

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:

1 PART 18. PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

2

3 R 336.2801 Definitions.

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

7 (a) "Actual emissions" means the actual rate of emissions of a regulated new
8 source review pollutant from an emissions unit, as determined under R 336.1101(b),
9 except that this definition shall not apply for calculating whether a significant
10 emissions increase has occurred, or for establishing a plantwide applicability limit
11 under R 336.2823. Instead, the terms "projected actual emissions" and "baseline
12 actual emissions" shall apply for those purposes.

13 (b) "Baseline actual emissions" means the rate of emissions, in tons per year, of a
14 regulated new source review pollutant, as determined by the following:

15 (i) For any existing electric utility steam generating unit, baseline actual emissions
16 means the average rate, in tons per year, at which the unit actually emitted the
17 pollutant during any consecutive 24-month period selected by the owner or operator
18 within the 5-year period immediately preceding when the owner or operator begins
19 actual construction of the project. The department shall allow the use of a different
20 time period upon a determination that it is more representative of normal source
21 operation. All of the following provisions apply:

22 (A) The average rate shall include fugitive emissions to the extent quantifiable,
23 and emissions associated with startups, shutdowns, and malfunctions.

24 (B) The average rate shall be adjusted downward to exclude any noncompliant
25 emissions that occurred while the source was operating above an emission limitation
26 that was legally enforceable during the consecutive 24-month period.

27 (C) For a regulated new source review pollutant, if a project involves multiple
28 emissions units, then only 1 consecutive 24-month period shall be used to determine
29 the baseline actual emissions for the emissions units being changed. A different
30 consecutive 24-month period may be used for each regulated new source review
31 pollutant.

32 (D) The average rate shall not be based on any consecutive 24-month period for
33 which there is inadequate information for determining annual emissions, in tons per
34 year, and for adjusting this amount if required by paragraph (i)(B) of this subdivision.

35 (ii) For an existing emissions unit, other than an electric utility steam generating
36 unit, baseline actual emissions means the average rate, in tons per year, at which
37 the emissions unit actually emitted the pollutant during any consecutive 24-month
38 period selected by the owner or operator within the 10-year period immediately
39 preceding either the date the owner or operator begins actual construction of the
40 project, or the date a complete permit application is received by the department for a
41 permit required by R 336.1201, whichever is earlier, except that the 10-year period
42 shall not include any period earlier than November 15, 1990. All of the following
43 provisions apply:

44 (A) The average rate shall include fugitive emissions to the extent quantifiable,
45 and emissions associated with startups, shutdowns, and malfunctions.

46 (B) The average rate shall be adjusted downward to exclude any noncompliant
47 emissions that occurred while the source was operating above an emission limitation
48 that was legally enforceable during the consecutive 24-month period.

49 (C) The average rate shall be adjusted downward to exclude emissions that would
50 have exceeded an emission limitation with which the major stationary source must
51 currently comply, had such major stationary source been required to comply with
52 such limitations during the consecutive 24-month period. However, if an emission
53 limitation is part of a maximum achievable control technology standard that the
54 United States environmental protection agency proposed or promulgated under 40
55 C.F.R. part 63, then the baseline actual emissions need only be adjusted if the state
56 has taken credit for such emissions reductions in an attainment demonstration or
57 maintenance plan submitted to the U.S. environmental protection agency. The
58 provisions of 40 C.F.R. part 63 are adopted by reference in R 336.2801a.

59 (D) For a regulated new source review pollutant, if a project involves multiple
60 emissions units, then only 1 consecutive 24-month period shall be used to determine
61 the baseline actual emissions for the emissions units being changed. A different
62 consecutive 24-month period may be used for each regulated new source review
63 pollutant.

64 (E) The average rate shall not be based on any consecutive 24-month period for
65 which there is inadequate information for determining annual emissions, in tons per
66 year, and for adjusting this amount if required by subparagraphs (B) and (C) of this
67 paragraph.

68 (iii) For a new emissions unit, the baseline actual emissions for purposes of
69 determining the emissions increase that will result from the initial construction and
70 operation of such unit shall equal zero; and thereafter, for all other purposes, shall
71 equal the unit's potential to emit.

72 (iv) For a plantwide applicability limit for a stationary source, the baseline actual
73 emissions shall be calculated for existing electric utility steam generating units under
74 paragraph (i) of this subdivision, for other existing emissions units under paragraph
75 (ii) of this subdivision, and for a new emissions unit under paragraph (iii) of this
76 subdivision.

77 (c) "Baseline area" means all of the following:

78 (i) Any intrastate area, and every part thereof, designated as attainment or
79 unclassifiable under section 107(d)(1) (D) or (E) of the clean air act in which the
80 major source or major modification establishing the minor source baseline date
81 would construct or would have an air quality impact equal to or greater than 1
82 microgram per cubic meter (annual average) of the pollutant for which the minor
83 source baseline date is established.

84 (ii) Area redesignations under section 107(d)(1) (D) or (E) of the clean air act shall
85 not intersect or be smaller than the area of impact of any major stationary source or
86 major modification which does either of the following:

87 (A) Establishes a minor source baseline date.

88 (B) Is subject to PSD regulations or new source review for major sources in
89 nonattainment areas regulations.

90 (iii) Any baseline area established originally for the total suspended particulates
91 increments shall remain in effect and shall apply for purposes of determining the
92 amount of available PM-10 increments, except that the baseline area shall not
93 remain in effect if the department rescinds the corresponding minor source baseline
94 date under subdivision (bb)(iv) of this rule.

95 (d) "Baseline concentration" means the value derived using the following
96 procedures:

97 (i) The ambient concentration level that exists in the baseline area at the time of
98 the applicable minor source baseline date. A baseline concentration is determined
99 for each pollutant for which a minor source baseline date is established and shall
100 include both of the following:

101 (A) The actual emissions representative of sources in existence on the applicable
102 minor source baseline date.

103 (B) The allowable emissions of major stationary sources that commenced
104 construction before the major source baseline date, but were not in operation by the
105 applicable minor source baseline date.

106 (ii) The following shall not be included in the baseline concentration and shall
107 affect the applicable maximum allowable increase:

108 (A) Actual emissions from any major stationary source on which construction
109 commenced after the major source baseline date.

110 (B) Actual emissions increases and decreases at any stationary source occurring
111 after the minor source baseline date.

112 (e) "Begin actual construction" means, in general, initiation of physical on-site
113 construction activities on an emissions unit which are of a permanent nature. Such
114 activities include, but are not limited to, installation of building supports and
115 foundations, laying of underground pipework, and construction of permanent storage
116 structures. "A change in method of operation" refers to those on-site activities, other
117 than preparatory activities, which mark the initiation of the change.

118 (f) "Best available control technology" or "BACT" means an emissions limitation,
119 including a visible emissions standard, based on the maximum degree of reduction
120 for each regulated new source review pollutant, which would be emitted from any
121 proposed major stationary source or major modification which the department -- on a
122 case-by-case basis, taking into account energy, environmental, and economic
123 impacts and other costs -- determines is achievable for such source or modification
124 through application of production processes or available methods, systems, and
125 techniques, including fuel cleaning or treatment or innovative fuel combination
126 techniques for control of the pollutant. Application of best available control
127 technology shall not result in emissions of any pollutant which would exceed the
128 emissions allowed by any applicable standard under 40 C.F.R. parts 60 and 61,
129 adopted by reference in R 336.2801a. If the department determines that
130 technological or economic limitations on the application of measurement
131 methodology to a particular emissions unit would make the imposition of an
132 emissions standard infeasible, then a design, equipment, work practice, operational
133 standard or combination thereof, may be prescribed instead to satisfy the
134 requirement for the application of best available control technology. The standard
135 shall, to the degree possible, set forth the emissions reduction achievable by
136 implementation of the design, equipment, work practice or operation, and shall
137 provide for compliance by means which achieve equivalent results.

138 (g) "Building, structure, facility, or installation" means all of the pollutant-emitting
139 activities which belong to the same industrial grouping, are located on 1 or more
140 contiguous or adjacent properties, and are under the control of the same person, or
141 persons under common control, except the activities of any vessel. Pollutant-
142 emitting activities are part of the same industrial grouping if they have the same 2-
143 digit major group code associated with their primary activity. Major group codes and
144 primary activities are described in the standard industrial classification manual,
145 1987. For assistance in converting north American industrial classification system
146 codes to standard industrial classification codes see
147 <http://www.census.gov/epcd/naics02/>.

148 (h) "Clean coal technology" means any technology, including technologies applied
149 at the precombustion, combustion, or post-combustion stage, at a new or existing
150 facility which will achieve significant reductions in air emissions of sulfur dioxide or
151 oxides of nitrogen associated with the utilization of coal in the generation of
152 electricity, or process steam which was not in widespread use as of November 15,
153 1990.

154 (i) "Clean coal technology demonstration project" means a project using funds
155 appropriated under the heading "Department of Energy -- Clean Coal Technology,"
156 up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal
157 technology, or similar projects funded through appropriations for the United States
158 Environmental Protection Agency. The federal contribution for a qualifying project
159 shall be at least 20% of the total cost of the demonstration project.

160 (j) [Reserved]

161 (k) "Commence," as applied to construction of a major stationary source or major
162 modification, means that the owner or operator has all necessary preconstruction
163 approvals or permits and has done either of the following:

164 (i) Begun, or caused to begin, a continuous program of actual on-site construction
165 of the source, to be completed within a reasonable time.

166 (ii) Entered into binding agreements or contractual obligations, which cannot be
167 canceled or modified without substantial loss to the owner or operator, to undertake
168 a program of actual construction of the source to be completed within a reasonable
169 time.

170 (l) "Complete" means, in reference to an application for a permit, that the
171 application contains all the information necessary for processing the application.
172 Designating an application complete for purposes of permit processing does not
173 preclude the department from requesting or accepting additional information.

174 (m) "Construction" means any physical change or change in the method of
175 operation, including fabrication, erection, installation, demolition, or modification of
176 an emissions unit, that would result in a change in emissions.

177 (n) "Continuous emissions monitoring system" or "CEMS" means all of the
178 equipment that may be required to meet the data acquisition and availability
179 requirements of these rules, to sample, condition if applicable, analyze, and provide
180 a record of emissions on a continuous basis.

181 (o) "Continuous emissions rate monitoring system" or "CERMS" means the total
182 equipment required for the determination and recording of the pollutant mass
183 emissions rate in terms of mass per unit of time.

184 (p) "Continuous parameter monitoring system" or "CPMS" means all of the
185 equipment necessary to meet the data acquisition and availability requirements of
186 these rules, to monitor process and control device operational parameters (for
187 example, control device secondary voltages and electric currents) and other
188 information (for example, gas flow rate, oxygen or carbon dioxide concentrations),
189 and to record average operational parameter value or values on a continuous basis.

190 (q) "Electric utility steam generating unit" means any steam electric generating
191 unit that is constructed for supplying more than 1/3 of its potential electric output
192 capacity and more than 25 megawatt electrical output to any utility power distribution
193 system for sale. Steam supplied to a steam distribution system for providing steam
194 to a steam-electric generator that would produce electrical energy for sale is also
195 considered in determining the electrical energy output capacity of the affected
196 facility.

197 (r) "Emissions unit" means any part of a stationary source that emits or would
198 have the potential to emit any regulated new source review pollutant and includes an
199 electric utility steam generating unit. Both of the following are types of emissions
200 units:

201 (i) A new emissions unit is any emissions unit that is, or will be, newly constructed
202 and that has existed for less than 2 years from the date the emissions unit first
203 operated.

204 (ii) An existing emissions unit is any emissions unit that does not meet the
205 definition of a new emissions unit. A replacement unit is an existing emissions unit
206 and no creditable emission reductions shall be generated from shutting down the
207 existing emissions unit that is replaced. A replacement unit shall meet all of the
208 following criteria:

209 (A) The emissions unit is a reconstructed unit if the replacement of components of
210 an existing facility is to such an extent that the fixed capital cost of the new
211 components exceeds 50% of the fixed capital cost that would be required to
212 construct a comparable entirely new facility or the emissions unit completely takes
213 the place of an existing emissions unit.

214 (B) The emissions unit is identical to or functionally equivalent to the replaced
215 emissions unit.

216 (C) The replacement does not alter the basic design parameters of the process
217 unit.

218 (D) The replaced emissions unit is permanently removed from the major
219 stationary source, otherwise permanently disabled, or permanently barred from
220 operation by a permit that is enforceable as a practical matter. If the replaced
221 emissions unit is brought back into operation, it shall constitute a new emissions
222 unit.

223 (s) "Federal land manager" means, with respect to any lands in the United States,
224 the secretary of the department with authority over such lands.

225 (t) "High terrain" means an area having an elevation 900 feet or more above the
226 base of the stack of a source.

227 (u) "Hydrocarbon combustion flare" means either a flare used to comply with an
228 applicable new source performance standard or maximum achievable control
229 technology standard, including uses of flares during startup, shutdown, or
230 malfunction permitted under such a standard, or a flare that serves to control
231 emissions of waste streams comprised predominately of hydrocarbons and
232 containing not more than 230 milligrams per dry standard cubic meter hydrogen
233 sulfide.

234 (v) "Indian reservation" means any federally recognized reservation established by
235 treaty, agreement, executive order, or act of congress.

236 (w) "Indian governing body" means the governing body of any tribe, band, or
237 group of Indians subject to the jurisdiction of the United States and recognized by
238 the United States as possessing power of self-government.

239 (x) "Innovative control technology" means any system of air pollution control that
240 has not been adequately demonstrated in practice, but may have a substantial
241 likelihood of achieving greater continuous emissions reduction than any control
242 system in current practice or of achieving at least comparable reductions at lower
243 cost in terms of energy, economics, or non-air quality environmental impacts.

244 (y) "Low terrain" means any area other than high terrain.

245 (z) "Lowest achievable emission rate" or "LAER", for any source, means the more
246 stringent rate of emissions based on R 336.1112(f).

247 (aa) "Major modification" means any of the following:

248 (i) Physical change in or change in the method of operation of a major stationary
249 source that would result in both of the following:

250 (A) A significant emissions increase of a regulated new source review pollutant.

251 (B) A significant net emissions increase of that pollutant from the major stationary
252 source.

- 253 (ii) A significant emissions increase from any emissions units or net emissions
254 increase at a major stationary source that is significant for volatile organic
255 compounds shall be considered significant for ozone.
- 256 (iii) Physical change or change in the method of operation shall not include any of
257 the following:
- 258 (A) Routine maintenance, repair, and replacement.
 - 259 (B) Use of an alternative fuel or raw material by reason of any order under section
260 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or by
261 reason of a natural gas curtailment plan under the Federal Power Act.
 - 262 (C) Use of an alternative fuel by reason of an order or rule under section 125 of
263 the clean air act.
 - 264 (D) Use of an alternative fuel at a steam generating unit to the extent that the fuel
265 is generated from municipal solid waste.
 - 266 (E) Use of an alternative fuel or raw material by a stationary source which meets
267 either of the following:
 - 268 (1) The source was capable of accommodating before January 6, 1975, unless
269 such change would be prohibited under any federally enforceable permit condition
270 which was established after January 6, 1975, under PSD regulations or R
271 336.1201(1)(a).
 - 272 (2) The source is approved to use under any permit issued under PSD regulations
273 or under R 336.1201(1)(a).
 - 274 (F) An increase in the hours of operation or in the production rate, unless the
275 change would be prohibited under any federally enforceable permit condition which
276 was established after January 6, 1975, under PSD regulations or R 336.1201(1)(a).
 - 277 (G) Any change in ownership at a stationary source.
 - 278 (H) [Reserved]
 - 279 (I) The installation, operation, cessation, or removal of a temporary clean coal
280 technology demonstration project, provided that the project complies with both of the
281 following:
 - 282 (1) The state implementation plan.
 - 283 (2) Other requirements necessary to attain and maintain the national ambient air
284 quality standards during the project and after the project is terminated.
 - 285 (J) The installation or operation of a permanent clean coal technology
286 demonstration project that constitutes repowering, provided that the project does not
287 result in an increase in the potential to emit of any regulated pollutant emitted by the
288 unit. This exemption shall apply on a pollutant-by-pollutant basis.
 - 289 (K) The reactivation of a very clean coal-fired electric utility steam generating unit.
- 290 (iv) This definition shall not apply with respect to a particular regulated new source
291 review pollutant when the major stationary source is complying with the
292 requirements for an actuals PAL for that pollutant. Instead, the definition of PAL
293 major modification in R 336.2823 shall apply.
- 294 (bb) All of the following apply to major and minor source baseline dates:
- 295 (i) "Major source baseline date" means both of the following:
 - 296 (A) January 6, 1975, for particulate matter and sulfur dioxide.
 - 297 (B) February 8, 1988, for nitrogen dioxide.

298 (ii) "Minor source baseline date" means the earliest date after the trigger date on
299 which a major stationary source or a major modification subject to PSD regulations
300 submits a complete application under the relevant regulations. The trigger date is
301 both of the following:

302 (A) August 7, 1977, for particulate matter and sulfur dioxide.

303 (B) February 8, 1988, for nitrogen dioxide.

304 (iii) The baseline date is established for each pollutant for which increments or
305 other equivalent measures have been established if both of the following occur:

306 (A) The area in which the proposed source or modification would construct is
307 designated as attainment or unclassifiable under section 107(d)(i) (D) or (E) of the
308 clean air act for the pollutant on the date of its complete application under R

309 336.1201 and PSD regulations.

310 (B) If a major stationary source, the pollutant would be emitted in significant
311 amounts, or, if a major modification, there would be a significant net emissions
312 increase of the pollutant.

313 (iv) Any minor source baseline date established originally for the total suspended
314 particulates increments shall remain in effect and shall apply for determining the
315 amount of available PM-10 increments, except that the department may rescind any
316 minor source baseline date where it can be shown, to the satisfaction of the
317 department, that the emissions increase from the major stationary source, or the net
318 emissions increase from the major modification, responsible for triggering that date
319 did not result in a significant amount of PM-10 emissions.

320 (cc) "Major stationary source" means any of the following:

321 (i) Any of the following stationary sources of air pollutants which emits, or has the
322 potential to emit, 100 tons per year or more of a regulated new source review
323 pollutant:

324 (A) Fossil fuel-fired steam electric plants of more than 250 million British thermal
325 units per hour heat input.

326 (B) Coal cleaning plants with thermal dryers.

327 (C) Kraft pulp mills.

328 (D) Portland cement plants.

329 (E) Primary zinc smelters.

330 (F) Iron and steel mill plants.

331 (G) Primary aluminum ore reduction plants.

332 (H) Primary copper smelters.

333 (I) Municipal incinerators capable of charging more than 250 tons of refuse per
334 day.

335 (J) Hydrofluoric, sulfuric, and nitric acid plants.

336 (K) Petroleum refineries.

337 (L) Lime plants.

338 (M) Phosphate rock processing plants.

339 (N) Coke oven batteries.

340 (O) Sulfur recovery plants.

341 (P) Carbon black plants (furnace process).

342 (Q) Primary lead smelters.

343 (R) Fuel conversion plants.

- 344 (S) Sintering plants.
345 (T) Secondary metal production plants.
346 (U) Chemical process plants.
347 (V) Fossil fuel boilers, or combinations thereof, totaling more than 250 million
348 British thermal units per hour heat input.
349 (W) Petroleum storage and transfer units with a total storage capacity exceeding
350 300,000 barrels.
351 (X) Taconite ore processing plants.
352 (Y) Glass fiber processing plants.
353 (Z) Charcoal production plants.
354 (ii) Any stationary source not listed in the previous subdivision which emits, or has
355 the potential to emit, 250 tons per year or more of a regulated new source review
356 pollutant.
357 (iii) Any physical change that would occur at a stationary source not otherwise
358 qualifying under subdivision (cc) of this subrule, as a major stationary source if the
359 change would constitute a major stationary source by itself.
360 (iv) A major source that is major for volatile organic compounds shall be
361 considered major for ozone.
362 (v) The fugitive emissions of a stationary source shall not be included in
363 determining, for any of the purposes of this rule, whether it is a major stationary
364 source, unless the source belongs to 1 of the categories of stationary sources listed
365 in paragraph (i) of this subdivision.
366 (dd) "Necessary preconstruction approvals or permits" means a permit issued
367 under R 336.1201(1)(a) that is required by R 336.2801 to R 336.2819, R 336.2823,
368 and R 336.2830 or R 336.1220.
369 (ee) "Net emissions increase" means all of the following:
370 (i) For any regulated new source review pollutant emitted by a major stationary
371 source, the amount by which the sum of the following exceeds zero:
372 (A) The increase in emissions from a particular physical change or change in the
373 method of operation at a stationary source as calculated under R 336.2802(4).
374 (B) Any other increases and decreases in actual emissions at the major stationary
375 source that are contemporaneous with the particular change and are otherwise
376 creditable. Baseline actual emissions for calculating increases and decreases under
377 this paragraph shall be determined as provided in the definition of baseline actual
378 emissions, except that paragraphs (b)(i)(C) and (b)(ii)(D) of this rule shall not apply.
379 (ii) An increase or decrease in actual emissions is contemporaneous with the
380 increase from the particular change only if it occurs between the following:
381 (A) The date 5 years before construction on the particular change commences.
382 (B) The date that the increase from the particular change occurs.
383 (iii) An increase or decrease in actual emissions is creditable only if the
384 department has not relied on it in issuing a permit under R 336.1201(1)(a) or R
385 336.1214a, which permit is in effect when the increase in actual emissions from the
386 particular change occurs.
387 (iv) An increase or decrease in actual emissions of sulfur dioxide, particulate
388 matter, or oxides of nitrogen that occurs before the applicable minor source baseline

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

391 (v) An increase in actual emissions is creditable only to the extent that the new
392 level of actual emissions exceeds the old level.

393 (vi) A decrease in actual emissions is creditable only to the extent that it meets all
394 of the following criteria:

395 (A) The old level of actual emissions or the old level of allowable emissions,
396 whichever is lower, exceeds the new level of actual emissions.

397 (B) It is enforceable as a practical matter at and after the time that actual
398 construction on the particular change begins.

399 (C) It has approximately the same qualitative significance for public health and
400 welfare as that attributed to the increase from the particular change.

401 (vii) An increase that results from a physical change at a source occurs when the
402 emissions unit on which construction occurred becomes operational and begins to
403 emit a particular pollutant. A replacement unit that requires shakedown becomes
404 operational only after a reasonable shakedown period, not to exceed 180 days.

405 (viii) The definition of actual emissions in R 336.1101(b) shall not apply for
406 determining creditable increases and decreases after a change, instead the
407 definitions of the terms "projected actual emissions" and "baseline emissions" shall
408 be used.

409 (ff) [Reserved]

410 (gg) "Pollution prevention" means any activity that through process changes,
411 product reformulation or redesign, or substitution of less polluting raw materials,
412 eliminates or reduces the release of air pollutants, including fugitive emissions, and
413 other pollutants to the environment before recycling, treatment, or disposal.
414 Pollution prevention does not mean recycling, other than certain "in-process
415 recycling" practices, energy recovery, treatment, or disposal.

416 (hh) "Potential to emit" means the maximum capacity of a stationary source to
417 emit a pollutant under its physical and operational design. A physical or operational
418 limitation on the capacity of the source to emit a pollutant, including air pollution
419 control equipment and restrictions on hours of operation or on the type or amount of
420 material combusted, stored, or processed, shall be treated as part of its design if the
421 limitation or the effect it would have on emissions is legally enforceable and
422 enforceable as a practical matter by the state, local air pollution control agency, or
423 United States environmental protection agency. Secondary emissions do not count
424 in determining the potential to emit of a stationary source.

425 (ii) "Predictive emissions monitoring system" or "PEMS" means all of the
426 equipment necessary to monitor process and control device operational parameters
427 (for example, control device secondary voltages and electric currents) and other
428 information (for example, gas flow rate, oxygen or carbon dioxide concentrations),
429 and calculate and record the mass emissions rate (for example, pounds per hour) on
430 a continuous basis.

431 (jj) "Prevention of significant deterioration" or "PSD" program means the major
432 source preconstruction permit program required by 40 C.F.R. §52.21, adopted by
433 reference in R 336.2801a, or R 336.2801 to R 336.2819, R 336.2823 and R
434 336.2830. A permit issued under this program is a major NSR permit.

435 (kk) "Project" means a physical change in, or change in method of operation of, an
436 existing major stationary source.

437 (ll) "Projected actual emissions" means all of the following:

438 (i) The maximum annual rate, in tons per year, at which an existing emissions unit
439 is projected to emit a regulated new source review pollutant in any 1 of the 5 years
440 (12-month period) following the date the unit resumes regular operation after the
441 project, or in any 1 of the 10 years following that date, if the project involves
442 increasing the emissions unit's design capacity or its potential to emit that regulated
443 new source review pollutant, and full utilization of the unit would result in a significant
444 emissions increase, or a significant net emissions increase at the major stationary
445 source.

446 (ii) In determining the projected actual emissions, before beginning actual
447 construction, the owner or operator of the major stationary source shall do all of the
448 following:

449 (A) Consider all relevant information, including but not limited to, historical
450 operational data, the company's own representations, the company's expected
451 business activity and the company's highest projections of business activity, the
452 company's filings with the state or federal regulatory authorities, and compliance
453 plans under the state implementation plan.

454 (B) Include fugitive emissions to the extent quantifiable and emissions associated
455 with startups, shutdowns, and malfunctions.

456 (C) Exclude, in calculating any increase in emissions that results from the
457 particular project, that portion of the unit's emissions following the project that an
458 existing unit could have accommodated during the consecutive 24-month period
459 used to establish the baseline actual emissions and that are also unrelated to the
460 particular project, including any increased utilization due to product demand growth.

461 (iii) The owner or operator of a major stationary source may use the emissions
462 unit's potential to emit, in tons per year, instead of calculating projected actual
463 emissions.

464 (mm) "Reactivation of a very clean coal-fired electric utility steam generating unit"
465 means any physical change or change in the method of operation associated with
466 the commencement of commercial operations by a coal-fired utility unit after a period
467 of discontinued operation where the unit meets all of the following criteria:

468 (i) The unit was not in operation for the 2-year period before the enactment of the
469 clean air act amendments of 1990, and the emissions from the unit continue to be
470 carried in the department's emissions inventory at the time of enactment.

471 (ii) The unit was equipped before shutdown with a continuous system of
472 emissions control that achieves a removal efficiency for sulfur dioxide of not less
473 than 85% and a removal efficiency for particulates of not less than 98%.

474 (iii) The unit was equipped with low-oxides of nitrogen burners before the time of
475 commencement of operations following reactivation.

476 (iv) The unit otherwise complies with the requirements of the clean air act.

477 (nn) "Regulated new source review pollutant," for purposes of this rule, means all
478 of the following:

479 (i) A pollutant for which a national ambient air quality standard has been
480 promulgated and any constituents or precursors for the pollutants identified by the

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

483 (ii) A pollutant that is subject to any standard promulgated under section 111 of
484 the clean air act.

485 (iii) A class I or II substance subject to a standard promulgated under or
486 established by title VI of the clean air act.

487 (iv) A pollutant that otherwise is subject to regulation under the clean air act;
488 except that any or all hazardous air pollutants either listed in section 112 of the clean
489 air act or added to the list under section 112(b)(2) of the clean air act, which have
490 not been delisted under section 112(b)(3) of the clean air act, are not regulated new
491 source review pollutants unless the listed hazardous air pollutant is also regulated as
492 a constituent or precursor of a general pollutant listed under section 108 of the clean
493 air act.

494 (oo) "Repowering" means all of the following:

495 (i) Replacement of an existing coal-fired boiler with 1 of the following clean coal
496 technologies:

497 (A) Atmospheric or pressurized fluidized bed combustion.

498 (B) Integrated gasification combined cycle.

499 (C) Magneto hydrodynamics.

500 (D) Direct and indirect coal-fired turbines.

501 (E) Integrated gasification fuel cells.

502 (F) A derivative of 1 or more of these technologies, and any other technology
503 capable of controlling multiple combustion emissions simultaneously with improved
504 boiler or generation efficiency and with significantly greater waste reduction relative
505 to the performance of technology in widespread commercial use as of November 15,
506 1990, as determined by the United States environmental protection agency, in
507 consultation with the Secretary of Energy.

508 (ii) Repowering shall also include any oil and/or gas-fired unit which has been
509 awarded clean coal technology demonstration funding as of January 1, 1991, by the
510 United States Department of Energy.

511 (iii) The department shall give expedited consideration to permit applications for
512 any source that satisfies the definition of repowering and is granted an extension
513 under section 409 of the clean air act.

514 (pp) "Secondary emissions" means emissions which occur as a result of the
515 construction or operation of a major stationary source or major modification, but do
516 not come from the major stationary source or major modification itself. For this rule,
517 secondary emissions shall be specific, well defined, quantifiable, and impact the
518 same general areas the stationary source modification which causes the secondary
519 emissions. Secondary emissions include emissions from any offsite support facility
520 which would not be constructed or increase its emissions except as a result of the
521 construction or operation of the major stationary source or major modification.
522 Secondary emissions do not include any emissions which come directly from a
523 mobile source, such as emissions from the tailpipe of a motor vehicle, from a train,
524 or from a vessel.

525 (qq) "Significant" means:

526 (i) In reference to a net emissions increase or the potential of a source to emit any
527 of the following pollutants, a rate of emissions that would equal or exceed any of the
528 following pollutant emission rates:

529 (A) Carbon monoxide: 100 tons per year.

530 (B) Oxides of nitrogen: 40 tons per year.

531 (C) Sulfur dioxide: 40 tons per year.

532 (D) Particulate matter: 25 tons per year of particulate matter emissions; 15 tons
533 per year of PM-10 emissions; **10 tons per year of PM 2.5 emissions.**

534 (E) Ozone: 40 tons per year of volatile organic compounds.

535 (F) Lead: 0.6 tons per year.

536 (G) Fluorides: 3 tons per year.

537 (H) Sulfuric acid mist: 7 tons per year.

538 (I) Hydrogen sulfide: 10 tons per year.

539 (J) Total reduced sulfur, including hydrogen sulfide: 10 tons per year.

540 (K) Reduced sulfur compounds, including hydrogen sulfide: 10 tons per year.

541 (L) Municipal waste combustor organics, measured as total tetra- through octa-
542 chlorinated dibenzo-p-dioxins and dibenzofurans: 3.2×10^{-6} megagrams per year
543 or 3.5×10^{-6} tons per year.

544 (M) Municipal waste combustor metals, measured as particulate matter: 14
545 megagrams per year or 15 tons per year.

546 (N) Municipal waste combustor acid gases, measured as sulfur dioxide and
547 hydrogen chloride: 36 megagrams per year or 40 tons per year.

548 (O) Municipal solid waste landfill emissions, measured as nonmethane organic
549 compounds: 45 megagrams per year or 50 tons per year.

550 (ii) In reference to a net emissions increase or the potential of a source to emit a
551 regulated new source review pollutant not listed in this definition, any emissions rate.

552 (iii) Any emissions rate or any net emissions increase associated with a major
553 stationary source or major modification, which would construct within 10 kilometers
554 of a class I area, and have an impact on such area equal to or greater than 1
555 microgram per cubic meter (24-hour average).

556 (rr) "Significant emissions increase" means, for a regulated new source review
557 pollutant, an increase in emissions that is significant for that pollutant.

558 (ss) "Stationary source" means any building, structure, facility, or installation which
559 emits or may emit a regulated new source review pollutant.

560 (tt) "Temporary clean coal technology demonstration project" means a clean coal
561 technology demonstration project that is operated for a period of 5 years or less, and
562 which complies with the state implementation plan and other requirements
563 necessary to attain and maintain the national ambient air quality standards during
564 and after the project is terminated.

565

566 R 336.2816 Sources impacting federal class I areas; additional requirements.

567 Rule 1816. (1) The department shall transmit to the United States environmental
568 protection agency a copy of each permit application relating to a major stationary
569 source or major modification and provide notice to the United States environmental
570 protection agency of every action related to the consideration of the permit.

571 (2) If the proposed major stationary source or major modification affects a federal
 572 class 1 area, the department shall not approve the permit application if the
 573 department concurs with a demonstration provided by the federal land manager that
 574 the emissions from the proposed major source or major modification would have an
 575 adverse impact on the air quality related values of class I lands, including visibility,
 576 notwithstanding that the change in air quality resulting from emissions from a major
 577 source or major modification would not cause or contribute to concentrations that
 578 would exceed the maximum allowable increases for a class I area.

579 (3) If the department determines that the emissions from a proposed major source
 580 or major modification would cause or contribute to concentrations which would
 581 exceed the maximum allowable increases for a class I area, the department shall not
 582 approve a permit application unless **the applicable requirements of Michigan's**
 583 **state implementation plan are otherwise met and** 1 of the following occurs:

584 (a) The applicant submits a written certification that the applicant has
 585 demonstrated to the federal land manager that the emissions from the proposed
 586 major source or major modification would have no adverse impact on the air quality
 587 related values of class I lands, including visibility, notwithstanding that the change in
 588 air quality resulting from emissions from a major source or major modification would
 589 cause or contribute to concentrations that would exceed the maximum allowable
 590 increases for a class I area. The department may then, provided that applicable
 591 requirements are otherwise met, issue the permit with emission limitations to assure
 592 that emissions of sulfur dioxide, particulate matter, and oxides of nitrogen would not
 593 exceed the following maximum allowable increases over minor source baseline
 594 concentration for the pollutants:
 595

596 Table 183
 597 Maximum allowable increases over minor source baseline concentrations
 598

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

599 (b) If the department cannot approve the permit application under
 600 R 336.2816(3)(a) due to sulfur dioxide emissions resulting in increases greater than
 601 those specified in Table 183 for periods of 24 hours or less, the applicant may obtain
 602 approval by providing a written certification that the applicant has demonstrated to
 603 the federal land manager that the emissions from the proposed major source or
 604 major modification would have no adverse impact on the air quality related values of
 605 class I lands, including visibility, and that both the governor and the federal land
 606

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

609 (c) If the department cannot approve the permit application under
610 R 336.2816(3)(a) due to sulfur dioxide emissions resulting in increases greater than
611 those specified in Table 183 for periods of 24 hours or less, and the department
612 cannot approve the permit application under R 336.2816(3)(b) because the federal
613 land manager does not concur with the governor’s issuance of a sulfur dioxide
614 variance that is otherwise consistent with R 336.2816(3)(b), the applicant may obtain
615 approval by providing a written certification that the applicant has demonstrated to
616 the president that a sulfur dioxide variance is in the national interest and the
617 president concurs with the issuance of the sulfur dioxide variance by the governor.

618 **The applicant shall transfer the recommendations of the governor and the**
619 **federal land manager to the president in any case where the governor**
620 **recommends a variance in which the federal land manager does not concur.**

621 (4) The department will not issue a permit affecting a class I area in which a sulfur
622 dioxide variance was granted under R 336.2816(3)(b) or (c), unless the permit
623 includes emission limitations necessary to assure that emissions of sulfur dioxide
624 from the major source or major modification would not, during any day on which the
625 otherwise applicable maximum allowable increases are exceeded, cause or
626 contribute to concentrations which would exceed the following maximum allowable
627 increases over the baseline concentration and to assure that emissions would not
628 cause or contribute to concentrations which exceed the otherwise applicable
629 maximum allowable increases for periods of exposure of 24 hours or less for more
630 than 18 days, not necessarily consecutive, during any annual period.

632 Table 184
633 Maximum allowable sulfur dioxide increments
634

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

635