

CHAPTER 8 FUGITIVE PARTICULATE

Subchapter 1 General Provisions

Rule 8.101 - Definitions

For purpose of this Chapter, the following definitions apply:

- (1) “Approved deicer” means a magnesium chloride based product or other product with similar dust suppression properties, that is approved for use by the department and the Missoula Valley Water Quality District.
- (2) “Area of Regulated Road Sanding Materials” means the area defined by:
T13N R19W Sections 2,8,11,14,15,16,17,20,21,22,23,27,28,29, 32,33,34;
T12N R19W Sections 4,5,6,7; as shown on the attached map, (see Appendix A).
- (3) “AASHTO” means the American Association of State and Highway Transportation Officials Test Methods.
- (4) “Best available control technology (BACT)” means an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the 1990 amendments to the Federal Clean Air Act or the Clean Air Act of Montana that would be emitted from any proposed stationary source or modification that 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. In no event may application of BACT result in emission of any pollutant that would exceed the emissions allowed by the applicable standard under 40 CFR Part 60 and 61. 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 emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard or combination thereof, to require the application of BACT. Such standard must, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation and must provide for compliance by means which achieve equivalent results.
- (5) “Block pavers” means a block or brick made of hard, durable material designed to handle vehicle traffic. A block paver keeps vehicles off the underlying soils while allowing the growth of vegetation through spaces inside or outside the block or paver.
- (6) “Bound recycled glass” means a solid, self-draining surface composed of elastomerically bound recycled glass created by bonding post-consumer glass with a mixture of resins, pigments and binding agents.
- (7) “Commercial” means:
 - (a) any activity related to the purchase, sale, offering for sale, or other transaction involving the handling or disposition of any article, service, or commodity; or
 - (b) other facilities including but not limited to office buildings, offices, maintenance, recreational or amusement enterprises, churches, schools, trailer courts, apartments, and three or more dwelling units on one parcel.
- (8) “Existing source” means a source that was in existence and operating or capable of being operated or had an air quality permit from the department prior to February 16, 1979.

- (9) “Extraordinary circumstance” means when a law officer calls for sanding of a roadway to eliminate an existing unsafe traffic situation when deicer would be inadequate or cannot be applied within a reasonable amount of time, or when the slope of a roadway or thickness of ice prevent the use of deicing materials as an adequate method of providing a safe driving surface within a reasonable amount of time.
- (10) “Fugitive particulate” means any particulate matter discharged into the outdoor atmosphere that is not discharged from the normal exit of a stack or chimney for which a source test can be performed in accordance with Method 5 (determination of particulate emissions from stationary sources), Appendix A, Part 60.275 (Test Method and Procedures), Title 40, Code of Federal Regulations [CFR] (Revised July 1, 1977).
- (11) “Industrial” means activity related to the manufacture, storage, extraction, fabrication, processing, reduction, destruction, conversion, or wholesaling of any article, substance or commodity or any treatment thereof in such a manner as to change the form, character, or appearance thereof.
- (12) “Long-term parking for heavy equipment or semis” means an area where only heavy equipment or semis are parked, and these vehicles are parked there for longer than 48 hour periods. This does not include loading or unloading areas for semis.
- (13) “Major arterial” means any roadway eligible for primary or urban funds from the Montana Department of Transportation.
- (14) “New source” means a source that was constructed, installed or altered on or after February 16, 1979, unless the source had a permit to construct prior to February 16, 1979.
- (15) “Parking lot” or “parking area” means an area where operable vehicles are parked for more than 15 days of a calendar year including but not limited to areas that contain vehicles offered for sale.
- (16) “Paved” means having a minimum of two (2) inches of hot mix asphalt or four (4) inches of portland cement concrete with an appropriate base for the soil type. The requirements are for the purpose of minimizing fugitive particulate emissions and do not represent structural standards.
- (17) “Private driveway” means a privately owned access or egress that serves two or fewer dwelling units.
- (18) “Private road” means a privately owned access or egress that serves three or more dwelling units or that serves one or more non-residential parcels.
- (19) “Public road” means a publicly owned or maintained road, a road dedicated to the public, a petitioned road or a prescriptive use road.
- (20) “Reasonable precautions” means any reasonable measure to control emissions of airborne particulate matter. The department will determine what is reasonable on a case by case basis taking into account energy, environmental, economic, and other costs.
- (21) “Reinforced grids” means a solid material composed of connected patterns designed to handle vehicle traffic. A reinforced grid keeps vehicles off the underlying soils while allowing the growth of vegetation through spaces built into the grid.
- (22) “Required deicing zone” means the area within the City limits, bordered in the north by the northern right-of-way boundary of Interstate 90 and in the south by the southern right-of-way boundary of 39th Street and Southwest Higgins Avenue, but also including those portions of Rattlesnake Drive and Van Buren Street that lie inside the City limits.

- (23) “Road” means an open way for purposes of vehicular travel including highways, streets, and alleys. A private driveway is considered a new road when its use is increased to serve more than two dwelling units or to serve one or more commercial/industrial sites.
- (24) “Utility” means unoccupied equipment sites or facilities, including but not limited to communication antennas and power line right of ways.
- (25) “Vehicle” means every device in, upon, or by which any person or property may be transported or drawn upon a public highway, except bicycles and devices moved by animal power or used exclusively upon stationary rails or tracks.

Rule 8.102 - General Requirements

- (1) A person may not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control fugitive particulate are taken.
- (2) Fugitive particulate emissions from any source may not exhibit an opacity of twenty (20) percent or greater averaged over six (6) consecutive minutes.
- (3) A person may not cause or permit a building or its appurtenances or a road, or a driveway, or an open area to be constructed, used, repaired or demolished without applying all reasonable precautions to prevent fugitive particulate. The department may require reasonable measures to prevent fugitive particulate emissions, including but not limited to, paving or frequent cleaning of road, driveways, and parking lots; applying dust suppressants; applying water; planting and maintaining vegetative ground cover and using a combination of reinforced grids or block pavers with a healthy vegetative cover.
- (4) Governmental agencies are subject to the same regulations as commercial enterprises in this chapter.

Rule 8.103 - Stationary Source Requirements

Within any area designated non-attainment for either the primary or secondary NAAQS person who owns or operates:

- (1) An existing source of fugitive particulate shall apply reasonably available control technology (RACT);
- (2) A new source of fugitive particulate that has a potential to emit less than 100 tons per year of particulate shall apply best available control technology (BACT);
- (3) A new source of fugitive particulate that has a potential to emit 100 or more tons per year of particulate shall apply lowest achievable emission rate (LAER).

Rule 8.104 - Construction and Mining Sites

- (1) A person in charge of a construction project or mining operation may not cause, suffer or allow dirt, rock, sand and other material from the site to be tracked out onto paved surfaces without taking all reasonable measures to prevent the deposition of the material and/or to promptly clean up the material. Reasonable measures include but are not limited to frequent cleaning of the paved roadway, paving access points, use of dust suppressants, filling and covering trucks so material does not spill in transit and use of a track out control device.
- (2) Temporary roads and parking areas at active construction sites and mining operations do not need to be paved and are not subject to the permitting requirements of subchapter 2 of this Chapter. After the project(s) or mining is complete, temporary roads and parking areas must be permanently removed or closed off to traffic.

Rule 8.105 - Agricultural Exemption

The provisions of this Chapter do not apply to fugitive particulate originating from any activity or equipment associated with the use of agricultural land or the planting, production, harvesting, or storage of agricultural crops. (This exemption does not apply to the processing of agricultural products by a commercial business).

Subchapter 2 Paving Requirements in the Air Stagnation Zone

Rule 8.201 - Permits Required

- (1) After September 16, 1994, a person may not construct or cause to be constructed a new road, private or commercial driveway or parking lot in the Air Stagnation Zone without having a permit from the department except as provided for in Rule 8.104(2), 8.105 and 8.202(4).
- (2) The applicant shall supply plans for the proposed construction at the time of the application for the permit. Plans must be legibly drawn with permanent ink or printed or reproduced by a process guaranteeing a permanent record. The department may require that the plans include the following information:
 - (a) A complete legal description of the affected parcels and a location map of the proposed construction area.
 - (b) A scaled plan-view drawing that includes all existing and proposed property boundaries, structures, roads, parking areas and adjoining exterior roads. Proposed construction must be clearly labeled.
 - (c) The width of proposed roads and driveways and dimensions of proposed parking areas.
 - (d) The thickness of the base material and the pavement to be used on the proposed construction.
 - (e) A description of the intended uses of the road, driveway or parking lot, including but not limited to the estimated number and type of vehicles using the road, parking lot or driveway.
 - (f) A description of adjoining exterior roads, e.g. paved or unpaved, public or private.
 - (g) Any additional information the department may require to evaluate the application prior to the issuance of a permit.

Rule 8.202 - New Roads in the Air Stagnation Zone

- (1) After September 16, 1994, all new roads in the Air Stagnation Zone must be paved, except as provided in (3) through (5) of this rule and in Rule 8.104.
- (2) New public and private roads must be paved within 2 years (730 days) after road construction begins or final plat approval, whichever comes first, except that new private roads serving commercial and industrial sites must be paved prior to occupancy.
- (3) The department may allow temporary occupancy of a building or use of a road serving a commercial or industrial site before the road is paved if weather prevents paving before occupancy or use. Such an extension may not exceed six months.
- (4) Roads used solely for utilities, or solely for agricultural or silvicultural purposes are exempt from paving requirements of Subchapter 8.2, but are subject to dust abatement measures to prevent particulate matter from becoming airborne. If the use of a road changes so that it is no longer used solely for utilities, or solely for agricultural or silvicultural purposes, the road will be considered a new road and all paving regulations pertinent to the new uses on the road must be met.

- (5) Temporary roads at landfills do not have to be paved or permitted, but are subject to dust abatement measures. For this rule, a road at a landfill is considered temporary if it exists in the same location less than three years.

Rule 8.203 - New Parking Areas in the Air Stagnation Zone

- (1) After September 16, 1994, new public and private parking areas must be paved prior to occupancy, except as provided in (2)-(4) of this rule.
- (2) The department may allow temporary occupancy of a building before the parking areas are paved if weather prevents paving before occupancy. Such an extension may not exceed six months.
- (3) Exceptions.
 - (a) The following areas do not have to be paved if they are constructed in accordance with Section (5) of this rule:
 - (i) Long term parking areas for heavy equipment and semi trucks where the vehicles will be parked for longer than 48 hours at a time and no other vehicular traffic is allowed. (This exemption does not apply to sales lots or loading areas.)
 - (ii) Long term parking areas for vehicles that will be parked for extended periods of time, if no other vehicular traffic is allowed and if no more than fifteen (15) vehicles travel in or out of the area per day averaged over any three consecutive days. (This exemption does not apply to sales lots for vehicles)
 - (iii) Display areas for heavy equipment, where no other vehicles will be displayed or offered for sale and no other vehicular traffic is allowed.
 - (b) At licensed RV parks, accesses to parking spots must be paved, but parking spots for RVs need not be paved if:
 - (i) they are constructed in accordance with 4 (a) of this rule; or
 - (ii) they are constructed using reinforced grids and a healthy vegetative cover is maintained that can handle traffic.
 - (c) Parking areas used exclusively for the sale or display of light tractors and implements with no other vehicular use need not be paved if:
 - (i) the area is mowed and maintained with a healthy stand of vegetation adequate to be an effective dust suppressant; or
 - (ii) the area meets the requirements of 4 (a) of this rule.
 - (d) Parking areas used exclusively for outdoor recreational/entertainment facilities including, but not limited to, outdoor theatres, fairs or athletic fields, may use vegetation or reinforced grids with vegetation as an alternative to paving if the following conditions are met.
 - (i) New access road(s) for the parking area will be paved.
 - (ii) The parking area will be used less than 61 days per calendar year.
 - (iii) The department has approved a construction plan showing:
 - (A) that the parking area soils can support a vegetative cover and the proposed vehicular traffic;
 - (B) that vegetation able to survive and maintain ground cover with the proposed vehicle use is present or that appropriate vegetation will be planted and established prior to use of the parking area; and
 - (C) that an irrigation system able to maintain the vegetative cover will be installed.
 - (iv) The department has approved a maintenance plan that:
 - (A) states that vehicles will not use the parking area when soil conditions are muddy or excessive damage to the vegetation will occur;
 - (B) states that vehicles will not use the parking area when carry out of dirt or dust onto surrounding paved surfaces will occur;

- (C) states that the parking area will be blocked off with a physical barrier that will prevent vehicle access when the parking area is not in use; and
- (D) explains how the ground cover vegetation will be maintained by the appropriate use of irrigation, fertilizer, aeration and other necessary measures.
- (E) may include rotation of vehicle use around the parking area to reduce impacts on the soil and vegetation. Any use of the parking area counts as one day of use for the entire parking area.

(e) The department may order that an area that qualifies for one of the above exemptions be paved if:

- (i) the area is not constructed or maintained as required by this rule.
- (ii) particulate emissions exceed those typical of a clean paved surface; or
- (iii) carryout of dirt or dust onto surrounding paved surfaces occurs.

(f) If the use of an area changes so that an exemption no longer applies, the area must meet all regulations for new construction applicable to the new uses of the area.

- (4) The department may allow self-draining solid surfaces including, but not limited to, block pavers and bound recycled glass for parking areas provided the following conditions are met.
- (i) The surface is rated for the vehicular traffic loads projected for that parking area
 - (ii) Fugitive emissions from the surface will not exceed those from a clean, paved parking area.
 - (iii) The surface is cleaned regularly to prevent fugitive particulate
 - (iv) If the surface is disturbed or destroyed it must be paved or rebuilt before continued use.

(5) Construction Specifications for Exemptions.

(a) Unless otherwise specified in this rule, unpaved parking and display areas must consist of a suitable base material topped with a minimum of four inches of ¾ inch minus gravel, that meets the following specifications:

- (i) The material must consist of hard, durable particles or fragments of slag, stone or gravel screened and crushed to the required size and grading specified here.

Sieve Designation	Percent Passing, by Weight
¾ inch	100
No. 4	30 – 60
No. 10	20 - 50
No. 200	less than 8

- (ii) That portion of the material passing a No. 40 sieve must have a plasticity index of 4 or less, as determined by AASHTO T-91.

(b) To minimize carry-out of material onto the access road, pavement must be placed between unpaved parking areas allowed in (3)(a) of this rule and the paved or unpaved access road as follows:

- (i) At least 60 linear feet of paved surface of adequate width must be placed between an unpaved long term parking area for heavy equipment and semi-trucks and the access road. This paved surface must be placed and used so that heavy equipment and semi-trucks cross 60 feet of paved surface before entering the access road.
- (ii) At least 20 linear feet of paved surface of adequate width must be placed between unpaved long term parking areas allowed in (3)(a)(ii) of this rule and the access road. This paved surface must be placed and used so that vehicles cross 20 feet of paved surface before entering the access road.
- (iii) The paved surface must begin at the edge of the access road.

Rule 8.204 - New Driveways in the Air Stagnation Zone

- (1) After September 16, 1994, before occupancy of a residential unit, new private driveways accessing a paved road must be paved or covered with a self-draining solid surface as provided by part (4) of this rule to a minimum of twenty (20) feet back from the paved road or to the outside boundary of the right of way, whichever is longer.
- (2) The department may allow temporary occupancy of a residential unit before the driveway is paved if weather prevents paving before occupancy. Such an extension may not exceed six months.
- (3) Private driveways accessing an existing unpaved road do not have to be paved, but must meet the requirements of Rule 8.205.
- (4) The department may allow a self-draining solid surface including, but not limited to, block pavers and bound recycled glass in lieu of pavement provided the following conditions are met.
 - (i) The surface is rated for the vehicular traffic loads projected for that driveway
 - (ii) Fugitive emissions from the surface will not exceed those from a clean, paved driveway.
 - (iii) The surface is cleaned regularly to prevent fugitive particulate
 - (iv) If the surface is disturbed or destroyed it must be paved or rebuilt before continued use.

Rule 8.205 - Unpaved Access Roads

- (1) The department may not issue a permit for a new road, commercial site, industrial site, or private driveway in the Air Stagnation Zone accessed by an unpaved road unless:
 - (a) a waiver of the option to protest an RSID or SID for the paving of the unpaved access road has been recorded at the Clerk and Recorder's Office for the parcel; or
 - (b) the owner of the real property accessed by the unpaved road executes a deed restriction waiving the option to protest any RSIDs or SIDs for the paving of the unpaved access road using the language set forth below.

I/We, the undersigned, hereby certify that I/we are the owners of the real property located at (legal description) and hereby waive any option to protest an RSID or SID affecting said property for the purpose of financing the design and construction of a public paved road accessing said property. Further, my/our signatures on this waiver may be used in lieu of my/our signature(s) on an RSID or SID petition for the creation of one or more RSID's or SID petitions for the purpose of financing the design and construction of a public paved road accessing the above-described property.

This waiver runs with the land and is binding on the transferees, successors, and assigns of the owners of the land described herein. All documents of conveyance must refer to and incorporate this waiver.

- (2) In the Air Stagnation Zone, property owner who is subdividing land that contains parcels accessing an unpaved road, or whose primary access is an unpaved road, shall waive the option to protest an RSID or SID that upgrades and paves the road and shall include the language set forth in (1)(b)above on the plat.

Rule 8.206 - Maintenance of Pavement Required

- (1) All paved roads, driveways, storage areas and parking lots within the Air Stagnation Zone must be cleaned and maintained regularly to prevent fugitive particulate.
- (2) Any existing paved surface that is disturbed or destroyed must be re-paved before continued use.

Rule 8.207 - Paving Existing Facilities in the Air Stagnation Zone

- (1) The department may require any person owning or operating a commercial establishment which is located on a publicly owned or maintained road which is used by more than 200 vehicles per day averaged over any 3-day period to submit a plan which provides for paving and restricting traffic to paved surfaces for any areas used by said commercial establishment for access, egress, and parking except where said access, egress, and parking is seasonal and intermittent and the area in which said access, egress and parking is located is not in violation of Ambient Air Quality Standards as listed in ARM 17.8.201 - 17.8.230. The plan must include drawings and other information that the department may require to indicate the adequacy of the plan. The plan must provide reasonable time for construction of paved roads or structures limiting traffic to paved surfaces, but this time may not exceed one year from the date of submittal to the department.
- (2) The department may require any person owning, leasing, or managing property containing a road or thoroughfare which is used by more than 50 vehicles per day, averaged over any three day period, to submit a plan which provides for paving or for restricting traffic to paved surfaces. Roads located in areas that do not violate the ambient air quality standards (ARM 17.8.201 - 17.8.230), and which are used seasonally and intermittently are exempt from this requirement. The plan must include drawings and other information that the department may require. A reasonable time will be permitted for the construction of paved roads or structures limiting traffic to paved surfaces, but this time may not exceed one year from the date of submittal of the plan to the department unless an extension is granted by the Control Board.

Subchapter 3 - Road Maintenance Inside the Area of Regulated Road Sanding Materials

Rule 8.301 - Deicer Required

- (1) When the ambient temperature is above 10°F, a person may not apply street sanding materials other than an approved deicer to those public roadways in the required deicing zone, except under extraordinary circumstances.

Rule 8.302 - Durability Requirements

- (1) A person may not place any sanding or chip sealing materials upon any road or parking lot located inside the area of regulated road sanding materials that has a durability of less than or equal to 80 as defined by AASHTO T-210 procedure B and a silt content passing the #200 sieve of greater than 2.5% as defined by AASHTO T-27 and T-11.

Rule 8.303 - Street Sweeping Requirements

- (1) Between December 1 and March 31, when the paved road surface is above 32°F for longer than four hours, political subdivisions shall clean the center line and areas immediately adjacent to the travel lane of any major arterials they maintain inside the area of regulated road sanding materials.
- (2) The Control Board hereby incorporates Chapter 10.50 of the Missoula Municipal Codes which requires street sweeping.

Rule 8.304 - Contingency Measure

- (1) The area of regulated road sanding materials defined by Rule 8.101(2) is expanded to include Section 1, T12N R20W, Sections 5 and 24, T13N R19W, Sections 19, 24, 25, 30, 31 and 36, T13N R20W.