

PROHIBITED EMISSIONS

040.030 DUST CONTROL (Amended 12/88, 12/15/93, 11/16/94; Revised 7/26/02, Effective 11/1/02)

SECTION A - GENERAL

1. PURPOSE: To limit particulate material emissions into the ambient air from any property, operations or activities that may serve as a fugitive dust source. The effect of this regulation shall be to minimize the amount of PM10 emitted into the ambient air as a result of the impact of human activities by requiring measures to prevent, reduce, or mitigate particulate matter emissions.
2. APPLICABILITY: The provisions of this regulation shall apply to, but are not limited to, the following dust generating activities:
 - a. Dismantling or demolition of buildings;
 - b. Public or private construction;
 - c. Mining;
 - d. Processing of sand, gravel, rock or dirt;
 - e. Operation of machines or equipment;
 - f. Operation and use of unpaved parking facilities;
 - g. Operation and use of livestock arenas;
 - h. Operation and use of horse arenas;
 - i. Operation of feed lots;
 - j. Operation and use of raceways for animals or motor vehicles;
 - k. Motor vehicle/off road motor vehicle use on vacant land; or
 - l. Unpaved roads in the PM10 non-attainment area.
3. Except when engaged in commercial agricultural operations, no person may disturb the topsoil by removing, altering, or overlaying the ground cover through scraping, burning, excavating, storing of fill, application of palliative, or any other method on any real property unless reasonable precautions are taken to prevent generation of dust during both the active development phases and thereafter if the property is to remain unoccupied, unused, vacant or undeveloped.

SECTION B - DEFINITIONS: For the purpose of this regulation, the following definitions shall apply.

1. Access Road. Any public or private road open to travel.
2. Bulk Material. Any material, including but not limited to, earth, rock, silt, sediment, sand, gravel, soil, fill, dirt, mud, demolition debris, cotton, trash, cinders, pumice, saw dust, feeds, grains, fertilizers, and dry concrete, which are capable of producing fugitive dust at any location.
3. Bulk Material Handling, Storage, and/or Transporting Operation. The use of equipment, haul trucks, and/or motor vehicles, such as but not limited to, the loading, unloading, conveying, transporting, piling, stacking, screening, grading, or moving of bulk materials, which are capable of producing fugitive dust at any location.

4. Carry-Out/Trackout. Any and all bulk materials that have adhered to and agglomerate on the exterior surfaces of motor vehicles and/or equipment (including tires) and that have fallen onto a paved public roadway.
5. Control Measure. A technique, practice, or procedure used to prevent or minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust. Control measures may include but are not limited to:
 - a. Paving.
 - b. Pre-wetting.
 - c. Applying dust suppressants.
 - d. Stabilizing with vegetation, gravel, re-crushed/recycled asphalt or other forms of physical stabilization.
 - e. Limiting, restricting, phasing and/or rerouting motor vehicle access.
 - f. Reducing vehicle speeds and/or number of vehicle trips.
 - g. Limiting use of off-road vehicles on open areas and vacant lots.
 - h. Utilizing work practices and/or structural provisions to prevent wind and water erosion onto paved public roadways.
 - i. Using dust control implements appropriately.
 - j. Installing one or more grizzlies, gravel pads, and/or wash down pads adjacent to the entrance of a paved public roadway to control carry-out and trackout.
 - k. Keeping open-bodied haul trucks in good repair, so that spillage may not occur from beds, sidewalls, and tailgates.
 - l. Covering the cargo beds of haul trucks to minimize wind-blown dust emissions and spillage.
6. Disturbed Surface Area. A portion of the earth's surface (or material placed thereupon), which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed native condition, thereby increasing the potential for the emission of fugitive dust.
7. Dust Control Implement. A tool, machine, equipment, accessory structure, enclosure, cover, material or supply, including an adequate readily available supply of water and its associated distribution/delivery system, used to control fugitive dust emissions.
8. Dust Control Permit. A written plan describing control measures for a specific project.
9. Dust Generating Activity. Any activity capable of generating fugitive dust.

10. Dust Suppressant. Water, hygroscopic material, solution or water and chemical surfactant, foam, non-toxic chemical stabilizer or any other dust palliative, which is not prohibited for ground surface application by the U.S. Environmental Protection Agency (EPA) or any applicable law, rule, or regulation, as a treatment material for reducing fugitive dust emissions.
11. Freeboard. The vertical distance between the top edge of a cargo container area and the highest point at which the bulk material contacts the sides, front, and back of a cargo container area.
12. Fugitive Dust. The particulate matter, which is not collected by a capture system, which is entrained in the ambient air, and which is caused from human and/or natural activities, such as but not limited to, movement of soil, vehicles, equipment, blasting, and wind. For the purpose of this regulation, fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, or from piledrivers. It does not include emissions from process and combustion sources that are subject to the specific requirements as listed in "Prohibited Emissions" of these regulations.
13. Fugitive Emissions. Emissions of any pollutants, including fugitive dust, which could not reasonably pass through a stack, chimney, vent or a functionally equivalent opening. (Amended 7/28/93)
14. Gravel Pad. A layer of washed gravel, rock, or crushed rock which is at least one inch or larger in diameter, maintained at the point of intersection of a paved public roadway and a work site entrance to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to leaving the work site.
15. Grizzly. A device (i.e., rails, pipes, or grates) used to dislodge mud, dirt and/or debris from the tires and undercarriage of motor vehicles and/or haul trucks prior to leaving the work site.
16. Haul Truck. Any fully or partially open-bodied, self-propelled vehicle including any non-motorized attachments, such as but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle used for transporting bulk materials.
17. Motor Vehicle. A self-propelled vehicle for use on the public roads and highways of the State of Nevada, including any non-motorized attachments, such as but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.
18. Off-Road Vehicle. Any self-propelled conveyance specifically designed for off-road use, including but not limited to, off-road or all-terrain equipment, trucks, cars, motorcycles, motorbikes, or motorbuggies.
19. Owner and/or Operator. Any person who owns, leases, operates, controls, or supervises a dust generating activity subject to the requirements of this regulation.
20. Open Areas and Vacant Lots. For the purpose of this regulation, vacant portions of

residential or commercial lots that are immediately adjacent and owned and/or operated by the same individual or entity are considered one vacant open area or vacant lot.

- a. An unsubdivided or undeveloped tract of land adjoining a developed or a partially developed residential, industrial, institutional, governmental, or commercial area.
 - b. A subdivided residential, industrial, institutional, governmental, or commercial lot, which contains no approved or permitted buildings or structures of a temporary or permanent nature.
 - c. A partially developed residential, industrial, institutional, governmental, or commercial lot.
21. Optimum Moisture Content. Water content at which soil can be compacted to the maximum dry weight by modified compacted effort using ASTM Method D1557 for Optimum Soil Content/Maximum Density.
 22. Pave. To apply and maintain asphalt, concrete, or other similar material to a roadway surface (i.e., asphaltic concrete, concrete payment, chip seal, or rubberized asphalt).
 23. Public Roadways. Any roadways that are open to public travel regardless of ownership.
 24. Silt. Any aggregate material with a particle size less than 75 micrometers in diameter, which passes through a No. 200 Sieve.
 25. Trackout Control Device. A gravel pad, grizzly, wheel wash system, or a paved area, located at the point of intersection of an unpaved area and a paved roadway, that controls or prevents vehicular trackout.
 26. Unpaved Haul/Access Road. Any on-site unpaved road used by commercial, industrial, institutional, and/or governmental traffic.
 27. Unpaved Parking Lot. Any area that is not paved and that is used for parking, maneuvering, or storing motor vehicles.
 28. Unpaved Road. Any road or equipment path that is not paved. For the purpose of this regulation, an unpaved road is not a horse trail, hiking path, bicycle path, or other similar path used exclusively for purposes other than travel by motor vehicles.
 29. Wind-Blown Dust. Visible emissions from any disturbed surface area, which are generated by wind action alone.
 30. Work Site. Any property upon which any dust generating activities occur.

SECTION C - STANDARDS

1. **VISIBLE EMISSIONS PROHIBITION:** The owner and/or operator of a source engaging in dust generating activities shall not allow visible fugitive dust emissions for a period or periods accumulating more than 5 minutes in any hour.

2. STABILIZATION REQUIREMENTS FOR FUGITIVE DUST SOURCES:

- a. Unpaved Parking Lot/Staging Areas: The owner and/or operator of any unpaved parking lot or staging area shall not allow visible fugitive dust emissions for a period or periods accumulating more than 5 minutes in any hour, and either:
 - (1) Shall not allow silt loading equal to or greater than 0.33 oz/ft²; or
 - (2) Shall not allow the silt content to exceed 8 percent.

- b. Unpaved Haul/Access Road: The owner and/or operator of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall not allow visible fugitive dust emissions for a period or periods accumulating more than 5 minutes in any hour, and either:
 - (1) Shall not allow silt loading equal to or greater than 0.33 oz/ft²; or
 - (2) Shall not allow the silt content to exceed 6 percent.

- c. Open Area and Vacant Lot or Disturbed Surface Area: The owner and/or operator of an open area and vacant lot or any disturbed surface area on which no activity is occurring shall meet at least one of the following standards:
 - (1) Maintain a visible crust;
 - (2) Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;
 - (3) Maintain a flat vegetative cover (i.e., attached [rooted] vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50 percent;
 - (4) Maintain a standing vegetative cover (i.e., vegetation that is attached [rooted] with a predominate vertical orientation) that is equal to or greater than 30 percent;
 - (5) Maintain a standing vegetative cover (i.e., vegetation that is attached [rooted] with a predominant vertical orientation) that is equal to or greater than 10 percent and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;
 - (6) Maintain a percent cover that is equal to or greater than 10 percent for non-erodible elements; or
 - (7) Comply with a standard of an alternative test method upon obtaining the written approval from the Control Officer and the U.S.

Environmental Protection Agency.

- d. Open Storage Piles: All open storage piles shall be stabilized by utilizing at least one of the following standards:
 - (1) Maintain a visible crust;
 - (2) Cover or tarp to prevent visible fugitive dust emissions for a period or periods accumulating more than 5 minutes in any hour;
 - (3) Adequate moisture to control fugitive dust or apply water to maintain a soil moisture content at a minimum of 12 percent, as determined by ASTM Method D2216-98, or other equivalent as approved by the Control Officer and the Administrator of EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method D1557-91 (1998) or other equivalent approved by the Control Officer and the Administrator of EPA, maintain at least 70 percent of the optimum soil moisture content;
 - (4) Stabilize material in the stockpile using a palliative for compliance as described in **Sections E.1.b.(3).i and E.1.b.(3).ii** of this Rule;
 - (5) An alternate control measure approved in writing by the Control Officer and the U.S. Environmental Protection Agency.
3. DUST CONTROL PERMIT REQUIREMENTS: The owner and/or operator of a dust generating activity shall apply for and obtain a Dust Control Permit prior to commencement of the dust generating activity. In the Dust Control Permit application, the owner and/or operator shall designate a person responsible for compliance with the "District Board of Health Regulations Governing Air Quality Management." Failure to comply with the provisions of an approved Dust Control Permit shall be deemed a violation of this Rule.
 - a. ELEMENTS OF A DUST CONTROL PERMIT: The Dust Control Permit shall describe all control measures to be implemented before, after, and while conducting any dust generating activity, including weekends, after work hours, and on holidays.
 - b. DUST CONTROL PERMIT REVISIONS:
 - (1) If the Control Officer determines that an approved Dust Control Permit has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed the standards of Section C of this Rule, then the Control Officer shall issue a written notice to the owner and/or operator of such source explaining such determination. The owner and/or operator of such source shall make written revisions to the Dust Control Permit. These revisions shall be made in consultation with the Control Officer and be submitted within three working days of receipt of the Control Officer's written notice. The Control Officer, upon request, may extend such time period. During the time that such owner and/or operator is preparing revisions to the approved Dust

Control Permit, such owner and/or operator must still comply with all requirements of this Rule.

- (2) The owner and/or operator of a dust generating activity shall provide written notification to the Control Officer upon change of ownership and/or responsibility for said Dust Control Permit. The approved Dust Control Permit shall then apply to the new owner and/or operator for all or a portion of the site in which ownership and/or responsibility is stipulated.

c. PROJECT INFORMATION SIGN: The owner and/or operator of a dust generating activity subject to **Section C.3** of this Rule shall comply with the following project information sign requirements:

- (1) The project information sign shall be constructed at the main entrance and be visible to the public at all construction sites;
- (2) Shall meet the project information sign criteria listed in the Dust Control Permit application; and
- (3) Shall remain in place for all phases of the project.

d. EXEMPTIONS:

- (1) The following dust generating activities shall be exempt from **Sections C.3.a, C.3.b, and C.3.c** of this Rule:
 - i. Dust generating activities requiring a Washoe County Air Quality Management Division stationary source Permit to Operate as specified in Rule **030.200**;
 - ii. Dust generating activities less than one (1) acre in size;
 - iii. Playing on a ballfield; and
 - iv. Landscape maintenance. For the purpose of this Rule, landscape maintenance does not include grading, trenching, or any other mechanized surface disturbing activities.
- (2) The Control Officer may exempt the following dust generating activities from the Project Information Sign requirements of **Section C.3.c** of this Rule:
 - i. One unit residential projects;
 - ii. Projects that take less than two weeks to complete;
 - iii. Line projects (i.e., pipelines, cable access lines, etc.); and
 - iv. Other projects deemed appropriate by the Control Officer.

4. WORK PRACTICES: When engaged in the specific activities listed in Subsections a and b, the owner/operator of a source shall comply with the following work practices, in addition to any approved control measures in the applicable Dust Control Permit or Permit to Operate, to minimize fugitive dust emissions associated with haul trucks.
 - a. Bulk Material Hauling Off-Site Onto Paved Public Roadways:
 - (1) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment floor, sides, and/or tailgate.
 - (2) At least one of the following control measures.
 - i. Cover all haul trucks with a tarp or other suitable closure; or
 - ii. Bulk materials must contain enough moisture and/or dust suppressant to prevent fugitive dust emissions during transport; or
 - iii. Load all haul trucks such that the freeboard is not less than six (6) inches.
 - b. Spillage, Carry-Out, Erosion, and/or Trackout:
 - (1) Install and maintain a suitable trackout control device that controls and prevents trackout and removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site at all exits onto a paved public roadway.
 - (2) Clean-up spillage, carry-out, erosion, and/or trackout on the following time schedule:
 - i. At the end of the day, when spillage, carry-out, erosion, and/or trackout extend beyond the project boundaries; or
 - ii. Immediately at any time during the day if trackout is creating visible fugitive dust emissions for a period or periods accumulating more than 5 minutes in any hour.
 - c. EXEMPTIONS: The Control Officer may exempt the following work practices from **Section C.4** of this Rule:
 - (1) Construction, maintenance, and/or repair of paved roadways; and
 - (2) Application of de-icing and traction materials for wintertime driving safety as specified in **Rule 040.031, Street Sanding Operations**.

SECTION D – ADMINISTRATIVE REQUIREMENTS

1. DUST SCHOOL ATTENDANCE: Upon the issuance of a Notice of Violation Citation for **Sections C.1, C.2, or C.4** of this Rule upheld by the Board of Health, the person

causing the dust generation shall attend the next available "Dust School" as provided by the Air Quality Management Division of the District Health Department. Failure to attend the "Dust School" shall constitute another violation of the regulations along with the appropriate penalty as specified in **Section 020.040** of the District Regulations.

SECTION E –COMPLIANCE AND RECORDS

1. COMPLIANCE DETERMINATION: To determine compliance with this Rule, the following test methods shall be conducted.
 - a. Visible Emissions Observations:
 - (1) Visible emissions shall be determined by observations of visible emissions conducted in accordance with U.S. Environmental Protection Agency Reference Method 22 using an observation period of not less than 5 minutes in any hour.
 - b. Stabilization Observations (Test Methods Text in Appendix A):
 - (1) Unpaved Parking Lots
 - i. Test Methods of Unpaved Roads and Unpaved Lots.
 - (2) Unpaved Haul/Access Roads
 - i. Test Methods for Stabilization for Unpaved Roads and Unpaved Parking Lots.
 - (3) Open Areas and Vacant Lot or Disturbed Surface Area: One of the test methods listed below.
 - i. Test Methods for Stabilization – Visible Crust Determination.
 - ii. Test Methods for Stabilization – Determination of Threshold Friction Velocity (TFV).
 - iii. Test Methods for Stabilization – Determination of Flat Vegetative Cover.
 - iv. Test Methods for Stabilization – Determination of Standing Vegetative Cover.
 - v. Test Methods for Stabilization – Rock Test Method.
2. RECORDKEEPING:
 - a. Any person who conducts dust-generating activities subject to **Section C.3** of this Rule shall maintain daily records demonstrating compliance with **Section C** of this Rule.
 - (1) The Dust Control Permit shall be kept on the specific job site and

made available to the Control Officer immediately upon request.

(2) Daily records shall be made available to the Control Officer immediately upon request.

b. Any person who conducts dust-generating activities exempt from **Section C.3** of this Rule shall maintain daily records demonstrating compliance with **Sections C.1, C.2, and C.4** of this Rule.

(1) Daily records shall be made available to the Control Officer immediately upon request.

3. RECORD RETENTION: Daily records required by **Section E.2** of this Rule shall be retained for at least one (1) year following termination of the dust generating activity.