a nonattainment area if the department has determined that the owner or operator of the major stationary source or major modification will comply with all of the provisions of this rule.

- (2) The owner or operator of the proposed major stationary source or major modification shall provide an analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed major stationary source or major modification which demonstrates that the benefits of the proposed major stationary source or major modification significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.
- (3) The major stationary source or major modification shall comply with the lowest achievable emissions rate for each regulated new source review pollutant for which the area is designated as nonattainment.
- (4) All stationary sources which have a potential to emit 100 or more tons per year of any air contaminant regulated under the clean air act, which are located in the state, and which are owned or controlled by the owner, operator, or an entity controlling, controlled by, or under common control with, the owner or operator of the proposed major stationary source or major modification shall be in compliance with all applicable local, state, and federal air quality regulations or and shall be in compliance with a legally enforceable permit condition or order of the department specifying a plan and timetable for compliance.
- (5) Before the start-up of the new major stationary source or major modification, an emission reduction offset for each major nonattainment air contaminant shall be provided consistent with the following provisions:
- (a) The baseline for determining credit for emissions reductions is the emissions limit under the state implementation plan in effect at the time the application to construct is filed, except that the offset baseline shall be the actual emissions of the source from which offset credit is obtained where either of the following occurs:
- (i) The demonstration of reasonable further progress and attainment of ambient air quality standards is based upon the actual emissions of sources located within the nonattainment area.
- (ii) The state implementation plan does not contain an emissions limitation for that source or source category.
 - (b) The following requirements apply to emissions offset credits:

- (i) Where the allowable emissions are greater emissions than the potential to emit of the source, emissions offset credit shall be allowed only for control below this potential.
- (ii) For an existing fuel combustion source, credit shall be based on the source's allowable emissions for the type of fuel being burned at the time the application to construct is filed. If the existing source commits to switch to a cleaner fuel at some future date, then emissions offset credit based on the allowable, or actual, emissions for the fuels involved is not acceptable, unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emissions reduction should the source switch back to a dirtier fuel at some later date. The department shall ensure that adequate long-term supplies of the new fuel are available before granting emissions offset credit for fuel switches.
- (c) An emission reduction credit shall not be creditable as an emission offset unless it meets the following requirements:
- (i) Emissions reductions that have been achieved by shutting down an existing emission unit or curtailing production or operating hours may be generally credited for offsets only if they meet all of the following requirements:
 - (A) The reductions are surplus, permanent, quantifiable and federally enforceable.
- (B) The shutdown or curtailment occurred after the last day of the base year for the SIP planning process. The department may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes emissions from such previously shutdown or curtailed emission units. However, credit shall not be given for shutdowns that occurred before August 7, 1977.
- (ii) Emissions reductions that are achieved by shutting down an existing emissions unit or curtailing production or operating hours and that do not meet the requirements of R 336.2908(5)(c)(i)(A) and (B) may be generally credited only if they meet either of the following:
- (A) The shutdown or curtailment occurred on or after the date the construction permit application is filed.
- (B) The applicant can establish that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit, and the emissions reductions are surplus, permanent, quantifiable and federally enforceable.
- (d) Emissions credit shall not be allowed for replacing 1 hydrocarbon compound with another of lesser reactivity, except for those compounds listed in table 1 of the United States environmental protection agency's "Recommended Policy on Control of Volatile Organic Compounds," 42 FR 35314, adopted by reference in R 336.1902.
 - (e) All emission reductions claimed as offset credit shall be federally enforceable.
- (f) Offsets shall be obtained from the same nonattainment area as the proposed major source or major modification, except another nonattainment area may be used if both of the following conditions are met:
- (i) The other area has an equal or higher nonattainment classification than the area in which the proposed source is located.
- (ii) Nonattainment air contaminant emissions from the other area contribute to a violation of a national ambient air quality standard in the nonattainment area in which the proposed major source or major modification would be located.

- (g) Credit for an emissions reduction may be claimed to the extent that the reviewing authority has not relied on it in issuing any permit required by R 336.1220 or R 336.2902 and the department has not relied on it in demonstrating attainment or reasonable further progress.
- (h) The total tonnage of increased emissions, in tons per year, resulting from a major modification that must be offset shall be determined by summing the difference between the allowable emissions after the modification and the actual emissions before the modification for each emissions unit. Unless specified otherwise in this rule, the offset ratio for each nonattainment air pollutant that will be emitted in significant amounts from a new major source or major modification located in a nonattainment area that is subject to subpart 1, part D, title 1 of the clean air act shall be at least 1:1.
- (i) The provisions of this subrule do not apply to emissions resulting from proposed major sources or major modifications to the extent that the emissions are temporary and will not prevent reasonable further progress towards attainment of any applicable standard. Examples of temporary emissions include emissions from all of the following:
 - (i) Pilot plants.
- (ii) Portable facilities which will be relocated outside the nonattainment area within 18 months.
 - (iii) The construction phase of a new major stationary source or major modification.
- (6) For facilities meeting the emissions offset requirements of R 336.2908(5) for ozone nonattainment areas that are subject to subpart 2, part D, title 1 of the clean air act, the facility must meet the following requirements:
- (a) The ratio of total actual emissions reductions of Volatile Organic Compound (VOC) or Oxides of Nitrogen (NO_x) to the emissions increase of VOC or NO_x shall be as follows:
 - (i) In any marginal nonattainment area for ozone, the ratio shall be 1.1:1.
 - (ii) In any moderate nonattainment area for ozone, the ratio shall be 1.15:1.
 - (iii) In any serious nonattainment area for ozone, the ratio shall be 1.2:1.
- (iv) In any severe nonattainment area for ozone, the ratio shall be 1.3:1, except that the ratio may be 1.2:1 if all existing major sources in the severe nonattainment area use BACT for the control of VOC.
- (v) In any extreme nonattainment area for ozone, the ratio shall be 1.5:1, except that the ratio may be 1.2:1 if all existing major sources in the extreme nonattainment area use BACT for the control of VOC.
- (b) Notwithstanding the requirements of R 336.2908(6)(a) for meeting the requirements of R 336.2908(5), the ratio of total actual emissions reductions of VOC to the emissions increase of VOC shall be 1.15:1 for all areas within an ozone transport region that is subject to subpart 2, part D, title 1 of the clean air act except for serious, severe, and extreme ozone nonattainment areas that are subject to subpart 2, part D, title 1 of the clean air act.
- (c) For each facility meeting the emissions offset requirements of R 336.2908(5) for ozone nonattainment areas that are subject to subpart 1, part D, title 1 of the clean air act but are not subject to subpart 2, part D, title 1 of the clean air act, including 8-hour ozone nonattainment areas subject to 40 C.F.R. 51.902(b), adopted by reference in R 336.1902, the ratio of total actual emissions reductions of VOC to the emissions increase of VOC shall be 1:1.

(7) The requirements of this section that apply to major stationary sources and major modifications of PM-10 and PM 2.5 shall also apply to major stationary sources and major modifications of PM-10 and PM 2.5 precursors, except when the department determines that such sources do not contribute significantly to PM-10 and PM 2.5 levels that exceed the PM-10 and PM 2.5 ambient standards in the area.

History: 2008 AACS; 2012 AACS; 2019 AACS.

Editor's Note: An obvious error in R 336.2901 was corrected at the request of the promulgating agency, pursuant to Section 56 of 1969 PA 306, as amended by 2000 PA 262, MCL 24.256. The rule containing the error was published in Michigan Register, 2019 MR 1. The memorandum requesting the correction was published in Michigan Register, 2019 MR 2.