

ENVIRONMENTAL QUALITY

CHAPTER 8

AIR QUALITY

Subchapter 10

Preconstruction Permit Requirements for Major Stationary
Sources or Major Modifications Locating Within
Attainment or Unclassified Areas

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Locating Within Attainment or Unclassified Areas

17.8.1001 DEFINITIONS For the purpose of this subchapter:

- (1) The definitions contained in ARM 17.8.901 shall be applicable.
- (2) "Cause or contribute" means, in regard to an ambient air quality impact caused by emissions from a major source or modification, an ambient air quality impact that exceeds the significance level as defined in (3), for any pollutant at any location.
- (3) "Significance level" means, for any of the following pollutants, an ambient air quality impact greater than any of the averages cited below:
 - (a) for sulfur dioxide:
 - (i) an annual average of 1.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$);
 - (ii) a 24-hour average of $5.0 \mu\text{g}/\text{m}^3$; or
 - (iii) a three-hour average of $25.0 \mu\text{g}/\text{m}^3$.
 - (b) for PM-10:
 - (i) an annual average of $1.0 \mu\text{g}/\text{m}^3$; or
 - (ii) a 24-hour average of $5.0 \mu\text{g}/\text{m}^3$.
 - (c) for nitrogen dioxide, an annual average of $1.0 \mu\text{g}/\text{m}^3$.
 - (d) for carbon monoxide:
 - (i) an eight-hour average of 0.5 milligrams per cubic meter (mg/m^3); or
 - (ii) a one-hour average of $2.0 \text{mg}/\text{m}^3$. (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; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.1002 INCORPORATION BY REFERENCE (1) For the purposes of this subchapter, the board adopts and incorporates by reference the following:

- (a) 40 CFR Part 60, pertaining to standards of performance for new stationary sources;
- (b) 40 CFR Part 61, pertaining to emission standards for hazardous air pollutants;
- (c) 40 CFR 81.327, pertaining to the air quality attainment status designations for Montana;
- (d) section 173 of the FCAA, as codified in 42 USC 7503, pertaining to requirements for permit programs in nonattainment areas;
- (e) sections 188 through 190 of the FCAA, as codified in 42 USC 7513 through 7513b, pertaining to additional requirements for particulate matter in nonattainment areas; and
- (f) the Standard Industrial Classification Manual (1987), Office of Management and Budget (PB 87-100012), pertaining to a system of industrial classification and definition based upon the composition and structure of the economy.

(2) Copies of materials incorporated by reference in this subchapter may be obtained as referenced in ARM 17.8.102(3) and (4). (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. 2828, Eff. 10/28/94; AMD, 1996 MAR p. 1844, Eff. 7/4/96; TRANS, from DHES, 1996 MAR p. 2285; AMD, 1997 MAR p. 1581, Eff. 9/9/97; AMD, 2001 MAR p. 1468, Eff. 8/10/01; AMD, 2003 MAR p. 645, Eff. 4/11/03; AMD, 2005 MAR p. 959, Eff. 6/17/05; AMD, 2006 MAR p. 1956, Eff. 8/11/06; AMD, 2007 MAR p. 1663, Eff. 10/26/07; AMD, 2009 MAR p. 1784, Eff. 10/16/09; AMD, 2018 MAR p. 438, Eff. 2/24/18.)

Rule 17.8.1003 reserved

17.8.1004 WHEN MONTANA AIR QUALITY PERMIT REQUIRED (1) Any new major stationary source or major modification which would locate anywhere in an area designated as attainment or unclassified for a national ambient air quality standard under 40 CFR 81.327 and which would cause or contribute to a violation of a national ambient air quality standard for any pollutant at any locality that does not or would not meet the national ambient air quality standard for that pollutant, shall obtain from the department a Montana air quality permit prior to construction in accordance with subchapters 7 and 8 and all requirements contained in this subchapter if applicable. A major stationary source or major modification exempted from the requirements of subchapter 7 under ARM 17.8.744 or 17.8.745 which would locate anywhere in an area designated as attainment or unclassified for a national ambient air quality standard under 40 CFR 81.327 and which would cause or contribute to a violation of a national ambient air quality standard for any pollutant at any locality that does not or would not meet the national ambient air quality standard for that pollutant, shall, prior to construction, still be required to obtain a Montana air quality permit and comply with the requirements of ARM 17.8.748, 17.8.749, 17.8.756, 17.8.759 and 17.8.760 and other applicable requirements of this subchapter.

(2) In the absence of emission reductions compensating for the adverse impact of the source, the Montana air quality permit will be denied. (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, 1995 MAR p. 535, Eff. 4/14/95; TRANS, from DHES, 1996 MAR p. 2285; AMD, 2003 MAR p. 106, Eff. 12/27/02.)

17.8.1005 ADDITIONAL CONDITIONS OF MONTANA AIR QUALITY PERMIT (1) The department will not issue a Montana air quality permit required under ARM 17.8.1004 unless the requirements of subchapters 7 and 8 and the following additional conditions are met:

(a) the new source is required to meet an emission limitation, as more fully described in (2) and (3), which specifies the lowest achievable emission rate for such source;

(b) the applicant certifies that all existing major stationary sources owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in the state of Montana are in compliance with all applicable emission limitations and standards under the FCAA or are in compliance with an expeditious schedule of compliance which is federally enforceable or contained in a court decree;

(c) the new source must obtain from existing sources emission reductions (offsets), expressed in tons per year, which provide both a positive net air quality benefit in the affected area as determined in accordance with (3), ARM 17.8.1006 and 17.8.1007, and a ratio of required emission offsets to the proposed source's emissions of 1:1 or greater; and

(d) the Montana air quality permit contains a condition requiring the source to submit documentation, prior to commencement of operation that the offsets required in the Montana air quality permit have occurred.

(2) If the department determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an enforceable numerical emission standard infeasible, the department may, instead, prescribe a design, operational or equipment standard. In such cases, the department shall make its best estimate as to the emission rate that will be achieved, and must take such steps as are necessary to ensure that this rate is federally enforceable. Any Montana air quality permit issued without an enforceable numerical emission standard must contain enforceable conditions which assure that the design characteristics or equipment will be properly maintained (or that the operational conditions will be properly performed) so as to continuously achieve the assumed degree of control. As used in this subchapter, the term "emission limitation" shall also include such design, operational, or equipment standards.

(3) The requirements of (1)(a) and (c), shall only apply to those pollutants for which the major stationary source or major modification is major and for which the source is causing or contributing to a violation of a national ambient air quality standard.

(4) If the emissions from the proposed source would cause a new violation of a national ambient air quality standard but would not contribute to an existing violation, the new source must meet a more stringent and federally enforceable emission limitation, as more fully described in (2), and/or control existing sources below allowable levels through federally enforceable methods so that the source will not cause a violation of any national ambient air quality standard. The new emission limitation must be accomplished prior to the new source's startup date.

(5) The issuance of a Montana air quality permit does not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the Montana State Implementation Plan and any other requirements of local, state or federal law.

(6) Emission reductions (air quality offsets) under (1)(c) must also comply with the additional requirements for determining the baseline and magnitude of emission reductions (air quality offsets) contained in ARM 17.8.905(1)(c) and 17.8.906, except that 17.8.906(7) through (9) shall not be applicable to offsets required under this subchapter. (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, 1995 MAR p. 535, Eff. 4/14/95; TRANS, from DHES, 1996 MAR p. 2285; AMD, 2002 MAR p. 1747, Eff. 6/28/02; AMD, 2002 MAR p. 3567, Eff. 12/27/02.)

17.8.1006 REVIEW OF SPECIFIED SOURCES FOR AIR QUALITY IMPACT

(1) For "stable" air pollutants (i.e., sulfur dioxide, particulate matter and carbon monoxide), the determination of whether a source will cause or contribute to a violation of a national ambient air quality standard generally should be made on a case-by-case basis as of the proposed new source's startup date using the source's allowable emissions in an atmospheric simulation model (unless a source will clearly impact on a receptor which exceeds a national ambient air quality standard).

(2) For sources of nitrogen oxides, the initial determination of whether a source would cause or contribute to a violation of the national ambient air quality standard for nitrogen dioxide should be made using an atmospheric simulation model assuming all the nitric oxide emitted is oxidized to nitrogen dioxide by the time the plume reaches ground level. The initial concentration estimates may be adjusted if adequate data are available to account for the expected oxidation rate. (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; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.1007 BASELINE FOR DETERMINING CREDIT FOR EMISSIONS AND AIR QUALITY OFFSETS (1) For the purposes of this subchapter, the following requirements apply:

(a) The requirements of ARM 17.8.906, except that ARM 17.8.906(7) through (9) do not apply to offsets required under this subchapter;

(b) Emission offsets must be reductions in actual emissions for the same pollutant obtained from the same source or other sources which are located in the same general area of the proposed major stationary source or modification, and that contribute to or would contribute to the violation of the national ambient air quality standard;

(c) In meeting the emissions offset requirements in this subchapter, emissions offsets for direct PM-2.5 emissions or emissions of precursors of PM-2.5 may be satisfied by offsetting reductions in direct PM-2.5 emissions or emissions of any precursor;

(d) In the case of emission offsets involving volatile organic compounds and oxides of nitrogen, offsets will generally be acceptable if they are obtained from within the areas specified in (1)(b). If the proposed offsets would be from sources located at considerable distances from the new source, the department shall increase the ratio of the required offsets and require a showing by the applicant that nearby offsets were investigated and reasonable alternatives were not available;

(e) In the case of emission offsets involving sulfur dioxide (SO₂), particulates, and carbon monoxide, areawide mass emission offsets are not acceptable, and the applicant shall perform atmospheric simulation modeling to ensure that emission offsets provide a positive net air quality benefit. The department may exempt the applicant from the atmospheric simulation modeling requirement if the emission offsets provide a positive net air quality benefit, are obtained from an existing source on the same premises or in the immediate vicinity of the new source, and the pollutants disperse from substantially the same effective stack height; and

(f) No emissions credit shall be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for those compounds listed in Table 1 of EPA's "Recommended Policy on Control of Volatile Organic Compounds" (42 FR 35314, July 8, 1977). (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; TRANS, from DHES, 1996 MAR p. 2285; AMD, 2007 MAR p. 1663, Eff. 10/26/07; AMD, 2008 MAR p. 2267, Eff. 10/24/08; AMD, 2011 MAR p. 2134, Eff. 10/14/11.)