

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

(Adopted February 14, 1997)(Amended December 11, 1998)
(Amended September 10, 1999)(Amended April 2, 2004)
(Amended July 11, 2008)

RULE 1186. PM₁₀ EMISSIONS FROM PAVED AND UNPAVED ROADS, AND LIVESTOCK OPERATIONS

(a) Purpose

The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of vehicular travel on paved and unpaved public roads, and at livestock operations.

(b) Applicability

The provisions of this rule shall apply to specified land uses and activities conducted within the South Coast Air Quality Management District which result in fugitive dust.

(c) Definitions

- (1) AVERAGE DAILY TRIPS (ADT) means the average number of vehicles that cross a given surface during a specified 24-hour time period as determined by the most recent Institute of Transportation Engineers trip generation manual, tube counts, or observations.
- (2) CERTIFIED STREET SWEEPER is a sweeper that has been certified by the District as meeting the Rule 1186 sweeper certification procedures and requirements for PM₁₀-efficient sweepers.
- (3) CHEMICAL STABILIZERS mean any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- (4) CHEMICAL STABILIZATION means a method of dust control implemented by a person to mitigate fugitive dust and corresponding PM₁₀ emissions which involves the use of non-toxic chemical stabilizers in sufficient quantities to maintain a stabilized surface.

- (5) CONTRACT DATE is the date the contract has been signed by both parties but no earlier than 6 months before sweeping begins. Renewals of sweeping contracts are considered new contracts.
- (6) DISTRICT'S TEST PROTOCOL: RULE 1186 CERTIFIED STREET SWEEPER COMPLIANCE TESTING means the reference test method contained in Appendix A, or hereafter approved by the Executive Officer and the U.S. Environmental Protection Agency to be an equivalent method.
- (7) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (8) ESSENTIAL PUBLIC SERVICES are sewage treatment facilities, prisons, police facilities, fire fighting facilities, schools, hospitals, landfills, and water delivery operations.
- (9) FEED LANE ACCESS AREAS are roads providing access from the feed preparation areas to and including feed lane areas at a livestock operation. These access roads are typically used to distribute feed from feed trucks to the animals.
- (10) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of man.
- (11) INDEPENDENT TESTING FACILITY (OR LABORATORY) means a testing facility that meets the requirements of District Rule 304, subdivision (k) and is approved by the District to conduct certification testing under the District's Test Protocol: RULE 1186 Certified Street Sweeper Compliance Testing.
- (12) LIVESTOCK OPERATIONS means any operation directly related to the raising of more than 50 animals for the primary purpose of making a profit or for a livelihood.
- (13) OWNER/OPERATOR is any person who owns, leases, or operates a land use or activity subject to the requirements of this rule.
- (14) PAVED ROAD means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county,

municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.

- (15) PM₁₀ is particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- (16) PURCHASE OR LEASE DATE is the date the purchase or lease contract for delivery of sweeping equipment has been signed by both parties. Renewals of leasing contracts are considered new leases.
- (17) ROUTINE STREET SWEEPING is street sweeping performed by local governments or their contractors at least once every three months for a given paved road.
- (18) SOUTH COAST AIR BASIN means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.
- (19) STABILIZED SURFACE means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust.
- (20) STREET CLEANING means the removal of post-event visible roadway accumulations using street sweeping equipment, front end loaders, haul vehicles, manual shoveling, street flushing, or any other methods determined effective by the responsible agency.
- (21) TYPICAL ROADWAY MATERIALS means concrete, asphaltic concrete, recycled asphalt, asphalt or any other material of equivalent performance as determined by the Executive Officer, the California Air Resources Board, and the U.S. EPA.
- (22) UNPAVED ACCESS CONNECTIONS means any unpaved road connection with a paved public road.
- (23) UNPAVED ALLEY means any roadway not exceeding 25 feet in width, which is primarily used for access to the rear or side entrances of abutting property, and that is not covered by typical roadway materials.
- (24) UNPAVED ROADS are any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public

unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all unpaved roadways not defined as public. This definition excludes horse trails, hiking paths, bicycle paths, or other similar pathways used exclusively for purposes other than travel by motorized vehicles.

- (25) **VISIBLE ROADWAY ACCUMULATIONS** means the deposit of particulate matter onto paved roads as a result of wind or water erosion, haul vehicle spillage, or any other event excluding vehicular track-out, which results in the accumulation of visible roadway dust covering a contiguous area in excess of 200 square feet.
- (26) **WIND-DRIVEN FUGITIVE DUST** means visible emissions from any disturbed surface area which is generated by wind action alone.

(d) Requirements

Paved Roads

- (1) Any owner or operator of a paved public road on which there is visible roadway accumulations shall begin removal of such material through street cleaning within 72 hours of any notification of the accumulation and shall completely remove such material as soon as feasible. If removal cannot be completed within 10 days of notification, the owner/operator shall notify the Executive Officer and provide information on the location of the accumulation(s) and estimated removal completion date.
- (2) Any government or government agency which contracts to acquire street sweeping equipment or street sweeping services for routine street sweeping on public roads that it owns and/or maintains, shall acquire or use only certified street sweeping equipment.
- (3) Any government or government agency subject to the requirements of paragraph (d)(2) and/or its contractors shall operate and maintain the certified street sweeping equipment in accordance with the manufacturer's specifications. The use of parts determined by the Executive Officer to be substantially similar under the provisions of paragraph (f)(4) shall not be deemed a violation of this subparagraph.
- (4) Beginning January 1, 2006, any owner or operator of a public or private paved road shall construct, or require to be constructed, all new or widened paved roads in accordance with the American Association of

State Highway and Transportation Officials (AASHTO) guidelines or the applicable equivalent locally adopted guidelines for curbing, width of shoulders, and medians as specified below:

- (A) New construction or widening of paved roads with projected average daily trips of 500 vehicles or more shall be constructed with curbs or as an alternative paved outside shoulders using typical roadway materials and having the following minimum widths:

Average Daily Trips	Minimum Shoulder Width
500 - 3,000	4 feet
3,000 or greater	8 feet

- (B) New construction or widening of paved roads with medians and projected average daily trips of 500 vehicles or more shall pave the median area with typical roadway materials unless:
 - (i) the speed limits are set at or below 45 miles per hour; or
 - (ii) the medians are landscaped and maintained with grass or other vegetative ground cover and are surrounded by curbing; or
 - (iii) the medians are treated with chemical stabilizers in sufficient quantity and frequency to establish a stabilized surface and are surrounded by curbing.

Unpaved Roads

- (5) Any owner or operator of an unpaved public road in the South Coast Air Basin shall annually treat unpaved roads that have greater than the average ADT of all unpaved roads in its jurisdiction (as determined by the owner/operator) beginning January 1, 1998 and each of the 8 calendar years thereafter by either:
 - (A) Paving at least 1 mile of such roads using typical roadway materials; or
 - (B) Applying chemical stabilization to 2 miles of such roads in sufficient quantities to maintain a stabilized surface; or
 - (C) Taking one or more of the following actions on 3 miles of such roads:
 - (i) Installing signage at 1/4 mile intervals that prohibits vehicular speeds in excess of 15 miles per hour

(mph) as authorized by California Vehicle Code section 22365 and/or

- (ii) Installing speed control devices (e.g., speed bumps) every 500 feet and/or
- (iii) Maintaining the roadway in such a manner that inhibits vehicular speeds in excess of 15 mph.

(Note: Treatment in excess of the annual requirement can be credited toward future year requirements.)

Livestock Operations

- (6) Any owner or operator of a livestock operation shall cease all hay grinding activities between 2:00 and 5:00 p.m. each day, if visible emissions extend more than 50 feet from a hay grinding source.
- (7) Any owner or operator of a livestock operation shall treat all unpaved access connections and unpaved feed lane access areas with either pavement, gravel (maintained to a depth of four inches), or asphaltic road-base no later than January 1, 1998.

(e) Street Sweeper Testing and Certification Procedures

- (1) Any manufacturer seeking certification of street sweeping equipment as a certified street sweeper shall utilize the following procedures;
 - (A) The manufacturer shall submit a signed and dated certification request to the Executive Officer, and attest to the accuracy of all statements therein, that shall include:
 - (i) the name and address of the manufacturer, the brand name, the model number, and a complete description of the sweeper's dust collection and suppression system by submitting all of the information in paragraph (f)(2); and
 - (ii) confirmation that the specific sweeper configuration to be certified has been tested in accordance with District's Test Protocol: Rule 1186 Certified Street Sweeper Compliance Testing by an independent test facility or laboratory, and that test results demonstrate that the sweeper meets the Rule 1186 sweeper certification limits specified in paragraph (e)(2).

- (B) Manufacturers of certified street sweeping equipment may submit a certification request for additional equipment that has substantially similar material collection and dust suppression system(s) as equipment that was certified under the provisions of paragraph (e)(2), by providing the information specified in clause (e)(1)(A)(i). If the Executive Officer determines that the information submitted by the manufacturers in support of an equivalency determination and previous certification test results are sufficient to certify the additional equipment, the Executive Officer will approve the request.
- (2) The Executive Officer will certify street sweeping equipment provided such equipment meets the following conditions based on a single certification test:
 - (A) The pick-up efficiency, as defined in the District's Test Protocol: Rule 1186 Certified Street Sweeper Compliance Testing, is greater or equal to 80 percent; and
 - (B) The normalized mass of entrained PM₁₀, as defined by District's Test Protocol: Rule 1186 Certified Street Sweeper Compliance Testing, is less than or equal to 200 mg/m.
- (f) Street Sweeper Performance Characteristics
 - (1) Any manufacturer of a street sweeper that has previously been certified under the provisions of subdivision (e) shall, no later than November 11, 2008, submit to the Executive Officer a complete description of the dust collection and suppression systems of the equipment as configured during the certification testing or as otherwise certified under the provisions of subparagraph (e)(1)(B).
 - (2) The description of the dust collection and suppression systems required under paragraph (f)(1) shall, at a minimum, consist of the following:
 - (A) Dust collection
 - (i) Gutter broom
 - (I) material composition;
 - (II) bristle count and weight;
 - (III) tensile strength expressed as pounds per square inch (PSI); and
 - (IV) dimensions including length, thickness, and width.

- (ii) Main pickup broom (if part of the original certified street sweeper)
 - (I) material composition and pounds of fiber per broom;
 - (II) tensile strength expressed as PSI; and
 - (III) dimensions including length, thickness, and width.
 - (iii) Blower/Vacuum system (if part of the original certified street sweeper)
 - (I) horsepower; and
 - (II) drive type.
- (B) Dust suppression
 - (i) Water suppression
 - (I) schematic drawing showing water nozzle locations and orifice nozzle sizes; and
 - (II) minimum system relief valve setting for water pump expressed as pounds per square inch (PSI).
 - (ii) Filter-based suppression
 - (I) filter media type and surface area; and
 - (II) filtration cleansing system, including mechanism and frequency.
- (3) Any manufacturer of street sweeping equipment shall notify the Executive Officer through submission of a plan regarding any change to a part specification or part supplier submitted pursuant to paragraph (f)(2). Street sweeping manufacturers shall be required to submit sufficient specifications and other data as determined by the Executive Officer to demonstrate that the equipment performance has not been affected by the change of a part specification or part supplier prior to the continued distribution of equipment as a certified street sweeper. In the event the Executive Officer determines that the certification of performance is not maintained, the manufacturer shall lose equipment certification for the specific street sweeper.
- (4) Any street sweeper parts supplier may sell parts to an entity required to procure certified street sweeping equipment provided that:
 - (A) such parts were installed on equipment that was certified under the provisions of subdivision (e). Documentation that a given part was

on a street sweeper during certification testing must be submitted to the Executive Officer as a plan and must include the following:

- (i) Invoices from the parts supplier to the manufacturer, or
 - (ii) Contractual agreements between the parts supplier to the manufacturer, or
 - (iii) Any other documentation that the Executive Officers deems sufficient to demonstrate that a given part was on a piece of equipment that was previously certified; or
- (B) the supplier submits a plan that demonstrates to the satisfaction of the Executive Officer that the replacement part is substantially similar to the original equipment manufacturer part.
- (5) Any person subject to the plan submittal requirements under paragraphs (f)(3) or (f)(4) shall be assessed applicable filing and evaluation fees pursuant to Rule 306 (Plan Fees).
- (6) Any plan submitted under the requirements under paragraphs (f)(3) or (f)(4) shall be either approved, conditionally approved or disapproved in writing by the Executive Officer within 120 days of the receipt of a complete plan.
- (g) Recordkeeping
- (1) Any person subject to paragraph (d)(3) shall maintain operational and maintenance records demonstrating compliance with paragraph (d)(3). Such records for the previous two years of operation (or total period of operation, if less than two years) must be made available to the Executive Officer upon request.
 - (2) Any person subject to paragraph (d)(5) shall maintain records that document compliance with the requirements specified in paragraph (d)(5). Such records must be updated annually and must be made available to the Executive Officer upon request.
- (h) Exemptions
- (1) The provisions of this rule shall not apply to essential public services that are in compliance with District Rule 403 (Fugitive Dust).
 - (2) The provisions of paragraph (d)(1) shall not apply to:
 - (A) visible roadway accumulations that occur on roads with fewer than 500 average daily trips.

- (B) paved roads that have been closed until such time that the road is again opened to vehicular activity.
 - (C) events of such magnitude that a State of Emergency has been declared by the Governor, provided that removal of visible roadway accumulations associated with such events are initiated and completed as soon as feasible.
- (3) The provisions of paragraph (d)(5) shall not apply to:
- (A) any unpaved road 3,000 feet above mean sea level with fewer than 500 ADT.
 - (B) any unpaved road used for emergency fire or flood protection or emergency maintenance of essential service utilities to provide electricity, natural gas, telephone, water, and sewer.
 - (C) any unpaved public road where public access is prohibited.
 - (D) any unpaved alley.
 - (E) any government agency if it:
 - (i) notifies the Executive Officer that it has less than 5 miles of unpaved road mileage and implements once at least one of the control strategies identified in either subparagraph (d)(5)(A) or (d)(5)(B) or (d)(5)(C) on the unpaved road mileage with greater than the average ADT (as determined by the owner/operator) by January 1, 2000; or
 - (ii) notifies the Executive Officer that it has more than 5 but less than 10 miles of unpaved road mileage and implements at least one of the control strategies identified in either subparagraph (d)(5)(A) or (d)(5)(B) or (d)(5)(C) on unpaved roads with greater than the average ADT (as determined by the owner/operator) in each three year period beginning January 1, 1998 (with final treatments completed by December 31, 2005); or
 - (iii) notifies the Executive Officer that all of its remaining unpaved roads have 20 ADT or less (as determined by the owner/operator).
- (4) The provisions of paragraphs (d)(6) and (d)(7) shall not apply to livestock operations whose contiguous bounded areas do not exceed ten acres.
- (5) The provisions of subparagraph (d)(4)(A) shall not apply to unpaved road shoulders provided that the area extending eight feet from the outside edge

of the pavement is landscaped and maintained with grass or other vegetative ground cover.

(i) Alternative Control Options

In lieu of complying with the provisions of paragraphs (d)(5) and (d)(7), a person may submit for approval by the Executive Officer and the U.S. Environmental Protection Agency a plan for achieving equivalent emissions reductions through alternative control measures.