

Tehama County Air Pollution Control District

Rule 4:24 Fugitive Dust Emissions
Adopt 8/4/87, Repealed/Adopted 2/5/08

- 1 Purpose: The purpose of this Rule is to control fugitive dust emissions to the atmosphere emitted from significant man-made fugitive dust sources.
- 2 Applicability: The provisions of this rule shall apply to any active operation, disturbed surface area, or man-made condition capable of generating fugitive dust, including, but not limited to, bulk material handling, earthmoving, construction and demolition activity, storage piles, unpaved roads, or track-out.
- 3 Definitions:
 - 3.1 Active Operation – any activity or condition capable of generating fugitive dust, including any open storage pile, earth-moving activity, construction and demolition activity, demolition disposal, fly ash used as ground cover (not soil amendment for on-field farming operations), disturbed surface areas, non-emergency movement of motor vehicles on unpaved roadways, and operation of commercial or industrial unpaved roads or parking facilities.
 - 3.2 Bulk Material - sand, gravel, soil, aggregate, and any other organic or inorganic solid matter capable of releasing dust.
 - 3.3 Construction and Demolition Activity - any on-site mechanical activity preparatory to or related to building, alteration, rehabilitation, demolition or improvement of property, including but not limited to the following activities: grading, excavation, loading, crushing, cutting, leveling, shaping or other ground breaking.
 - 3.4 Contractor -any person or company, or licensed construction contractor having a contractual arrangement to conduct an active operation subject to this Rule.
 - 3.5 Disturbed Surface Area - portion of the earth's surface having been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition, thereby increasing the potential for emission of fugitive dust. Disturbed surface area does not include areas restored to a natural state with vegetative ground cover and soil characteristics similar to adjacent or nearby natural conditions.
 - 3.6 Dust Suppressant - water, hygroscopic materials, or non-toxic chemical stabilizers used as treatment to reduce fugitive dust emissions. A suppressant shall not be used if prohibited by the Regional Water Quality Control Board, the California Air Resources Board, the Environmental Protection Agency, or any applicable law, rule or regulation. All suppressants shall meet all specifications, criteria, or tests required by any federal, state, or local water agency. The use of dust suppressants shall be of sufficient concentration and application frequency to maintain a stabilized surface.
 - 3.7 Earth-Moving Activity - grading, earth cutting and filling, loading or unloading of dirt or bulk material, adding to or removing from open storage piles of bulk material, landfilling, or soil mulching.
 - 3.8 Fly ash (bottom ash from boilers) - a byproduct of steam generation that is produced by burning wood fuels from in-forest operations, orchards, sawmills (bark, sawdust, shavings, or wood chips), and occasionally urban trees and shrubs (tree stems, limbs, stumps, leaves, or needles).
 - 3.9 Fugitive Dust - any particulate matter becoming airborne, other than being emitted from an exhaust stack, directly or indirectly as a result of human activity.

- 3.10 Grading – movement of any earth materials.
- 3.11 Inactive Disturbed Surface Area - any disturbed surface area upon which an active operation has not occurred for a period of at least ten consecutive days.
- 3.12 Open Storage Pile - any accumulation of bulk material with 5 percent or greater silt content not fully enclosed, covered or chemically stabilized, and attaining a volume of 40 cubic yards or greater. A 40 cubic yard storage pile is roughly equivalent to the volume of soil of an 8.5 foot high pile at a 37 degree angle of repose, and a surface area of 500 square feet. Silt content level in an accumulation of bulk material shall be presumed to be 5 percent or greater unless a person shows, by sampling and analysis in accordance with ASTM Method C-136, the silt content is less. Results of ASTM Method C-136 are valid for 60 days from the date the sample was taken, or such longer period as designated by the Air Pollution Control Officer. If the Air Pollution Control Officer concurs it is constant, future sampling may be required to confirm this conclusion.
- 3.13 Large Operation - any active operation, including vehicle movement on unpaved roadways, involving in excess of 100 contiguous acres of disturbed surface area, or any earth-moving activity exceeding a daily volume of 7,700 cubic meters (10,000 cubic yards) three or more times during the preceding 365-day period.
- 3.14 Particulate Matter - any solid material, existing in finely divided form.
- 3.15 Prevailing wind - from south to north, unless otherwise specified by the Air Pollution Control Officer.
- 3.16 Property Line - boundaries of the contiguous area over which the person causing or allowing fugitive dust has ownership or legal right to use the property.
- 3.17 On-field Agricultural Operations - Activities conducted for the primary purpose of the commercial growing of agricultural or horticultural commodities, tree fruits, or the commercial raising of fowl or animals, (excluding construction and construction related activities), upon the premises on which the agricultural or horticultural commodities, tree fruits, or fowl or animals are grown or raised. Such activities include, but are not limited to:
- 3.17.1 Brush or timber clearing, grubbing, scraping, ground excavation, land leveling, grading, turning under stalks, disking or tilling.
- 3.17.2 Drying, pre-cleaning, handling, or storing of agricultural commodity material on the field where it was harvested.
- 3.17.3 Handling of fowl, or animal feed materials at sites where animals or fowl are raised.
- 3.17.4 Disturbing of cultivated land as a result of fallowing, planting, plowing, disking, fertilizing the soil, cultivating, irrigating, controlling weeds, thinning, heating, pruning, fumigating, spraying, dusting, or harvesting.
- 3.18 Reasonably Available Control Measure (RACM) - any technique or procedure used to prevent or reduce the emission and airborne transport of fugitive dust. RACM's include, but are not limited to, application of dust suppressants, use of coverings or enclosures, paving, enshrouding, planting, control of vehicle speeds, and any other measure recognized by the Air Pollution Control Officer as providing equivalent dust control. Table I (Page 4:24-3) and U.S. EPA's reference document "Control of Open Fugitive Dust Sources", Midwest Research Institute, September 1988 shall be used for guidance.

- 3.19 Simultaneous sampling - operation of two PM10 samplers such that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period of not less than 290 minutes and not more than 310 minutes.
- 3.20 Stabilized surface - previously disturbed surface area showing visual or other evidence of surface particle conglomeration after application of a dust suppressant.
- 3.21 Track-Out- any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
- 3.22 Unpaved Road - any straight or curved length of well-defined travel way for motor vehicles not covered by one or the following: concrete, asphaltic concrete, or asphalt.
- 3.23 Wind gusts- maximum instantaneous wind speed as measured by an anemometer or as provided by the nearest local meteorological station.

Table I

**SUGGESTED
FUGITIVE DUST REASONABLY AVAILABLE CONTROL MEASURES**

Source Category	Control Measure
Unpaved Road	Improve Road Surface Control Vehicular Traffic Speed Apply Dust Suppressants
Construction/Demolition Activity	Use Wind Breaks Apply Dust Suppressants Daily Clean Up of Track Out
Earth-moving or	Use Wind Screens
Open Storage Pile	Use Enclosures Around Storage Piles Apply Dust Suppressants Daily Clean Up of Track Out
Disturbed Surface Area	Use Fences/Barriers Vegetate Apply Dust Suppressants Cover with Gravel Compact Surface Daily Clean Up of Track Out

NOTE: If water is selected as a dust suppressant, use of nonpotable water is encouraged.

4 Exemptions:

4.1 The following exemptions are established as set forth in this subsection:

4.1.1 On-field Agricultural Operations are exempt from the provisions of this rule;

- 4.1.2 A permitted stationary source located within the District that has a valid air pollution Permit to Operate (PTO) issued by the District and has fugitive dust permit condition(s) listed in the permit is not required to have a separate Fugitive Dust Permit to Operate, but shall otherwise be subject to the provisions of this rule
- 4.1.3 Construction activities (including maintenance, remodeling, or addition to an existing building) of four or fewer single family residential dwellings, none of which is located within an incorporated city, where such construction or demolition is not part of any other development project (other than a subdivision of four or fewer single family residential or agricultural parcels), shall not be subject to the provisions of this rule;
- 4.1.4 Construction activities (including maintenance, remodeling, or addition to an existing building) of two or fewer single family residential dwellings, any of which is located within an incorporated city, where such construction or demolition is not part of any other development project (other than a subdivision of two or fewer single family residential or agricultural parcels), shall not be subject to the provisions of this rule;
- 4.1.5 Grading activities that disturb less than 10,000 square feet of surface area shall not be subject to the provisions of this rule;
- 4.1.6 Movement of less than 2,000 cubic yards of earth shall not be subject to the provisions of this rule;
- 4.1.7 Active operations conducted in response to an emergency life-threatening situation, or in accordance with any officially-declared disaster or state of emergency shall not be subject to the provisions of this rule;
- 4.1.8 Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions shall not be subject to the provisions of this rule;
- 4.1.9 Restorative grading of unpaved shoulders of paved roads shall not be subject to the provisions of this rule;
- 4.1.10 The construction, operation, maintenance, or vacation of any public road by a public entity shall not be subject to the provisions of this rule;
- 4.1.11 Emergency maintenance of flood control channels and water spreading basins shall not be subject to the provisions of this rule
- 4.1.12 Weed and dried vegetation removal required by a governmental fire prevention/control agency shall not be subject to the provisions of this rule;
- 4.1.13 Active operations conducted during freezing weather if the only applicable RACM involves application of water shall be subject to the provisions of this rule pertaining to Fugitive Dust Permits to Operate, but shall otherwise be exempt from the provisions of this rule;
- 4.1.14 Blasting operations permitted by the California Division of Industrial Safety shall not be subject to the provisions of this rule;
- 4.1.15 Motion picture, television, and video production activities when dust emissions are required for visual effects shall not be subject to the provisions of this rule, provided that a certificate of exemption is obtained from the Air Pollution Control Officer in advance;

- 4.1.16 Activities conducted within officially designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, County regional parks, and City parks, by the officials responsible for such public parks and recreational areas shall not be subject to the provisions of this rule;
- 4.1.17 Provisions of Subsection [5.2](#) (visible emissions limit) shall not apply when wind gusts exceed 25 miles per hour, provided
 - 4.1.17.1 Table I (Page 4:24-3) Reasonably Available Control Measures are implemented for each applicable fugitive dust source type, or;
 - 4.1.17.2 A person has on file with the District an approved "High Wind Fugitive Dust Control Plan" indicating technical reasons why any Reasonably Available Control Measure cannot be implemented. Such Plan shall provide an alternative measure of fugitive dust control, if technically feasible, and shall be subject to the same approval conditions as specified in Section [5](#).

5 Requirements:

- 5.1 No person shall conduct, cause, suffer, or permit any activity or condition to which this rule applies without first obtaining a Fugitive Dust Permit to Operate (FDPTO) from the Tehama County Air Pollution Control District and paying the applicable permit fee. A FDPTO shall be valid for a period of one year from date of issuance. Any FDPTO shall be subject to the provisions of Rule 2.19 ("District Indemnification")
- 5.2 No person shall discharge into the atmosphere from any fugitive source for a period aggregating more than three (3) minutes in one hour which is:
 - 5.2.1 As dark or darker in shade as that designated as No. 1 on the Ringelman Chart, as published by the United States Bureau of Mines, or
 - 5.2.2 Opacity as to obscure an observer's view to a degree equal to or greater than does smoke as described in subdivision [5.2.1](#).
- 5.3 Every person conducting, causing, suffering, or permitting any active operation subject to this rule shall utilize all applicable Reasonably Available Control Measures to minimize fugitive dust emissions from each fugitive dust source type which is part of that active operation.
- 5.4 For any large operation, except those in compliance with their district approved dust control plan, no person shall cause, suffer, or permit downwind PM10 ambient concentrations to increase more than 50 micrograms per cubic meter above upwind concentrations as determined by simultaneous upwind and downwind sampling. Any person conducting, causing, suffering, or permitting a large operation shall conduct sampling as follows: High-volume particulate matter samplers, or other EPA-approved equivalent method(s) for PM10 monitoring shall be used. Samplers shall be:
 - 5.4.1 Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate EPA-published documents for EPA-approved equivalent methods(s) for PM10 sampling;
 - 5.4.2 Reasonably placed upwind and downwind of the large operation based on prevailing wind direction and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized; and

5.4.3 Operated during active operations.

5.5 Additional Special Requirements for Large Operations:

5.5.1 No person shall conduct, cause, suffer, or permit a large operation to which this rule applies without either: 1) conducting on-site PM10 air quality monitoring and associated recordkeeping, or 2) filing for, obtaining, and complying with an approved fugitive dust emissions control plan pursuant to Subsection [5.5.3.1](#).

5.5.2 Any person subject to Subsection [5.5.1](#), electing to conduct on-site PM10 monitoring and recordkeeping shall take the following actions:

5.5.2.1 Notify the Air Pollution Control Officer of intent to monitor PM10 at least seven days prior to initiating such monitoring. Notification shall contain, at a minimum, the person's name, address, telephone number, brief description and location of the operation(s), and anticipated first date of sampling.

5.5.2.2 Be responsible for acquisition, calibration and operation of PM10 samplers.

5.5.2.3 Collect one sample per calendar month. Sampling shall be conducted during typical operations, and during prevailing wind direction conditions. All other provisions of this Rule shall continue to be applicable on days when monitoring is not conducted.

5.5.2.4 Collect up to two additional samples per calendar month if requested by the Air Pollution Control Officer based on receipt of complaints from the public, visible dust emissions, or other determinations by District personnel indicating that violations of conditions specified in Subsection [5.4](#) may be occurring. Each sampling day shall be conducted during typical operations, and during prevailing wind direction conditions.

5.5.2.5 Conduct laboratory analyses in accordance with 40 CFR, Part 50, Appendix J, for all samples collected as required by Subsections [5.5.2.3](#) and [5.5.2.4](#).

5.5.2.6 Compile and submit records to the District on a quarterly basis, not later than 30 days after the end of each calendar quarter. Such records shall include:

5.5.2.6.1 Brief description and location of the operation(s);

5.5.2.6.2 Hours of active operations on days when particulate sampling occurred;

5.5.2.6.3 Location, vendor, model, and serial number of PM10 samplers used on each sampling day;

5.5.2.6.4 Date, start and end times of all PM10 sampling;

5.5.2.6.5 Laboratory results (measured ambient concentrations) of all PM10 samples;

- 5.5.2.6.6 List of consultants, laboratories, and other groups of individuals responsible for collection, analysis, evaluation and validation of each PM10 sample; and
 - 5.5.2.6.7 Documentation of any maintenance and calibration actions performed on each PM10 sampler conducted in accordance with 40 CFR, Part 50, Appendix J.
- 5.5.3 Any person subject to Subsection [5.5.1](#) electing to obtain an approved fugitive dust emissions control plan shall take the following actions:
- 5.5.3.1 At least 45 calendar days prior to a calendar quarter during which air monitoring would otherwise be conducted in accordance with Subsection [5.5.2](#), submit to the Air Pollution Control Officer a fugitive dust emissions control plan, including at least:
 - 5.5.3.1.1 Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission, and implementation of the plan;
 - 5.5.3.1.2 Description and location of operation(s);
 - 5.5.3.1.3 Listing of all fugitive dust emissions sources included in the large operation;
 - 5.5.3.1.4 Description of Reasonably Available Control Measures to be applied to each source identified in Subsection [5.3](#). Such description must be sufficiently detailed to demonstrate Reasonably Available Control Measures will be utilized and/or installed during all periods of active operations.
 - 5.5.3.2 If there are special technical, e.g., non-economic, circumstances preventing use of Reasonably Available Control Measures for any source identified in Subsection [5.3](#), justification shall be provided in lieu of the description required in Subsection [5.5.3.1.4](#). Justification statement shall explain reason(s) why Reasonably Available Control Measures cannot be implemented.
- 5.5.4 The Air Pollution Control Officer shall either approve, conditionally approve, or disapprove the plan, in writing, within 30 calendar days of receipt of the plan. For a plan to be approved or conditionally approved, three conditions shall be satisfied:
- 5.5.4.1 All sources of fugitive dust emissions shall be identified, e.g., earth-moving, storage piles, vehicular traffic on unpaved roads, etc.;
 - 5.5.4.2 For each source identified, at least one Reasonably Available Control Measure shall be implemented, unless the Air Pollution Control Officer approves a justification statement for that source in accordance with [5.5.3.2](#); and
 - 5.5.4.3 If, after implementation of control measures, visible dust emissions cross property line(s), standby control measures, e.g., increased watering, shall be specified for immediate implementation.

- 5.5.5 If a plan can be conditionally approved with actions not specified in the plan, the applicant shall be notified in writing. Such modifications shall be incorporated into the plan within 30 days of receipt of the notice of conditional approval, or the plan shall be disapproved. A letter to the Air Pollution Control Officer stating such modifications will be incorporated into the plan shall be used as a basis to approve the plan.
- 5.5.6 An approved plan for a specific project shall be valid for a period of one year from date of approval or conditional approval. Plans shall be resubmitted, annually, at least 60 days prior to expiration date, or the plan shall be disapproved as of the expiration date. If all fugitive dust sources and corresponding Reasonably Available Control Measures or special circumstances remain identical to those identified in the previously approved plan, the resubmittal may contain a simple statement of "no-change". Otherwise a resubmittal shall contain all items specified in Subsections [5.5.3.1](#) and [5.5.3.2](#).
- 5.5.7 A contractor may have on file with the District a pre-approved plan or plans for one or more types of large projects subject to Subsection [5.5.3](#). Prior to initiation of any project, one or more applicable preapproved plan or plans may be specified by the contractor in lieu of filing a new plan or plans. However, a FDPTO shall be applied for each new project.
- 5.5.8 Any person subject to requirements of Subsection [5.5.1](#) making changes to an active operation resulting in it not fitting the definition for a large operation for a period of at least one year, may request reclassification as a non-large operation. To obtain this reclassification, a person shall submit a request in writing to the Air Pollution Control Officer specifying actions which have taken place and have reduced disturbed surface area and/or earth-moving process rate to levels below criteria for large operations. A person shall also indicate criteria for a large operation will not be exceeded during the subsequent 12-month period. The Air Pollution Control Officer shall either approve or disapprove reclassification within 60 days from receipt of a reclassification request. The Air Pollution Control Officer shall disapprove the request if indicated changes cannot be verified. If approved, a person shall be relieved of all requirements under Subsections [5.5.1](#), [5.5.2](#), and [5.5.3](#). Any person so reclassified shall again be subject to requirements of Subsection [5.5.1](#) if, at any time subsequent to reclassification, criteria for large operations are met.