

**CLARK COUNTY**

**AIR QUALITY REGULATIONS**

**SECTION 94 – PERMITTING AND DUST CONTROL FOR  
CONSTRUCTION ACTIVITIES**

**94.1 Purpose.**

94.1.1 The purpose of this section of the Air Quality Regulations is:

- (a) To limit the EMISSION of PARTICULATE MATTER into the AMBIENT AIR by preventing, controlling, and mitigating FUGITIVE DUST from CONSTRUCTION ACTIVITIES; and
- (b) To establish FUGITIVE DUST control standards for Clark County, define reasonable precautions for the prevention and control of FUGITIVE DUST from all CONSTRUCTION ACTIVITIES and to establish thresholds for enforcement of these standards.

**94.2 Applicability.**

94.2.1 This section of the Air Quality Regulations applies to all CONSTRUCTION ACTIVITIES that disturb or have the potential to disturb soils and that emit or have the potential to emit particulate matter into the atmosphere. This section covers the requirements for a Dust Control Permit and a Dust Mitigation Plan as well as the application procedures.

94.2.2 For the purpose of this Regulation, CONSTRUCTION ACTIVITIES include, but are not limited to, the following practices:

- (a) Land clearing, maintenance, and land cleanup using machinery;
- (b) soil and rock excavation or removal;
- (c) soil or rock hauling;
- (d) soil or rock crushing or screening;
- (e) filling, compacting, stockpiling and grading;
- (f) explosive blasting;
- (g) demolition;
- (h) implosion;

- (i) handling of building materials capable of entrainment in air (e.g., sand, cement powder);
- (j) abrasive blasting;
- (k) concrete, stone, and tile cutting;
- (l) mechanized trenching;
- (m) initial landscaping;
- (n) operation of motorized machinery;
- (o) driving vehicles on a CONSTRUCTION site; and
- (p) establishing and/or using staging areas, parking areas, material storage areas, or access routes to or from a CONSTRUCTION site.

94.2.3 This regulation shall not apply to operation of emission units or activities permitted under any other section of the Air Quality Regulations, with the specific exception that any CONSTRUCTION ACTIVITIES that occur at such facilities and the land area that Various Location Operating Permits are located on shall be subject to this regulation. In all permits issued under the Air Quality Regulations the provisions of this section shall be considered as part of a BACT determination.

94.2.4 This regulation shall not apply to NORMAL FARM CULTURAL PRACTICES and existing equestrian facilities that are in compliance with zoning requirements.

94.2.5 This regulation shall not apply to emergency activities that may disturb the soil, conducted by any utility or government agency in order to prevent public injury or restore critical utilities to functional status.

### 94.3 **Definitions.**

94.3.1 For the purpose of this section of the Air Quality Regulations, terms listed in this subsection have the meanings ascribed.

94.3.2 **Best Available Control Measures (BACM):** means those control measures that are the best available with current technology for reducing or eliminating the release of particulate matter into the atmosphere from construction activities. These include but are not limited to all measures listed in the Construction Activities Dust Control Handbook as Best Management Practices, any control measure required by a Corrective Action Order, and any other control measures required by the Control Officer.

94.3.3 **Construction Activities Dust Control Handbook:** means the reference manual used to complete a Dust Control Permit and a Dust Mitigation Plan, and contains a listing of the Best Management Practices, copies of

which are on file in the office of the Clark County Department of Air Quality and Environmental Management.

94.3.4 Department or DAQEM: means the Clark County Nevada, Department of Air Quality and Environmental Management.

94.3.5 Dust Mitigation Plan: means an attachment to a Dust Control Permit that lists all the Construction Activities that shall occur and the Best Management Practices that shall be used, to mitigate dust at a permitted site. Upon approval of the application the Dust Mitigation Plan becomes an enforceable part of the Dust Control Permit.

94.3.6 Gravel: means a mineral or rock aggregate ranging in size from 0.25 inch to 3 inch on its longest dimension that is either natural or the product of a mineral processing operation and contains no more than 6% silt, by weight.

94.4 **Permits Required, Exemptions from Required Permit and Responsibility when Exempt.**

94.4.1 Prior to engaging in any CONSTRUCTION ACTIVITIES, the property OWNER AND/OR OPERATOR, who is the owners designee shall apply for and obtain a DUST CONTROL PERMIT from the Clark County Department of Air Quality and Environmental Management.

94.4.2 A DUST CONTROL PERMIT shall not be required for soil disturbing or CONSTRUCTION ACTIVITIES less than 0.25 acre in overall area, mechanized trenching less than one hundred (100) feet in length, or for mechanical demolition of any structure smaller than one thousand (1,000) square feet.

94.4.3 The following activities shall not require a DUST CONTROL PERMIT:

- (a) Landscaping by an individual at his/her place of residence;
- (b) EMERGENCY maintenance activities conducted by government agencies on publicly maintained roads, road shoulders, right-of-ways and on public flood control facilities; or,
- (c) Weed removal or dust palliative application projects conducted solely for the purpose of compliance with weed abatement or vacant land dust control regulations, wherein no grade elevation changes, no soil or rock is imported or exported, or no cut and fill operations occur. Importing of gravel or rock for use as a dust palliative is allowed under this subsection.

94.5 **Permit Applications.**

- 94.5.1 Application for issuance or renewal of a DUST CONTROL PERMIT shall be made on a form and in a manner prescribed by the CONTROL OFFICER.
- 94.5.2 Each application shall be accompanied by payment of a fee in accordance with Section 18.
- 94.5.3 Public agency maintenance projects, performed by that agency's employees, may be eligible for a waiver of permit fees upon approval of the CONTROL OFFICER.
- 94.5.4 All applications for a DUST CONTROL PERMIT shall include a Dust Mitigation Plan with appropriate CONTROL MEASURES from the Construction Activities Dust Control Handbook for every CONSTRUCTION ACTIVITY to be conducted. Other CONTROL MEASURES that are at least as effective as CONTROL MEASURES contained in the Construction Activities Dust Control Handbook may be implemented provided they meet the criteria outlined in Section 2 of the introduction to the Best Management Practices section of the handbook and with the approval of the CONTROL OFFICER.
- 94.5.5 An application for a DUST CONTROL PERMIT for a CONSTRUCTION project ten (10) acres or more in area, for trenching activities one (1) mile or greater in length, or for structure demolition using implosive or explosive blasting techniques, shall be required to submit a detailed supplement to the Dust Mitigation Plan. This supplement shall be in the form of a written report and shall, at minimum, detail the project description, the area and schedule of the phases of land disturbance, the Control Measures and the Contingency Measures to be used for all CONSTRUCTION ACTIVITIES. This supplement shall become part of the DUST CONTROL PERMIT as an enforceable permit condition.
- 94.5.6 An application for a DUST CONTROL PERMIT that includes demolition of a structure One thousand (1,000) square feet or greater in area or explosive blasting of rock or soil, shall include the appropriate supplemental form that is provided in Attachment 1 of the Construction Activities Dust Control Handbook for each activity. These forms shall become part of the DUST CONTROL PERMIT as an enforceable permit condition.
- 94.5.7 An application for a Dust Control Permit for a Construction project of fifty (50) acres or more in area shall contain an actual soils analysis of the entire project. The soils analysis shall use the appropriate ASTM test method to determine soil types. If the soils analysis identifies two or more soil types, the area of each soil type shall be shown on a map of the project. A copy of the map shall be included in the application for the Dust Control Permit. The soils analysis shall utilize at least one (1) sample taken from the top one (1) foot of soil for each soil type identified. The

soils analysis shall use the appropriate ASTM test to determine the silt content and optimum moisture of the sample(s). The application for the Dust Control Permit shall contain the particulate emission potential (PEP) for each soil type identified calculated from the results of the soils analysis and the Silt Content vs. Optimum Moisture Content Chart (figure 2) in the Construction Activities Dust Control Handbook. The choice of Best Management Practices for the Dust Mitigation Plan may be different for each soil type area, if not, the highest PEP identified on the project shall be used.

94.5.8 The application shall be signed by the property owner or the owner's designee as listed on the "Owner's Designee for Dust Control Permit for Construction Activities" form.

94.5.9 Upon approval, the completed DUST CONTROL PERMIT application, Dust Mitigation Plan and related maps and forms shall become a part of the DUST CONTROL PERMIT.

94.6 **DUST CONTROL PERMIT Requirements.**

94.6.1 Issuance or renewal of each DUST CONTROL PERMIT requires payment of a DUST CONTROL PERMIT fee in accordance with Section 18.

94.6.2 A DUST CONTROL PERMIT is to be granted subject to the right of inspection of such affected land without prior notice by the CONTROL OFFICER.

94.6.3 The permit shall be granted subject to, but not limited to, the following conditions:

- (a) The permittee is responsible for ensuring that all PERSONS abide by the conditions of the permit and these regulations;
- (b) The permittee is responsible for supplying complete copies of the DUST CONTROL PERMIT including the Dust Mitigation Plan, to all project contractors and subcontractors; and,
- (c) The permittee is responsible for all permit conditions, until a Certificate of Project Completion (form DCP 08 see Attachment 1) has been submitted by the permittee and approved by the Control Officer.

94.6.4 The signature of the OWNER AND/OR OPERATOR who is the OWNER's designee on the DUST CONTROL PERMIT shall constitute agreement to accept responsibility for meeting the conditions of the permit and for ensuring that Best Available Control Measures are implemented throughout the project site.

- 94.6.5 Requirements and conditions of the DUST CONTROL PERMIT shall be made a part of the specifications of the CONSTRUCTION contract between the owner and prime contractor and contracts between the prime contractor and applicable subcontractors. Said contracts must provide a monetary allowance for any dust control options specified in the Dust Mitigation Plan. The amount of the allowance may be specified either by the OWNER, competitively bid, or negotiated by and amongst the parties.
- 94.6.6 Projects less than 0.25 acres in area under common control that are either contiguous or separated only by a public or private roadway and that cumulatively equal or exceed 0.25 acre in area are also required to obtain a DUST CONTROL PERMIT. These projects are required to meet all DUST CONTROL PERMIT requirements based on cumulative area. All contiguous projects under common control may be required to obtain and operate under a single permit, at the discretion of the CONTROL OFFICER.
- 94.6.7 A DUST CONTROL PERMIT shall be required for routine, public agency road maintenance, road shoulder maintenance, flood control facility maintenance, and maintenance activities that disturb soil and are capable of causing FUGITIVE DUST. Such Dust Control Permits may be issued based upon written monthly, quarterly, semi-annual, or annual schedules of work for routine maintenance activities. Such permits shall include a Dust Mitigation Plan listing all activities to be performed that may disturb the soil, and shall include BEST MANAGEMENT PRACTICES for all these activities. Public agencies shall quantify miles and acres of maintenance activities to be performed under the conditions of the Dust Control Permit.
- 94.6.8 The permit holder shall notify the DEPARTMENT OF AIR QUALITY AND ENVIRONMENTAL MANAGEMENT in writing within ten (10) days following the cessation of active operations on all or part of a CONSTRUCTION site when cessation will extend thirty (30) days or longer.
- 94.6.9 A Dust Control Permit is valid for one calendar year from the date of issuance.
- 94.6.10 A complete copy of the Dust Control Permit shall be kept on the project site at all times that Construction Activities occur and made available upon request of the Control Officer.
- 94.7 **General and Administrative Standards.**
- 94.7.1 Anyone engaging in CONSTRUCTION ACTIVITIES on a site having a Dust Control Permit shall be subject to all conditions set forth in that permit. Failure to comply with any condition set forth in the permit shall be in violation of this section of the Air Quality Regulations.

- 94.7.2 The Construction Activities Dust Control Handbook, excluding all attachments, is adopted and made a part of this section of the Air Quality Regulation, as if it were fully set forth herein, except as amended by this Regulation.
- 94.7.3 **DUST CONTROL PERMIT: Restrictions on issuance; Suspension; Revocation; Requirement for Bond; Right to Appeal:**
- 94.7.3.1 Permits shall not be issued to an applicant having outstanding unpaid DAQEM fees and/or penalties, not under appeal.
- 94.7.3.2 If an OWNER AND/OR OPERATOR has three (3) Notices of Violation that have been adjudicated by the HEARING OFFICER at the same project for which the Dust Control Permit was issued, the CONTROL OFFICER or his/her representative may suspend or revoke the permit. Upon suspension or revocation of a permit, all activities that are authorized by that permit shall cease. The CONTROL OFFICER shall post notices of suspension or revocation conspicuously on the property involved. The notice shall state the reasons and indicate the date and time of suspension and/or revocation. The suspension or revocation shall remain in effect until such time as rescinded by the CONTROL OFFICER. If the permit has been suspended, the permit may be reinstated. If revoked, a new permit will not be issued until an application is made and fees paid in accordance with Section 18 of these regulations. The permittee shall have a right to hearing before the HEARING OFFICER within five (5) working days from date of issuance of the suspension or revocation. Alternatively, in such instances, the CONTROL OFFICER may require compliance with Subsection 94.7.6 for all operators of earth moving or soil disturbing equipment.
- 94.7.3.3 If during any 180 day period an OWNER AND/OR OPERATOR has three (3) NOTICES OF VIOLATION that have been adjudicated by the HEARING OFFICER for the same construction site, the CONTROL OFFICER shall require the posting of a surety bond to ensure implementation of the mitigation measures set forth in the approved Dust Control Permit for the subject site. If an OWNER AND/OR OPERATOR has two (2) or more NOTICES OF VIOLATION that have been adjudicated by the HEARING OFFICER from the DAQEM for: failure to obtain a Dust Control Permit; failure to implement BEST MANAGEMENT PRACTICES; or failure to comply with a Corrective Action Order, the CONTROL OFFICER may, as a condition of obtaining or maintaining a Dust Control Permit, issue a Corrective Action Order requiring the OWNER AND/OR OPERATOR to post a surety bond to ensure the implementation of the mitigation measures set forth in said Dust Control Permits.

The OWNER AND/OR OPERATOR shall provide the CONTROL OFFICER the surety bond executed in a form acceptable to the CONTROL OFFICER for the approved Dust Control Permit as the principal with a corporation authorized to transact surety business in the State of Nevada. The OWNER AND/OR OPERATOR shall condition the surety bond upon the faithful performance of all other conditions of the permit and faithful compliance with the provisions of these regulations. The surety bond shall remain in effect until the construction activity specified in the said Dust Control Permit is complete and the department closes the said Dust Control Permit. The amount of each bond required by this section shall equal the estimated cost of implementing the dust CONTROL MEASURES set forth in the approved Dust Control Permit plus an additional 10% of the estimated cost to cover contingencies, as determined by the DAQEM.

94.7.3.4 Any PERSON aggrieved by a decision of the CONTROL OFFICER pursuant to this section may appeal in accordance with Section 7 of these Regulations.

94.7.4 **Corrective Action Orders (CAO) and Notices of Violation (NOV).**

94.7.4.1 If it is found that any provision of Section 94, a DUST CONTROL PERMIT, or a Dust Mitigation Plan has not been complied with, the CONTROL OFFICER may issue a Corrective Action Order to any OWNER AND/OR OPERATOR or other PERSON that they may be in violation of these regulations and said finding shall be corrected within a specified period of time, dependent upon the scope and extent of the problem.

94.7.4.2 The failure to comply with the corrective measures of a Corrective Action Order within the specified period of time shall be a violation of this section of the Air Quality Regulations.

94.7.4.3 Regardless of whether a Corrective Action Order has been issued, the CONTROL OFFICER may issue a Notice of Violation upon determination that the OWNER AND/OR OPERATOR is out of compliance with any provisions of this section of the Air Quality Regulations, a DUST CONTROL PERMIT, a Dust Mitigation Plan, or upon the failure to comply with a previously issued Corrective Action Order.

94.7.4.4 The CONTROL OFFICER, or his/her designee shall be further empowered to enter upon any said land where any loose soil or dust problem exists, and to take such remedial and corrective action as may be deemed appropriate to cope with and relieve, reduce, or remedy the loose soil, dust situation or condition, when the OWNER AND/OR OPERATOR fails to do so.

- 94.7.4.4.1 Any cost incurred in connection with any such remedial or corrective action by the Department of Air Quality and Environmental Management or any PERSON acting for the Department of Air Quality and Environmental Management shall be reimbursed by the land OWNER AND/OR OPERATOR. If these costs are not reimbursed the CONTROL OFFICER may request a lien be placed on the subject lands that shall remain in full force and effect until any and all such costs have been collected.
- 94.7.4.5 Any additional CONTROL MEASURES prescribed by the CONTROL OFFICER in a Corrective Action Order, issued to the holder of a Dust Control Permit, shall become a part of that permit's Dust Mitigation Plan.
- 94.7.5 **Dust Control Monitor.**
- 94.7.5.1 Any CONSTRUCTION project having 50 acres or more of actively disturbed soil at any given time shall be required by the CONTROL OFFICER to have in place an individual designated as the Dust Control Monitor with full authority to ensure that dust CONTROL MEASURES are implemented, including inspections, record keeping, deployment of resources, and shut-down or modification of CONSTRUCTION ACTIVITIES as needed. This individual shall be listed on the Construction Site Dust Control Monitor form provided in Attachment 1 of the Construction Activities Dust Control Handbook.
- 94.7.5.2 A Dust Control Monitor shall also be required for individually permitted projects that have less than fifty (50) acres of actively disturbed soil if they are:
- (a) under common control and are either contiguous or separated by a public or private roadway and cumulatively have fifty (50) acres or more of actively disturbed soil; or
  - (b) under common control and not contiguous, but are contained within a common master-planned community and cumulatively have fifty (50) acres or more of disturbed soil.
- 94.7.5.3 The Dust Control Monitor shall be present at all times CONSTRUCTION ACTIVITIES occur on the project site and shall devote the majority of his/her time specifically to managing dust prevention and control on the site.
- 94.7.5.4 The requirement for a Dust Control Monitor shall lapse when:
- (a) the area of actively disturbed soil becomes less than fifty (50) acres;
  - (b) the previously disturbed areas have been stabilized in accordance with the requirements of these Regulations; and,
  - (c) the stabilization has been approved and the acreage verified by the CONTROL OFFICER.

- 94.7.5.5 A Dust Control Monitor shall be considered qualified when he/she has met the following minimum qualifications:
- (a) successfully completed the Basic Dust Control Class;
  - (b) successfully completed the Dust Control Monitor Class;
  - (c) two years of experience in the CONSTRUCTION industry; and,
  - (d) successfully completed a course that certifies him/her in Visual Emissions Evaluation (VEE) that has been approved or is conducted by the CONTROL OFFICER.
- 94.7.5.6 For a Dust Control Monitor to maintain his/her certification he/she must successfully complete the Dust Control Monitor class at least once every three years.
- 94.7.6 **Dust Control Class.**
- 94.7.6.1 The CONSTRUCTION site superintendent or other designated on-site representative of the project developer and all construction site supervisors and foremen shall be required to have successfully completed a Clark County Department of Air Quality and Environmental Management Dust Control Class.
- 94.7.6.2 Water truck and water pull driver(s) for each CONSTRUCTION project shall be required to have successfully completed a Clark County Department of Air Quality and Environmental Management Dust Control Class.
- 94.7.6.3 All individuals required to attend and successfully complete the Dust Control Class shall do so at least once every three years.
- 94.7.6.4 CONSTRUCTION site workers and equipment operators, may be required to attend a Dust Control Class as a remedial or corrective measure.
- 94.7.7 Signage Requirements.
- 94.7.7.1 For each Dust Control Permit issued where the project site is less than or equal to ten (10) acres, or for trenching projects between one hundred (100) feet and one (1) mile in length, or for demolition of a structure totaling one thousand (1,000) square feet or more, the permittee shall install a sign on the project site prior to commencing CONSTRUCTION ACTIVITY that is visible to the public and measures, at minimum, four (4) feet wide by four (4) feet high, conforming to Department policy on Dust Control Permit Design and Posting of Signage listed in Attachment 4 of the Construction Activities Dust Control Handbook.

94.7.7.2 For each Dust Control Permit issued where the project site is over ten (10) acres, or for trenching projects aggregating one (1) mile or greater in length, the permittee shall install a sign on the project site prior to commencing CONSTRUCTION ACTIVITY and visible to the public and measures, at minimum, eight (8) feet wide by four (4) feet high, conforming to Department policy on Dust Control Permit Design and Posting of Signage listed in Attachment 4 of the Construction Activities Dust Control Handbook.

94.7.7.3 Projects shorter than two (2) weeks in duration may request a waiver of the requirement of posting a DUST CONTROL PERMIT Sign.

#### 94.7.8 **Record Keeping.**

94.7.8.1 On a site having a Dust Control Permit a written record of self inspection shall be made each day soil disturbing work is conducted. The "Record of Daily Dust Control" form provided in Appendix A of the Construction Activities Dust Control Handbook, or other written record that provides at a minimum the same information, shall be completed.

94.7.8.2 Records of CONSTRUCTION site self inspections shall be kept for a minimum of one (1) year or for six (6) months beyond the project duration, whichever is longer. Self inspection records include daily inspections for crusted or damp soil, trackout conditions and cleanup measures, daily water usage, DUST SUPPRESSANT application records, etc.

94.7.8.3 For CONTROL MEASURES involving chemical or organic soil stabilization, records shall indicate the type of product applied, vendor name, label instructions for approved usage, and the method, frequency, concentration, and quantity of application.

#### 94.8 **Soil Stabilization Standards.**

94.8.1 All permittees, contractors, OWNERS, operators, or other PERSONS involved in CONSTRUCTION ACTIVITIES shall employ CONTROL MEASURES as set forth in the Construction Activities Dust Control Handbook.

94.8.2 One or a combination of the following methods shall be used to maintain dust control on all disturbed soils on Construction Sites and staging areas:

- (a) The soil shall be maintained in a sufficiently damp condition to prevent loose grains of soil from becoming dislodged when the disturbed soil is tested using the Drop Ball Test outlined in Subsection 94.12.5; or
- (b) The soil shall be crusted over by application of water, as demonstrated by the Drop Ball Test outlined in Subsection 94.12.5; or

(c) The soil shall be completely covered with clean gravel or treated with a DUST SUPPRESSANT approved by the CONTROL OFFICER, to the extent necessary to pass a Drop Ball Test outlined in Subsection 94.12.5.

94.8.3 When a CONSTRUCTION site or part thereof becomes inactive for a period of thirty (30) days or longer, long-term stabilization shall be implemented within ten (10) days following the cessation of active operations.

94.8.4 Stockpiles located within one hundred (100) yards of occupied buildings shall not be constructed over eight (8) feet in height.

94.8.5 Stockpiles over eight (8) feet high shall have a road bladed to the top to allow water truck access or shall have a sprinkler irrigation system installed, used and maintained.

94.9 **Best Available Control Measures (BACM)**

94.9.1 Any PERSON who engages in a Construction Activity as defined in this regulation shall employ BACM for the purpose of dust control.

94.9.2 All CONTROL MEASURES that are necessary to maintain soil stability as well as those listed in an approved Dust Mitigation Plan, shall be implemented twenty four (24) hours a day, seven (7) days a week, until the permit is closed in accordance with Subsection 94.6.3(c).

94.9.3 In the event there are wind conditions that cause FUGITIVE DUST EMISSIONS; in excess of 20% OPACITY using the Time Averaged Method or Intermittent Emissions Method, in excess of 50% OPACITY using the Instantaneous Method, or one hundred (100) yards in length from the point of origin, in spite of the use of Best Available CONTROL MEASURES, all CONSTRUCTION ACTIVITIES that may contribute to these emissions shall immediately cease. Water trucks and water pulls shall continue to operate under these circumstances, unless wind conditions are such that the continued operation of watering equipment cannot reduce FUGITIVE DUST EMISSIONS or that continued equipment operation poses a safety hazard.

94.9.4 If a Dust Control Permit is not required, the OWNERS, operators, or any other PERSON involved in CONSTRUCTION ACTIVITIES shall employ BEST MANAGEMENT PRACTICES, as set forth in the Construction Activities Dust Control Handbook and comply with the soil stabilization standards listed in Subsections 94.8 and emissions standards listed in Subsection 94.11.

94.10 **CONSTRUCTION ACTIVITIES Violations.**

94.10.1 Any of the following circumstances constitute a violation of the Clark County Air Quality Regulations:

- (a) Failure to obtain an approved DUST CONTROL PERMIT before engaging in activities that disturb or have the potential to disturb soils and/or cause or have the potential to cause FUGITIVE DUST to enter the air.
- (b) Failure to obtain an approved DUST CONTROL PERMIT for all areas subject to CONSTRUCTION ACTIVITIES.
- (c) Conducting a CONSTRUCTION ACTIVITY as defined by Subsection 94.2 for which no specified control option is indicated in the approved DUST CONTROL PERMIT or the Dust Mitigation Plan.
- (d) Failure to perform any duty to allow or carry out an inspection, entry, or monitoring activity required by the Department of Air Quality and Environmental Management.
- (e) Failure to renew or obtain a new permit, prior to a DUST CONTROL PERMIT expiring, provided the site does not meet the exemption requirements for a DUST CONTROL PERMIT as defined in Subsection 94.4.2.
- (f) Failure to implement any item that is listed as a "Requirement" in the Best Management Practices section of the Construction Activities Dust Control Handbook for an applicable Construction Activity.
- (g) Failure to implement any BEST MANAGEMENT PRACTICE listed in an approved DUST CONTROL PERMIT / Dust Mitigation Plan.
- (h) Failure to maintain static (not actively worked) project soils with adequate surface crusting to prevent wind erosion as measured by test method "Soil Crust Determination (The Drop Ball Test)" in Subsection 94.12.5, or alternative control measures approved in the Dust Mitigation Plan.
- (i) Failure to comply with any record keeping requirements of this section.
- (j) Failure to maintain project haul routes or haul roads in a stable condition as measured by the Intermittent Emissions test method outlined in Section 94.12.3.
- (k) Failure to have a Dust Control Monitor in place, per Subsection 94.7.5, for a Construction project.
- (l) Allowing FUGITIVE DUST emissions to exceed the standards set forth in Subsection 94.11.1 through 94.11.4.
- (m) Using a dry rotary brush or blower device without sufficient water to limit emissions per Subsection 94.11.5.
- (n) Allowing mud or dirt to be tracked out onto a paved road that exceed the standards set forth in Subsection 94.11.6.

- (o) Failure to comply with any other provision of this section.

**94.11 Emission Standards.**

- 94.11.1 No PERSON shall cause or permit the handling, transporting, or storage of any material in a manner that allows visible emissions of particulate matter to exceed: 20% OPACITY using the Time Averaged Method or the Intermittent Emissions Method; 50% OPACITY using the Instantaneous Method. These Test Methods are set forth in Subsection 94.12.
- 94.11.2 No PERSON shall cause or permit the handling, transporting, or storage of any material in a manner that allows a dust plume that extends one hundred (100) yards or more, horizontally or vertically, from the point of origin.
- 94.11.3 Where a DUST CONTROL PERMIT is required and has not been issued or in the event Best Available CONTROL MEASURES have not been fully implemented, no PERSON shall cause or permit the handling, transportation, or storage of any material in a manner that exceeds the limits listed in any one of the following:
  - (a) The limits set forth in Subsection 94.11.1; or
  - (b) Allow a dust plume to extend more than one hundred (100) feet, horizontally or vertically, from the point of origin; or
  - (c) Allow a dust plume to cross a property line.
- 94.11.4 Visible emissions from abrasive blasting shall be limited to no more than an average of 40% OPACITY for any period aggregating three (3) minutes in any sixty (60) minute period, utilizing the test method set forth in Subsection 94.12.
- 94.11.5 The use of dry rotary brushes and blower devices for removal of deposited mud/dirt trackout from a paved road is prohibited, unless sufficient water is applied to limit the visible emissions to an OPACITY of not greater than: 20% OPACITY using the Time Averaged Method or Intermittent Emissions Method; 50% OPACITY using the Instantaneous Method. These test methods are set forth in Subsection 94.12. The use of rotary brushes without water is prohibited.
- 94.11.6 Mud or dirt shall not be allowed to be tracked out onto a paved road where such mud or dirt extends fifty (50) feet or more in cumulative length from the point of origin or allow any trackout to accumulate to a depth greater than 0.25 inch. Notwithstanding the preceding, all accumulations of mud or dirt on curbs, gutters, sidewalks, or paved roads including trackout less than fifty (50) feet in length and 0.25 inch in depth, shall be cleaned and

maintained to eliminate emissions of Fugitive Dust. At a minimum all trackout must be cleaned up by the end of the workday or evening shift, as applicable.

## 94.12 **Test Methods**

### 94.12.1 Visual Determination of OPACITY of EMISSIONS from Sources of Visible EMISSIONS.

**Applicability:** This method is applicable for the determination of the OPACITY of EMISSIONS from sources of visible EMISSIONS. The Time Averaged Method requires averaging of visible EMISSION readings over a specific time period to determine the OPACITY of visible EMISSIONS. The Time Averaged Method is applicable to continuous EMISSIONS sources. The Intermittent Emissions Method requires averaging a set number of visible EMISSIONS readings to determine the OPACITY of visible EMISSIONS. The Intermittent Emissions Method is applicable to Intermittent EMISSIONS sources. The Instantaneous Method sets an OPACITY limit that shall not be exceeded at any time. The Instantaneous Method is applicable to any emissions source and is a non-federal requirement.

**Principle:** The OPACITY of EMISSIONS of a source of visible EMISSIONS is determined visually by an observer who has current certification approved by the Control Officer, as a qualified Visible EMISSIONS Evaluator, using US EPA Method 9.

**Procedures:** A qualified Visible EMISSIONS Evaluator shall use the procedures set forth in Subsections 94.12.2, 94.12.3, and 94.12.4 for visually determining the OPACITY of EMISSIONS.

### 94.12.2 Time Averaged Method: These procedures is for evaluating continuous FUGITIVE DUST EMISSIONS and are for the determination of the OPACITY of continuous FUGITIVE DUST EMISSIONS by a qualified observer. Continuous FUGITIVE DUST EMISSIONS sources include activities that produce emissions continuously during operations such as earthmoving, grading, and trenching. Emissions from these types of continuous activities are considered continuous even though speed of the activity may vary and Emissions may be controlled to 100%, producing no visible emissions, during parts of the operation. The qualified observer should do the following:

- (a) **Position:** Stand at a position at least twenty (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 earth moving 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, trenching), 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, and color of the plume and type of background on the visible EMISSION observation 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 three (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 15-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 (3) feet above the mechanical equipment generating the plume).
- (d) **Recording Observations:** Record the OPACITY observations to the nearest 5% every fifteen (15) seconds on an observational record sheet. Each momentary observation recorded represents the average OPACITY of EMISSIONS for a fifteen (15) second period. If a multiple plume exists at the time of an observation, do not record an OPACITY reading. Mark an "x" for that reading. If the equipment generating the plume travels outside of the field of observation, resulting in the inability to maintain the orientation of the sun within the 140° sector or if the equipment ceases operating, mark an "x" for the fifteen (15) second interval reading. Readings identified as "x" shall be considered interrupted readings.
- (e) **Data Reduction For Time-Averaged Method:** For each set of twelve (12) or twenty four (24) consecutive readings, calculate the appropriate average OPACITY. Sets shall consist of consecutive observations, however, readings immediately preceding and following interrupted readings shall be deemed consecutive and in no case shall two sets overlap, resulting in multiple violations.

94.12.3 **Intermittent EMISSIONS Method:** This procedure is for evaluating Intermittent FUGITIVE DUST EMISSIONS: This procedure is for the determination of the OPACITY of intermittent FUGITIVE DUST EMISSIONS by a qualified observer. Intermittent FUGITIVE DUST EMISSIONS sources include activities that produce

emissions intermittently such as screening, dumping, and stockpiling where predominant emissions are produced intermittently. The qualified observer should do the following:

- (a) **Position:** Stand at a position at least twenty (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. 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., 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, and color of the plume and type of background on the visible EMISSION observation 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 three (3) feet above the surface from which the plume is generated). Make two observations per plume at the same point, beginning with the first reading at zero (0) seconds and the second reading at five (5) seconds. The zero (0) second observation should begin immediately after a plume has been created above the surface involved.
- (d) **Recording 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 (5) second period.
- (e) Repeat Subsection 94.12.3(c) of this Regulation and Subsection 94.12.3(d) of this Regulation until you have recorded a total of 12 consecutive OPACITY readings. This will occur once six intermit plumes on which you are able to take proper readings have been observed. 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 averaged method OPACITY standard described in this Section.

- 94.12.4 Instantaneous Method: This is a non-federal procedure for evaluation of FUGITIVE DUST EMISSIONS: This procedure is for the instantaneous determination of the OPACITY of FUGITIVE DUST EMISSIONS by a qualified observer. This method is a Clark County local requirement and is not submitted as part of the applicable State Implementation Plan. The qualified observer should do the following:
- (a) Position: Stand at a position at least twenty (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 earth moving 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, and color of the plume and type of background on the visible EMISSION observation 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 three (3) feet above the surface from which the plume is generated).
  - (d) Recording Observations: Record the OPACITY observations to the nearest 5%.
  - (e) Data Reduction For Instantaneous Regulations: Evaluate all observations for conformance with the instantaneous regulation.

94.12.5 Soil Crust Determination (The Drop Ball Test):

- (a) Drop a steel ball with a diameter of 0.625 (5/8<sup>th</sup>) inch and a mass ranging from 0.56-0.60 ounce from a distance of one (1) foot directly above the soil surface. If blowsand is present, clear the blowsand from the surfaces on which the soil crust test method is conducted. Blowsand is defined as thin deposits of loose uncombined grains covering less than 50% of a project site that have not originated from the representative surface being tested. If material covers a visible crust, which is not blowsand, apply the test method in Subsection 90.4.1.3 (Determination Of Threshold Friction Velocity) of this Regulation to the loose material to determine whether the surface is stabilized.

A sufficient crust is defined under the following conditions: once a ball has been dropped according to Subsection 90.4.1.1 of this Regulation, the ball does not sink into the surface, so that it is partially or fully surrounded by loose grains and, upon removing the ball, the surface upon which it fell has not been pulverized, so that loose grains are visible.

- (b) Randomly select each representative disturbed surface for the drop ball test by using a blind “over the shoulder” toss of a throwable object (e.g., a metal weight with survey tape attached). Using the point of fall as the lower left hand corner, measure a one (1) foot square area. Drop the ball three times within the 1-foot by 1-foot square survey area, using a consistent pattern across the survey area. The survey area shall be considered to have passed the Soil Crust Determination Test if at least two out of the three times that the ball was dropped, the results met the criteria in Subsection 90.4.1.1(a) of this Regulation. Select at least two other survey areas that represent a random portion of the overall disturbed conditions of the site, and repeat this procedure. If the results meet the criteria of Subsection 90.4.1.1(a) of this Regulation for all of the survey areas tested, then the site shall be considered to have passed the Soil Crust Determination Test and shall be considered sufficiently crusted.
- (c) At any given site, the existence of a sufficient crust covering one portion of the site may not represent the existence or protectiveness of a crust on another portion of the site. Repeat the soil crust test as often as necessary on each portion of the overall conditions of the site using the random selection method set forth in Subsection 90.4.1.1(b) of this Regulation for an accurate assessment.

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