[Bracketed and strikethrough] material is that portion being deleted <u>Underlined and italicized</u> material is that portion being added

BILL NO. <u>12-3-24-1</u>

SUMMARY - An ordinance to amend Clark County Air Quality Regulations Sections 92 and 92 to update applicability, add new requirements, revise existing requirements, and add clarifying language.

#### ORDINANCE NO.

(of Clark County, Nevada)

AN ORDINANCE TO AMEND CLARK COUNTY AIR QUALITY REGULATIONS SECTION 92, "FUGITIVE DUST CONTROL REQUIREMENTS FOR UNPAVED PARKING LOTS AND STORAGE AREAS," TO UPDATE APPLICABILITY, DEFINITIONS, STABILIZATION STANDARDS, INSTANTANEOUS TEST METHOD, AND ADD CLARIFYING LANGUAGE; AMEND SECTION 94, "PERMITTING AND DUST CONTROL FOR CONSTRUCTION AND TEMPORARY COMMERCIAL ACTIVITIES AND FUGITIVE DUST CONTROL AT STATIONARY SOURCES," TO UPDATE APPLICABILITY, DEFINITIONS, PERMIT REVOCATION PROCEDURES, DUST CONTROL MONITOR REQUIREMENTS, EMISSIONS STANDARDS, STOCKPILE REQUIREMENTS, INSTANTANEOUS TEST METHOD, LONG-TERM STABILIZATION REQUIREMENTS, AND ADD CLARIFYING LANGUAGE; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATED THERETO.

NOW, THEREFORE, THE CLARK COUNTY BOARD OF COUNTY COMMISSIONERS DOES HEREBY ORDAIN AS FOLLOWS:

**SECTION 1.** Clark County Air Quality Regulations Section 92, "Fugitive Dust Control Requirements for Unpaved Parking Lots and Storage Areas," is hereby amended as reflected in Exhibit 1, attached hereto.

**SECTION 2.** Clark County Air Quality Regulation Section 94, "Permitting and Dust Control for Construction and Temporary Commercial Activities and Fugitive Dust Control at Stationary Sources," is hereby amended as reflected in Exhibit 2, attached hereto.

**SECTION 3.** If any section of this ordinance, or portion thereof, is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this ordinance.

**SECTION 4.** All ordinances, parts of ordinances, chapters, sections, subsections, clauses, phrases, or sentences contained in the Clark County Code in conflict herewith are hereby repealed.

**SECTION 5.** This ordinance shall take effect and be in force from and after its passage and the publication thereof by title only, together with the names of the County Commissioners voting for or against its passage, in a newspaper published in and having a general circulation in Clark County, Nevada, at least once a week for a period of two (2) weeks.

PROPOSED on the	e day of	, 2024.
PROPOSED BY: O	Commissioner	
PASSED on the	day of	2024.
AYES:		
-		
-		
-		
-		
NAYS:		
ABSTAINING:		
ABSENT	:	
	BOARD OF COUNTY COMMISSION CLARK COUNTY, NEW	
	By: TICK SEGERBLOM, Chair	
ATTEST:		
LYNN GOYA, County Clerk		

This ordinance shall be in force and effect from and after the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

### SECTION 92: FUGITIVE DUST [FROM] CONTROL REQUIREMENTS FOR UNPAVED PARKING LOTS AND STORAGE AREAS

92.1	Applicabil	ity	1
92.2	Definition	S	1
92.3	Requirem 92.3.1 92.3.2 92.3.3 92.3.4	ents. New Parking Lots or Storage Areas. Existing Unpaved Parking Lot(s) or Storage Area(s). <u>Paving Exemptions for</u> New[- <del>and Existing Unpaved</del> ] Parking Lot(s) Storage Area(s). Control Measures.	2 2 ) or 3
92.4	Stabilizati	on Standards	4
92.5	Recordke	eping [ <mark>&amp;]<i>and</i> Reporting</mark>	4
92.6	92.6.1 92.6.2	nods Opacity Test Method Instantaneous Method Silt Content Test Method	4 6

## [92.0 Fugitive Dust from Unpaved Parking Lots and Storage Areas]

## 92.1 APPLICABILITY

- (a) [The provisions of this regulation shall apply]Section 92 applies to all [U]unpaved [P]parking [L]/ots and storage areas[-which], 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 [in-]any other [H]hydrographic [A]area upon it being designated as nonattainment for PM<sub>10</sub>; or in any other [H]hydrographic [A]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[-of the Clark County Air Quality Regulations (AQRs)], "Permitting and Dust Control for Construction and Temporary Commercial Activities and Fugitive Dust Control at Stationary Sources."
- [e](b) [These provisions shall not apply to Stationary Sources as defined in Section 0, except that the Control Measures and stabilizationstandards in Section 92.3.4 and 92.4 shall apply to the control of Fugitive Dust Emissions, and be enforced by the terms and conditions of [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 [S]stationary [S]source permit.
- [**b**](*c*) Unpaved [**P**]*p*arking [**L**]/ots 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

<u>Unless the context requires otherwise, [+]the following terms have the meanings set forth</u> below for the purposes of [Section 92]this section. [Any]When a term is not defined, [inthese paragraphs shall have the meaning given in Section 0 or the Clean Air Act] 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[-inch] to 3[-]

inch<u>es</u> on its longest dimension that is either natural or the product of a mineral processing operation and contains [<u>no more]/ess</u> than [<u>6]5</u>% silt<u>(measured by the</u> <u>percent of soil fines that will pass through a 200-mesh sieve)</u>[<del>,</del>] by weight <u>as determined</u> <u>using "Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples" in AP-42 (App. C.2.3, "Silt Analysis")</u>.

"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, <u>or parking and storage areas with public</u> <u>access that existed prior to [insert rule effective date], at a stationary source</u>, [I]in Hydrographic Areas 212, 216, or 217; in any other [H]<u>h</u>ydrographic [A]<u>a</u>rea upon its being designated as nonattainment for PM<sub>10</sub>; or in any other [H]<u>h</u>ydrographic [A]<u>a</u>rea 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

## 92.3.0 New Parking Lots or Storage Areas

- (a) New parking lots constructed after January 1, 2003. or constructed with public access after [insert rule effective date], at a stationary source, as applicable, in Hydrographic Areas 212, 216, or 217; in any other [H]hydrographic [A]area upon its being designated as nonattainment for PM<sub>10</sub>; or in any other [H]hydrographic [A]area that becomes subject to a PM10 maintenance plan, as defined under 42 U.S.C. [§-]7505a, must be [P]paved.
- (b) New storage areas constructed after January 1, 2003, or constructed with public access after [insert rule effective date], at a stationary source, as applicable, in Hydrographic Areas 212, 216, or 217; in any other [H]hydrographic [A]area upon its being designated as nonattainment for PM10; or in any other [H]hydrographic [A]area that becomes subject to a PM10 maintenance plan, as defined under 42 U.S.C. [§-]7505a, must comply with the control measures described in Sections 92.3.[4,]4 (a), (b) or (d).

## 92.3.1 Existing Unpaved Parking Lot(s) or Storage Area(s)

The owner and/or operator of existing  $[\bigcup] \underline{u}$  npaved  $[\Rho] \underline{\rho}$  arking  $[\bigsqcup] / ot(s)$  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.

# 92.3.2 <u>Paving</u> Exempt<u>ions for</u> New[<u>and Existing Unpaved</u>] Parking Lot(s) or Storage Area(s)

The following activities shall be exempt from the paving requirement in Section 92.3.1[ $\frac{.2}{(a)}$ ], but must comply with one or more of the control measures in Section 92.3.[ $\frac{1.2}{4}$ ].

- (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 [is-]used for storing and handling of landscaping, aggregate, and other similar bulk materials, provided that all access, parking, and loading areas <u>primarily</u> used by [on-road vehicles ]<u>rubber-tired</u> <u>equipment</u> 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) <u>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.</u>
- [d](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.
- [e](f) [An-]Unpaved [P]parking [L]/ots and/or storage areas utilized [intermittently, i.e., ]for [a period of ]35 days or less [during the ]per calendar year (continuously or intermittently).

## 92.3.3 Control Measures

For the purpose of [this regulation] <u>Section 92</u>, the control measures set forth below shall be considered effectively implemented when the [U] parking [U] parking [U] or storage area meets the stabilization standards described in Section 92.4.

- (a) Pave, as defined in Section 0, <u>"Definitions</u>."
- (b) Apply <u>and maintain</u> alternative asphalt paving <u>with prior written approval</u> <u>from the Control Officer</u>.
- (c)  $[\underline{\mathbf{u}}]\underline{U}$  niformly apply and maintain clean gravel to a depth of  $[\underline{\mathbf{two}}]\underline{2}$  inches.

(d) Apply and maintain an alternative control measure with prior written approval from the Control Officer.

## 92.4 STABILIZATION STANDARDS

- (a) [f] <u>F</u>ugitive dust emissions from unpaved parking lots or storage areas shall not exceed:
  - (1) 20[-percent]% opacity based on the [o]\_pacity [t]\_est [m]Method described in Section 92.6.1[.4]; or
  - (2) [50 percent]35% opacity based on the [i]/nstantaneous [m]Method described in Section 92.6.[4.]2[,].
- (b) Unpaved parking lots or storage areas shall not exceed 0.33 oz/ft<sup>2</sup> silt loading[,] or 6[-percent]% silt content, as determined by Section 92.6[4].3[, except in areas on which clean gravel has been applied under the provisions of Section 92.3.4 (c)].
- [b](c) No owner and/or operator of an unpaved parking lot or storage area shall [permit a dust plume from it ]allow fugitive dust emissions to cross a property line or a facility boundary of a stationary source.

## 92.5 RECORDKEEPING [&]<u>AND</u> REPORTING

- (a) Any person subject to the requirements of [this regulation]<u>Section</u> <u>92</u>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

## 92.6.0 Opacity Test Method

The purpose of this test method is to estimate the percent opacity of fugitive dust plumes caused by vehicle movement on  $[\underline{+}]\underline{u}$ npaved  $[\underline{P}]\underline{p}$ arking  $[\underline{+}]\underline{l}$ ots 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[-degree]<sup>o</sup> sector to the back. [Following the above requirements,

**m**]<u>M</u>ake 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[7] instead[7] observe the plume briefly at zero seconds and then again at five seconds.
- (d) Record Observations: Record the opacity observations to the nearest 5[<u>percent]%</u> 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<sub>1</sub>[-or] heavy-duty truck) and the approximate speeds the vehicles are traveling when readings are taken.
- (e) Repeat [steps]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 [your]the line of observation for which [you are able to take]proper readings can be taken. The 12 consecutive readings must be taken within the same period of observation, but must not exceed [one]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[<u>percent]%</u> or lower, the source is in compliance with the opacity standard described in [this regulation]<u>Section 92</u>.

## 92.6.1 Instantaneous Method

[This is a non-federal procedure for evaluation of Fugitive Dust Emissions:]This procedure is for the instantaneous determination of the [ $\Theta$ ]opacity of [F]fugitive [D]dust [E]emissions by a qualified [observer]*Visible Emissions Evaluator (e.g., EPA Method 9-certified 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 [F]fugitive [D]dust source in order to provide a clear view of the [E]emissions with the sun oriented in the 140° sector to the back. Consistent as much as possible with maintaining the above requirements, make [O]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 [F]fugitive [D]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, [F]fugitive [Đ]dust source type (e.g., earthmoving, grading, storage pile, material handling, transfer, loading, sorting), method of control used[, [f] any], observer's name, certification data, and affiliation, and a sketch of the observer's position relative to the [F]fugitive [Đ]dust source. Also[, record the time, estimated distance to the [F]fugitive [Đ]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 [F]fugitive [D]dust source, and type of background on the visible emission observation form when [Opacity readings are initiated and completed.
- (c) Observations: Make [O]opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of sight. Make [O]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 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 [O]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 <u>5-second period</u>.

(e) Data Reduction for Instantaneous [Regulations: Evaluate all observations for conformance with the instantaneous regulation.]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.

## 92.6.2 Silt Content Test Method

The purpose of this test method is to estimate the silt content of the trafficked parts of  $[\bigcup] \underline{u}$  npaved  $[\Rho] \underline{\rho}$  arking  $[\lfloor]$ /ots 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  $[\bigcup] \underline{u}$  npaved  $[\Rho] \underline{\rho}$  arking  $[\lfloor]$ /ots or storage areas.

- (a) Equipment:
  - Set of sieves with the following openings: 4 millimeters (mm), 2 mm, 1 mm, 0.5 mm, and 0.25 mm; a lid; and <u>a</u> collector pan;
  - (2) Small whiskbroom or paintbrush with stiff bristles and dustpan [one]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 [and] 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 [or (1 cm) in the 1 square foot area. If you reach a hard, underlying subsurface that is [greater]/ess than 3/8 inch in depth, do not continue collecting the sample by digging into the hard surface. [In other words, you are o]Only collect[ing] 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 [one]<sup>1</sup> 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 [Đ]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 [Đ]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 [↓]/ot 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 [step]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 [U]unpaved [P]parking [L]/ot 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/ ft², the surface is stable. If the average silt loading is greater than or equal to 0.33 oz/ft², examine the average percent silt content. If the source is an [U]unpaved [P]parking [L]/ot 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 [U]unpaved [P]parking [L]/ot or storage area), collect three additional samples from the source (see [step]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).

History: Initial adoption: June 22, 2000. Amended: November 16, 2000; November 20, 2001; December 17, 2002; June 3, 2003; July 1, 2004; December 30, 2008; March 17. 2009; August 2, 2011; April 15, 2014; August 3, 2021; Month, DD, YYYY.

#### SECTION 94: PERMITTING AND DUST CONTROL FOR CONSTRUCTION AND TEMPORARY COMMERCIAL ACTIVITIES <u>AND FUGITIVE</u> <u>DUST CONTROL AT STATIONARY SOURCES</u>

Definitions	2
Activities Exempt from Dequirement For Duct Control Operating	
Activities Exempt from <u>Requirement For Dust Control Operating</u> Permit[ <mark>ting</mark> ]	5
Dust Control OperatingPermit Applications594.4.1Duty to Apply for a Dust Control Operating Permit594.4.2Complete Application694.4.3Application Content6	5
Dust Control Operating Permit Requirements	7
[General and Administrative Standards]Dust Control Operating Permit_ Revocation and Suspension	9
Notices of Non[-]compliance and Notices of Violation	1
Dust Control Monitor 11	1
Dust Control Monitor Recordkeeping13	3
Clark County Air Quality Dust Control Class	3
Signage Requirements14	1
Soil Stabilization Standards14	4
Best Available Control Measures	5
Emission Standards	3
Test Methods1794.15.1Visual Determination of Emission Opacity from Sources of Visible Emissions1794.15.2Time Averaged Method1894.15.3Intermittent Emissions Method1994.15.4Instantaneous Method2094.15.5Soil Crust Determination (Drop Ball Test)22	e 7 3 9 0
	Permit[ting]       4         Dust Control Operating       Permit Applications       6         94.4.1       Duty to Apply for a Dust Control Operating Permit       6         94.4.2       Complete Application       6         94.4.3       Application Content       6         Dust Control Operating       Permit Requirements       7         [General and Administrative Standards]Dust Control Operating Permit       Revocation and Suspension       6         Notices of Non[-]compliance and Notices of Violation       1*       7         Dust Control Monitor       1*       1*         Dust Control Monitor Recordkeeping       1*         Clark County Air Quality Dust Control Class       1*         Signage Requirements       1*         Soil Stabilization Standards       1*         Emission Standards       1*         Test Methods       1*         94.15.1       Visual Determination of Emission Opacity from Sources of Visible Emissions       1*         94.15.2       Time Averaged Method       1*         94.15.3       Intermittent Emissions Method       1*

APPENDIX	1: BEST MANAGEMENT PRACTICES (BMPs)	23
BMP 01	BACKFILLING (filling area previously excavated or trenched)	24
BMP 02	BLASTING – Abrasive (sandblasting, abrasive blasting, and/or hydro- blasting)	25
BMP 03	BLASTING – Soil and Rock (explosive blasting of soil and rock)	25
BMP 04	CLEARING AND GRUBBING (clearing and grubbing for site preparation and vacant land cleanup)	27
BMP 05	CLEARING FORMS, FOUNDATIONS AND SLABS (clearing and cleanin of forms, foundations and slabs)	
BMP 06	CRUSHING (crushing of construction and demolition debris, rock, and soi	
BMP 07	CUT AND FILL (cut and/or fill soils for site grade preparation)	29
BMP 08	DEMOLITION – Implosion (implosive blasting demolition of structure)	29
BMP 09	DEMOLITION - Mechanical/Manual (mechanical and manual demolition o walls, stucco, concrete, free-standing structures, buildings, and load-beari walls)	ing
BMP 10	DISTURBED SOIL (disturbed soil throughout project, including between structures)	32
BMP 11	LONG-TERM STABILIZATION (applies to disturbed land that is not built out, landscaped, or paved at DCOP closure)	33
BMP 12	DUST PALLIATIVE – Selection and Use (selection and use of chemical and organic dust suppressing agents and other dust palliatives)	
BMP 13	IMPORTING/EXPORTING OF BULK MATERIAL (importing or exporting or soil, aggregate, decorative rock, debris, Type II, and other bulk material).	
BMP 14	LANDSCAPING (installation of sod, decorative rock, desert or other landscape material)	36
BMP 15	SUBGRADE PREPARATION FOR PAVING (subgrade preparation for paving streets, parking lots, etc.)	36
BMP 16	SAWING/CUTTING MATERIALS (sawing or cutting materials such as concrete, asphalt, block or pipe)	36
BMP 17	SCREENING (screening of rock, soil, or construction debris)	37
BMP 18	STAGING AREAS (staging areas and equipment/material storage areas)	38
BMP 19	STOCKPILING (stockpiling of materials, such as Type II, rock or debris, for future use or export)	
BMP 20	TRACKOUT PREVENTION AND CLEANUP (prevention and cleanup of mud, silt, and soil tracked out onto paved surfaces)	39

BMP 21	TRAFFIC—Unpaved Routes and Parking Areas (construction-related traffic on unpaved roads and parking areas)
BMP 22	TRENCHING (trenching with track- or wheel-mounted excavator, shovel, backhoe, or trencher)
	TRUCK LOADING (loading trucks with materials including construction and demolition debris, rock, and soil)

Appendix 2:	Guidance on Design/Posting of Dust Control Operating Permit	
	Signage	. 46

## LIST OF FIGURES

Figure 1:	Examples of Signage	43
[Appendix]Fig	gure 2: Particulate Emission Potential Map[ <mark>s]—<i>Clark County.</i></mark>	44
Figure 3:	Particulate Emission Potential Map—Las Vegas Valley	45
Figure 4:	Example of DCOP Signage.	47

#### 94.1 APPLICABILITY

- (a) Section 94 applies to:
  - (1) [a]All [C]construction [and Temporary Commercial-A]activities located in Clark County, including those at stationary sources, that disturb, or have the potential to disturb, soils and/or [that E]emit, or have the potential to [E]emit, [P]particulate [M]matter into the atmosphere.[-Itestablishes the requirements to obtain and comply with a Dust Control Operating Permit and a Dust Mitigation Plan, and the procedures to maintain Dust Control of theseactivities.]
  - (2) All temporary commercial activities located in Hydrographic Areas 212 (Las Vegas Valley), 216 (Garnett Valley), and 217 (Hidden Valley North) that disturb, or have the potential to disturb, soils and/or emit, or have the potential to emit, particulate matter into the atmosphere.
  - (3) All stationary sources located 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 94 shall be incorporated into the stationary source permit.
- (b) Section 94 does not apply to:

#### [94.1.1 Items to Which the Regulation Does Not Apply

- (a) Operation of Emission Units or activities permitted under a Stationary Source Permit, with the specific exception that the Control Measures, Emission standards and soil stabilization standards in Sections 94.12 through 94.14 shall apply to the control of Fugitive Dust Emissions, and enforced by the terms and conditions of the Stationary Source Permit.]
  - [(<del>b</del>)](1) Normal [F]<u>f</u>arm [C]<u>c</u>ultural [P]<u>p</u>ractices and equestrian facilities [that are]in compliance with zoning requirements.
  - [(c)](2) Emergency activities, as defined in Section 0, <u>"Definitions,"</u> that may disturb the soil <u>but are</u> performed or ordered under a directive by any utility or government agency [in order\_]to prevent public injury or restore <u>the functionality of</u> critical [utilities to functional status]systems.
  - [(d) Temporary Commercial Activities outside of Hydrographic-

Areas 212 (Las Vegas Valley), 216 (Garnet Valley), and 217 (Hidden Valley North).]

## 94.2 DEFINITIONS

Unless the context requires otherwise, the following terms shall have the meanings set forth below for the purposes of [Section 94]*this section*. When a term is not defined, it shall have the meaning provided in Section 0 of the [Clark County Air Quality Regulations-(]AQRs[-]], Chapter 445B of the Nevada Revised Statutes, the [federal-]Clean Air Act *(the Act) under Title 42, Section 7511a of the U.S. Code* (42 U.S.C. [7401 et seq.]7511a), or common usage, in that order of priority.

"Best [A]available [C]control [M]measures" [and "][BACM]["] means those [C]control [M]measures that are the best available with current technology for reducing or eliminating the release of [P]carticulate [M]matter into the atmosphere from [C]construction [A]activities. These include, but are not limited to, all measures listed as [B]best [M]management [P]cractices and any other [C]control [M]measures required by the Control Officer.

"Best management practice" [or "][BMP]["] means methods that have been determined to be the most effective and practical means of preventing or reducing [E]emissions of [F]fugitive [D]dust [as provided] in Appendix 1[to this section].

"Clean [G]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 [no more]/ess than [6]5% silt (measured by the percent of soil fines that will pass through a 200-mesh sieve) by weight as determined by using "Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples" in AP-42 (App. C.2.3, "Silt Analysis").

"Common [ $\bigcirc$ ] control" means having power or control, directly or indirectly, of the management decisions of another [ $\bigcirc$ ] construction project by ownership, contract, or other means.

"Construction [A]activities" means the following activities: [G]commercial and [R]residential [G]construction, [F]flood [G]construction, and [H]highway [G]construction, as defined in Section 0, "Definitions." These activities may include, but are not limited to, the following:

- 1. Land clearing, [M]<u>m</u>aintenance, change of grade, and land cleanup using machinery;
- 2. Soil and rock excavation or removal;
- 3. Soil or rock hauling (import/export);
- 4. Soil or rock crushing or screening;

- 5. Filling, compacting, and/or stockpiling;
- 6. Grading;
- 7. Explosive blasting;
- 8. Demolition;
- 9. Implosion;
- 10. Handling of building materials capable of entrainment in air (e.g., sand, cement powder);
- 11. Abrasive blasting;
- 12. Concrete, block, stone, asphalt, and tile cutting;
- 13. Mechanized [**+**]<u>t</u>renching;
- 14. Initial or replacement landscaping;
- 15. Driving vehicles on a [G] construction site;
- 16. Establishing and/or using staging areas, material storage areas, or unpaved parking areas in support of a [C]construction project;
- 17. Establishing and/or using unpaved access routes to or from a [C]construction project;
- 18. Paving roadways and alleyways; and
- 19. Flood control [M]maintenance.

"Contiguous" means being in actual contact along a boundary or a point. Properties that are separated by [P]oublic [R]oadways are considered in actual contact.

"Department" means the Clark County, Nevada, Department of Environment and Sustainability[<del>, and "DAQ" means the Department's Division of Air Quality</del>].

"Dust [ $\bigcirc$ ] control [ $\bigcirc$ ] operating [ $\mathbb{P}$ ] permit" [and "Permit"] (DCOP) means a single [ $\mathbb{P}$ ] permit that authorizes the [ $\mathbb{P}$ ] permittee to perform soil-disturbing, [ $\bigcirc$ ] construction, demolition, or [ $\mathbb{T}$ ] temporary [ $\bigcirc$ ] commercial [ $\mathbb{A}$ ] activities that may result in [ $\mathbb{F}$ ] fugitive [ $\mathbb{D}$ ] dust becoming airborne.

"Dust [M]*m*itigation [P]*p*lan" means an attachment to a [Dust Control Operating-Permit]*DCOP* that lists all the [C]*c*onstruction [A]*a*ctivities that may occur and the BMPs that shall be used to mitigate [D]*d*ust at a permitted site. Upon approval of the application, the [D]*d*ust [M]*m*itigation [P]*p*lan becomes an enforceable part of the [Dust]

Control Operating Permit]DCOP.

"Grading" means any excavation, filling, rough [G] grading, and/or stockpiling for the purpose of altering the natural ground surface or its elevation.

"Maintenance" means the upkeep or restoration of property to its intended use.

"Notice of Non[-C]compliance" means a document of notification intended to provide the findings that identify deficiencies through inspection where failure to comply with terms and conditions of the [Permit]DCOP or AQRs has been observed.

*"Particulate Emission Potential" (PEP) means a soil-type classification determined by soil silt content (measured by the percent of soil fines that will pass through a 200-mesh sieve) by weight as determined by using "Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples" in AP-42 (App. C.2.3, "Silt Analysis") and optimum moisture content (measured by the percent of moisture necessary to compact soils). There are five categories: high, moderately high, moderately-low, low, and slight.* 

"Responsible Official" means the [P] $\underline{\rho}$ erson who is authorized by the [ $\underline{\varphi}$ ] $\underline{\rho}$ wner or [ $\underline{\varphi}$ ] $\underline{\rho}$ perator to oversee the [ $\underline{\varphi}$ ] $\underline{c}$ onstruction [A] $\underline{a}$ ctivities related to the project, to sign all documents, and to make all decisions that:

- (1) Govern the operation at the  $[G]_{C}$  onstruction site;
- (2) Initiate and direct measures to assure compliance with air quality laws and regulations; and
- (3) Ensure actions are taken to gather complete and accurate information for permitting, recordkeeping, and reporting requirements.

"Surfactant" means a compound or element that reduces the surface tension of a liquid. The term is used to describe wetting and spray adjuvants designed to promote the economical application of water to hydrophobic soils and prevent drifting, decrease runoff, increase the penetrating and wetting properties, and promote even, consistent spray patterns.

<u>"Tackifier" means a substance mixed with water that binds together mulches, small particles, or other dust palliatives without forming a hard crust. Many dust palliatives, in a more dilute concentration, can be used as tackifiers.</u>

"Temporary [C]commercial [A]activities" means activities that are limited to less than 90 [-]days, [including]such as special events, holiday activities (e.g., pumpkin patches, Christmas tree lots), and festivals, including associated unpaved parking areas[-], and that have the potential to disturb soils.

"Trackout" means soil, mud, or dirt on [P]oaved surfaces, including curbs, gutters, and sidewalks, that has come from a [C]onstruction site or an unpaved access route onto

the [P]paved surface.

#### 94.3 ACTIVITIES EXEMPT FROM <u>REQUIREMENT FOR DUST CONTROL</u> <u>OPERATING</u>PERMIT[TING]

All the following activities are required to control [**D**]<u>d</u>ust, but are exempt from the requirement to obtain a [**Dust Control Operating Permit**]<u>*DCOP*</u>. However, soils shall be kept moist during all activities and crusted at the completion of the project.

- (a) Landscaping conducted by an individual(s) at their place of residence.
- (b) Emergency, [{]as defined in Section 0[], "Definitions," [M]maintenance activities conducted by government agencies on publicly maintained roads, road shoulders, rights-of-way, and public flood control facilities.
- (c) Weed and trash removal activities and [₽]dust [₽]palliative, [€]clean [€]gravel, or recycled asphalt product (for road shoulders only) applications conducted solely for the purpose of compliance with weed and/or trash abatement wherein no grade elevation changes, no soil or rock is imported or exported,[<u>and/or</u>] no cut and fill operations occur, and/or no clearing and grubbing activities occur.
- (d) Application of [D]dust [P]palliatives, [C]clean [G]gravel, or other approved materials to stabilize soils and prevent [F]fugitive [D]dust to comply with Section 90[<u>vacant land regulations</u>], "Fugitive Dust from Open Areas and Vacant Lots," wherein no grade elevation changes, no clearing and grubbing activities, and/or no cut and fill operations occur.

## 94.4 *DUST CONTROL OPERATING* PERMIT APPLICATIONS

#### 94.4.0 Duty to Apply for a Dust Control Operating Permit

- (a) Except as provided in Section 94.3, no [P]person shall commence any [G]construction [A]activities or [T]temporary [G]commercial [A]activities except in compliance with a [Permit]DCOP that authorizes such activities.
- (b) A [Permit]DCOP shall be required for any of the following:
  - (1) Construction [A]activities that disturb soils 0.25 acres or greater in overall area.
  - (2) Mechanized  $[\mp]_{t}$  renching 100 feet or greater in total length.

- (3) Mechanical demolition of any structure 1,000 square feet or greater.
- (4) Temporary [**G**]<u>c</u>ommercial [A]<u>a</u>ctivities 0.25 acres or greater in overall area.

### 94.4.1 Complete Application

- (a) Application for issuance, [R]renewal, or revision of a [Permit]DCOP shall be submitted on a form and in a manner prescribed by the Control Officer.
- (b) The Control Officer shall notify the Responsible Official if a [Permit]DCOP application is incomplete, and may request additional information that is needed.
- (c) If the Responsible Official fails to comply within 14 calendar days of the notice, the application may be denied and all applicable fees forfeited.

## 94.4.2 Application Content

- (a) All applications for a [Dust Control Operating Permit]DCOP shall include a [D]dust [M]mitigation [P]plan with appropriate [C]control [M]measures for every [C]construction [A]activity to be conducted. Other [C]control [M]measures that are at least as effective as approved [C]control [M]measures may be implemented with the approval of the Control Officer.
- (b) The application shall include a detailed supplement to the [D]dust [M]mitigation [P]plan for a [C]construction project 10 acres or [more]greater in area, [T]trenching activities [one]1 mile or greater in length, or structure demolition using implosive or explosive blasting techniques. A [Permit]DCOP for [T]temporary [C]commercial [A]activities is exempt from this requirement.
  - (1) The supplement shall be a written report and, at minimum, detail the project description, the area and schedule of the phases of land disturbance, the [C]control [M]measures, the contingency measures to be used for all [C]construction [A]activities, and a statement of the authority and training of personnel who will ensure compliance on-site.
  - (2) The supplement shall be signed by the Responsible Official.
- (c) An appropriate supplemental form shall be included with the application if the project includes explosive blasting.

- (d) The application shall identify the highest [particulate emission potential (]PEP[)] for the total project area, identified from the[particulate emission potential M]maps[ provided] in [Appendix]Figures 2 and 3[ to this section]. The PEP identified for the project shall be used to determine the BMPs for the [Đ]dust [M]mitigation [P]plan.
- (e) The application shall be signed by the Responsible Official.
- (f) The application, [Đ]<u>d</u>ust [M]<u>m</u>itigation [P]<u>p</u>lan, and related maps and forms shall become part of the [Permit]<u>DCOP</u>.

#### 94.5 *DUST CONTROL OPERATING* PERMIT REQUIREMENTS

- (a) Any [P]person engaging in [C]construction [A]activities on a site having a [Permit]DCOP shall be subject to all conditions set forth in the [Permit]DCOP. Failure to comply with any condition set forth in the [Permit]DCOP shall be a violation of the AQRs.
- (b) Issuance or [R]renewal of each [Permit]DCOP shall require payment of the applicable [P]permit fee(s) in accordance with Section 18. <u>"Permit and Technical Service Fees.</u>" A [Permit]DCOP for [T]temporary [G]commercial [A]activities is exempt from this requirement.
- (c) A complete copy of the current [Permit]DCOP must be kept on the project site at all times that [C]construction [A]activities occur and be made available upon request of the Control Officer.
- (d) Any additional [G]control [M]measure requirements resulting from adjudicated corrective orders by the Control Officer or Hearing Officer shall become a part of the [Permit's]DCOP [D]dust [M]mitigation [P]plan.
- (e) The Control Officer may waive [P]permit fees for public agency [M]maintenance projects performed by the agency's own employees.
- (f) No [P]person shall:
  - (1) Refuse access if the Control Officer requests entry for inspection and presents appropriate credentials.
  - (2) Obstruct, hamper or interfere with an inspection.
- (g) The Responsible Official shall:

- (1) Ensure that all contractors, subcontractors, and other [P]persons on the [G]construction site abide by the conditions of the [Permit]DCOP and the AQRs.
- (2) Supply complete copies of the [Permit]DCOP, including the [D]dust [M]mitigation [P]plan, to all project contractors and subcontractors.
- (3) Ensure compliance with all [Permit]DCOP conditions until a [Permit]DCOP [e]Closure [f]Form has been submitted to and approved by the Control Officer.
- (h) The Control Officer may determine when  $[\car{G}]\car{c}$  onstruction projects that are under  $[\car{G}]\car{c}$  ontrol and are  $[\car{G}]\car{c}$  ontiguous may be required to obtain and operate under a single  $[\car{Permit}]\car{D}\car{C}\car{O}\car{P}$ .
- (i) The Control Officer may determine when more than one [C]construction [A]activity less than 0.25 acres in area, or [T]trenching activities less than 100 feet, can be treated as a single activity and the [C]construction project is required to obtain a [Permit]DCOP [due to]because the properties [being]are:
  - (1) [<code>ʉ]U</code>nder [<code>G]c</code>ommon [<code>G]c</code>ontrol;
  - (2) Contiguous [;] or [(3)] separated only by a roadway and
  - (3) [e]Cumulatively equal to or [exceeding]greater than 0.25 acres, or trenching activities equal to or greater than 100 feet.
- A [Permit]DCOP shall be required for routine, public agency road [M]maintenance, road shoulder [M]maintenance, flood control facility [M]maintenance, and [M]maintenance activities that disturb soil and are capable of causing [F]fugitive [D]dust. Such [Permit]DCOPs shall:
  - Require that records be maintained based upon written annual schedules of work for routine [M]maintenance activities;
  - (2) Include a [D]dust [M]mitigation [P]plan listing all the activities to be performed that may disturb the soil and BMPs for all these activities; and
  - (3) Include conditions requiring that miles and acres be quantified for [M]*m*aintenance activities to be performed.
- (k) A [Permit]DCOP shall be valid for up to 365 days from the effective date of the [Permit]DCOP. A [Permit]DCOP issued for [T]temporary

[C]commercial [A]activities shall be valid for up to 90 days from the effective date of the [Permit]DCOP.

- (I) A DCOP must be renewed if Sections 94.4.1(b)(1), (2), or (3) still apply, and an application must be submitted before the DCOP expiration date.
- [(+)](m) If a [R]renewal application is submitted within 30 days prior to the [Permit's]DCOP expiration date, the effective date of the renewed [Permit]DCOP will reflect one day after the expiration date of the current [Permit]DCOP. If a [R]renewal application is submitted more than 30 days before the [Permit's]DCOP expiration date, the [Permit's]DCOP effective date will change to the new issuance date. If a [R]renewal application is submitted after the [Permit's]DCOP expiration date, the effective date of the renewed [Permit]DCOP will reflect one day after the expiration date of the current [Permit]DCOP. Applications submitted after the expiration of the [Permit]DCOP will be subject to a late fee.
- [(m)](n) A [Permit]<u>DCOP</u> issued for [T]<u>t</u>emporary [C]<u>c</u>ommercial [A]<u>a</u>ctivities is not renewable.
- [(n)](0) The Responsible Official shall:
  - (1) Notify the Control Officer in writing within 10 days following the cessation of active operations on all or part of a [C]construction site when cessation will extend 30 days or longer. Stabilization shall also be implemented within 10 days, in accordance with BMP 11, <u>"Long-term Stabilization."</u>
  - (2) Complete and submit a Dust Control Operating Permit Closure Form for approval to the [D]department within 10 days following the completion of a [C]construction project and/or expiration of the [Dust Control Operating Permit]DCOP if permit renewal is not required per Section 94.5(I). Prior to the submittal of the[-closure] form, the Responsible Official shall:
    - (A) Implement a control method for long-term stabilization, as described in BMP 11, <u>"Long-term Stabilization,"</u> on all disturbed areas that are not built out, landscaped, or [P]paved.

#### 94.6 [GENERAL AND ADMINISTRATIVE STANDARDS] DUST CONTROL OPERATING PERMIT REVOCATION AND SUSPENSION

(a) The Control Officer may revoke or suspend a DCOP for cause.

- (1) If suspended, the DCOP may be reinstated upon a demonstration that the circumstances that led to the suspension have been remedied.
- (2) If revoked, an application for a new DCOP must be submitted and fees paid in accordance with Section 18, "Permit and Technical Services Fees."
- [(a)](b) [N]The Control Officer shall not issue new, renewed, or revised [Permits]DCOPs [shall not be issued] to any [P]person [havingoutstanding unpaid D]who is delinquent paying department fees and/or <u>delinquent paying adjudicated</u> penalties[-that have beenadjudicated].
- [(b) As part of the adjudication of the third Notice of Violation by the Hearing Officer, the Control Officer may, within any 180-day periodand for the same project for which the Permit was issued, recommend suspension or revocation of the Permit.
  - (1) Upon the Hearing Officer issuing such order:
    - (A) All activities that are authorized by the Permit shallcease.
    - (B) The Hearing Officer Order shall be posted conspicuously on the property involved, stating the reasons and indicating the date of suspension and/orrevocation.
    - (C) The suspension or revocation shall remain in effect until such time as rescinded by the Hearing Officer.
  - (2) Upon Hearing Officer approval:
    - (A) If suspended, the Permit may be reinstated.
    - (B) If revoked, an application for a new Permit must be submitted and fees paid in accordance with Section-18.
  - (3) The Permittee may file a written Notice of Appeal to the Hearing Board within 10 days of the date of the Hearing Officer's order, except as otherwise provided by law.]
- (c) Any [P]person aggrieved by a decision of the Control Officer pursuant to this section may appeal in accordance with Section 7.5 of the AQRs.

#### 94.7 NOTICES OF NON[-]COMPLIANCE AND NOTICES OF VIOLATION

- (a) Whenever the Control Officer finds that any provision of a [Permit]DCOP or [D]dust [M]mitigation [P]plan has been violated, the Control Officer may issue a Notice of Non[-C]compliance to the Responsible Official for the alleged violation in accordance with Section 4.3 of the AQRs, <u>"Alleged Violations</u>." The notice shall specify:
  - The [Permit]<u>DCOP</u> and/or plan provision(s) alleged to be violated;
  - (2) The facts alleged to constitute the violation; and
  - (3) Direction to correct the observed non[-]compliance.
- (b) Regardless of whether a Notice of Non[-C]compliance has been issued, the Control Officer may issue a Notice of Violation upon determination that the [P]permittee has violated any provision(s) of the [Permit]DCOP, the [D]dust [M]mitigation [P]plan, or other [A]applicable [R]requirements. Such Notice of Violation shall be adjudicated in accordance with Section 7.3 of the AQRs, "Procedures – Hearing Officer."
- (c) Nothing herein prevents the Control Officer from making efforts to obtain voluntary compliance through warning, conference, or other appropriate means.

#### 94.8 DUST CONTROL MONITOR

- (a) The Control Officer shall require a Dust Control Monitor for:
  - (1) Any [C] construction project that has 50 acres or more of disturbed soil at any given time.
  - (2) Individually permitted projects that have less than 50 acres of disturbed soil at any given time when two or more projects are under [C]common [C]control, are [C]contiguous, and total 50 acres or more.
- (b) The Control Officer may require a Dust Control Monitor for any construction project equal to or greater than 10 acres, but less than 50 acres, with documented noncompliance with Section 94.14.
- [(b)](c) The Control Officer may require additional Dust Control Monitors due to the size of a project [and/]or <u>documented</u> non[-]compliance [issues]with Section 94.

- [(c)](d) The requirement for a Dust Control Monitor shall not apply to a [C]construction project that meets all of the following:
  - (1) The area of actively disturbed soil becomes less than 50 acres;
  - (2) The previously disturbed areas have been stabilized as required by BMP 11[-and], *"Long-term Stabilization";*
  - (3) The Control Officer has verified and approved the stabilization[-]; and

(4) Section 94.8(b) does not apply.

- [(d)](e) A Dust Control Monitor cannot be assigned to more than one non[C]contiguous permitted [C]construction site unless the Control Officer approves in advance.
- [(e)](f) The Responsible Official shall provide full authority to the Dust Control Monitor to ensure that effective [D]dust [C]control [M]measures are implemented. This [P]person's name must be included on the ["]Construction Site Dust Control Monitor["-f]Form and submitted with the [Dust Control Operating Permit]DCOP application, as applicable. The authority of the Dust Control Monitor shall include all of the following:
  - (1) Conduct site inspections and monitor current [monitoring] activities on site;
  - (2) Deploy resources to maintain compliance with the [Permit]DCOP; and
  - (3) Be able to shut down or regulate [C]construction [A]activities to maintain compliance as needed.
- [(f)](g) The Dust Control Monitor shall be present and available at all times [C]construction [A]activities occur on the project site and shall devote the majority of [his/her]their time specifically to managing [D]dust prevention and control on the site.
- [(g)](h) The Dust Control Monitor may temporarily operate a water truck for monitoring and resolving [D]dust issues, but may not support [C]construction [A]activities unless approved by the Control Officer.
- [(h)](i) No employee with responsibilities other than ensuring [Đ]dust [C]control [M]measures are implemented on a [C]construction site (such as a supervisor or foreman) may be assigned as the Dust Control Monitor.

- [(i)](i) A [P]person shall be certified as a Dust Control Monitor upon complying with all of the following:
  - (1) Successfully completing the Clark County Air Quality Dust Control Monitor Class within the past three years.
  - (2) Successfully completing a course approved by the Control Officer and becoming certified in Visual Emissions Evaluation (VEE) within the past three years.

#### 94.9 DUST CONTROL MONITOR RECORDKEEPING

- (a) On a site having a [Dust Control Operating Permit]DCOP, a written record of self-inspection shall be made at least twice each day on which soil- disturbing work is conducted. The ["]Record of Daily Dust Control["] <u>for Construction Activities – Dust Monitor Use</u> [f]Form, or other written record that provides at a minimum the same information, shall be completed.
- (b) Records of [€] construction site self-inspections shall be kept for a minimum of one year or for six months beyond project duration, whichever is longer. Self-inspection records shall include daily inspections for crusted or damp soil, [∓]trackout conditions and cleanup measures, daily water usage, [₽]dust [\$]suppressant application records, etc.

#### 94.10 CLARK COUNTY AIR QUALITY DUST CONTROL CLASS

- (a) The following individuals are required to successfully complete the Dust Control Class:
  - (1) Construction site superintendent and all others designated as on-site representatives of the [₽]*p*ermittee.
  - (2) All [C]construction supervisors and foremen of on-site contractors and subcontractors.
  - (3) Water truck and water pull driver(s) for each [C]construction project.
- (b) Each of the individuals listed in <u>paragraph</u> (a) [above]<u>of this section</u> are required to attend and successfully complete the Dust Control Class at least once every three years.
- (c) The Control Officer may require any personnel affiliated with a permitted site to attend a Dust Control Class as a remedial or corrective measure.

(d) A [Permit]<u>DCOP</u> issued for [T]<u>t</u>emporary [C]<u>c</u>ommercial [A]<u>a</u>ctivities is exempt from this requirement.

#### 94.11 SIGNAGE REQUIREMENTS

- (a) Projects required to obtain a [Dust Control Operating Permit]DCOP shall install signage prior to commencing [C]construction [A]activities.
  - (1) Exemptions from this requirement include:
    - (A) Projects with a duration of 14 calendar days or less.
    - (B) [Permit]<u>DCOP</u>s issued for [T]<u>t</u>emporary [C]<u>c</u>ommercial [A]<u>a</u>ctivities.
- (b) The sign shall:
  - (1) Measure, at minimum, four feet wide by four feet high.
  - (2) Conform to the [D]department guidance[-on the design and posting of signage, as provided] in Appendix [3]2[-to this section]. The signage must include current [Permit]DCOP information.
  - (3) Be located near the main entrance to the project, and be visible and legible to the public.

#### 94.12 SOIL STABILIZATION STANDARDS

- (a) The Responsible Official shall ensure that all contractors, operators, and other [₽]persons involved in [€]construction [A]activities <u>that</u> <u>cause or may cause fugitive dust emissions</u> employ effective [€]control [M]measures.
- (b) One or more of the following methods shall be implemented to maintain [D]dust control on all disturbed soils [on]at [C]construction sites and staging areas to the extent necessary to pass the Drop Ball Test described in Section 94.15.5:
  - (1) Maintained in a sufficiently damp condition to prevent loose particles of soil from becoming dislodged.
  - (2) Crusted over by application of water.
  - (3) Completely covered with  $[\underline{G}]\underline{c}$  lean  $[\underline{G}]\underline{g}$  ravel.
  - (4) Treated with a  $[-D] \underline{d}$  ust  $[S] \underline{s}$  uppressant.

(5) Treated using another method approved in advance by the Control Officer.

### 94.13 BEST AVAILABLE CONTROL MEASURES

- (a) Any [₽]person who engages in a [C]construction [A]activity or [T]temporary [C]commercial [A]activity[,] with or without a [Permit]DCOP that causes or may cause fugitive dust emissions, shall employ BACM and comply with the soil stabilization standards [{]in\_Section 94.12[}] and [E]emissions standards [{]in\_Section 94.14[}].
- (b) Control [M]<u>m</u>easures [that are listed ]in [the approved Permit]<u>a</u> <u>DCOP</u>, and other measures as needed for the purpose of maintaining [<del>D</del>]<u>d</u>ust control, shall be implemented 24 hours a day, [seven]<u>7</u> days a week, until the [Permit]<u>DCOP</u> is closed in accordance with Section 94.5([n]<u>o</u>)(2).
- (c) All [€] construction [A] ctivities that contribute to [E] missions, even when BACM is implemented, shall immediately cease when wind conditions cause [F] fugitive [₽] dust:
  - (1) In excess of  $20\% [\Theta]_{O}$  pacity using the:
    - (A) Time Averaged Method (Section 94.15.2); or
    - (B) Intermittent Emissions Method (Section 94.15.3).
  - (2) In excess of [50]35% [O]opacity using the Instantaneous Method (Section 94.15.4).
  - (3) Resulting in a [**→**]<u>d</u>ust plume <u>extending</u> 100 yards <u>or more</u> in length.

Water trucks and water pulls shall continue to operate under these circumstances until wind conditions are such that the continued operation of this equipment poses a safety hazard.

(d) <u>A control method for long-term stabilization, as described in BMP</u> <u>11, "Long-term Stabilization," shall be implemented on all disturbed</u> <u>areas that are not built out, landscaped, or paved within 10 days of</u> <u>completion of a construction project and/or expiration of the DCOP</u> <u>if a permit renewal is not required per Sections 94.4.1(b)(1), (2), or</u> <u>(3).</u>

### 94.14 EMISSION STANDARDS

- (a) [No Person conducting]Any person who engages in [C]construction [A]activities, with or without a [Permit]DCOP, shall not cause or allow the handling, transport, or storage of any material in a manner that allows visible [E]emissions of [P]particulate [M]matter to:
  - (1) Exceed 20% [O]opacity using the Time Averaged Method or the Intermittent Emissions Method.
  - (2) Exceed  $[\frac{50}{35}\% [\Theta]_{0}$  pacity using the Instantaneous Method.
  - (3) [Allow a dust plume to e] Extend more than 100 feet.
  - (4) [Allow a dust plume to c]Cross a property line.
- (b) The use of blower devices and dry rotary brushes for the removal of deposited mud, dirt, or rock from a [₽]paved surface is prohibited except when the use of water is not technically feasible and only with prior Control Officer approval.
- (c) Rotary brushes may[-only] be used <u>for removal of deposited mud,</u> <u>dirt, or rock</u> when sufficient water is applied to limit the visible [E]emissions consistent with the visible [E]emission standards in Sections 94.14(a)(1), (2), or (3). <u>Dry rotary brushes may only be used</u> <u>when the use of water is not technically feasible and only with prior</u> <u>Control Officer approval.</u>
- (d) Mud or dirt shall not be allowed to accumulate on a [P] $\underline{p}$ aved surface where  $[\underline{+}]\underline{t}$ rackout extends greater than 50 feet in cumulative length or accumulates to a depth greater than 0.25 inches.
- (e) Trackout, including [∓]<u>t</u>rackout less than 50 feet in length or 0.25 inches in depth, shall be cleaned immediately and maintained to eliminate [E]<u>e</u>missions of [F]<u>f</u>ugitive [P]<u>d</u>ust by removing all accumulations of mud or dirt on curbs, gutters, sidewalks, or [P]<u>p</u>aved surfaces[<sub>7</sub>] that cause[s] one or more of the following:
  - (1) An exceedance of 20% [O]opacity using the Time Averaged Method or the Intermittent Emissions Method.
  - (2) An exceedance of [50]35% [O]opacity using the Instantaneous Method.
  - (3) A [Đ]dust plume to extend more than 100 feet, horizontally or vertically.
  - (4) A  $[-D] \underline{d}$  ust plume to cross a property line.

- (f) Except as required in <u>Sections</u> 94.14(d) and (e), all [+]<u>trackout shall</u> be cleaned up by the end of the workday or evening shift regardless of length or depth.
- (g) [No s]Stockpiles located 100 yards or less from occupied buildings must be less than [over eight]8 feet high [shall be located within 100 yards of occupied buildings]unless the permittee occupies the buildings or receives prior Control Officer approval based on feasibility, necessity, or other condition. Stockpiles [over eight feet high-]located farther than 100 yards from occupied buildings may be higher than 8 feet.
  - (1) Stockpiles higher than 8 feet [must]shall have a road bladed to the top to allow water truck access, or <u>the permittee</u> must\_ demonstrate <u>to the Control Officer</u> another means [toprovide] <u>of</u> effectively <u>controlling</u> [D]<u>d</u>ust [control at the top of the]from the entire stockpile.

### 94.15 TEST METHODS

#### 94.15.0 Visual Determination of Emission Opacity from Sources of Visible Emissions

- (a) Applicability: This method is applicable for determining the  $[\bigcirc]_{o}$  pacity of  $[\textcircled{e}]_{e}$  missions from sources of visible  $[\textcircled{e}]_{e}$  missions.
  - The Time Averaged Method requires averaging visible
     [E]emission readings over a specific time period to determine
     the [O]opacity of the [E]emissions. It is used for continuous
     [E]emissions sources.
  - (2) The Intermittent Emissions Method requires averaging a set number of visible [€]emissions readings to determine the [⊖]opacity of visible [€]emissions. It is used for intermittent [€]emissions sources.
  - (3) The Instantaneous Method sets an [⊖]opacity limit that shall not be exceeded [at any time]when averaging set number of visible emissions readings to determine the opacity of visible emissions. It can be used with any [E]emissions source[-and is a non-federal requirement].
- (b) Principle: The [⊖]opacity of [E]emissions from a source of visible [E]emissions is determined visually by an observer with a current certification, approved by the Control Officer, as a qualified Visible Emissions Evaluator using EPA Method 9.

(c) Procedures: A qualified Visible Emissions Evaluator shall use the procedures set forth in Sections 94.15.2, 94.15.3, and 94.15.4 for visually determining the [⊖]opacity of [E]emissions.

## 94.15.1 Time Averaged Method

The procedure in this section is for evaluating and determining the  $[\Theta]$  pacity of continuous [F] ugitive  $[\Phi]$  dust [F] missions by a qualified observer. Sources of these [F] missions include activities that produce [F] missions continuously during operations, such as earthmoving, [G] and [F] renching. Emissions from these types of activities are considered continuous even though the speed of the activity may vary and [F] missions may be controlled to 100%, producing no visible [F] missions, during parts of the operation. The qualified observer should do the following:

- (a) Position: Stand at a position at least 20 feet from the [F]fugitive [D]dust source to provide a clear view of the [E]emissions, with the sun oriented in the 140° sector to the back. Consistent as much as possible with maintaining this stance, make [O]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 [F]fugitive [D]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 site name, [F]fugitive [D]dust source type (e.g., earthmoving, [G]grading, [T]frenching), method of control used (if any), observer's name, certification data and affiliation, and a sketch of the observer's position relative to the [F]fugitive [D]dust source. Also, record the time, estimated distance to the [F]fugitive [D]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 [F]fugitive [D]dust source, color of the plume, and type of background [of]on the Clark County DAQ [V]Visible Emission[-observation] Evaluation (VEE) Form when [O]opacity readings are initiated and completed.
- (c) Observations: Make [↩] pacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of sight. Observe at a point just beyond where material is no longer being deposited out of the plume (normally three 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 [F]fugitive [₽] ust from earthmoving equipment, make [♀] pacity 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  $[\Theta]$  pacity observations to the nearest 5% every 15 seconds on a[<u>n observational record sheet</u>] <u>Clark County DAQ – Visible Emission Evaluation (VEE) Form</u>. Each momentary observation recorded represents the average [Q] pacity of [E] missions for a 15-second period. If multiple plumes exist at the time of an observation, do not record an  $[\Theta]$  pacity reading; mark an "x" for that reading. If the equipment generating the plume travels outside the field of observation, resulting in an inability to maintain sun orientation within the 140° sector, or if the equipment ceases operating, mark an "x" for the 15-second interval reading. Readings identified as "x" shall be considered interrupted readings.
- (e) Data Reduction For Time-Averaged Method: For each set of 12 or 24 consecutive readings, calculate the appropriate average [O]opacity. Sets shall consist of consecutive observations; however, readings immediately preceding and following interrupted readings shall be deemed consecutive. In no case shall two sets overlap, resulting in multiple violations.

## 94.15.2 Intermittent Emissions Method

The procedure in this section is for evaluating and determining intermittent  $[F]_{f}^{f}$  ugitive  $[D]_{d}^{f}$  ust  $[E]_{e}^{f}$  missions by a qualified observer. Sources of intermittent  $[F]_{f}^{f}$  ugitive  $[D]_{d}^{f}$  ust  $[E]_{e}^{f}$  missions include activities that produce  $[E]_{e}^{f}$  missions intermittently, such as screening, dumping, and stockpiling, where predominant  $[E]_{e}^{f}$  missions are produced intermittently. The qualified observer should do the following:

- (a) Position: Stand at a position at least 20 feet from the [F]fugitive [Đ]dust source to provide a clear view of the [E]emissions, with the sun oriented in the 140° sector to the back. Consistent as much as possible with maintaining this stance, make [O]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 site name, [F]fugitive [D]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 [F]fugitive [D]dust source. Also, record the time, estimated distance to the [F]fugitive [D]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 [F]fugitive [D]dust source, and type of background [ef]on the Clark

<u>County DAQ –</u> [v]V is the Emission <u>observation</u> <u>Evaluation (VEE)</u> <u>Form</u> when  $[\Theta]o$  pacity 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. Observe 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 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.
- (d) Recording Observations: Record the [⊖]opacity observations to the nearest 5% on a[n observational record sheet] <u>Clark County DAQ</u> – <u>Visible Emission Evaluation (VEE) Form</u>. Each momentary observation recorded represents the average [⊖]opacity of [E]omissions for a five-second period.
- (e) Repeat [Sections 94.15.3]paragraphs (c) and (d) of this section until a total of 12 consecutive [O]opacity readings have been recorded. This will occur once [six]6 intermittent plumes on which the observer is 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.

#### 94.15.3 Instantaneous Method

[This is a non-federal procedure for evaluation of Fugitive Dust Emissions. It provides a method] *This procedure is* for *the* instantaneous determination of the [O]opacity of [F]*f*ugitive [D]*d*ust [E]*e*missions by a qualified observer. [This method is a Clark County-local requirement and has not been submitted as part of the Nevada State Implementation Plan.] The qualified observer should do the following:

(a) Position: Stand at a position at least 20 feet from the [₣]fugitive [₽]dust source to provide a clear view of the [E]emissions[,] with the sun oriented in the 140° sector to the back. Consistent as much as possible with maintaining [this stance]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  $[F]_{1}^{f}$ ugitive  $[D]_{2}^{d}$ ust 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 site name [F]fugitive [D]dust source type (e.g., earthmoving, [G]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 [F]fugitive [D]dust source. Also record the time, estimated distance to the [F]fugitive [D]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 [F]fugitive [D]dust source, color of the plume, and type of background [ef]on the visible emission observation form when [O]opacity readings are initiated and completed.
- (c) Observations: Make [O]opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of sight. [Observe]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 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 94.

### 94.15.4 Soil Crust Determination (Drop Ball Test)

- (a) Drop a steel ball with a diameter of 0.625 (%) inches (<u>15.9 mm</u>) and a mass ranging from 0.56 to 0.60 ounces (<u>16–17 g</u>) from a distance of one foot (<u>30.5 cm</u>) directly above the soil surface. If blowsand is present, clear the blowsand from the surfaces on which the [<del>soil crust</del> test method]Drop Ball Test 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 that is not blowsand covers a visible crust, apply the test method in [AQR-]accordance with Section 90.4.1.3 of the AQRs. [{]"Determination of Threshold Friction Velocity (<u>TFV</u>),"[}] to the loose material to determine whether the surface is stable.
- (b) A sufficient crust is defined under the following conditions: once a ball has been dropped according to [AQR Section 90.4.1.1]paragraph (a) of this section, the ball does not sink into the surface, where it would be partially or fully surrounded by loose grains; and, upon removing the ball, the surface upon which it fell has not been pulverized, where loose grains [would be]are visible.
- (b)(c) Randomly select each representative disturbed surface for the [d]Drop [b]Ball [t]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 1foot-square area. Drop the ball three times within the 1-foot by 1foot square, using a consistent pattern across the survey area. The survey area shall be considered to have passed the Soil Crust Determination]Drop Ball Test if the results meet the criteria of [AQR-Section 90.4.1.1(a)]paragraph (b) of this section at least two out of the three times the ball [was] is dropped. Select at least two other survey areas that represent a random portion of the overall disturbed conditions of the site and repeat [this]the procedure. If the results meet the criteria of [AQR Section 90.4.1.1(a)]paragraph (b) of this section in all the survey areas tested, the site shall be considered to have passed the [Soil Crust Determination]Drop Ball Test and shall be considered sufficiently crusted.
- [(c)](d) 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 t]Drop Ball T est as often as necessary on each portion of the overall site using the random selection method set forth in [AQR Section 90.4.1.1(b)]paragraph (c) of this section for an accurate assessment.

## Appendix 1: BEST MANAGEMENT PRACTICES (BMPs)

BMPs are site-specific  $[\square] \underline{d}$  ust  $[\square] \underline{c}$  ontrol  $[\square] \underline{m}$  easures that are based on project soil type, specific  $[\square] \underline{c}$  onstruction  $[\square] \underline{a}$  ctivities, and project phases/stages. These practices are established to reduce particulate  $[\blacksquare] \underline{e}$  missions from  $[\square] \underline{c}$  onstruction sites. Some practices are also designed to reduce the amount of water needed for  $[\square] \underline{d}$  ust control.

### 1. Soil Type Categories

Soil types are classified into five categories—high, moderately high, moderately low, low, and slight—based on their PEP. The fifth category, "slight," was created solely to identify areas of bedrock outcrops. PEP is determined by soil silt content (measured by the percent of soil that will pass through a 200-mesh sieve) and optimum moisture content (measured by the percent of moisture necessary to compact soils).

### 2. BMPs

The following sections list the current BMPs developed and approved for use in Clark County to mitigate [P]dust during [G]construction [A]dctivities. The BMPs are organized alphabetically by [G]construction [A]dctivity.

The control requirements of each  $[\car{C}]\car{C}$  onstruction  $[\car{A}]\car{C}$  ctivity category to be conducted on the project must be met through implementation of  $[\car{C}]\car{C}$  ontrol  $[\car{M}]\car{M}$  easures. Within most  $[\car{C}]\car{C}$  onstruction  $[\car{A}]\car{C}$  ctivity categories, there are choices of  $[\car{C}]\car{C}$  ontrol  $[\car{M}]\car{M}$  easures to select to meet control requirements. Control requirements are stated for each  $[\car{C}]\car{C}$  onstruction  $[\car{A}]\car{C}$  ctivity.

Table 1 provides the required [ $\bigcirc$ ] control [M] measures to be implemented for each soil type based on PEP. Some [ $\bigcirc$ ] control [M] measures apply to [ $\bigcirc$ ] construction [A] ctivities regardless of soil type. The [ $\bigcirc$ ] control [M] measures implemented must address the PEP for the area in which the [ $\bigcirc$ ] construction project is permitted.

Particulate Emission Potential (PEP)	Control Measure
Low	Apply water and mix moist soil with dry soil until optimum moisture content is reached <u>to meet emissions and soil</u> <u>stabilization standards</u> .
Moderate Low	Apply and mix water into soil and/or material until optimum moisture content is reached <u>to meet emissions and soil</u> <u>stabilization standards</u> .
Moderate High	Apply and mix water and [tackifier] <i>surfactant</i> solution into soil and/or material until optimum moisture content is reached <i>to meet emissions and soil stabilization standards</i> .
High	Apply and mix water and surfactant solution into soil and/or material until optimum moisture content is reached <u>to meet</u> <u>emissions and soil stabilization standards</u> .

#### Table 1: Soil Types

Control measures not currently listed in the BMPs may be proposed in a  $[\square]_d$ ust  $[M]_m$ itigation  $[\square]_p$ lan. Such unlisted  $[\square]_c$ ontrol  $[M]_m$ easures will be reviewed by <u>the</u> <u>Department of Environment and Sustainability</u>, <u>Division of Air Quality</u> (DAQ) [staff-]and may require additional information regarding their effectiveness. Any unlisted  $[\square]_c$ ontrol  $[M]_m$ easure must clearly meet the control requirements for an activity category.

DAQ will apply the following minimum criteria when evaluating any unlisted [G]control [M]measures [a Permittee proposes to meet]proposed for meeting the control requirements for a BMP:

- a. The [C]control [M]measure technique is a new or alternative technology demonstrated to be equally or more effective in meeting the control requirement than existing [C]control [M]measures;
- b. Site logistics do not practically allow for implementation of a listed [G]control [M]measure as written (e.g., road width prevents truck entry or preexisting barriers limit the size or width of a gravel pad); or
- c. [The Owner/Operator demonstrates]/t is demonstrated that a listed [C]control [M]measure is technically infeasible due to site-specific or material-specific conditions such that implementation of the [C]control [M]measure will not provide a benefit in reducing [F]fugitive [D]dust (e.g., presoaking screened, washed rock when handling).

# BMP 01 BACKFILLING ([F]*f*illing area previously excavated or [T]*f*renched)

- (a) Maintain optimum moisture content in backfill material and operate equipment in a manner that limits [₣]fugitive [₽]dust to comply with the AQRs before, during, and after handling of material and during storage until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a stabilized condition.
  - (2) Dedicate an adequate water source to backfilling equipment and apply water as needed to minimize [Đ]dust.
  - (3) Empty loader bucket slowly and minimize drop height from loader bucket.
  - (4) Ensure backfill material is moist or crusted at all times.
  - (5) Apply water[,] or surfactant[, or tackifier] to maintain disturbed soils in a stable condition to limit [F]fugitive [D]dust.

**Note:** The appropriate [C]control [M]measure for the project soil type must be selected from Table 1.

# BMP 02 BLASTING – Abrasive ([S]sandblasting, abrasive blasting, and/or hydro-blasting)

## 02 Requirements

- (a) Ensure soil moisture is maintained to limit [F]/ugitive [D]/ust where support equipment and vehicles will operate until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils and maintain in a stabilized condition.
  - (2) If water is not effective, apply and maintain a surfactant and/or  $[\underline{P}]\underline{d}$ ust  $[\underline{P}]\underline{p}$ alliative on surface soils as needed.
- (b) Limit visible [E]emissions to no more than an average of 40% [O]opacity for any period totaling 3 minutes in any 60-minute period, or to no more than [50]35% instantaneous [O]opacity, pursuant to the AQRs.
- (c) Hydro-blasting (using water as the propellant) must be conducted in a manner that maintains visible [**⊑**]emissions within [**♀**]opacity standards.
- (d) Stabilize [P]<u>p</u>articulate [M]<u>m</u>atter in the surrounding area following blasting.
  - (1) Clean [P]<u>p</u>articulate [M]<u>m</u>atter from the surrounding area and water disturbed soils after blasting.
  - (2) If water is not effective, apply and maintain a surfactant and/or [D]dust [P]2alliative on the surrounding area following blasting.

**Note:** Whenever possible, abrasive blasting should be conducted within an enclosed structure to limit the release of visible [E]emissions to the atmosphere.

# BMP 03 BLASTING – Soil and Rock ([E]explosive blasting of soil and rock)

### 03 Requirements

(a) Maintain optimum moisture content in soil where drills, support equipment, and vehicles will operate to prevent unstable soil

conditions and limit  $[F]_{f}$  ugitive  $[D]_{d}$  ust until the long-term stabilization requirements listed in BMP 11 are achieved.

- (1) Pre-water surface soils where drills, support equipment, and vehicles will operate, and maintain in a stabilized condition.
- (b) If water is not effective, apply and maintain a surfactant and/or  $[\underline{P}]\underline{d}$ ust  $[\underline{P}]\underline{p}$ alliative on surface soils as needed.
- (c) [A Blasting Supplemental form must be filled out, submitted, and approved by DAQ prior to any blasting]Complete and submit a Blasting Supplemental Form; receive DAQ approval before conducting any blasting.
- (d) No blasting may be conducted within 1,500 feet of a residential area, occupied building, or major roadway when the wind direction is toward these structures.
- (e) Blasting shall take place between the hours of 8:00 a.m. and 4:30 p.m., excluding Saturdays, Sundays, and holidays, unless prior permission is obtained from the Control Officer.
- (f) No blasting is allowed when the National Weather Service forecasts wind gusts above 25 [miles per hour (]mph[)].
- (g) Before setting explosive charges in holes, document current and predicted weather conditions according to the National Weather Service. If the forecast is for wind gusts of 25 mph or more, do not load explosives or blast holes. If wind conditions are forecasted to be 25 mph or more during a future scheduled blast, do not load explosives or blast holes.
- (h) If DAQ issues a Construction Notice or Dust Advisory when a blast has been scheduled, do not load explosives or blast holes during the time period listed on the notice/advisory. If holes were loaded before the notices were issued, call a DAQ Compliance [S]supervisor or [M]manager for permission to blast.
- (i) Maintain the optimum moisture content in soil before, during, and after blasting activities to limit [**E**]emissions until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Limit the blast area to what can be stabilized immediately following the blast.
  - (2) Limit disturbed areas by maintaining natural rock and vegetation.

- (3) Presoak surface soils to the depth of caliche or bedrock with water[,] <u>or</u> surfactant[, <u>or tackifier</u>] to limit [F]<u>f</u>ugitive [D]<u>d</u>ust.
- (4) Apply water, surfactant, <u>tackifier</u>, and/or [D]dust [P]palliative on disturbed soils to form a crust immediately following blasting activities until the long-term stabilization requirements listed in BMP 11 are achieved.

**Note:** The appropriate  $[G]_{c}$  ontrol  $[M]_{m}$  easure for the project soil type must be selected from Table 1.

# BMP 04 CLEARING AND GRUBBING ([Definition: C]clearing and grubbing for site preparation and vacant land cleanup)

#### 04 Requirement

- (a) Maintain optimum moisture content in soil before, during, and after clearing and grubbing activities to prevent unstable soil conditions and limit [F]<sup>f</sup>ugitive [D]<sup>d</sup>ust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a stabilized condition.
  - (2) Apply water[,] <u>or</u> surfactant[, or tackifier] during clearing and grubbing activities to prevent unstable soil conditions and limit [₣]<u>f</u>ugitive [₽]<u>d</u>ust.
  - (3) Apply water, surfactant, <u>tackifier</u>, and/or [<code>Đ]d</code>ust [<code>P]p</code>alliative on disturbed soils to form a crust immediately following clearing and grubbing activities until the long-term stabilization requirements listed in BMP 11 are achieved.

**Note:** The appropriate  $[G]_{c}$  ontrol  $[M]_{m}$  easure for the project soil type must be selected from Table 1.

# BMP 05 CLEARING FORMS, FOUNDATIONS AND SLABS ([C]clearing and cleaning of forms, foundations and slabs)

### 05 Requirement

Limit visible [E]emissions before, during, and after the clearing of forms, foundations, and slabs to no more than an average of 20% [⊖]opacity for any period totaling 3 minutes in any 60-minute period, or to no more than [50]35% instantaneous [⊖]opacity, pursuant to the AQRs.

- (1) Avoid the use of high pressure air to blow soil and/or debris from forms, foundations, and slabs.
- (b) At least one of the following must be used to clear forms, foundations, and slabs:
  - (1) Water spray.
  - (2) Sweeping and water spray.
  - (3) Industrial vacuum.

# BMP 06 CRUSHING ([C]crushing of [C]construction and demolition debris, rock, and soil)

#### 06 Requirements

- (a) Maintain optimum moisture content in soil where support equipment and vehicles will operate to prevent unstable soil conditions and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - If water is not effective, apply and maintain a surfactant and/or
     [D]dust [P]palliative on surface soils as needed.
- (b) Maintain optimum moisture content in material before, during, and after crushing activities to limit [**E**]emissions.
  - (1) Pre-water material before loading it into the crusher.
  - (2) Apply water to material during crushing to ensure compliance with [Θ]opacity standards and [Permit]DCOP conditions.
  - (3) Monitor Emissions Opacity. Make adjustments to ensure compliance with [Opacity standards and [Permit]DCOP conditions.
  - (4) Apply water to crushed material immediately following crushing.

**Note:** If required, obtain the appropriate [Operating P]<u>stationary</u> <u>source p</u>ermit for powered crushers prior to engaging in crushing activity and comply with [Permit]<u>stationary source permit</u> conditions.

# BMP 07 CUT AND FILL ([C]cut and/or fill soils for site grade preparation)

### 07 Requirement

- (a) Maintain optimum moisture content in soil where support equipment and vehicles will operate to prevent unstable soil conditions and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - (2) If water is not effective, apply and maintain a surfactant and/or [<code>Đ]d</code>ust [<code>P]p</code>alliative on surface soils.
- (b) Maintain optimum moisture content in soils before, during, and after cut and fill activities to limit [F]<u>f</u>ugitive [D]<u>d</u>ust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water to cut depth and maintain surface soils in a stabilized condition.
  - (2) Rip soil and add water and/or surfactant as needed to reach moisture throughout the cut depth.
  - (3) During cut and fill activities, apply water[,] <u>or</u> surfactant[, or tackifier] to ensure moisture content is maintained to cut depth.
  - (4) Immediately following cut and fill activities, apply water, <u>tackifier</u>, surfactant, and/or [D]<u>d</u>ust [P]<u>p</u>alliative to disturbed soils to form a crust until the long-term stabilization requirements listed in BMP 11 are achieved.

**Note:** The appropriate [C]control [M]measure for the project soil type must be selected from Table 1.

# BMP 08 DEMOLITION – Implosion ([4]/mplosive blasting demolition of structure)

#### 08 Requirements

(a) A [Demolition Supplemental Form]supplemental form for demolition and a [S]supplement to the [D]dust [M]mitigation [P]plan must be filled out, submitted to, and approved by the Control Officer prior to implosion.

- (b) An asbestos survey must be conducted on any facility before demolition can commence.
- (c) A separate, complete [Clark County NESHAP ]Demolition Notification Form must be submitted to DAQ for each structure at least 10 working days prior to demolition. The asbestos survey must be attached to this notification.
- (d) All friable and non-friable asbestos-containing material must be removed from the facility prior to implosion.
- (e) Blasting must be confined to times when the wind direction is away from the closest residential areas, occupied buildings, and major roadways.
- (f) Implosion time must be preapproved by the Control Officer.
- (g) Current weather conditions and weather predictions from the National Weather Service must be monitored and documented.
  - (1) Prior to setting explosive charges, obtain and document current and predicted weather conditions from the National Weather Service.
  - (2) If [a wind advisory (over 20 mph gusts or average wind speed of 10 mph) is]average wind speeds of 10 mph or more or gusts over 20 mph are current or forecasted for the blast period, do not set charges and do not blast.
  - (3) Maintain a calibrated anemometer and log ambient air velocity and direction within 1,000 feet of the implosion site, beginning at least 1 (one) hour prior to and 15 minutes after the implosion.
- (h) Maintain optimum moisture content in soil where support equipment and vehicles will operate to prevent unstable soil conditions and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Restrict support equipment and vehicles to existing [P]paved and/or stable areas.
  - (2) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - (3) If water is not effective, apply and maintain a surfactant and/or  $[\underline{P}]\underline{d}$ ust  $[\underline{P}]\underline{\rho}$ alliative on surface soils as needed.

- (i) Maintain optimum moisture content in demolition debris before, during, and after implosion activities to limit [**E**]<u>e</u>missions.
  - (1) Apply water to debris immediately following blast and safety clearance, and maintain optimum moisture content in debris throughout cleanup and exporting activities.
  - (2) If water is not effective, apply and maintain a surfactant to debris immediately following blast and safety clearance.
  - (3) Clean and stabilize surrounding areas immediately following blast and safety clearance by applying water to all disturbed soil surfaces to establish a crust.
  - (4) Thoroughly clean blast debris from [P] aved and other surfaces following blast and safety clearance.

## BMP 09 DEMOLITION - Mechanical/Manual ([M]mechanical and manual demolition of walls, stucco, concrete, free-standing structures, buildings, and load-bearing walls)

- (a) An asbestos survey must be conducted on any facility or structure subject to NESHAP requirements before demolition can [C]commence.
- (b) A separate, complete [Clark County NESHAP ]Demolition Notification Form must be submitted to DAQ for each structure at least 10 working days prior to demolition. The asbestos survey must be attached to this notification.
- (c) Maintain optimum moisture content in soil where support equipment and vehicles will operate to prevent unstable soil conditions and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - (2) If water is not effective, apply and maintain a surfactant and/or [<code>Đ]d</code>ust [<code>P]p</code>alliative on surface soils as needed.
- (d) Maintain optimum moisture content in demolition debris before, during, and after demolition activities to limit [E]emissions.
  - (1) Apply water to demolition debris during handling.

- (2) Apply water to stabilize demolition debris immediately following demolition.
- (3) If water is not effective, apply and maintain a [D]dust [P]alliative to demolition debris immediately following demolition.
- (e) Stabilize surrounding area immediately following demolition by applying water and/or [<code><code><code>P</code>]<code><code>d</code></code>ust [<code><code>P</code>]<code><code>p</code></code>alliative to all disturbed soil surfaces.</code></code></code>

# BMP 10 DISTURBED SOIL ([D]disturbed soil throughout project, including between structures)

- Maintain optimum moisture content in soils before, during, and after all [C]construction [A]activities to prevent unstable soils and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Limit vehicle traffic and disturbance of soils to areas not being immediately developed using fencing, barriers, and/or barricades.
  - (2) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - (3) Apply water[,] <u>or</u> surfactant[, <u>or tackifier</u>] during [C]construction [A]activities to prevent unstable soil conditions and limit [F]<u>f</u>ugitive [D]dust.
  - (4) Apply water, surfactant, <u>tackifier</u>, and/or [D]dust [P]palliative to disturbed soils to form a crust immediately following [C]construction [A]activities until the long-term stabilization requirements listed in BMP 11 are achieved.
- (b) If interior block walls are planned, install walls as early as possible in the [-]\_onstruction project.

## BMP 11 LONG-TERM STABILIZATION ([A]applies to disturbed land that is not built out, landscaped, or [P]paved at [Permit]DCOP closure)

#### 11 Requirements

- (a) Stabilize all disturbed land within 10 days of the completion of a project, or when active operations on all or part of the [C]construction site will cease for 30 days or more. Restrict access to these areas to prevent soil disturbance and maintain long-term stabilization where <u>feasible</u>. The Control Officer must approve the control method selected by the [P]permittee before its implementation. The [P]permittee shall select one or more of the following control methods:
  - (1) Pave.
  - (2) Apply [G]clean [G]gravel or dust palliative.
  - (3) Install permanent metal or wood fencing and/or a post and cable at least 3 feet high, or other similar barrier approved by the Control Officer, and stabilize soil with one of the following to create adequate crust <u>to pass the Drop Ball Test</u>:
    - (A) Water[<del>, or</del>];

(B) Tackifier; or

[(B)](C) Dust [P]palliative.

- (4) Install a dirt berm at least 4 feet high, or a similar barrier approved by the Control Officer, and stabilize soil with one of the following to create adequate crust to pass the Drop Ball <u>Test</u>:
  - (A) Water[<del>, or</del>]:
  - (B) Tackifier; or
  - [(B)](C) Dust [P]palliative.
- (b) Installation of signs, as described below, is required if [a dirt berm or similar barrier is used or if Clean Gravel is applied.]BMPs 11(a)(2) or (4) are implemented unless the permittee obtains prior Control Officer approval based on infeasibility or lack of necessity.

- Install orange "No Parking/Trespassing" signs with black lettering, at least 24 inches wide by 18 inches high, every 50 feet or as approved by the Control Officer ([Table 2] Figure 1).
- (2) Construct the sign(s) from materials capable of withstanding Clark County's harsh environment (e.g., wood, metal, plastic).
- (3) Attach the sign(s) to a sturdy post, such as metal or wood, placed securely in the ground, or attach the sign(s) to a fence, barricade, or other stable object that is clearly visible.
- (4) Post on or near the property boundary, the property corners, and at all access points; post no further than 50 feet apart.
- (c) New [C]construction or modification of [P]paved roads or disturbance of road shoulders must be stabilized [consistent with Section 93] before the [Dust Control Operating Permit]DCOP is closed.
  - (1) Roads with vehicular traffic equal to 3,000 vehicles or fewer per day shall have a 4-foot [P]paved road shoulder or be stabilized with [C]clean [G]qravel, recycled asphalt, or trafficrated [D]dust [P]palliative.
  - (2) Roads with vehicular traffic greater than 3,000 vehicles per day shall have an 8-foot [P]oaved road shoulder or be stabilized with [C]olean [G]gravel, recycled asphalt, or trafficrated [D]odust [P]oalliative.
  - (3) All disturbed areas outside the road shoulder boundaries must be treated for long-term stabilization.
- (d) New construction or modification of unpaved roads must be stabilized before the DCOP is closed. Control measures shall be considered effectively implemented when:
  - (1) Fugitive dust emissions do not exceed 20% opacity; and
  - (2) Silt loading on the unpaved road surface is not equal to or greater than 0.33 oz/ft<sup>2</sup> or the surface does not exceed 6% silt content as determined by Section 91.4.1.2, "Silt Content Test Method," of the AQRs.

**Note:** No unpaved roads or alleys may be constructed in public thoroughfares in areas where Section 91, "Fugitive Dust from Unpaved Roads, Unpaved Alleys, and Unpaved Easement Roads," is applicable.

(e) Based on site conditions, other control methods that are at least as

<u>effective as approved control methods may be implemented with</u> <u>prior Control Officer approval.</u>

## BMP 12 DUST PALLIATIVE – Selection and Use ([S]selection and use of chemical and organic dust suppressing agents and other [D]dust [P]palliatives)

### 12 Requirement

T<u>he Responsible Official shall ensure t</u>he selection and use of chemical and organic  $[\underline{P}]\underline{d}$ ust  $[\underline{S}]\underline{s}$ uppressing agents and other  $[\underline{P}]\underline{d}$ ust  $[\underline{P}]\underline{p}$ alliative shall adhere to all local,  $[\underline{S}]\underline{s}$ tate, and federal regulations as well as all manufacturer specifications.

## BMP 13 IMPORTING/EXPORTING OF BULK MATERIAL ([1]/mporting or exporting of soil, aggregate, decorative rock, debris, Type II, and other bulk material)

- (a) Maintain optimum moisture content in surface soils and bulk material before, during, and after all importing/exporting activities to prevent unstable soils and limit [F]fugitive [Đ]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where importing/exporting activities occur, including haul routes, and maintain in a moist condition.
  - (2) If water is not effective, apply and maintain a surfactant and/or [D]dust [P]palliative, or [C]clean [G]gravel, on surface soils where importing/exporting activities occur, including haul routes.
  - (3) Limit vehicle speeds to 15 mph on the work site.
  - (4) Maintain 3–6 inches of freeboard to prevent spillage.
  - (5) Apply tarps or other suitable enclosures that completely cover the load on haul trucks before they exit the project onto [P]public [R]roads, and maintain throughout transport. Tarps must be well-maintained and serviceable at all times.
- (b) Clean the wheels and undercarriage of haul trucks before they leave the Construction site.
- (c) Check belly/end dump truck seals regularly, and remove trapped rocks to prevent spillage.

# BMP 14 LANDSCAPING ([I] installation of sod, decorative rock, desert or other landscape material)

### 14 Requirement

- Maintain optimum moisture content in soils and landscaping material before, during, and after landscaping activities to limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
- (b) Apply water[,] <u>or</u> surfactant[, <u>or tackifier</u>] to maintain disturbed soils and landscaping material in a stable condition until the long-term stabilization requirements listed in BMP 11 are achieved.

**Note:** The appropriate  $[G]_{\underline{C}}$  ontrol  $[M]_{\underline{m}}$  easure for the project soil type must be selected from Table 1.

# BMP 15 SUBGRADE PREPARATION FOR PAVING ([S]subgrade preparation for paving streets, parking lots, etc.)

#### 15 Requirement

- (a) Maintain optimum moisture content in soils before, during, and after all paving/subgrade preparation activities to prevent unstable soils and limit [F]fugitive [Đ]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water subgrade surfaces until optimum moisture content is reached.
  - (2) Maintain optimum moisture content in material while aggregate is being applied.
  - (3) Place tack coat on aggregate base.

# BMP 16 SAWING/CUTTING MATERIALS ([S]sawing or cutting materials such as concrete, asphalt, block or pipe)

- (a) Limit visible [E]emissions to no more than an average of 20% [O]opacity for any period totaling 3 minutes in any 60-minute period, or to no more than [50]35% instantaneous [O]opacity, pursuant to the AQRs. One of the following two control methods must be used when sawing/cutting materials:
  - (1) Use water to control  $[\underline{P}]\underline{d}$ ust.

(2) Use a vacuum to collect [**]**<u>d</u>ust.

# BMP 17 SCREENING ([S]screening of rock, soil, or [C]construction debris)

### 17 Requirements

- (a) Maintain optimum moisture content in soil where support equipment and vehicles will operate to prevent unstable soil conditions and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - (2) If water is not effective, apply and maintain a surfactant and/or [<code>Đ]d</code>ust [<code>P]p</code>alliative on surface soils as needed.
- (b) Maintain optimum moisture content in material before, during, and after screening activities to limit [€]emissions until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Apply sufficient water or a [Đ]<u>d</u>ust [S]<u>s</u>uppressant prior to screening.
  - (2) Drop material through the screen slowly; minimize drop height.
  - (3) Dedicate an adequate water source to the screening operation, and apply water as needed to minimize [Đ]dust.
  - (4) Monitor visible [E]emissions; make adjustments to [C]control [M]measures to ensure compliance with [O]opacity standards and [Permit]DCOP conditions.
  - (5) Apply water, surfactant, or [D]dust [P]palliative to screened material and surrounding areas following screening activities until long-term stabilization is achieved.

**Note:** If required, obtain the appropriate [Operating]<u>stationary source</u> [P]permit for powered screens before engaging in screening activity and comply with [Permit]<u>stationary source permit</u> conditions.

# BMP 18 STAGING AREAS ([S]staging areas and equipment/material storage areas)

### 18 Requirement

- Maintain optimum moisture content in soils before, during, and after all staging area activities to prevent unstable soils and limit [₱]fugitive [₱]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - If water is not effective, apply and maintain a surfactant and/or
     [D]dust [P]palliative on surface soils as needed.
  - (3) Limit vehicle speed to 15 mph in staging area(s) and on all unpaved access routes.
  - (4) Apply water,  $[G]_{\underline{c}}$  lean  $[G]_{\underline{c}}$  ravel, recycled asphalt, or  $[D]_{\underline{c}}$  dust  $[P]_{\underline{c}}$  alliative to staging area soils for the duration of the project.

# BMP 19 STOCKPILING ([S]stockpiling of materials, such as Type II, rock or debris, for future use or export)

- (a) Maintain optimum moisture content in soil where support equipment and vehicles will operate to prevent unstable soil conditions and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - (2) If water is not effective, apply and maintain a surfactant and/or [D]dust [P]palliative on surface soils as needed.
- (b) Maintain optimum moisture content in material before, during, and after stockpiling activities to limit [**⊢**]<u>f</u>ugitive [**→**]<u>d</u>ust until long-term stabilization is achieved.
  - (1) Stockpiles located [within-]100 yards [of-]or less from occupied buildings [shall not be constructed over]must be less than 8 feet [in height]high unless [otherwise approved by the]the permittee occupies the buildings or receives prior Control Officer approval based on feasibility, necessity, or other

condition. Stockpiles located farther than 100 yards from occupied building may be higher than 8 feet.

- [(2)](A) Stockpiles [located farther than 100 yards from any occupied building and constructed over]higher than 8 feet [in height must]shall have a road bladed to the top to allow water truck access, or [shall]the permittee must demonstrate to the Control Officer another means [to provide effective Dust control]of effectively controlling dust from the entire stockpile.
- [(3)](2)Apply water[,] <u>or</u> surfactant[, <u>or tackifier</u>] during stockpiling activities to prevent unstable soil conditions and limit [F]<u>f</u>ugitive [D]<u>d</u>ust.
- [(4)](3)Apply water, surfactant, <u>tackifier</u>, and/or [Đ]<u>d</u>ust [P]<u>p</u>alliative to material and surface soils to form a crust immediately following stockpiling activities until the long-term stabilization requirements listed in BMP 11 are achieved.
- (c) All stockpiles must be removed or leveled prior to project completion unless otherwise approved by the Control Officer. Stockpiles approved to be left in place must be in compliance with the long-term stabilization requirements listed in BMP 11.

**Note:** The appropriate  $[G]_{\underline{C}}$  ontrol  $[M]_{\underline{M}}$  easure for the project soil type must be selected from Table 1.

## BMP 20 TRACKOUT PREVENTION AND CLEANUP ([P]@revention and cleanup of mud, silt, and soil tracked out onto [P]@aved surfaces)

- (a) Install and maintain a [∓]trackout control device in an effective condition at all [access points]/ocations where [₽]paved and unpaved[access or] travel routes intersect.
  - (1) Install gravel pad(s) consisting of a minimum of 2 inches in rough diameter of [C]clean [G]gravel or crushed rock on a well-graded surface (Type II material is not acceptable). Minimum dimensions must be 30 feet wide by 6 inches deep by 50 feet in length or the length of the longest haul truck, whichever is greater. Re-screen, wash, or apply additional rock to gravel pads to maintain effectiveness.

- (A) Install wheel shakers if gravel pads are not effective in pre- venting [+] trackout. Clean wheel shakers regularly to maintain their effectiveness.
- (B) Install wheel washers if wheel shakers are not effective in preventing [∓]<u>t</u>rackout. Maintain wheel washers regularly to maintain effectiveness.
- (C) Alternative [+]trackout control devices may be used if approved by the Control Officer.
- (2) All exiting traffic must be routed over selected [+]trackout control device(s) by clearly establishing and enforcing traffic patterns on-site.
- (b) Maintain [₽]<u>d</u>ust control and clean all [∓]<u>t</u>rackout from [₽]<u>p</u>aved surfaces.
  - (1) Maintain [₽] dust control during working hours and clean all [₽] rackout from [₽] aved surfaces, including sidewalks and gutters, at the end of each work shift.
  - (2) Immediately clean up [∓]<u>t</u>rackout that extends 50 feet or more, or more than ¼ inch in depth, from [₽]<u>p</u>aved surfaces, including sidewalks and gutters, or any amount of [∓]<u>t</u>rackout that causes one or more of the following:
    - (A) A [**D**]<u>d</u>ust plume that extends more than 100 feet horizontally or vertically.
    - (B) An average of 20% [♀]opacity for any period totaling 3 minutes in any 60-minute period, pursuant to the AQRs.
    - (C) [50]35% instantaneous [O]opacity, pursuant to the AQRs.
  - (3) Use street sweeper(s) in addition to [+]trackout control devices to ensure the cleanup of [+]trackout is maintained. If one street sweeper is not effective in controlling [+]trackout [to Air Quality Standards]pursuant to the AQRs, bring in additional street sweepers.
  - (4) The use of blower devices to remove deposited mud/dirt [∓]<u>t</u>rackout from a [₽]<u>p</u>aved road is prohibited <u>except when the</u> <u>use of water is not technically feasible and only with prior</u> <u>Control Officer approval</u>.

- (5) The use of rotary brushes without water is prohibited. <u>Dry</u> rotary brushes may only be used when the use of water is not technically feasible and only with prior Control Officer approval.
- (6) The use of soil to create a ramp for vehicle access over a curb is prohibited.

## BMP 21 TRAFFIC—Unpaved Routes and Parking Areas ([C]construction-related traffic on unpaved roads and parking areas)

#### 21 Requirement

- (a) Limit visible [₽]dust [E]emissions from vehicle operations and stabilize all unpaved routes, including unpaved parking areas.
  - (1) Limit vehicle speeds to 15 mph on all unpaved routes and parking areas.
  - (2) Apply water to unpaved haul routes and off-road traffic areas, including parking areas, and maintain in a stabilized condition.
  - (3) If water is not effective, apply and maintain a surfactant and/or [D]dust [P]palliative on unpaved routes, off-road traffic areas, and parking areas.
  - (4) If water, surfactant, and/or [D]dust [P]palliative is not effective, apply and maintain [C]clean [G]gravel (or other suitable material approved by the Control Officer) on unpaved routes, off-road traffic areas, and parking areas.
  - (5) If a preexisting unpaved road or haul route is being used but is not permitted, it must be maintained in a stabilized condition. These unpaved roads or haul routes must not be changed in any way unless permitted or as approved by the Control Officer.

# BMP 22 TRENCHING ([**T**] renching with track- or wheel-mounted excavator, shovel, backhoe, or trencher)

#### 22 Requirement

 Maintain optimum moisture content in soil where support equipment and vehicles will operate to prevent unstable soil conditions and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.

- (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
- (2) If water is not effective, apply and maintain a surfactant and/or [<code>Đ]d</code>ust [<code>P]p</code>alliative on surface soils as needed.
- (b) Maintain optimum moisture content in soils before, during, and after [Ţ]trenching activities to limit [₽]fugitive [₽]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils before  $[\mp]$ *t*renching.
  - (2) Apply water[,] <u>or</u> surfactant[, <u>or tackifier</u>] during []<u>t</u>renching activities to prevent unstable soil conditions, and limit [F]<u>f</u>ugitive [D]<u>d</u>ust by dedicating a water truck or large hose.
  - (3) Apply water, surfactant, <u>tackifier</u>, and/or [D]dust [P]palliative to excavated soils to form a crust immediately following [T]trenching activities until the long-term stabilization requirements listed in BMP 11 are achieved.

**Note:** The appropriate [C]control [M]<u>m</u>easure for the project soil type must be selected from Table 1.

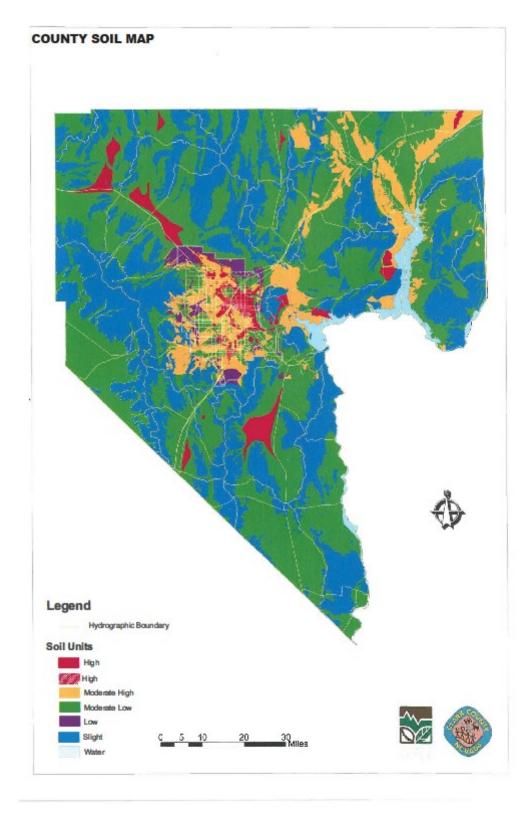
# BMP 23 TRUCK LOADING ([L]/oading trucks with materials including [C]construction and demolition debris, rock, and soil)

- (a) Maintain optimum moisture content in soil where support equipment and vehicles will operate to prevent unstable soil conditions and limit [F]fugitive [D]dust until the long-term stabilization requirements listed in BMP 11 are achieved.
  - (1) Pre-water surface soils where support equipment and vehicles will operate, and maintain in a moist condition.
  - If water is not effective, apply and maintain a surfactant and/or
     [₽]dust [₽]palliative on surface soils as needed.
- (b) Maintain optimum moisture content in material before, during, and after truck loading activities to limit [**⊨**]<u>f</u>ugitive []<u>d</u>ust.
  - Mix material with water[,] <u>or</u> surfactant[, or tackifier] prior to truck loading activities to limit Fugitive Dust.
  - (2) Empty loader bucket slowly and minimize the drop height while dumping.

**Note:** The appropriate  $[G]_{c}$  ontrol  $[M]_{m}$  easure for the project soil type must be selected from Table 1.

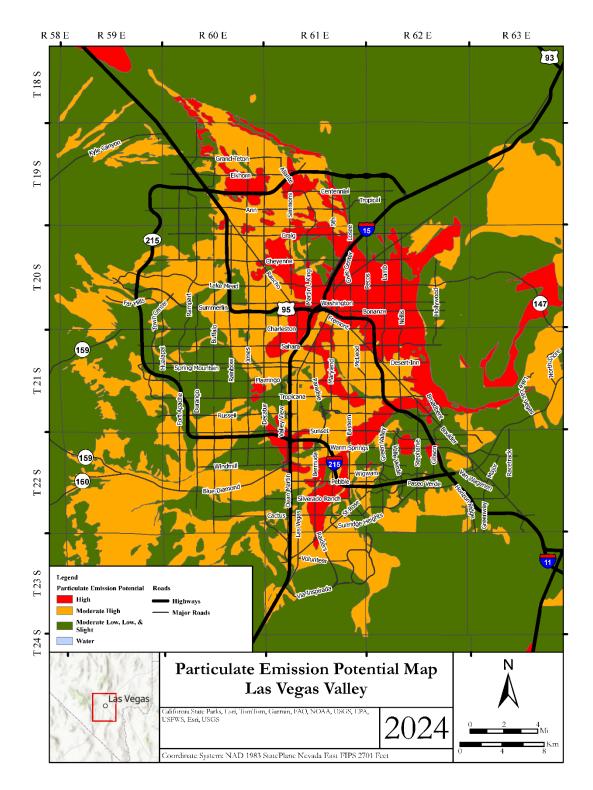


Figure 1: Examples of Signage.



[Appendix]*Figure* 2:

Particulate Emission Potential Map[s]-Clark County.



## Figure 3: Particulate Emission Potential Map—Las Vegas Valley.

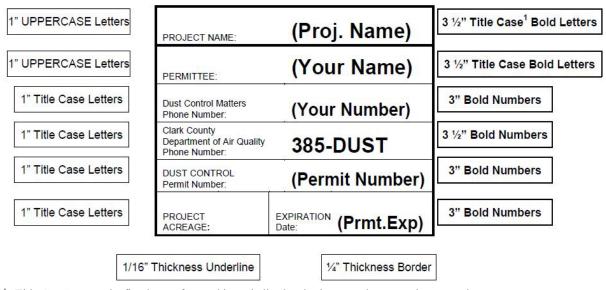
## Appendix [3]2: Guidance on Design and Posting of Dust Control Operating Permit Signage

- 1. The signboard shall be constructed with materials capable of withstanding the harsh environment (e.g., strong winds, intense sunlight) of Clark County, have a minimum dimension of 4 feet by 4 feet, and be constructed with the following materials:
  - (a) <sup>3</sup>/<sub>4</sub> inch AC laminated plywood board;
  - (b) Two 4-inch x 4-inch posts;
  - (c) Posts should be attached to the edges of the plywood board with a minimum of two carriage bolts on each post; and
  - (d) The front surface of the signboard should be painted in the contrasting colors of a white background with black lettering.
- 2. The signboard shall be installed and maintained in a condition such that members of the public can easily view, access, and read the sign at all times.

For all signs, DAQ recommends the following measures:

- (a) The lower edge of the sign board should be mounted at a minimum of 2 feet above the existing ground surface to facilitate ease of viewing;
- (b) Posts should be set in a hole a minimum of 3 feet deep with concrete footings to prevent downing by high winds;
- (c) On the construction site, the sign should be positioned so that it is not obstructed from public view from the primary street access point; and
- (d) For construction projects that are developed in phases, the sign should be relocated to the area that is under active construction.
- 3. The signboard shall contain the following information:
  - (a) Project [N]<u>n</u>ame.
  - (b) Permittee [N]<u>n</u>ame.
  - (c) Phone [N]number of [P]person [R]responsible for [D]dust [G]control [M]natters.
  - (d)  $DAQ [\underline{P}]\underline{d}ust [\underline{H}]\underline{h}otline [\underline{P}]\underline{p}hone [\underline{N}]\underline{n}umber.$
  - (e) [Dust Control Operating Permit]DCOP [N]number.

- (f) Project [A]<u>a</u>creage.
- (g) [Dust Control Operating Permit]DCOP [E]expiration [D]date.
- 4. The signboard shall be designed to the following alpha and numeric text dimensions (sign boards written in longhand are unacceptable).



<sup>1</sup> "Title Case" means the first letter of a word is capitalized and subsequent letters are lowercased.

Figure 4: Example of DCOP Signage.

History: Initial Adoption: June 22, 2000 Amended: November 16, 2000; March 18, 2003; June 3, 2003; July 1, 2004; January 21, 2020; August 3, 2021; Month DD, YYYY.