

Subchapter 8

Prevention of Significant Deterioration of Air Quality

17.8.801 DEFINITIONS In this subchapter, the following definitions apply:

(1) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with (1)(a) through (c).

(a) Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The department may determine that a different time period is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) The department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(c) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(2) "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate or hours of operation, or both) and the most stringent of the following:

(a) the applicable standards as set forth in ARM 17.8.340 or 17.8.341;

(b) the applicable Montana State Implementation Plan emissions limitation, including those with a future compliance date; or

(c) the emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

(3) "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable in 40 CFR 81.327 in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than one $\mu\text{g}/\text{m}^3$ (annual average) of the pollutant for which the minor source baseline date is established, except baseline areas for PM-2.5 are designated when a major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 0.3 $\mu\text{g}/\text{m}^3$ as an annual average for PM-2.5.

(a) Area redesignations under section 107 of the FCAA to attainment or unclassifiable cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(i) establishes a minor source baseline date; or

(ii) is subject to 40 CFR 52.21 or regulations approved pursuant to 40 CFR 51.166, and would be constructed in the same state as the state proposing the redesignation.

(b) Any baseline area established originally for the total suspended particulate increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that such baseline area shall not remain in effect if the department rescinds the corresponding minor source baseline date in accordance with (21)(d).

(4) "Baseline concentration" means that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date.

(a) A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

(i) the actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in (4)(b); and

(ii) the allowable emissions of major stationary sources which commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(b) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

(i) actual emissions from any major stationary source on which construction commenced after the major source baseline date; and

(ii) actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

(5) "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. With respect to a change in method of operation this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change.

(6) "Best available control technology (BACT)" means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each pollutant subject to regulation under the FCAA, excluding hazardous air pollutants except to the extent that such hazardous air pollutants are regulated as constituents of more general pollutants listed in section 108(a)(1) of the FCAA, 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 impacts, environmental impacts (including, but not limited to, the effect of the control technology option on hazardous air pollutants), 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. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under ARM 17.8.340 and 17.8.341. 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, any design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation, and shall provide for compliance by means which achieve equivalent results.

(7) "Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one 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 shall be considered as part of the same industrial grouping if they belong to the same major group (i.e., which have the same two-digit code) as described in the standard industrial classification manual, 1987.

(8) "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 either has:

(a) begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(b) 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.

(9) "Complete" means, in reference to an application for a permit, that the application contains all the information necessary for processing the application, except that designating an application complete for purposes of permit processing does not preclude the department from requesting or accepting any additional information.

(10) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

(11) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the FCAA.

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

(13) "Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana State Implementation Plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the Montana State Implementation Plan and expressly requires adherence to any permit issued under such program.

(14) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

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

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

(17) "Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of Congress.

(18) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

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

(20) "Major modification" means any physical change in, or change in the method of operation of, a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the FCAA, excluding hazardous air pollutants, except to the extent that such hazardous air pollutants are regulated as constituents of more general pollutants listed in section 108(a)(1) of the FCAA.

(a) Any net emissions increase that is significant for volatile organic compounds or NO_x will be considered significant for ozone.

- (b) A physical change or change in the method of operation shall not include:
- (i) routine maintenance, repair, and replacement;
 - (ii) use of an alternative fuel or raw material by reason of any order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 USC 791, et seq. (1988), or by reason of a natural gas curtailment plan pursuant to the Federal Power Act, 16 USC 791a, et seq. (1988 and Supp. III 1991);
 - (iii) use of an alternative fuel by reason of an order or rule under section 125 of the FCAA;
 - (iv) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
 - (v) use of an alternative fuel or raw material by a stationary source which:
 - (A) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or section 51.166; or
 - (B) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
 - (vi) an increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or section 51.166; or
 - (vii) any change in ownership at a stationary source.
- (21) The following apply to the definitions of the terms "major source baseline date" and "minor source baseline date":
- (a) "major source baseline date" means:
 - (i) in the case of PM-10 and sulfur dioxide (SO₂), January 6, 1975;
 - (ii) in the case of nitrogen dioxide (NO₂), February 8, 1988; and
 - (iii) in the case of PM-2.5, October 20, 2010.
 - (b) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulation. The trigger date is:
 - (i) in the case of PM-10 and sulfur dioxide (SO₂), August 7, 1977;
 - (ii) in the case of nitrogen dioxide (NO₂), February 8, 1988; and
 - (iii) in the case of PM-2.5, October 20, 2011.
 - (c) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
 - (i) the area in which the proposed source or modification would construct is designated as attainment or unclassifiable in 40 CFR 81.327 for the pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and
 - (ii) in the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

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

(22) The following apply to the definition of the term "major stationary source":

(a) "major stationary source" means:

(i) any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the FCAA, excluding hazardous air pollutants, except to the extent that such hazardous air pollutants are regulated as constituents of more general pollutants listed in section 108(a)(1) of the FCAA: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, Portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(ii) notwithstanding the stationary source size specified in (22)(a)(i), any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under the FCAA, excluding hazardous air pollutants, except to the extent that such hazardous air pollutants are regulated as constituents of more general pollutants listed in section 108(a)(1) of the FCAA; or

(iii) any physical change that would occur at a stationary source not otherwise qualifying under (22)(a)(i) or (ii), as a major stationary source if the change would constitute a major stationary source by itself.

(b) A major source that is major for volatile organic compounds or NO_x will be considered major for ozone.

(c) The fugitive emissions of a stationary source may not be included in determining, for any of the purposes of this subchapter, whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

- (i) coal cleaning plants (with thermal dryers);
- (ii) kraft pulp mills;
- (iii) Portland cement plants;
- (iv) primary zinc smelters;
- (v) iron and steel mills;
- (vi) primary aluminum ore reduction plants;
- (vii) primary copper smelters;
- (viii) municipal incinerators capable of charging more than 250 tons of refuse per day;
- (ix) hydrofluoric, sulfuric, or nitric acid plants;
- (x) petroleum refineries;
- (xi) lime plants;
- (xii) phosphate rock processing plants;
- (xiii) coke oven batteries;
- (xiv) sulfur recovery plants;
- (xv) carbon black plants (furnace process);
- (xvi) primary lead smelters;
- (xvii) fuel conversion plants;
- (xviii) sintering plants;
- (xix) secondary metal production plants;
- (xx) chemical process plants;
- (xxi) fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (xxii) petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (xxiii) taconite ore processing plants;
- (xxiv) glass fiber processing plants;
- (xxv) charcoal production plants;
- (xxvi) fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; and
- (xxvii) any other stationary source category which, as of August 7, 1980, is being regulated under sections 111 or 112 of the FCAA.

(23) "Necessary preconstruction approvals or permits" means those permits or approvals required under federal air quality control laws and regulations and those air quality control laws and regulations which are part of the Montana State Implementation Plan.

(24) The following apply to the definition of the term "net emissions increase":

(a) "net emissions increase" means the amount by which the sum of the following exceeds zero:

(i) any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and

(ii) any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date five years before construction on the particular change commenced, and the date that the increase from the particular change occurs.

(c) An increase or decrease in actual emissions is creditable only if the department has not relied on it in issuing a permit for the source under this subchapter, which permit is in effect when the increase in actual emissions from the particular change occurs.

(d) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available. With respect to particulate matter, only PM-10 emissions may be used to evaluate the net emissions increase for PM-10.

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

(f) A decrease in actual emissions is creditable only to the extent that:

(i) the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(ii) it is federally enforceable at and after the time that actual construction on the particular change begins; and

(iii) it has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(g) 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.

(25) "Nitrogen oxides" or "NO_x" means the sum of nitric oxide and nitrogen dioxide in the flue gas or emission point.

(26) "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 enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(27) "Secondary emissions" means emissions which 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 chapter, secondary emissions must 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 offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(28) The following apply to the definition of the term "significant":

(a) "significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides (NO_x): 40 tpy

Sulfur dioxide (SO₂): 40 tpy

Particulate matter: 25 tpy of particulate matter emissions
15 tpy of PM-10 emissions

PM-2.5: 10 tpy of direct PM-2.5 emissions, 40 tpy of sulfur dioxide emissions, or 40 tpy of ~~nitrogen oxides (NO_x)~~ emissions unless demonstrated not to be a PM-2.5 precursor

Ozone: 40 tpy of volatile organic compounds or nitrogen oxides

Lead: 0.6 tpy

Fluorides: 3 tpy

Sulfuric acid mist: 7 tpy

Hydrogen sulfide (H₂S): 10 tpy

Total reduced sulfur (including H₂S): 10 tpy

Reduced sulfur compounds (including H₂S): 10 tpy

Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): $3.2 * 10^{-6}$ megagrams per year ($3.5 * 10^{-6}$ tpy)

Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tpy)

Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tpy)

(b) "significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the FCAA, that (28)(a) does not list any emissions rate. This does not include hazardous air pollutants, except to the extent that such hazardous air pollutants are regulated as constituents of more general pollutants listed in section 108(a)(1) of the FCAA.

(c) Notwithstanding (28)(a), "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than one $\mu\text{g}/\text{m}^3$ (24-hour average).

(29) "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the FCAA, excluding hazardous air pollutants, except to the extent that such hazardous air pollutants are regulated as constituents of more general pollutants listed in section 108(a)(1) of the FCAA.

(30) "Volatile organic compounds (VOC)" means the same as defined in 40 CFR 51.100(s). (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-202, 75-2-203, 75-2-204, MCA; NEW, 1993 MAR p. 2919, Eff. 12/10/93; AMD, 1994 MAR p. 2829, Eff. 10/28/94; AMD, 1995 MAR p. 2410, Eff. 11/10/95; AMD, 1996 MAR p. 1843, Eff. 7/4/96; TRANS, from DHES, 1996 MAR p. 2285; AMD, 1998 MAR p. 1725, Eff. 6/26/98; AMD, 2002 MAR p. 1747, Eff. 6/28/02; AMD, 2003 MAR p. 645, Eff. 4/11/03; AMD, 2004 MAR p. 724, Eff. 4/9/04; AMD, 2006 MAR p. 1956, Eff. 8/11/06; AMD, 2007 MAR p. 1663, Eff. 10/26/07; AMD, 2011 MAR p. 2134, Eff. 10/14/11; AMD, 2012 MAR p. 2058, Eff. 10/12/12.)