

**SECTION 92: FUGITIVE DUST CONTROL REQUIREMENTS FOR  
UNPAVED PARKING LOTS AND STORAGE AREAS**

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## 92.1 APPLICABILITY

- (a) Section 92 applies to all unpaved parking lots and storage areas, including those with public access at stationary sources, that are 5,000 square feet or larger and are located in Hydrographic Areas 212 (Las Vegas Valley), 216 or 217 (Apex Valley), or any other hydrographic area upon it being designated as nonattainment for PM<sub>10</sub>; or in any other hydrographic area that becomes subject to a PM<sub>10</sub> maintenance plan as defined under Title 42, Section 7505a of the U.S. Code (42 U.S. Code 7505a), and is not regulated by Section 94, “Permitting and Dust Control for Construction and Temporary Commercial Activities and Fugitive Dust Control at Stationary Sources.”
- (b) Section 92 applies to unpaved parking lots and storage areas that do not have public access at stationary sources in Clark County as part of the consideration of a RACT, BACT, or LAER determination pursuant to Sections 12.1-12.4 of the Clark County Air Quality Regulations (AQRs). In accordance with this determination, provisions of Section 92 shall be incorporated into the stationary source permit.
- (c) Unpaved parking lots and storage areas include, but are not limited to, automobile impound yards, wrecking yards, automobile dismantling yards, salvage yards, material handling yards, equestrian staging areas, and storage yards.

## 92.2 DEFINITIONS

Unless the context requires otherwise, the following terms have the meanings set forth below for the purposes of this section. When a term is not defined, it shall have the meaning provided in Section 0 of the AQRs, Chapter 445B of the Nevada Revised Statutes (NRS), the Clean Air Act (the Act), or common usage, in that order of priority.

“Alternative asphalt paving” means the application of milled recycled asphalt pavement material in accordance with department specifications that are preapproved in writing by the Control Officer.

“Clean gravel” means a mineral or rock aggregate ranging in size from 0.25 to 3 inches on its longest dimension that is either natural or the product of a mineral processing operation and contains less than 5% silt (measured by the percent of soil fines that will pass through a 200-mesh sieve) by weight as determined using “Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples” in AP-42 (App. C.2.3, “Silt Analysis”).

“Equestrian staging area” means the area(s) used exclusively to load, unload, and saddle horses; organize riders before a ride; and park vehicles used to transport horses.

“Existing unpaved parking lot(s) and(or) storage area(s)” means parking and storage areas that existed prior to January 1, 2003, or parking and storage areas with public access that existed prior to December 31, 2024, at a stationary source, in Hydrographic

Areas 212, 216, or 217; in any other hydrographic area upon its being designated as nonattainment for PM<sub>10</sub>; or in any other hydrographic area that becomes subject to a PM<sub>10</sub> maintenance plan, as defined under 42 U.S.C. 7505a, and is in compliance with all applicable state and local regulations and codes, including those related to land use and zoning.

## **92.3 REQUIREMENTS**

### **92.3.1 New Parking Lots or Storage Areas**

- (a) New parking lots constructed after January 1, 2003, or constructed with public access after December 31, 2024, at a stationary source, as applicable, in Hydrographic Areas 212, 216, or 217; in any other hydrographic area upon its being designated as nonattainment for PM<sub>10</sub>; or in any other hydrographic area that becomes subject to a PM<sub>10</sub> maintenance plan, as defined under 42 U.S.C. 7505a, must be paved.
- (b) New storage areas constructed after January 1, 2003, or constructed with public access after December 31, 2024, at a stationary source, as applicable, in Hydrographic Areas 212, 216, or 217; in any other hydrographic area upon its being designated as nonattainment for PM<sub>10</sub>; or in any other hydrographic area that becomes subject to a PM<sub>10</sub> maintenance plan, as defined under 42 U.S.C. 7505a, must comply with the control measures described in Sections 92.3.4 (a), (b) or (d).

### **92.3.2 Existing Unpaved Parking Lot(s) or Storage Area(s)**

The owner and/or operator of existing unpaved parking lot(s) or storage area(s) shall implement one or more of the control measures in Section 92.3.4 as needed to comply with the stabilization standards in Section 92.4.

### **92.3.3 Paving Exemptions for New Parking Lot(s) or Storage Area(s)**

The following activities shall be exempt from the paving requirement in Section 92.3.1, but must comply with one or more of the control measures in Section 92.3.4.

- (a) Parking lots for rural public facilities, such as trailheads, campgrounds, and similar facilities, where paved parking lots would conflict with the rural nature of these facilities. A rural public facility shall not include any facility located within the Bureau of Land Management (BLM) Disposal Boundary.
- (b) An area used for storing and handling of landscaping, aggregate, and other similar bulk materials, provided that all access, parking, and loading areas primarily used by rubber-tired equipment are paved.

- (c) An area used primarily for storage of non-rubber tired vehicles or tracked or heavy equipment that the Control Officer has determined to be of such weight as to damage or destroy pavement (e.g., heavy equipment), provided that all access, parking, and loading areas primarily used by rubber-tired vehicles are paved.
- (d) An area used primarily for automobile impound yards, wrecking yards, automobile dismantling yards, and salvage yards, provided that all access, parking, and loading areas are paved.
- (e) Equestrian staging areas designed and used exclusively for the loading, unloading, and saddling of horses for equestrian activities. Posted speed limits for vehicles using such designated areas shall not exceed 10 miles per hour.
- (f) Unpaved parking lots and/or storage areas utilized for 35 days or less per calendar year (continuously or intermittently).

#### **92.3.4 Control Measures**

For the purpose of Section 92, the control measures set forth below shall be considered effectively implemented when the unpaved parking lot or storage area meets the stabilization standards described in Section 92.4.

- (a) Pave, as defined in Section 0, "Definitions."
- (b) Apply and maintain alternative asphalt paving with prior written approval from the Control Officer.
- (c) Uniformly apply and maintain clean gravel to a depth of 2 inches.
- (d) Apply and maintain an alternative control measure with prior written approval from the Control Officer.

#### **92.4 STABILIZATION STANDARDS**

- (a) Fugitive dust emissions from unpaved parking lots or storage areas shall not exceed:
  - (1) 20% opacity based on the Opacity Test Method described in Section 92.6.1; or
  - (2) 35% opacity based on the Instantaneous Method described in Section 92.6.2.
- (b) Unpaved parking lots or storage areas shall not exceed 0.33 oz/ft<sup>2</sup> silt loading or 6% silt content, as determined by Section 92.6.3.

- (c) No owner and/or operator of an unpaved parking lot or storage area shall allow fugitive dust emissions to cross a property line or a facility boundary of a stationary source.

## **92.5 RECORDKEEPING AND REPORTING**

- (a) Any person subject to the requirements of Section 92 shall compile and retain records that provide evidence of control measure application by indicating (1) type of treatment or control measure, (2) extent of coverage, and (3) date applied. The records and supporting documentation shall be made available to the Control Officer within 24 hours of a written request.
- (b) Copies of the records required by Section 92.5(a) shall be retained for at least one year. Facilities subject to Section 12.5 shall maintain records in accordance with the recordkeeping requirements of Title 40, Part 70 of the Code of Federal Regulations.

## **92.6 TEST METHODS**

### **92.6.1 Opacity Test Method**

The purpose of this test method is to estimate the percent opacity of fugitive dust plumes caused by vehicle movement on unpaved parking lots and storage areas. This method can only be conducted by an individual who has received certification as a qualified Visible Emissions Evaluator (e.g., EPA Method 9-certified observer).

- (a) Position: Stand at least 16.5 feet from the fugitive dust source in order to provide a clear view of the emissions, with the sun oriented in the 140° sector to the back. Make opacity observations so that the line of vision is approximately perpendicular to the dust plume and wind direction. If multiple plumes are involved, do not include more than one plume in the line of sight at one time.
- (b) Field Records: Record the fugitive dust source location, source type, method of control used (if any), evaluator's name, certification data and affiliation, and a sketch of the observer's position relative to the fugitive dust source. Also, record the time, estimated distance to the fugitive dust source location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and color of the plume and type of background on the visible emission observation form when opacity readings are both initiated and completed.
- (c) Observations: Make opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of vision. Make opacity observations approximately 1 meter above the surface from which the plume is generated. Note that the observation is to be

made at only one visual point upon generation of a plume, as opposed to visually tracking the entire length of a dust plume as it is created along a surface. Make two observations per vehicle, beginning with the first reading at zero seconds and the second reading at five seconds. The zero-second observation should begin immediately after a plume has been created above the surface involved. Do not look continuously at the plume, but instead observe the plume briefly at zero seconds and then again at five seconds.

- (d) Record Observations: Record the opacity observations to the nearest 5% on an observational record sheet. Each momentary observation recorded represents the average opacity of emissions for a five-second period. While it is not required by the test method, EPA recommends that the observer estimate the size of vehicles that generate dust plumes for which readings are taken (e.g., mid-size passenger car, heavy-duty truck) and the approximate speeds the vehicles are traveling when readings are taken.
- (e) Repeat paragraphs (c) and (d) of this section until you have recorded a total of 12 consecutive opacity readings. This will occur once six vehicles have driven on the source in the line of observation for which proper readings can be taken. The 12 consecutive readings must be taken within the same period of observation, but must not exceed 1 hour. Observations immediately preceding and following interrupted observations can be considered consecutive.
- (f) Average the 12 opacity readings together. If the average opacity reading equals 20% or lower, the source is in compliance with the opacity standard described in Section 92.

### **92.6.2 Instantaneous Method**

This procedure is for the instantaneous determination of the opacity of fugitive dust emissions by a qualified Visible Emissions Evaluator (e.g., EPA Method 9-certified observer). The qualified observer should do the following:

- (a) Position: Stand at a position at least 20 feet from the fugitive dust source in order to provide a clear view of the emissions with the sun oriented in the 140° sector to the back. Consistent as much as possible with maintaining the above requirements, make opacity observations from a position such that the line of sight is approximately perpendicular to the plume and wind direction. The observer may follow the fugitive dust plume generated by mobile earthmoving equipment as long as the sun remains oriented in the 140° sector to the back. As much as possible, do not include more than one plume in the line of sight at one time.

- (b) **Field Records:** Record the name of the site, fugitive dust source type (e.g., earthmoving, grading, storage pile, material handling, transfer, loading, sorting), method of control used (if any), observer's name, certification data, and affiliation, and a sketch of the observer's position relative to the fugitive dust source. Also record the time, estimated distance to the fugitive dust source location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), observer's position relative to the fugitive dust source, color of the plume, and type of background on the visible emission observation form when opacity readings are initiated and completed.
- (c) **Observations:** Make opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of sight. Make opacity observations at a point just beyond where material is no longer being deposited out of the plume (normally 3 feet above the surface from which the plume is generated). The initial observation should begin immediately after a plume has been created above the surface involved. Do not look continuously at the plume, but instead observe the plume momentarily at 5-second intervals. For fugitive dust from earthmoving equipment, make opacity observations at a point just beyond where material is not being deposited out of the plume (normally three feet above the mechanical equipment generating the plume).
- (d) **Recording Observations:** Record the opacity observations to the nearest 5% every 5 seconds for 12 consecutive observations on a Clark County DAQ – Visible Emission Evaluation (VEE) Form. The 12 consecutive readings must be taken within 1 minute. Each momentary observation recorded represents the average opacity of emissions for a 5-second period.
- (e) **Data Reduction for Instantaneous Method:** Sets shall consist of 12 consecutive observations made within 1 minute. For each set, calculate the average opacity. In no case shall two sets overlap, resulting in multiple violations. Calculate the average by summing the opacity of the 12 observations and dividing this sum by 12. If the average opacity of one set is higher than 35%, the source is not in compliance with the opacity standard described in Section 92.

### **92.6.3 Silt Content Test Method**

The purpose of this test method is to estimate the silt content of the trafficked parts of unpaved parking lots and storage areas. The higher the silt content, the greater the amount of fine dust particles that are entrained into the atmosphere when cars and trucks drive on unpaved parking lots or storage areas.

- (a) Equipment:
- (1) Set of sieves with the following openings: 4 millimeters (mm), 2 mm, 1 mm, 0.5 mm, and 0.25 mm; a lid; and a collector pan;
  - (2) Small whiskbroom or paintbrush with stiff bristles and dustpan 1 foot in width (the broom/brush should preferably have one thin row of bristles no longer than 1.5 inches in length);
  - (3) Spatula without holes;
  - (4) Small scale with half-ounce increments (e.g., postal/package scale);
  - (5) Shallow, lightweight container (e.g., plastic storage container);
  - (6) Sturdy cardboard box or other rigid object with a level surface;
  - (7) Basic calculator;
  - (8) Cloth gloves (optional for handling metal sieves on hot, sunny days);
  - (9) Sealable plastic bags (if sending samples to a laboratory); and
  - (10) Pencil/pen and paper.
- (b) Look for a routinely traveled surface, as evidenced by tire tracks (only collect samples from surfaces that are not damp due to precipitation or dew). This statement is not meant to be a standard in itself for dampness where watering is being used as a control measure; it is only intended to ensure that surface testing is done in a representative manner. Use caution when taking samples to ensure personal safety with respect to passing vehicles. Gently press the edge of a dustpan (1 foot in width) into the surface four times to mark an area that is 1 square foot. Collect a sample of loose surface material by using a whiskbroom or brush to slowly sweep the material into the dustpan, minimizing escape of dust particles. Use a spatula to lift heavier elements such as gravel. Only collect dirt/gravel to an approximate depth of 3/8 inch (1 cm) in the 1 square foot area. If you reach a hard, underlying subsurface that is less than 3/8 inch in depth, do not continue collecting the sample by digging into the hard surface. Only collect a surface sample of loose material down to 1 cm. In order to confirm that samples are collected to 1 cm in depth, a wooden dowel or other similar narrow object at least 1 foot in length can be laid horizontally across the survey area while a metric ruler is held perpendicular to the dowel.

- (1) At this point, the sample can be collected into a plastic bag or container and taken to an independent laboratory for silt content analysis. Paragraph (k) below references the procedure the laboratory is required to follow.
- (c) Place a scale on a level surface. Place a lightweight container on the scale. Zero the scale with the weight of the empty container on it. Transfer the entire sample collected in the dustpan to the container, minimizing escape of dust particles. Weigh the sample and record its weight.
- (d) Stack a set of sieves in order according to the size openings specified above, beginning with the largest size opening (4 mm) at the top. Place a collector pan underneath the bottom (0.25 mm) sieve.
- (e) Carefully pour the sample into the sieve stack, minimizing escape of dust particles by slowly brushing material into the stack with a whiskbroom or brush (on windy days, use the trunk or door of a car as a wind barricade). Cover the stack with a lid. Lift the sieve stack and shake it vigorously up, down, and sideways for at least 1 minute.
- (f) Remove the lid from the stack and disassemble each sieve separately, beginning at the top. As each sieve is removed, examine it to make sure that all material has been sifted to the finest sieve through which it can pass: i.e., the material in each sieve (besides the top one, which captures a range of larger elements) should look the same size. If this is not the case, restack the sieves and collector pan, cover the stack with the lid, and shake it again for at least one minute. (Only reassemble the sieve(s) containing material that requires further sifting.)
- (g) After disassembling the sieves and collector pan, slowly sweep the material from the collector pan into the empty container originally used to collect and weigh the entire sample. Take care to minimize escape of dust particles. Do not do anything with material captured in the sieves, only that from the collector pan. Record the weight of the container with the material from the collector pan.
- (h) If the source is an unpaved road, multiply the resulting weight by 0.38. If the source is an unpaved parking lot or storage area, multiply the resulting weight by 0.55. The resulting number is the estimated silt loading. Divide by the total weight of the sample recorded in paragraph (b) of this section and multiply by 100 to estimate the percent silt content.
- (i) Select another two routinely traveled portions of the unpaved road or unpaved parking lot and repeat this test method. Once you have

calculated the silt loading and percent silt content of the three samples collected, average the results.

- (j) Examine the results. If the average silt loading is less than 0.33 oz/ ft<sup>2</sup>, the surface is stable. If the average silt loading is greater than or equal to 0.33 oz/ft<sup>2</sup>, examine the average percent silt content. If the source is an unpaved parking lot or storage area and the average percent silt content is 8% or less, the surface is stable. If field test results are within 2% of the standard (e.g., 6–10% silt content on an unpaved parking lot or storage area), collect three additional samples from the source (see paragraph (b) of this section) and take them to an independent laboratory for silt content analysis.
- (k) Another option is to collect three samples from the source in accordance with Section 92.6.3(b) and send them to an independent laboratory for silt content analysis. The laboratory is required to use the test process described in Volume 1, Appendix C.2.3 (“Silt Analysis”) of *Procedures for Laboratory Analysis of Surface/Bulk Loading Samples* (EPA 1995, 5th edition).

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