

**NOTICE OF FINAL RULEMAKING**  
**MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS**  
**REGULATION III – CONTROL OF AIR CONTAMINANTS**  
**PREAMBLE**

**1. Rules affected      Rulemaking action**

Rule 310: Fugitive Dust from Dust-Generating Operations Amended

Rule 310.01: Fugitive Dust from Non-Traditional Sources of Fugitive Dust Amended

**2. Statutory authority for the rulemaking:**

Authorizing statutes: A.R.S. §§ 49-474, 49-479, and 49-480

Implementing statute: A.R.S. § 49-112

**3. The effective date of the rules:**

Date of Adoption: January 27, 2010

**4. List of all previous notices appearing in the Register addressing the rulemaking:**

Notice of Rulemaking Docket Opening: 14 A.A.R. 4348, November 21, 2008

Notice of Proposed Rulemaking: 14 A.A.R. 1429, September 4, 2009

**5. The name and address of department personnel with whom persons may communicate regarding the rulemaking:**

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**6. An explanation of the rule, including the department's reasons for initiating the rulemaking:**

The Maricopa County Air Quality Department (department) revised Rules 310: Fugitive Dust from Dust-Generating Operations and 310.01: Fugitive Dust from Non-Traditional Sources of Fugitive Dust. These rules establish limits for the emissions of particulate matter into the ambient air from any property, operation, or activity that may serve as a fugitive dust source (Rule 310) and from non-traditional sources of fugitive dust (e.g., open areas, vacant lots, unpaved parking lots, and unpaved roadways), which are not regulated by Rule 310 and which are not required to have either a permit or a dust control plan (Rule 310.01).

On June 6, 2007, the U.S. Environmental Protection Agency (EPA) found that the Phoenix metropolitan area failed to attain the 24-hour PM<sub>10</sub> standard by the December 31, 2006, attainment deadline. This failure triggered a special requirement under Section 189(d) of the Clean Air Act (CAA) to submit a state implementation plan (SIP) revision to EPA by December 31, 2007. Such SIP revision was required to provide for annual reductions of PM<sub>10</sub> or PM<sub>10</sub> precursors of not less than five percent of the most recent emissions inventory, until the PM<sub>10</sub> standard is attained. In addition, such SIP revision was required to continue to demonstrate that the revisions would meet the best available control measures (BACM) test and the most stringent measures (MSM) test for significant sources and source categories in accordance with CAA § 189(b)(1)(B) and 188(e). See 14 A.A.R. 1842-1849, May 16, 2008 for a detailed discussion of the PM<sub>10</sub> nonattainment areas status history and explanation of the March 2008 revisions to Rules 200, 310, 310.01, and Appendix C.

This SIP revision (referred to as the “Five Percent Plan”) was prepared by the Maricopa Association of Governments and submitted by the Arizona Department of Environmental Quality (ADEQ) to EPA by the December 31, 2007, deadline. In March 2008, to meet commitments made in the Five Percent Plan, the department revised Rules 200, 310, 310.01 and Appendix C.

In September 2008, the department began a rulemaking process to reduce confusion, improve understanding and readability of Rules 310 and 310.01, and re-insert text inadvertently omitted from Rule 310.01. The rule amendments do not interfere with the BACM and MSM tests and do not reduce the emissions reductions claimed in the Five Percent Plan. During the rulemaking process, the department conducted three public workshops, one Director’s courtesy briefing, one informational workshop, seven meetings with stakeholders, and eight conference calls with EPA. The department received written comments from 20 stakeholders regarding this rulemaking process. The issues that were raised and discussed during this rulemaking process are categorized as follows:

- Rooftop tile cutting exemption
- Affirmative defense during a wind event
- “Immediate” clean-up of trackout
- Definition of “area accessible to the public” and “public roadways”
- Definition of “gravel pad”
- Definition of “unpaved parking lot”
- Stabilization standards for unpaved parking lots and unpaved roads
- “As necessary”
- Alternative control measures

Details about these issues are described below and following such details is a list of specific amendments to Rules 310 and 310.01.

**Issues Raised and Discussed During This Rulemaking Process:**

**Rooftop Tile Cutting Exemption:** The department received a formal request from Ballard Spahr Andrews & Ingersoll, LLP (Ballard Spahr) to exempt rooftop tile cutting from Rule 310. Because an acceptable dust control measure had not been identified that did not compromise worker safety or was not cost prohibitive, Ballard Spahr, representing certain entities which conduct rooftop tile cutting operations, requested that the department exempt tile cutting, when it is occurring on a roof, from the visible emissions requirements in Rule 310, Section 303 - specifically the 20% opacity limitation and the property line requirement. The exemption request was only for tile cutting that occurs on a rooftop.

Ballard Spahr provided the following documentation in defense of their exemption request:

- Study results from the National Institute of Occupational Safety and Health (NIOSH) regarding dust control measures for rooftop tile cutting and alternative solutions;
- An analysis of shrouding or total enclosure suggested by the department;
- Effectiveness evaluations for engineering controls in reducing respirable dust, silica exposures, and noise during tasks where roofers cut concrete roofing tiles; and
- An example of the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) construction safety regulation enacted in October 2008 requiring measures to reduce employee exposure from silica dust-generating operations in which rooftop tile cutting activities are exempt.

The department reviewed the documentation submitted by Ballard Spahr and revised Rule 310 to include an exemption for rooftop tile cutting (Rule 310, new Section 103.5), when such activity is occurring on a pitched roof. The department prepared an analysis of the requested exemption and an explanation of why the department decided to exempt rooftop tile cutting from Rule 310. See Item 8 of this notice for more information regarding the department's analysis and explanation.

**Affirmative Defense during a Wind Event:** The department was requested to revise the provision in Rule 310 regarding an affirmative defense in an enforcement action if an owner and/or operator exceeds the opacity limits during a wind event (Rule 310, Section 303.2(a)). The argument posed in opposition to the current provision was that “[t]he wind event definition itself is dysfunctional, because a 25 mph wind as a sixty minute average is so rare as to be valueless and there is no way to determine whether the definition has been met until the sixty-first minute, which is much too late to institute mitigatory measures.” Alternatives under discussion included an instantaneous wind speed standard, Clark County's definition, which centers around what wind causes (excess opacity) rather than a specific speed, and establishing the dust control permit as the standard to which the permittee must comply in order to assert the affirmative defense rather than the control measures listed in Rule 310 specific to an affirmative defense during a wind event. EPA informed the department that an instantaneous standard for a wind event is less stringent than the current provision in Rule 310.

The department considered the issues and deleted text regarding the wind event exemption from the visible emissions requirement (Rule 310, Section 303.2(a)). In its place, the department added text similar to Clark County rule 94.9.3 and retained some text from the existing version of Rule 310. The intent of the proposed replacement language is to require escalating controls as winds increase. Ceasing operations is the ultimate control when all else fails. The new provision requires ceasing operations at a lower threshold (e.g., earlier and more frequently) resulting in a provision that is as stringent as the former provision. Also, the department deleted the definition of “wind event” (Rule 310, Section 236).

**“Immediate” Clean-Up of Trackout:** The department was requested to replace the word “immediately” with a specific time limit for cleaning up trackout. The concern was that the word “immediately” creates confusion, because trackout takes time to remove. Even if a person reacts instantaneously to begin trackout removal, it takes time for the equipment to be brought to the location and for the trackout to be cleaned.

EPA informed the department that the insertion of a specific time limit for cleaning up trackout would be less stringent than the current provision in Rule 310.

The department asserted that specifying a time period that would be considered “immediate” would in essence create a grace period for action once the trackout reaches the regulatory limit. In the department’s experience, trackout builds up over time and the individual who can take action has a duty to monitor trackout and should be aware that clean-up is needed. The focus should be to prevent the trackout from reaching the regulatory limit.

The department considered the issues and did not amend the trackout provisions, but rather left the text as currently written: “Clean-up trackout...immediately when trackout...extends a cumulative distance of 25 linear feet or more.”

**Definition of “Area Accessible to the Public” and Definition of “Public Roadways”:** The department was asked to make the definition of “area accessible to the public” clear that it applies to paved areas and to areas outside the work site. The intention being that this clarification would clarify for the regulated community and the department what is and is not covered by this definition, and exclude private roads that are inside a worksite. Also, in light of the definition of “area accessible to the public”, the department was asked to revise the definition of “public roadways” to exclude public access to otherwise private areas and roadways.

The department asserted that the basis for these definitions is the fact that members of the public can be exposed to fugitive dust from private roadways to which they have access. The term “area accessible to the public” covers paved parking lots accessible to the public, schools, churches, and gated subdivisions. The term is intended to close a loophole that allowed permittees to use parking lot surfaces as trackout control devices without restricting public travel during work hours and to clarify at what physical point trackout must be

controlled and cleaned up. The key factor is whether an area is “open to public travel”. A roadway is not public if either (1) access to private roads is limited by posting signs to clearly indicate who might utilize a private roadway or (2) physically limiting access by installing barriers.

The department considered the issues and added “paved” and deleted “public” in the definition of “area accessible to the public” (Rule 310, Section 202). Also, the department deleted the definition of “public roadways” (Rule 310, Section 227), because the concept is already captured in the definition of “area accessible to the public”.

**Definition of “Gravel Pad”:** The department was asked to revise the definition of “gravel pad” to address situations in which the exit area is smaller than the gravel pad dimensions required in the rule. The department was asked to consider revising the definition such that a gravel pad area be at least 30 feet wide, but if there is not 30 feet of width/area, then the entire width of the exit should be covered/used as a gravel pad. In addition, the department was asked to change the required diameter of the rock used in a gravel pad, to change the required length and depth of a gravel pad, and to provide studies or other documentation supporting the required dimensions of a gravel pad.

The department considered the issues and added a sentence in the definition of “gravel pad” (Rule 310, Section 217) to include an unpaved exit less than than 30 feet wide. The sentence, particularly the last part – “and such shorter width shall be adequate to prevent trackout” – does not imply that width is the only important factor and that width is the only part of the gravel pad that must prevent trackout.

The definition of “gravel pad” and the gravel pad dimensions are modeled after those in the Clark County Construction Activities Dust Control Handbook. The EPA published “Control of Open Fugitive Dust Sources” in 1988 (EPA-450/3-88-008) and revised the document in 1992. The revised document, “Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures” (EPA-450/2-92-004) provides technical information on control of fugitive dust sources, provides background information that may be useful in determining reasonably available control measures (RACM) and best available control measures (BACM) for fugitive dust sources, provides technical guidance for the development of BACM strategies for fugitive dust in areas that are designated serious nonattainment for PM<sub>10</sub>.

**Definition of “Unpaved Parking Lot”:** The department was asked to revise the definition of “unpaved parking lot” to insert a size restriction (i.e., 3,000 square feet) to match the smallest size cited in Senate Bill 1552 (Arizona Revised Statutes (A.R.S.) § 49-474.01). The concern was that some size restriction was needed to define what constitutes a parking lot in order to prevent the creation of a regulated parking lot by a mere single parked vehicle. In addition, the concern was what criteria is used to determine that such area is a parking lot/area, when an area is not designated as a parking lot/area in the dust control plan.

The department considered the issues and added the phrase “that is designated for parking in the dust control plan or” in the definition of “unpaved parking lot” (Rule 310, Section 232). In addition, to accommodate this amendment, the department amended Rule 310, Section 402.3(b) to specify that unpaved parking lots must be identified on the site drawing required for the dust control plan. The department agrees that an isolated incident of “parking, maneuvering, material handling, or storing motor vehicles and equipment” does not convert a vacant area or property in use for the purpose described in the dust control plan into a parking lot.

**Stabilization Standards for Unpaved Parking Lots and Unpaved Roads:** The department was asked to clarify the stabilization standards (i.e., 20% opacity, silt loading, and silt content) for unpaved parking lots and unpaved roads. The concern was that it is unclear with which standard and owner and/or operator must comply – one of the standards, two of the standards, or all three of the standards.

The stabilization standards for unpaved parking lots and unpaved roads are described in Rule 310, Sections 304.1 and 304.2(a) and in Rule 310.01, Sections 302.6(a)(2), 302.7(a), and 302.10(a). The stabilization standards were required by the Federal Implementation Plan (FIP) (64 FR 71304, December 21, 1999). The FIP states: “The final FIP rule contains an opacity standard of 20% for unpaved roads and unpaved parking lots....Sources subject to the FIP rule will need to comply with both a silt content standard and an opacity standard...Surfaces with less than 0.33 oz/ft<sup>2</sup> silt loading will be considered stable under the FIP rule. However, when silt loading is greater than 0.33 oz/ft<sup>2</sup>, the silt content standard of 6% for unpaved roads and 8% for unpaved parking lots must be met...Retaining both the opacity and the silt content standards and test methods in the FIP rule...will allow opportunities to compare the relative value...of the two tests.”

The department considered the issues and revised the stabilization standards for unpaved parking lots and unpaved roads to match the intent of such standards as described in the FIP. Therefore, both Rule 310 and Rule 310.01 state that, for unpaved parking lots and unpaved roads, an owner and/or operator must comply with the 20% opacity standard and the silt loading standard (i.e., less than 0.33 oz/ft<sup>2</sup>). If silt loading is equal to or greater than 0.33 oz/ft<sup>2</sup>, then an owner and/or operator must comply with the silt content standard (i.e., 8% or less for unpaved parking lots and 6% or less for unpaved roads).

**“As Necessary”:** The department was asked to clarify the phrase “as necessary”, as it is used in Rule 310 regarding control measures for bulk material stacking, loading and unloading operations, open storage piles, and disturbed surface areas. The concern was that the phrase lacks specificity.

The department considered the issues, reviewed Clark County’s Dust Control Handbook and Section 94 and South Coast’s Best Available Control Measures for construction activities as described in Rule 403, and deleted “as necessary” from Rule 310, Sections 305.4(a), 305.4(b), 305.5(a)(1), 305.5(a)(2), 305.11(b)(1), and

305.11(b)(2). In its place, the department added the phrases (as control measures for “prior to” stacking, loading, and unloading): “mix material with water or mix material with a dust suppressant other than water”. Also, the department added the phrase (as a control measure for “while disturbed surfaces are being created”): “to keep the soil visibly moist throughout the process.”

**Alternative Control Measures:** The department was asked to add the option of using an alternative control measure to the control measures required for livestock activities in Rule 310.01. Also, the department was asked to provide further explanation regarding the application and approval process for alternative control measures.

The department considered the issues and included the option of using an alternative control measure for livestock activities in Rule 310.01, Section 302.8(b). In addition, the department developed language that explains the application and approval process for alternative control measures. This language will be incorporated into a guidance document, which will, in turn, be incorporated into a separate rule in Regulation II of the Maricopa County Air Pollution Control Regulations, when such regulation is revised.

**Description of Proposed Amendments:**

**Rule 310: Fugitive Dust from Dust-Generating Operations:** The amendments in Rule 310 are categorized as follows:

- Clarified exemptions
- Clarified dust control permit and dust control plan requirements
- Clarified trackout control device requirements
- Clarified control measures for certain activities
- Clarified how Rule 310 applies to certain sources/dust-generating operations
- Corrected typographical or other clerical errors

Details about these amendments are described below.

**Clarified exemptions** – The amendments make the following changes to Rule 310 exemptions:

- Section 103.4: Deleted an exemption regarding stabilization requirements for disturbed surface areas and added parallel text to Section 304.3: Disturbed Surface Area to clarify that disturbed surface areas are not exempt from the provisions of Rule 310.
- Re-Numbered Section 103.4: Amended the sentence structure regarding the exemption for establishing initial landscapes.
- New Section 103.5: Added an exemption for rooftop tile cutting to avoid creating potentially unsafe conditions by requiring dust control measures for rooftop tile cutting.
- Section 103.6: Deleted the exemption regarding fugitive dust and added parallel text to Section 216: Definition of Fugitive Dust to clarify that fugitive dust is not considered exempt from the provisions of Rule 310.

- Section 303.2(a): Deleted text regarding the wind event exemption from the visible emissions requirement and added text similar to Clark County rule 94.9.3. Retained text from existing version of Rule 310 to clarify the intent and implementation of the proposed replacement language. Deleted Section 236: Definition of Wind Event. Deleted Section 305.9(a) regarding the control measure for blasting operations when wind speed is greater than 25 miles per hour; such provision is addressed in the proposed amendments in Section 303.2(a).
- New Section 303.2(e): Added a partial exemption from the requirements in Section 303.2(a) regarding ceasing operations at a solid waste management facility.

**Clarified dust control permit and dust control plan requirements** – The amendments make the following changes to clarify dust control permit and dust control plan requirements:

- Section 302.5: Added specification regarding manner and form for filing a permit application.
- Section 308.2: Deleted “and expiration date” from being required on a project information sign.
- Sections 309.1, 310.7 and 404.2: Clarified dust control block permit application and training requirements.
- New Sections 309.1(e) and 309.2(c): Added text regarding the Control Officer having authority to suspend or revoke a certification issued to a person having successfully completed a dust control training class.
- Section 402.3: Clarified the required elements of the drawing for a dust control plan.
- New Section 402.3(b)(6): Added “unpaved parking lot(s)” to the list of items that must be included in the drawing for the dust control plan to match amendments to re-numbered Section 232: Definition of Unpaved Parking Lot.
- Section 406: Added, as last sentence, terms for permits for dust-generating operations to address concerns that the department issues Notices of Violation (NOVs) when a permit and a dust control plan are both on-site but the permit has expired even though there was a timely application for the permit’s renewal.
- Section 502.1: Added “for dust control measures” to recordkeeping requirements to specify that the department is only interested in water used for dust control purposes.

**Clarified trackout control device requirements** – The amendments make the following changes to clarify trackout control device requirements:

- Section 217: Clarified that using a 30-foot wide gravel pad is contingent on the physical impossibility of widening the existing exit – not mere inconvenience.

**Clarified control measures for certain activities** – The amendments make the following changes to clarify control measures for certain activities:

- Section 305.4: Re-formatted the control measures for bulk material stacking, loading, and unloading operations, so that control measures are identified for “prior to” stacking, loading, and unloading and “while” stacking, loading, and unloading. Deleted “as necessary” and, for “prior to” stacking, loading, and unloading, added “mix material with water or mix material with a dust suppressant other than water.”

- Section 305.5: Re-formatted the control measures for open storage piles, so that control measures are identified “when not” conducting stacking, loading, and unloading. Deleted Section 305.5(a) regarding control measures for prior to and/or while stacking, loading, and unloading, because such control measures are addressed in Section 305.4.
- Section 305.11(b)(1): Deleted “as necessary” and added “to keep the soil visibly moist throughout the process”, for the control measure regarding “while disturbed surfaces are being created”.
- Section 305.11(b)(2): Deleted “as necessary” for the control measure regarding “while disturbed surfaces are being created”, because “as necessary” is redundant; the control measure specifies that water must be applied to maintain a soil moisture content at a minimum of 12%.

**Clarified how Rule 310 applies to certain sources/dust-generating operations** – The amendments make the following changes to clarify how Rule 310 applies to certain sources/dust-generating operations:

- Section 202: Added “paved” and deleted “public” to clarify what is and is not considered an area accessible to the public.
- Re-Numbered Section 232: Added the phrase “that is designated for parking in the dust control plan or” in the definition of “unpaved parking lot” to clarify what is considered an unpaved parking lot.
- Section 227: Deleted the definition of “public roadways” because the concept is already captured in Section 202: Definition of Area Accessible to The Public.
- Section 301: Amended text regarding what constitutes a Rule 310 violation; used same text that was approved in Rule 310 in 2004.
- Section 301.4: Added a sentence that was previously contained in Section 402.4.

**Corrected typographical or other clerical errors; made minor grammatical changes to improve readability or clarity; modified the format, order, capitalization, punctuation, or syntax of certain text to increase standardization within and among rules; or made various other minor changes of a purely editorial nature** – The amendments make the following changes:

- Section 200: Clarified introduction to definitions section.
- Section 205.9: Deleted “paved”.
- Section 205.11: Deleted “paved” and added “an”.
- Re-Numbered Section 229: Deleted “a paved” and added “an”.
- Re-Numbered Section 230: Deleted “a paved” and added “an”.
- Section 303.1: Deleted “opacity limitation” and added “visible emissions”.
- Section 303.1(b): Deleted “suffer”.
- Section 303.2: Deleted “opacity limitation” and added “visible emissions”.
- Section 303.2(b): Deleted “opacity limit” and added “visible emissions limits”.
- Section 303.2(c): Deleted “opacity” and added “visible emissions”.
- Section 304.1: Clarified the stabilization requirements for unpaved parking lots.

- Section 304.2(a): Clarified the stabilization requirements for unpaved haul/access roads.
- Section 304.2(b): Deleted “including” and added “whether”.
- Section 304.3: Deleted “including” and added “whether” and clarified second sentence regarding “visibly distinguishable stabilization characteristics”.
- Section 305: Moved last sentence to second sentence in the introduction.
- Section 305.1: Deleted “paved” in the heading.
- Section 305.2: Deleted “a paved” and added “an”.
- Section 305.3: Deleted “a paved” and added “an”.
- Re-Numbered Section 305.5(c): Deleted “soil” and added “visible”.
- Re-Numbered Section 305.5(d): Deleted “a paved” and added “an”.
- Section 305.10(b): Added “visible”.
- Section 305.11(c)(2): Deleted “in sufficient quantity”.
- Section 306.1: Deleted “paved”.
- Sections 306.1(b)(1)-(4): Deleted “paved”.
- Section 306.2(a): Deleted “paved”.
- Section 307: Deleted “soil” and added “visible”.
- Section 402.3(b)(5): Deleted “paved”.
- Section 402.3(e): Deleted “paved”.
- Section 402.4: Deleted last sentence and added the sentence to Section 301.4.
- Section 403.3(a): Un-deleted “be”.
- Section 501.2(c)(1): Deleted “visible” and added “soil”.
- Section 503: Deleted “must” and added “shall”.
- Section 504: Deleted “adopted” and added “incorporated”.

**Rule 310.01: Fugitive Dust from Non-Traditional Sources of Fugitive Dust:** The amendments in Rule 310.01 are categorized as follows:

- Clarified exemptions
- Clarified control measure requirements
- Clarified how Rule 310.01 applies to certain sources/dust-generating operations
- Corrected typographical or other clerical errors

Details about these amendments are described below.

**Clarified exemptions** – The amendments make the following changes to Rule 310.01 exemptions:

- Section 103.4: Deleted an exemption regarding stabilization requirements for disturbed surface areas, because the exemption contradicts the purpose of Rule 310.01.

- Re-Numbered Section 103.4: Amended the sentence structure regarding exemption for establishing initial landscapes.
- Section 103.6: Deleted an exemption regarding fugitive dust and added parallel text to Section 213: Definition of Fugitive Dust to clarify that disturbed surface areas are not exempt from the provisions of Rule 310.01.

**Clarified control measure requirements** – The amendments make the following changes to clarify control measure requirements:

- Section 214: Clarified that using a 30-foot wide gravel pad is contingent on the physical impossibility of widening the existing exit – not mere inconvenience.
- Sections 302.4 and 302.5: Added stabilization requirements for vehicle use in open areas and vacant lots and for open areas and vacant lots. Such requirements were inadvertently omitted when Rule 310.01 was adopted on March 26, 2008.
- Section 302.6(b): Clarified relationship between existing control measures for unpaved parking lots and Senate Bill 1552 / Arizona Revised Statutes (A.R.S.) § 9-500.04.
- Section 302.8(b): Added an alternative control measure option to the control measures required for livestock activities.
- Sections 302.8(b)(1) and 302.8(b)(2): Combined Sections 302.8(b)(1) and 302.8(b)(2) into Section 302.8(b)(1) and added two control measures – apply water and install a trackout control device (Section 302.8(b)(1)(a)) and limit vehicle trips and vehicle speeds (Section 302.8(b)(1)(d)).
- New Section 302.8(b)(3)(e): Added a control measure for corrals, pens, and arenas.
- Section 302.8(c)(1): Revised first sentence to clarify that at least one control measure from each of the three sections must be implemented. Added a sentence regarding alternative control measures for livestock activities.
- Section 302.10(c)(2): Amended the traffic count requirements to match traffic count requirements in Section 302.7(c)(2). Text was inadvertently omitted when Rule 310.01 was adopted on March 26, 2008.

**Clarified how Rule 310.01 applies to certain sources/dust-generating operations** – The amendments make the following changes to clarify how Rule 310.01 applies to certain sources/dust-generating operations:

- Section 203: Added “paved” and deleted “public” to clarify what is and is not considered an area accessible to the public.
- Section 216: Added “residential activities related to feeding and raising animals” to clarify that livestock activities apply not only to large arenas and livestock events but also to residential activities related to feeding and raising animals.
- Section 231: Deleted “and any other property dedicated or otherwise reserved for public or private street uses, as evidenced by a recorded document, or having thereon a public easement for such use” to clarify that the definition of “unpaved roadway” does not apply to private roads.

**Corrected typographical or other clerical errors; made minor grammatical changes to improve readability or clarity; modified the format, order, capitalization, punctuation, or syntax of certain text to increase standardization within and among rules; or made various other minor changes of a purely editorial nature** – The amendments make the following changes:

- Section 200: Clarified introduction to definitions section.
- Section 215: Deleted “and/or haul trucks”.
- Section 227: Deleted “a paved” and added “an”.
- Section 228: Deleted “a paved” and added “an”.
- Section 302.2: Deleted “achieve” and added “and stabilization requirements” and added “to achieve”.
- Section 302.4: Deleted “visible emissions”.
- Section 302.4(a): Deleted “and stabilization requirements”.
- Section 302.4(a)(2)(a): Deleted “visible” and added “soil”.
- Section 302.4(c)(3): Deleted “achieve the compliance determinations” and added “meet the requirements”.
- Section 302.4(c)(5): Deleted “still achieve the compliance determinations described in Section 501 of this rule” and added “meet the requirements described in Section 302.5 of this rule”.
- Section 302.4(c)(6): Deleted “still achieve the compliance determinations described in Section 501 of this rule” and added “meet the requirements described in Section 302.5 of this rule”.
- Section 302.5: Deleted “visible emissions”.
- Section 302.5(a): Added “and stabilization requirements”.
- Section 302.5(a)(2)(a): Deleted “visible” and added “soil”.
- Section 302.5(b)(1)-(5): Added “or”.
- Section 302.5(c)(3): Deleted “achieves the compliance determinations” and added “meets the requirements”.
- Section 302.6(a)(1): Deleted “suffer”.
- Section 302.6(a)(2): Clarified the stabilization requirements for unpaved parking lots.
- Re-Numbered Section 302.6(c)(2): Deleted “paved”.
- Section 302.7: Deleted “stabilization”.
- Section 302.7(a): Clarified the stabilization requirements for unpaved roadways (including alleys).
- Section 302.7(c)(3)(a): Deleted “achieves the compliance determinations” and added “meets the requirements”.
- Section 302.8: Deleted “visible emissions”.
- Section 302.8(a)(3): Deleted “suffer”.
- Re-Numbered Section 302.8(b)(2): Deleted “a paved” and added “an”.
- Section 302.8(c)(3): Deleted “paved”.
- Section 302.10: Deleted “stabilization”.

- Section 302.10(a): Clarified the stabilization requirements for easements, rights-of-way, and access roads for utilities.
- Section 302.10(c)(3): Deleted “achieves the compliance determinations” and added “meets the requirements”.
- Section 501.3: Deleted “an open area and vacant lot” and added “open areas and vacant lots and/or open areas and vacant lots”.

**7. Demonstration of compliance with A.R.S. § 49-112:**

Under A.R.S. § 49-479(C), a county may not adopt a rule or ordinance that is more stringent than the rules adopted by the Director of ADEQ for similar sources unless it demonstrates compliance with the requirements of A.R.S. § 49-112.

**A.R.S. § 49-112 (A):**

When authorized by law, a county may adopt a rule, ordinance, or other regulation that is more stringent than or in addition to a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if all the following conditions are met:

1. The rule, ordinance or other regulation is necessary to address a peculiar local condition;
2. There is credible evidence that the rule, ordinance or other regulation is either:
  - (a) Necessary to prevent a significant threat to public health or the environment that results from a peculiar local condition and is technically and economically feasible.
  - (b) Required under a federal statute or regulation, or authorized pursuant to an intergovernmental agreement with the federal government to enforce federal statutes or regulations if the county rule, ordinance or other regulation is equivalent to federal statutes or regulations.

The Phoenix Nonattainment Area is the only nonattainment area designated serious for PM<sub>10</sub> in Arizona. Consequently stronger regulations must be adopted in this area to address a serious health threat. On June 6, 2007, EPA found that the Phoenix metropolitan area failed to attain the 24-hour PM<sub>10</sub> standard by the December 31, 2006, attainment deadline. This failure triggered a special requirement under Section 189(d) of the Clean Air Act to submit a SIP revision to EPA by December 31, 2007. Such SIP revision must provide for annual reductions of PM<sub>10</sub> or PM<sub>10</sub> precursors of not less than five percent of the most recent emissions inventory, until the PM<sub>10</sub> standard is attained. The Phoenix Nonattainment Area is one of three areas in the entire country for which EPA has issued a finding that Section 189(d) has been triggered.

The SIP revision was prepared by the Maricopa Association of Governments and submitted by ADEQ to EPA by the December 31, 2007, deadline. In March 2008, in response to the SIP revision and to implement control measures and increase compliance with existing rules, the department revised Rules 200, 310, 310.01 and Appendix C. Such previous rule revisions, as published in the Arizona Administrative Register (14 A.A.R.

1846, May 16, 2008), complied with A.R.S. § 49-112 (A)(1) and § 49-112 (A)(2). In this rulemaking, the department revised Rules 310 and 310.01 to correct grammatical errors and to clarify certain sections. These amendments also comply with A.R.S. § 49-112 (A)(1) and A.R.S. § 49-112 (A)(2).

**8. A reference to any study relevant to the rule that the department reviewed and either proposes to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

Clark County Air Quality Regulations, Section 94-Permitting and Dust Control for Construction Activities: Sections 94.11.3 and 94.9.3. Available at:

<http://www.accessclarkcounty.com/depts/daqem/aq/rules/pages/regs.aspx>

South Coast Air Quality Management District, Rule 403 Fugitive Dust: Rule 403 Section (d)(4). Available at: <http://www.aqmd.gov/rules/rulesreg.html>

Ballard Spahr Andrews & Ingersoll, LLP, "Formal Request for Exemption from Maricopa County Rule 310, Fugitive Dust from Dust Generating Operations for Rooftop Tile Cutting", letter, June 5, 2008. Document available by contacting persons listed in Item 5 of this notice.

Maricopa County Air Quality Department, "Analysis of Rooftop Tile Cutting Exemption". Document available by contacting persons listed in Item 5 of this notice.

**9. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision:**

Not applicable

**10. Summary of the economic, small business, and consumer impact:**

**10.1 Summary**

This rulemaking corrected and clarified existing rule provisions and definitions to reduce confusion and improve understanding and readability. Amendments to these rules are described in detail under Item 6 of this notice.

The department considered the implications of the amendments to the regulated entities and the implementing agency and deemed that none of the amendments have potentially significant economic impacts.

Because this rulemaking does not impose any new compliance burdens on regulated entities or introduce additional regulatory requirements on the department, it is not necessary for the department to prepare a detailed economic impact assessment.

## **10.2 Data Availability and Limitations of Assumptions**

During the formal comment period for this rulemaking, the department did not receive from interested parties additional relevant information and documentation on the anticipated costs and benefits resulting from compliance with the proposed rule(s).

### **11. Name and address of department personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:**

Name: Johanna M. Kuspert or Jo Crumbaker  
Maricopa County Air Quality Department  
Address: 1001 N. Central Ave, Suite 595  
Phoenix, AZ 85004  
Telephone: (602) 506-0169  
Fax: (602) 506-6179  
E-mail: jkuspert@mail.maricopa.gov or jcrumbak@mail.maricopa.gov

### **12. Description of the changes between the proposed rules, including supplemental notices and final rules:**

Since the final drafts of Rules 310 and 310.01 were published in the Notice of Proposed Rulemaking on September 4, 2009, the following changes were made to Rule 310 and Rule 310.01. The changes appear in the text of the final rules published in this Notice of Final Rulemaking:

**Rule 310, Section 304.3(a):** In the Notice of Proposed Rulemaking, “soil” was proposed to be deleted from one of the stabilization standards for a disturbed surface area - “maintain a soil crust” - and the term “visible” was proposed to be added. In this Notice of Final Rulemaking, “soil” was returned to the phrase and “visible” was not added. A soil crust – not a visible crust - must be maintained in order to properly conduct the test methods associated with determining stabilization of a disturbed surface area.

**Rule 310, Sections 306.1(a), 306.2(b)(1)-(4), and 306.2(a):** In the Notice of Proposed Rulemaking, “paved” modified “area accessible to the public” in these sections. In this Notice of Final Rulemaking, the definition of “area accessible to the public” has been revised to include paved surfaces; therefore, “paved” was deleted from these sections where it appears before “area accessible to the public”.

**Rule 310, Section 406:** In the Notice of Proposed Rulemaking, the following sentence was proposed to be added: “For the purpose of this section, a permit is considered expired, if a permit renewal is not applied for in a timely manner”. In this Notice of Final Rulemaking, the phrase “in a timely manner” was changed to “at least 14 calendar days prior to the expiration date of the original permit”.

**Rule 310, Section 501.2(c)(1):** In the Notice of Proposed Rulemaking, “visible” was used in Section 501.2(c)(1). In this Notice of Final Rulemaking, “visible” was changed to “soil”. A soil crust – not a visible crust – is the standard for stabilization measures.

**Rule 310.01, Sections 302.4(a)(2)(a) and 302.5(a)(2)(a):** In the Notice of Proposed Rulemaking, “visible” was used in Sections 302.4(a)(2)(a) and 302.5(a)(2)(a). In this Notice of Final Rulemaking, “visible” was changed to “soil”. A soil crust – not a visible crust – is the standard for stabilization measures.

**13. A summary of the comments made regarding the rule and the department response to them:**

The department conducted three public workshops, one director’s courtesy briefing, and one informational workshop during the informal rulemaking process – September 2008-July 2009. The department received formal comments during the formal comment periods: the 30-day comment period for the oral proceeding (September-October, 2009) and the 30-day comment period for the public hearing (December, 2009-January, 2010). The department received formal comments from the following stakeholders: Arizona Department of Transportation (ADOT), Maricopa County Farm Bureau, Arizona Center for Law in the Public Interest (ACLPI), and Happy Planet Consulting. The formal comments and the department’s responses to such formal comments are written below:

**Rule 310, New Section 103.5 – Rooftop Tile Cutting Exemption**

**Comment #1:** We have reviewed both the exemption request (although not the supporting documentation) and the department’s analysis of the request, and do not disagree with the general principle that the proposed dust control measures should not be required if their effectiveness is limited and they disproportionately compromise worker safety. However, neither the proposed rulemaking nor the department’s analysis addresses the issue of BACM or MSM with respect to the rejected control measures. Although the rulemaking mentions that California exempts rooftop tile cutting from OSHA regulations regarding worker exposure to silica dust-generating operations, it does not address whether the control measures are otherwise required in other jurisdictions as an air quality control measure. Are the rejected control measures or any other control measures currently being implemented in other jurisdictions to control dust from rooftop tile cutting? And if so, do those control measures represent BACM or MSM? We believe that any decision to exempt rooftop tile cutting must also answer these questions.

**Response #1:** In 2007, the department issued a notice of violation for opacity greater than 20% for dust from rooftop tile cutting, an activity the department rarely encounters. In response, the roofing industry filed a petition requesting a very limited exemption for tile cutting taking place on a pitched roof. That document presented an analysis of technological and economic feasibility issues specific to rooftop tile cutting, raising these safety issues for rulemaking consideration. The petition included a National Institute for Occupational Safety and Health (NIOSH) study completed in September of 2006 that analyzed saws and cutters controlling respirable and crystalline silica dust. The cutting equipment and add-on controls introduced additional hazards

for the workers, except for the manual cutter that did not provide the clean cut needed for the majority of roofing applications.

In 2007, the California Occupational Safety and Health Board (COSHB) initiated a rulemaking examining employee exposures from dust-generating operations conducted on masonry or concrete materials. The final rule adopted August 21, 2008 excludes rooftop tile cutting from the requirements to use a dust reduction system. COSHB noted in its Initial Statement of Reasons: “This exception is based on a conclusion that the prospect of using dust reduction systems appears at this time, considering the currently available technology and lack of information about its compatibility with roofing operations, to raise legitimate concerns about its feasibility, effectiveness, and susceptibility to creating slipping, tripping, and falling hazards when used in conjunction with roofing work on structures where fall distances can be fatal or seriously injurious.”

Rules 310 and 310.01 are part of the State Implementation Plan (SIP) revision referred to as the “Five Percent Plan”. The Five Percent Plan must meet the best available control measures (BACM) test and the most stringent measures (MSM) test for significant sources and source categories. The BACM and MSM tests require a review of rules and regulations from other jurisdictions across the United States and the incorporation of those requirements identified as feasible and more stringent than current control measures required by local rules; however, the requirement to meet BACM and MSM does not require the implementation of measures that are infeasible on technological or economic grounds, measures for insignificant source categories, or measures or groups of measures that will not contribute to expeditious attainment. When competing or similar control measures or work practice standards are deemed BACM or MSM in various parts of the country, the EPA allows some flexibility to determine which control measure and/or control measures to choose. In addition, since a BACM demonstration is done source category by source category and not measure by measure, the EPA looks at all the control measures for that category when determining if a state has provided for the implementation of BACM on a particular source category. In this particular instance, Rule 310 alone does not constitute the entire BACM-level control strategy. Rather, it is the combination of Rule 310, Rule 310.01, and city and town commitments that constitute the BACM strategy.

Rooftop tile cutting is not an explicit source category in the 2005 periodic PM<sub>10</sub> emissions inventory, because there is no EPA guidance, emission factors, or any other information available on estimating emissions specific to rooftop tile cutting. The following construction-related dust sources are assumed to be included in construction emission estimates: demolition and debris removal; site preparation (earth moving); and general construction (i.e. vehicular traffic, crushing, screening, material transfers, and other operations). Because rooftop tile cutting is an activity that occurs during residential and commercial construction, emissions from rooftop tile cutting are presumed to be included in construction emissions estimates.

The department has no data on how much of construction emissions may be apportioned to tile cutting; however, applying a conservative assumption that twenty percent (20%) of the contribution from construction activities are from tile cutting, results in a contribution between 0.20 to 3.91 μg/m<sup>3</sup>. This estimated contribution falls well below the 5 μg/m<sup>3</sup> value EPA generally presumes to be de minimis for a 24-hour average.

Consequently, the department amended Rule 310 such that the provisions of Rule 310 "...shall not apply to rooftop operations for cutting, drilling, grinding, or coring roofing tile when such activity is occurring on a pitched roof." The department has determined that this amendment is the most suitable approach to balance air quality and worker safety.

**Rule 310, Section 203 – Definition of “Bulk Material”**

**Comment #2:** The definition of “bulk material” states, in part: “Any material including, but not limited to, the following materials that are capable of generating fugitive dust...cotton, feeds, grains...” With this definition, if a source is stacking, loading, or unloading bulk materials (i.e., cotton, feeds, or grains), then such source would have to comply with Rule 310, Section 305.4. Rule 310, Section 305.4 states, in part: “The owner and/or operator of a dust-generating operation that involves bulk material stacking, loading, and unloading operations shall...prior to stacking, loading, and unloading (1) mix material with water; or (2) mix material with a dust suppressant other than water...” Both of these control measures are detrimental to the integrity of cotton, feeds, and grains.

**Response #2:** The department did not change the definition of “bulk material”. The issue raised in the comment was not raised in any prior workshop or meeting for this rulemaking. Under Arizona Revised Statutes (A.R.S.) § 49-471.07(C), the Board of Supervisors is not authorized to adopt a rule that is substantially different from the proposed rule contained in the Notice of Proposed Rulemaking. As the department is unable to make substantive changes at this point in the rulemaking process, the department will make note of this comment and consider the issue the next time the rule is revised.

The definition of “bulk material” is consistent with the definitions currently in the State Implementation Plan and other Maricopa County air quality rules. The dust-generating operations delineated in the definition of “bulk material” represent an illustrative, not exhaustive, list of possible materials. The test methods listed in the rule further refines what materials are regulated by the rule.

**Rule 310, Re-Numbered Section 232 – Definition of “Unpaved Parking Lot”**

**Comment #3:** We do not disagree with the intent of this change but suggest that the revision be clarified so that it is clear that the rule only exempts isolated incidents of “parking, maneuvering, material handling, or storing motor vehicles and equipment” but that regular use for such purposes can convert a vacant area or property into a parking lot.

**Response #3:** With the amendment to the definition of “unpaved parking lot”, the department clarified how an unpaved parking lot is distinguished from a disturbed surface area. The change does not exempt the isolated incidents of “parking”. Rule 310 contains control measure standards that apply while the incidental vehicle is parked or driving and stabilization standards that apply to the disturbed surface after the vehicle leaves and activity ceases.

An area to be used as an unpaved parking lot must be identified in the source’s Dust Control Plan. In such case, it is clear what and where an unpaved parking lot is and it is clear which standards must be met. When an

area is not identified in a Dust Control Plan but appears to be used as an unpaved parking lot, the overall context of the area must be considered. In order for an area to be considered an “unpaved parking lot”, such area must be used for an activity that exceeds a level beyond incidental use – beyond temporarily leaving/parking one vehicle in the area and beyond evidence of only one or two sets of tire tracks in the area with no vehicle present. Such area should reflect a level of significant use by vehicles.

#### **Rule 310, Section 303.2 – Affirmative Defense during a Wind Event**

**Comment #4:** The proposed changes to Section 303.2(a) are, frankly, confusing. The changes seem to eliminate both the concept of a violation and an affirmative defense, and do not result in a rule that clearly reflects the intent expressed in the earlier explanation for the proposed changes. We believe that rather than working within the existing framework of the rule, which seems to overcomplicate things, the department should consider simplifying the rule and adopting something closer to Clark County Rule 94.9.3. We also suggest eliminating the references to recordkeeping required under Sections 502 and 503, as they seem unnecessary. Toward that end, we propose the following language: “In the event there are wind conditions that cause fugitive dust emissions to exceed the visible emissions requirements in Section 303.1(a) of this rule despite implementation of the Dust Control Plan, an owner and operator shall immediately cease dust-generating operations and stabilize any disturbed surface area consistent with Section 304.3 of this rule.”

**Response #4:** The department does not agree with ACLIPI’s characterization of the changes. The provisions in Rule 310, Sections 303.2(a)(1) and (3) have been retained from the existing version of the rule in response to a recommendation by EPA to clarify the intent and implementation of the provision. The intent of the replacement language in Sections 303.2(a)(1)-(3) is to require escalating controls as winds increase. Ceasing operations is the ultimate control when all else fails. The new provision requires ceasing operations at a lower threshold (e.g., earlier and more frequently) resulting in a provision that is as stringent as the former provision.

#### **Rule 310, Section 305.1 – Off-Site Hauling Onto Areas Accessible to the Public**

**Comment #5:** The requirement to “load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area” when off-site hauling is difficult to comply with, because “cotton module” trailers are usually loaded with cotton – higher than the sides, front, and back of the cargo container area – but such trailers are covered; can meet one of the control measure requirements but cannot meet both.

**Response #5:** When Rule 310 was revised in 2008, stakeholders commented that “...it is impossible to load haul trucks so that a load is completely level or lower in the center than it is on the sides. Loading the trucks in this manner will require the bulk material in the haul truck cargo container area to be leveled before the truck moves. Such a requirement could be costly and could require a worker within the cargo box with a shovel or rake to move the material around to meet this requirement. Such activity could be hazardous.” The department concurred with the stakeholders’ concerns regarding flat loads and revised Rule 310 to include the control measure to “load all haul trucks such that at no time shall the highest point of the bulk material be higher than

the sides, front, and back of a cargo container area” when a haul truck’s cargo compartment was loaded and when the haul truck was hauling off-site onto an area accessible to the public. This control measure remains in Rule 310.

The department did not change the requirements regarding how haul trucks are loaded. The issue was not raised in any prior workshop or meeting for this rulemaking. Under Arizona Revised Statutes (A.R.S.) § 49-471.07(C), the Board of Supervisors is not authorized to adopt a rule that is substantially different from the proposed rule contained in the Notice of Proposed Rulemaking. As the department is unable to make substantive changes at this point in the rulemaking process, the department will make note of this comment and consider the issue the next time the rule is revised.

**Rule 310, Sections 305.5(c), 305.10(b), and 307 – Control Measures for Dust-Generating Operations**

**Comment #6:** Change “visible” to “soil”.

**Response #6:** The department did not change “visible” in these sections. A “visible” crust is the standard for fugitive dust control measures and a “soil” crust is the standard for stabilization measures. Since these sections address fugitive dust control measures, “visible” is the correct term.

**Rule 310, Section 306 – Trackout, Carry-Out, Spillage, and/or Erosion**

**Comment #7:** Trackout takes time to remove. Traffic needs to be controlled. Equipment must be mobilized. Immediate removal is not reasonable. Moreover, a distinction between trackout and soil stains on the roadway should be made. Perhaps if the material can be cleaned-up with a shovel or sweeper, then it is trackout. Otherwise, it is soil staining. Again, an understanding of traffic control requirements must be made.

**Response #7:** The department believes that the presence of trackout is an indication that maintenance or modification of the trackout control device is necessary. Appropriate attention directed to site trackout control will minimize the amount of clean-up necessary. In the department’s experience, trackout builds up over time and the individual who is responsible for the control measures on a site has a duty to monitor trackout and should be aware that clean-up will soon be needed. The department trains its inspectors on trackout enforcement to ensure fair and equitable treatment. The department requires that every effort be made to prevent as much trackout as possible. In general, trackout is considered "cleaned-up" or "removed" when the only visible materials are found in the small cavities or narrow cracks of the paved surface. The inspector makes this determination by visually inspecting the paved surface. The inspector may also observe traffic to see if any dust is re-entrained by passing vehicles.

The department has checked with various city and county transportation agencies on policies regarding cleaning-up trackout. Street sweepers are allowed to clean-up trackout, except on arterials and high volume roads during peak traffic periods. Appropriate attention directed to site trackout control and monitoring can avoid the necessity to clean-up trackout during peak traffic periods.

**Rule 310, Sections 306.1 and 306.2 – Trackout, Carry-Out, Spillage, and/or Erosion**

**Comment #8:** Delete “paved”.

**Response #8:** The department deleted “paved” from these sections, when it appeared before “area accessible to the public”. As originally written, “paved” modified “area accessible to the public”. Since the definition of “area accessible to the public” has been revised to include paved surfaces, “paved” is redundant when it appears before “area accessible to the public”.

#### **Rule 310, Sections 406 – Terms for Permits for Dust-Generating Operations**

**Comment #9:** This section is extremely clear in its criteria. It says that “the permittee shall re-apply...at least 14 calendar days prior to the expiration...” Adding the phrase “For the purpose of this section, a permit is considered expired, if a permit renewal is not applied for in a timely manner” relaxes the rule.

**Response #9:** The department deleted “in a timely manner” and added “at least 14 calendar days prior to the expiration date of the original permit”.

#### **Rule 310, Sections 501.2(c)(1) – Stabilization Observations-Disturbed Surface Area**

**Comment #10:** Change “visible” to “soil”.

**Response #10:** The department changed “visible” to “soil”. A “visible” crust is the standard for fugitive dust control measures and a “soil” crust is the standard for stabilization measures. Since these sections address stabilization measures, “soil” is the correct term.

#### **Rule 310.01, Section 226 – Definition of “Public Roadways”**

**Comment #11:** The definition should be deleted just as in Rule 310, as the language for a public roadway is now captured in the definition of “area accessible to the public”.

**Response #11:** The department did not delete the definition of “public roadways”. Since Rule 310.01 applies to non-traditional sources (e.g., unpaved roadways, unpaved parking lots), “public roadways” is relevant in Rule 310.01.

#### **Rule 310.01, Sections 302.4(a)(2)(a) and 302.5(a)(2)(a) – Stabilization Requirements for Vehicle Use in Open Areas and Vacant Lots and for Open Areas and Vacant Lots**

**Comment #12:** Change “visible” to “soil”.

**Response #12:** The department changed “visible” to “soil”. A “visible” crust is the standard for fugitive dust control measures and a “soil” crust is the standard for stabilization measures. Since these sections address stabilization measures, “soil” is the correct term.

#### **Rule 310.01, Section 302.8 – Livestock Activities**

**Comment #13:** It is still extremely difficult under these revisions to meet all the requirements, but staff should be recognized for their efforts to consider the reasonable agricultural practices in making these revisions.

**Response #13:** The amendments to Rule 310.01, Section 302.8 reflect the department’s extensive consideration of recommendations made by the Maricopa County Farm Bureau and the United Dairymen and the department’s research of conservation best management practices applied to similar livestock activities in California. The department believes the control measures in this section are necessary, prudent, and feasible. The department also understands that implementing some of these control measures may require a new way of “doing business”. However, given the severity of the PM<sub>10</sub> pollution problem in Maricopa County, the control measures are an integral part of reducing PM<sub>10</sub> emissions.

**Rule 310.01, Section 302.8(c)(1) – Livestock Activities**

**Comment #14:** Although we do not object in principle to adding an option for alternative control measures for livestock activities in Rule 310.01, we believe that the rule should clearly require that any proposed alternative control measure satisfy Clean Air Act requirements and be at least as stringent as the approved control measures set forth in Section 302.8(b).

**Response #14:** The alternative measure provision specifically requires that any alternative control measure must be approved by both the Control Officer and the EPA Administrator. This approval structure in conjunction with the standards and test methods contained in Rule 310.01 ensure that alternative control measures meet the stringency, feasibility, and any other principles and requirements of the Clean Air Act.

**Rule 310.01, Section 302.9(b)(1) – Erosion-Caused Deposition of Bulk Materials onto Paved Surfaces**

**Comment #15:** Replace “paved roadway, paved parking lot” with “area accessible to the public”.

**Response #15:** The department did not replace “paved roadway, paved parking lot” with “area accessible to the public”. Although “paved roadway” and “paved parking lot” are included in the definition of “area accessible to the public”, these terms are not meant to be replaced or substituted for “area accessible to the public” in this section. “Paved roadway” and “paved parking lot” are meant to be specifically addressed in Section 302.9(b)(1).

**14. Any other matters prescribed by the statute that are applicable to the specific department or to any specific rule or class of rules:**

Not applicable

**15. Incorporations by reference and their location in the rules:**

**Incorporation by Reference:**

ASTM Method C136-06

ASTM Method D2216-05

ASTM Method D1557-02e1

**Location:**

Rule 310, Section 223

Rule 310, Section 504.1

Rule 310, Section 305.5(b)(2)

Rule 310, Section 305.11(b)(2)

Rule 310, Section 504.2

Rule 310, Section 305.5(b)(2)

Appendix C: Fugitive Dust Test Methods

EPA Reference Method 203B

EPA Reference Method 22

Rule 310, Section 305.11(b)(2)  
Rule 310, Section 504.3  
Rule 310, Section 303.2(c)  
Rule 310, Section 304.3  
Rule 310, Section 304.4  
Rule 310, Section 501.1  
Rule 310, Section 501.2  
Rule 310.01, Section 302.7(c)(3)(b)  
Rule 310.01, Section 501.1(b)  
Rule 310.01, Section 501.2  
Rule 310.01, Section 501.3  
Rule 310.01, Section 501.1(a)  
Rule 310, Section 303.1(b)  
Rule 310, Section 501.1(d)  
Rule 310, Section 504.4

**16. Was this rule previously an emergency rule?**

No

**17. The full text of the rules follows:**

**REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 310**

**FUGITIVE DUST FROM DUST-GENERATING OPERATIONS**

**INDEX**

**SECTION 100 – GENERAL**

- 101 PURPOSE
- 102 APPLICABILITY
- 103 EXEMPTIONS

**SECTION 200 – DEFINITIONS**

- 201 AREA A
- 202 AREA ACCESSIBLE TO THE PUBLIC
- 203 BULK MATERIAL
- 204 BULK MATERIAL HANDLING, STORAGE, AND/OR TRANSPORTING OPERATION
- 205 CONTROL MEASURE
- 206 DISTURBED SURFACE AREA
- 207 DUST CONTROL IMPLEMENT
- 208 DUST CONTROL PLAN
- 209 DUST-GENERATING OPERATION
- 210 DUST SUPPRESSANT
- 211 EARTHMOVING OPERATION
- 212 EMERGENCY
- 213 EMERGENCY ACTIVITY
- 214 END OF WORKDAY
- 215 FREEBOARD
- 216 FUGITIVE DUST
- 217 GRAVEL PAD
- 218 GRIZZLY
- 219 HAUL TRUCK
- 220 MOTOR VEHICLE
- 221 NORMAL FARM CULTURAL PRACTICE
- 222 OFF-ROAD VEHICLE
- 223 OPEN STORAGE PILE
- 224 OWNER AND/OR OPERATOR

225	PAVE
226	PROPERTY LINE
<del>227</del>	<del>PUBLIC ROADWAYS</del>
<del>228</del>	<del>227</del> ROUTINE
<del>229</del>	<del>228</del> SILT
<del>230</del>	<del>229</del> TRACKOUT/CARRYOUT
<del>231</del>	<del>230</del> TRACKOUT CONTROL DEVICE
<del>232</del>	<del>231</del> UNPAVED HAUL/ACCESS ROAD
<del>233</del>	<del>232</del> UNPAVED PARKING LOT
<del>234</del>	<del>233</del> UNPAVED ROAD
<del>235</del>	<del>234</del> WIND-BLOWN DUST
<del>236</del>	<del>WIND EVENT</del>
<del>235</del>	<del>WORK SITE</del>

**SECTION 300 – STANDARDS**

301	GENERAL REQUIREMENTS FOR DUST-GENERATING OPERATIONS
302	PERMIT REQUIREMENTS FOR DUST-GENERATING OPERATIONS
303	VISIBLE EMISSIONS REQUIREMENTS FOR DUST-GENERATING OPERATIONS
304	STABILIZATION REQUIREMENTS FOR DUST-GENERATING OPERATIONS
305	CONTROL MEASURES FOR DUST-GENERATING OPERATIONS
306	TRACKOUT, CARRY-OUT, SPILLAGE, AND/OR EROSION
307	SOIL MOISTURE
308	PROJECT INFORMATION SIGN FOR DUST-GENERATING OPERATIONS
309	DUST CONTROL TRAINING CLASSES FOR DUST-GENERATING OPERATIONS
310	DUST CONTROL COORDINATOR FOR DUST-GENERATING OPERATIONS

**SECTION 400 – ADMINISTRATIVE REQUIREMENTS**

401	DUST CONTROL PERMIT REQUIREMENTS
402	DUST CONTROL PLAN REQUIREMENTS
403	DUST CONTROL PLAN REVISIONS
404	DUST CONTROL BLOCK PERMIT REQUIREMENTS
405	APPROVAL OR DENIAL OF PERMIT APPLICATIONS FOR DUST-GENERATING OPERATIONS
406	TERMS FOR PERMITS FOR DUST-GENERATING OPERATIONS
407	DEFACING, ALTERING, FORGING, COUNTERFEITING, OR FALSIFYING PERMITS FOR DUST-GENERATING OPERATIONS
408	FEES FOR PERMITS FOR DUST-GENERATING OPERATIONS

- 409 POSTING OF PERMITS FOR DUST-GENERATING OPERATIONS
- 410 COMPLIANCE SCHEDULE

**SECTION 500 – MONITORING AND RECORDS**

- 501 COMPLIANCE DETERMINATION
- 502 RECORDKEEPING
- 503 RECORDS RETENTION
- 504 TEST METHODS ADOPTED BY REFERENCE

**Revised 07/13/88**  
**Revised 07/06/93**  
**Revised 09/20/94**  
**Revised 06/16/99**  
**Revised 02/16/00**  
**Revised 04/07/04**  
**Revised 03/26/08**  
**Revised 01/27/10**

**MARICOPA COUNTY**  
**AIR POLLUTION CONTROL REGULATIONS**  
**REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 310**  
**FUGITIVE DUST FROM DUST-GENERATING OPERATIONS**

**SECTION 100 – GENERAL**

- 101 PURPOSE:** To limit particulate matter (PM<sub>10</sub>) emissions into the ambient air from any property, operation or activity that may serve as a fugitive dust source. The effect of this rule shall be to minimize the amount of PM<sub>10</sub> entrained into the ambient air as a result of the impact of human activities by requiring measures to prevent, reduce, or mitigate particulate matter emissions.
- 102 APPLICABILITY:** The provisions of this rule shall apply to all dust-generating operations except for those dust-generating operations listed in Section 103 of this rule.
- 103 EXEMPTIONS:** ~~The provisions of this rule shall not apply to the following activities:~~

**103.1** The provisions of this rule shall not apply to normal farm cultural practices according to Arizona Revised Statutes (A.R.S.) § 49-457 and A.R.S. § 49-504.4.

**103.2** The provisions of this rule shall not apply to the following non-traditional sources of fugitive dust that are located at sources that do not require any permit under these rules. These non-traditional sources of fugitive dust are subject to the standards and/or requirements described in Rule 310.01: Fugitive Dust from Non-Traditional Sources of Fugitive Dust of these rules:

- a. Vehicle use in open areas and vacant lots.
- b. Open areas and vacant lots.
- c. Unpaved parking lots.
- d. Unpaved roadways (including alleys).
- e. Livestock activities.
- f. Erosion-caused deposition of bulk materials onto paved surfaces.
- g. Easements, rights-of-way, and access roads for utilities (transmission of electricity, natural gas, oil, water, and gas).

**103.3** The provisions of this rule shall not apply to emergency activities that may disturb the soil conducted by any utility or government agency in order to prevent public injury or to restore critical utilities to functional status.

~~103.4~~ ~~An area is considered to be a disturbed surface area until the activity that caused the disturbance has been completed and the disturbed surface area meets the standards described in Section 304 of this rule.~~

~~103.5~~ **103.4** ~~Establishing~~ The provisions of this rule do not apply to the establishment of initial landscapes without the use of mechanized equipment, conducting landscape maintenance without the use of mechanized equipment, and playing on or maintaining a field used for non-motorized sports ~~shall not be considered a dust-generating operation.~~ However, establishing initial landscapes without the use of mechanized equipment and conducting landscape maintenance without the use of

mechanized equipment shall not include grading, or trenching performed to establish initial landscapes or to redesign existing landscapes.

**103.5** The provisions of this rule shall not apply to rooftop operations for cutting, drilling, grinding, or coring roofing tile when such activity is occurring on a pitched roof.

~~103.6 Fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers, and does not include emissions from process and combustion sources that are subject to other rules in Regulation III Control of Air Contaminants of these rules.~~

**SECTION 200 – DEFINITIONS:** For the purpose of this rule, the following definitions ~~shall apply, in addition to those definitions found in Rule 100: General Provisions and Definitions of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence. See Rule 100, General Provisions and Definitions of these rules for definitions of terms that are used but not specifically defined in this rule.~~

**201 AREA A** – As defined in A.R.S. § 49-541(1), the area in Maricopa County delineated as follows:

- Township 8 North, Range 2 East and Range 3 East
- Township 7 North, Range 2 West through Range 5 East
- Township 6 North, Range 5 West through Range 6 East
- Township 5 North, Range 5 West through Range 7 East
- Township 4 North, Range 5 West through Range 8 East
- Township 3 North, Range 5 West through Range 8 East
- Township 2 North, Range 5 West through Range 8 East
- Township 1 North, Range 5 West through Range 7 East
- Township 1 South, Range 5 West through Range 7 East
- Township 2 South, Range 5 West through Range 7 East
- Township 3 South, Range 5 West through Range 1 East
- Township 4 South, Range 5 West through Range 1 East

**202 AREA ACCESSIBLE TO THE PUBLIC** – Any paved parking lot or paved ~~public~~ roadway that can be entered or used for public travel primarily for purposes unrelated to the dust-generating operation.

**203 BULK MATERIAL** – Any material, including, but not limited to, the following materials that are capable of producing fugitive dust:

- 203.1 Earth.
- 203.2 Rock.
- 203.3 Silt.
- 203.4 Sediment.
- 203.5 Sand.
- 203.6 Gravel.
- 203.7 Soil.
- 203.8 Fill.
- 203.9 Aggregate less than 2 inches in length or diameter (i.e., aggregate base course [ABC]).
- 203.10 Dirt.
- 203.11 Mud.
- 203.12 Demolition debris.
- 203.13 Cotton.
- 203.14 Trash.
- 203.15 Cinders.
- 203.16 Pumice.
- 203.17 Saw dust.
- 203.18 Feeds.
- 203.19 Grains.
- 203.20 Fertilizers.
- 203.21 Fluff from shredders.
- 203.22 Dry concrete.

**204 BULK MATERIAL HANDLING, STORAGE, AND/OR TRANSPORTING OPERATION** – The use of equipment, haul trucks, and/or motor vehicles, including, but not limited to, for the following activities that are capable of producing fugitive dust:

- 204.1 Loading.
- 204.2 Unloading.
- 204.3 Conveying.
- 204.4 Transporting.
- 204.5 Piling.
- 204.6 Stacking.
- 204.7 Screening.
- 204.8 Grading.
- 204.9 Moving bulk materials.

**205 CONTROL MEASURE** – A technique, practice, or procedure used to prevent or minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust. Control measures include, but are not limited to:

- 205.1** Curbing;
- 205.2** Paving;
- 205.3** Pre-watering;
- 205.4** Applying dust suppressants;
- 205.5** Physically stabilizing with vegetation, gravel, recrushed/recycled asphalt or other forms of physical stabilization;
- 205.6** Limiting, restricting, phasing and/or rerouting motor vehicle access;
- 205.7** Reducing vehicle speeds and/or number of vehicle trips;
- 205.8** Limiting use of off-road vehicles on open areas and vacant lots;
- 205.9** Utilizing work practices and/or structural provisions to prevent wind and water erosion onto paved areas accessible to the public;
- 205.10** Appropriately using dust control implements;
- 205.11** Installing one or more grizzlies, gravel pads, and/or wash down pads adjacent to the entrance of a paved an area accessible to the public to control carry-out and trackout;
- 205.12** Keeping open-bodied haul trucks in good repair, so that spillage may not occur from beds, sidewalls, and tailgates; and
- 205.13** Covering the cargo beds of haul trucks to minimize wind-blown dust emissions and spillage.

**206 DISTURBED SURFACE AREA** – A portion of the earth's surface or material placed on the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed native condition if the potential for the emission of fugitive dust is increased by the movement, destabilization, or modification.

**207 DUST CONTROL IMPLEMENT** – A tool, machine, equipment, accessory, structure, enclosure, cover, material or supply, including an adequate readily available supply of water and its associated distribution/delivery system, used to control fugitive dust emissions.

**208 DUST CONTROL PLAN** – A written plan describing all control measures to be implemented and maintained in order to prevent or minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust.

**209 DUST-GENERATING OPERATION** – Any activity capable of generating fugitive dust, including, but not limited to, the following activities:

- 209.1 Land clearing, maintenance, and land clean-up using mechanized equipment.
  - 209.2 Earthmoving.
  - 209.3 Weed abatement by discing or blading.
  - 209.4 Excavating.
  - 209.5 Construction.
  - 209.6 Demolition.
  - 209.7 Bulk material handling (e.g., bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations).
  - 209.8 Storage and/or transporting operations (e.g., open storage piles, ~~bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations~~).
  - 209.9 Operation of any outdoor equipment.
  - 209.10 Operation of motorized machinery.
  - 209.11 Establishing and/or using staging areas, parking areas, material storage areas, or access routes to and from a site.
  - 209.12 Establishing and/or using unpaved haul/access roads to, from, and within a site.
  - 209.13 Disturbed surface areas associated with a site.
  - 209.14 Installing initial landscapes using mechanized equipment.
- 210 **DUST SUPPRESSANT** – Water, hygroscopic material, solution of water and chemical surfactant, foam, non-toxic chemical stabilizer or any other dust palliative, which is not prohibited for ground surface application by the U.S. Environmental Protection Agency (EPA) or the Arizona Department of Environmental Quality (ADEQ) or any applicable law, rule, or regulation, as a treatment material for reducing fugitive dust emissions.
- 211 **EARTHMOVING OPERATION** – The use of any equipment for an activity ~~which~~ that may generate fugitive dust, such as but not limited to, the following activities:
- 211.1 Cutting and filling.
  - 211.2 Grading.
  - 211.3 Leveling.
  - 211.4 Excavating.
  - 211.5 Trenching.
  - 211.6 Loading or unloading of bulk materials.
  - 211.7 Demolishing.
  - 211.8 Blasting.
  - 211.9 Drilling.
  - 211.10 Adding bulk materials to or removing bulk materials from open storage piles.
  - 211.11 Back filling.

- 211.12** Soil mulching.
- 211.13** Landfill operations.
- 211.14** Weed abatement by discing or blading.
- 212** **EMERGENCY** – A situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a limitation in this rule, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include any noncompliance due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- 213** **EMERGENCY ACTIVITY** – Repairs that are a result of an emergency which prevents or hinders the provision of electricity, the distribution/collection of water, and the availability of other utilities due to unforeseen circumstances that are beyond the routine maintenance and repair due to normal wear conducted by a utility or municipality.
- 214** **END OF WORKDAY** – The end of a working period that may include one or more work shifts. If working 24 hours a day, the end of a working period shall be considered no later than 8 pm.
- 215** **FREEBOARD** – The vertical distance between the top edge of a cargo container area and the highest point at which the bulk material contacts the sides, front, and back of a cargo container area.
- 216** **FUGITIVE DUST** – The particulate matter not collected by a capture system, that is entrained in the ambient air, and is caused from human and/or natural activities, such as, but not limited to, the movement of soil, vehicles, equipment, blasting, and wind. For the purpose of this rule, fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers, and does not include emissions from process and combustion sources that are subject to other rules in Regulation III (Control of Air Contaminants) of these rules.
- 217** **GRAVEL PAD** – A layer of washed gravel, rock, or crushed rock that is at least one inch or larger in diameter, that is maintained at the point of intersection of a paved an area accessible to the public and a work site ~~entrance~~ exit to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to leaving the work site. ~~A gravel pad shall consist of one inch to 3 inches rough diameter, clean, well-graded gravel or crushed rock.~~ Minimum dimensions must be 30 feet wide by 3 inches deep, and, ~~at minimum,~~ 50 feet long or the length of the longest haul truck, whichever is greater. If an unpaved surface exit does not have adequate width to install a 30-foot wide gravel pad, then the width of the gravel

pad must cover the full width of the unpaved surface exit and such shorter width must be adequate to prevent trackout.

- 218 GRIZZLY** – A device (i.e., rails, pipes, or grates) used to dislodge mud, dirt, and/or debris from the tires and undercarriage of motor vehicles and/or haul trucks prior to leaving the work site.
- 219 HAUL TRUCK** – Any fully or partially open-bodied self-propelled vehicle including any non-motorized attachments, such as, but not limited to, trailers or other conveyances that are connected to or propelled by the actual motorized portion of the vehicle used for transporting bulk materials.
- 220 MOTOR VEHICLE** – A self-propelled vehicle for use on the public roads and highways of the State of Arizona and required to be registered under the Arizona State Uniform Motor Vehicle Act, including any non-motorized attachments, such as but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.
- 221 NORMAL FARM CULTURAL PRACTICE** – All activities by the owner, lessee, agent, independent contractor, and/or supplier conducted on any facility for the production of crops and/or nursery plants. Disturbances of the field surface caused by turning under stalks, tilling, leveling, planting, fertilizing, or harvesting are included in this definition.
- 222 OFF-ROAD VEHICLE** – Any self-propelled conveyance specifically designed for off-road use, including, but not limited to, off-road or all-terrain equipment, trucks, cars, motorcycles, motorbikes, or motorbuggies.
- 223 OPEN STORAGE PILE** – Any accumulation of bulk material with a 5% or greater silt content that has a total surface area of 150 square feet or more and that at any one point attains a height of three feet. Silt content shall be assumed to be 5% or greater unless a person can show, by testing in accordance with ASTM Method C136-06 or other equivalent method approved in writing by the Control Officer and the Administrator that the silt content is less than 5%.
- 224 OWNER AND/OR OPERATOR** – The person including, but not limited to, the property owner, lessee, developer, responsible official, Dust Control permit applicant (who may also be the responsible party contracting to do the work), general contractor, prime contractor, supervisor, management company, or any person who owns, leases, operates, controls, or supervises a dust-generating operation subject to the requirements of this rule.

- 225 **PAVE** – To apply and maintain asphalt, concrete, or other similar material to a roadway surface (i.e., asphaltic concrete, concrete pavement, chip seal, or rubberized asphalt).
- 226 **PROPERTY LINE** – The boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- ~~227~~ **PUBLIC ROADWAYS** – ~~Any roadways that are open to public travel.~~
- ~~228~~ 227 **ROUTINE** – Any dust-generating operation which occurs more than 4 times per year or lasts 30 cumulative days or more per year.
- ~~229~~ 228 **SILT** – Any aggregate material with a particle size less than 75 micrometers in diameter, which passes through a No. 200 sieve.
- ~~230~~ 229 **TRACKOUT/CARRYOUT** – Any and all bulk materials that adhere to and agglomerate on the surfaces of motor vehicles, haul trucks, and/or equipment (including tires) and that have fallen or been deposited onto ~~a paved~~ an area accessible to the public.
- ~~231~~ 230 **TRACKOUT CONTROL DEVICE** – A gravel pad, grizzly, wheel wash system, or a paved area, located at the point of intersection of an unpaved area and ~~a paved~~ an area accessible to the public that controls or prevents vehicular trackout.
- ~~232~~ 231 **UNPAVED HAUL/ACCESS ROAD** – Any on-site unpaved road used by commercial, industrial, institutional, and/or governmental traffic.
- ~~233~~ 232 **UNPAVED PARKING LOT** – Any area that is not paved and that is designated for parking in the Dust Control Plan or that is used for parking, maneuvering, material handling, or storing motor vehicles and equipment. An unpaved parking lot includes, but is not limited to, automobile impound yards, wrecking yards, automobile dismantling yards, salvage yards, material handling yards, and storage yards. For the purpose of this ~~definition rule~~, maneuvering shall not include military maneuvers or exercises conducted on federal facilities.
- ~~234~~ 233 **UNPAVED ROAD** – Any road or equipment path that is not paved. For the purpose of this rule, an unpaved road is not a horse trail, hiking path, bicycle path, or other similar path used exclusively for purposes other than travel by motor vehicles.

~~235~~ **234** WIND-BLOWN DUST – Visible emissions, from any disturbed surface area, that are generated by wind action alone.

~~236~~ WIND EVENT – ~~When the 60 minute average wind speed is greater than 25 miles per hour.~~

**235** WORK SITE – Any property upon which any dust-generating operations occur.

## SECTION 300 – STANDARDS

**301** GENERAL REQUIREMENTS FOR DUST-GENERATING OPERATIONS: ~~Any person engaged in a dust generating operation subject to this rule shall be subject to the standards and/or requirements of this rule before, after, and while conducting such dust generating operation, including during weekends, after work hours, and on holidays. Failure to comply with any one of the following requirements shall constitute a violation.~~

**301.1** ~~Visible emissions requirements from dust generating operations described in Section 303 of this rule.~~ Any person engaged in a dust-generating operation subject to this rule shall be subject to the standards and/or requirements of this rule before, after, and while conducting such dust-generating operation, including during weekends, after work hours, and on holidays.

**301.2** ~~Stabilization requirements described in Section 304 of this rule.~~ For the purpose of this rule, any control measure that is implemented must achieve the applicable standard(s) described in this rule, as determined by the corresponding test method(s), as applicable, and must achieve other applicable standard(s) set forth in this rule.

**301.3** ~~Control measures described in Section 305 of this rule.~~ Regardless of whether a dust-generating operation is in compliance with an approved Dust Control Plan or there is no approved Dust Control Plan, the owner and/or operator of a dust-generating operation shall be subject to all requirements of this rule at all times.

**301.4** ~~Trackout, carry out, spillage, and/or erosion requirements described in Section 306 of this rule.~~ Failure to comply with the provisions of this rule, as applicable, and/or of an approved Dust Control Plan, shall constitute a violation.

**301.5** ~~Soil moisture requirements described in Section 307 of this rule.~~

**301.6** ~~Dust control training class requirements described in Section 309 of this rule.~~

- ~~301.7 Dust control permit requirements described in Section 401 of this rule.~~
- ~~301.8 Dust Control Plan requirements described in Section 402 of this rule.~~
- ~~301.9 Monitoring and recordkeeping requirements described in Section 500 of this rule.~~
- ~~301.10 Any other requirements of this rule.~~

**302 PERMIT REQUIREMENTS FOR DUST-GENERATING OPERATIONS:**

- 302.1** No person shall commence construction of, operate, or make a modification to any dust-generating operation when such dust-generating operations disturb a total surface area of 0.10 acre (4,356 square feet) or more without first obtaining a permit or permit revision from the Control Officer.
- 302.2** No person shall commence construction of, operate, or make a modification to any dust-generating operation that disturbs a total surface area of less than 0.10 acre (4,356 square feet) under common control that are either contiguous or separated only by a public or private roadway and that cumulatively equal or exceed 0.10 acre (4,356 square feet) in area without first obtaining a permit or permit revision from the Control Officer.
- 302.3** No person shall commence any routine dust-generating operation that disturbs a surface area of 0.10 acre or greater at a site that has obtained or must obtain a Title V, Non-Title V, or General permit under Regulation II (Permits and Fees) of these rules without first submitting to the Control Officer a Dust Control Plan.
- 302.4** The property owner, lessee, developer, responsible official, Dust Control permit applicant (who may also be the responsible party contracting to do the work), general contractor, prime contractor, supervisor, management company, or any person who owns, leases, operates, controls, or supervises a dust-generating operation subject to the requirements of this rule shall be responsible for obtaining a permit or permit revision from the Control Officer.
- 302.5** All permit applications shall be filed in the manner and form prescribed by the Control Officer, which includes, but is not limited to, the requirements of Section 400 of this rule. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision, which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of this rule.
- 302.6** The issuance of any permit or permit revision shall not relieve any person subject to the requirements of this rule from compliance with any Federal laws, Arizona laws, or these rules.

**302.7** Any other law, regulation or permit shall not relieve any person from obtaining a permit or permit revision required under this rule.

**303 VISIBLE EMISSIONS REQUIREMENTS FOR DUST-GENERATING OPERATIONS:**

**303.1 ~~Dust-Generating Operation Opacity Limitation~~ Visible Emissions Requirement:** The owner and/or operator of a dust-generating operation shall not allow visible fugitive dust emissions to exceed the limits listed in either one of the following:

- a. The owner and/or operator of a dust-generating operation shall not cause or allow visible fugitive dust emissions to exceed 20% opacity.
- b. The owner and/or operator of a dust-generating operation shall not cause, ~~suffer~~, or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined by using EPA Reference Method 22.

**303.2 ~~Exemptions from Dust-Generating Operation Opacity Limitation~~ Visible Emissions Requirement:**

a. ~~Wind Event: Exceedances of the opacity limit described in Section 303.1 of this rule that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the owner and/or operator demonstrates all of the following conditions: If wind conditions cause fugitive dust emissions to exceed the visible emissions requirements in Section 303.1(a) of this rule, despite implementation of the Dust Control Plan, an owner and/or operator shall:~~

(1) ~~All control measures required were followed and one or more of the following control measures were applied and maintained: Ensure that all control measures and requirements of the Dust Control Plan are implemented and the subject violations cannot be prevented by better application, operation, or maintenance of these measures and requirements.~~

(a) For dust generating operations:

- (i) ~~Cease dust generating operations for the duration of the condition/situation/event when the 60 minute average wind speed is greater than 25 miles per hour and if dust generating operations are ceased for the remainder of the workday, stabilize the area;~~
  - (ii) ~~Apply water or other suitable dust suppressant at least twice per hour to dust generating operations in the PM<sub>10</sub> nonattainment area and at least once per hour to dust generating operations outside the PM<sub>10</sub> nonattainment area;~~
  - (iii) ~~Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent method as approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content; or~~
  - (iv) ~~Implement Section 303.2(a)(1)(a)(ii) or Section 303.2(a)(1)(a)(iii) of this rule and construct fences or three foot to five foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of wind-blown material leaving a site.~~
- (b) ~~For temporary disturbed surface areas, including, but not limited to, after work hours, weekends, and holidays:~~
- (i) ~~Uniformly apply and maintain surface gravel or dust suppressants;~~
  - (ii) ~~Apply water to all disturbed surface areas three times per day. If there is any evidence of wind-blown dust, increase watering frequency to a minimum of four times per day;~~
  - (iii) ~~Apply water on open storage piles at least twice per hour to temporary disturbed surface areas in the PM<sub>10</sub> nonattainment area and at least once per hour to temporary disturbed surface areas outside the PM<sub>10</sub> nonattainment area; or~~
  - (iv) ~~Cover open storage piles with tarps, plastic, or other material such that wind will not remove the covering(s).~~

- (2) ~~Exceedances of the opacity limit described in Section 303.1 of this rule could not have been prevented by better application, implementation, operation, or maintenance of control measures;~~ Cease dust-generating operations and stabilize any disturbed surface area consistent with Section 304.3 of this rule.
- (3) ~~The owner and/or operator compiled and retained records, in accordance with Section 502 Recordkeeping of this rule; and~~ Compile records consistent with Sections 502 and 503 of this rule and document control measure and other Dust Control Plan requirement implementation.
- (4) ~~The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Air Quality Department monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.~~

- b. Emergency Maintenance of Flood Control Channels and Water Retention Basins:** The ~~opacity limit~~ visible emissions limits described in Section 303.1 of this rule shall not apply to emergency maintenance of flood control channels and water retention basins, provided that control measures are implemented.
- c. Vehicle Test and Development Facilities and Operations:** The ~~opacity~~ visible emissions limit described in Section 303.1(a) of this rule shall not apply to vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality, and/or commercial acceptance, if such testing is not feasible within enclosed facilities. However, all areas used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized after such testing, in compliance with Appendix C (Fugitive Dust Test Methods) of these rules. All areas not used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized, in compliance with Appendix C (Fugitive Dust Test Methods) of these rules. In addition, vehicle test and development facilities may require a Dust Control permit in accordance with Section 302 of this rule.
- d. Activities Near the Property Line:** The opacity limit described in Section 303.1(b) of this rule shall not apply to dust-generating operations conducted within 25 feet of the property line.

**e. Ceasing Operations at a Solid Waste Management Facility:** The requirement in Section 303.2(a)(2) of this rule to cease dust-generating operations if wind conditions cause fugitive dust emissions to exceed the visible emissions requirements in Section 303.1(a) of this rule shall not apply to daily compaction and covering of refuse if ceasing operations violates Arizona Department of Environmental Quality solid waste management rules or causes or threatens to cause a public health hazard or nuisance. However, the owner and/or operator must comply with all other provisions in Section 303.2(a) of this rule.

**304 STABILIZATION REQUIREMENTS FOR DUST-GENERATING OPERATIONS:**

**304.1 Unpaved Parking Lot:** The owner and/or operator of any unpaved parking lot shall not allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>, and either Section 304.1(a) or Section 304.1(b) of this rule. However, if silt loading is equal to or greater than 0.33 oz/ft<sup>2</sup>, then the owner and/or operator shall not allow the silt content to exceed 8%.

a. ~~Shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>; or~~

b. ~~Shall not allow the silt content to exceed 8%.~~

**304.2 Unpaved Haul/Access Road:**

a. The owner and/or operator of any unpaved haul/access road (whether ~~including~~ at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall not allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>, and either Section 304.2(a)(1) or Section 304.2(a)(2) of this rule. However, if silt loading is equal to or greater than 0.33 oz/ft<sup>2</sup>, then the owner and/or operator shall not allow the silt content to exceed 6%.

(1) ~~Shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>; or~~

(2) ~~Shall not allow the silt content to exceed 6%.~~

b. The owner and/or operator of any unpaved haul/access road (~~including whether~~ at a work site that is under construction or a work site that is temporarily or permanently inactive) shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road in

Section 304.2(a) of this rule, limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this section of this rule, the owner and/or operator must include, in a Dust Control Plan, the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

**304.3 Disturbed Surface Area:** The owner and/or operator of any disturbed surface area on which no activity is occurring (~~including whether~~ at a work site that is under construction or a work site that is temporarily or permanently inactive) shall meet at least one of the standards described in Sections 304.3(a) through 304.3(g) below, as applicable. Should ~~any such a~~ disturbed surface area ~~on which no activity is occurring~~ contain more than one type of ~~visibly distinguishable stabilization characteristics~~ stabilization characteristic, such as soil, vegetation, or other character- ~~istics~~ characteristic, which ~~are~~ is visibly distinguishable, then the owner and/or operator shall test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, in accordance with the appropriate test methods described in Section 501.2(c) of this rule and in Appendix C (Fugitive Dust Test Methods) of these rules. The owner and/or operator of such disturbed surface area on which no activity is occurring shall be considered in violation of this rule if the area is not maintained in a manner that meets at least one of the standards listed below, as applicable. An area is considered to be a disturbed surface area until the activity that caused the disturbance has been completed and the disturbed surface area meets the standards described in this section of this rule.

- a. Maintain a soil crust;
- b. Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;
- c. Maintain a flat vegetative cover (i.e., attached [rooted] vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
- d. Maintain a standing vegetative cover (i.e., vegetation that is attached [rooted] with a predominant vertical orientation) that is equal to or greater than 30%;
- e. Maintain a standing vegetative cover (i.e., vegetation that is attached [rooted] with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold

friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;

- f. Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
- g. Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator.

**304.4 Vehicle Test and Development Facilities and Operations:** No stabilization requirement shall apply to vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality, and/or commercial acceptance, if such testing is not feasible within enclosed facilities. However, all areas used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized after such testing, in compliance with Appendix C (Fugitive Dust Test Methods) of these rules. All areas not used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized, in compliance with Appendix C (Fugitive Dust Test Methods) of these rules. In addition, vehicle test and development facilities may require a Dust Control permit in accordance with Section 302 of this rule.

**305 CONTROL MEASURES FOR DUST-GENERATING OPERATIONS:** When engaged in a dust-generating operation, the owner and/or operator shall install, maintain, and use control measures, as applicable. Control measures for specific dust-generating operations are described in Sections 305.1 through 305.12 of this rule. The owner and/or operator of a dust-generating operation shall implement control measures before, after, and while conducting dust-generating operations, including during weekends, after work hours, and on holidays. At least one primary control measure and one contingency control measure must be identified in the Dust Control Plan for all dust-generating sources. ~~Control measures for specific dust-generating operations are described in Section 305.1 through Section 305.12 of this rule.~~

**305.1 Off-Site Hauling onto Paved Areas Accessible to the Public:** The owner and/or operator of a dust-generating operation that involves off-site hauling shall implement the following control measures:

- a. When cargo compartment is loaded:

(1) Load all haul trucks such that the freeboard is not less than three inches;

- (2) Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
- (3) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
- (4) Cover the cargo compartment with a tarp or other suitable closure.

**b.** When cargo compartment is empty:

- (1) Clean the interior of the cargo compartment; or
- (2) Cover the cargo compartment with a tarp or other suitable closure.

**c.** When off-site hauling, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site.

**305.2 Bulk Material Hauling/Transporting When On-Site Hauling/Transporting Within the Boundaries of the Work Site but not Crossing a Paved an Area Accessible to the Public:** The owner and/or operator of a dust-generating operation that involves bulk material hauling/transporting when on-site hauling/transporting within the boundaries of the work site but not crossing a ~~paved~~ an area accessible to the public shall implement one of the following control measures:

- a.** Limit vehicle speed to 15 miles per hour or less while traveling on the work site;
- b.** Apply water to the top of the load; or
- c.** Cover haul trucks with a tarp or other suitable closure.

**305.3 Bulk Material Hauling/Transporting When On-Site Hauling/Transporting Within the Boundaries of the Work Site and Crossing and/or Accessing a Paved an Area Accessible to the Public:** The owner and/or operator of a dust-generating operation that involves bulk material hauling/transporting when on-site hauling/transporting within the boundaries of the work site and crossing and/or accessing a ~~paved~~ an area accessible to the public shall implement all of the following control measures:

- a. Load all haul trucks such that the freeboard is not less than three inches;
- b. Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
- c. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
- d. When crossing and/or accessing a ~~paved~~ an area accessible to the public, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site.

**305.4 Bulk Material Stacking, Loading, and Unloading Operations:** The owner and/or operator of a dust-generating operation that involves bulk material stacking, loading, and unloading operations shall implement ~~at least one of~~ the following control measures:

- a. ~~Spray material with water, as necessary, prior to stacking, loading, and unloading and/or while stacking, loading, and unloading; or~~ Prior to stacking, loading, and unloading:

- (1) Mix material with water; or

- (2) Mix material with a dust suppressant other than water.

- b. ~~Spray material with a dust suppressant other than water, as necessary, prior to stacking, loading, and unloading and/or while stacking, loading, and unloading.~~ While stacking, loading, and unloading:

- (1) Apply water; or

- (2) Apply a dust suppressant other than water.

**305.5 Open Storage Piles:** The owner and/or operator of a dust-generating operation that involves an open storage pile shall implement one of the following control measures, as applicable, when not conducting stacking, loading, and unloading operations:

- a. ~~Prior to and/or while conducting stacking, loading, and unloading operations, implement one of the following control measures: Cover all open storage piles with a tarp, plastic, or other material to prevent wind from removing the covering(s)/such that the covering(s) will not be dislodged by wind; or~~
  - (1) ~~Spray material with water, as necessary; or~~
  - (2) ~~Spray material with a dust suppressant other than water, as necessary.~~
  
- b. ~~When not conducting stacking, loading, and unloading operations, implement one of the following control measures: Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent methods approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent methods approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content; or~~
  - (1) ~~Cover all open storage piles with a tarp, plastic, or other material to prevent wind from removing the covering(s)/such that the covering(s) will not be dislodged by wind; or~~
  - (2) ~~Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent methods approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent methods approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content.~~
  
- (3) ~~c.~~ c. ~~Maintain a soil~~ Maintain a soil visible crust; or
  
- (4) ~~d.~~ d. Implement the control measure described in ~~Section 305.5(b)(2)~~ Section 305.5(b) or in ~~Section 305.5(b)(3)~~ Section 305.5(c) of this rule and construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%.

**305.6 Unpaved Staging Areas, Unpaved Parking Areas, and Unpaved Material Storage Areas:** The owner and/or operator of a dust-generating operation that involves unpaved staging areas, unpaved

parking areas, and unpaved material storage areas shall implement one or more of the following control measures:

- a. Apply water so that the surface is visibly moist;
- b. Pave;
- c. Apply and maintain gravel, recycled asphalt, or other suitable material;
- d. Apply and maintain a suitable dust suppressant other than water; or
- e. Limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this section, the owner and/or operator shall provide to the Control Officer the maximum number of vehicle trips on the staging areas, parking areas, and/or material storage areas each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

**305.7 Unpaved Haul/Access Roads:** The owner and/or operator of a dust-generating operation that involves unpaved haul/access roads shall implement one or more of the following control measures:

- a. Apply water so that the surface is visibly moist;
- b. Pave;
- c. Apply and maintain gravel, recycled asphalt, or other suitable material;
- d. Apply and maintain a suitable dust suppressant other than water; or
- e. Limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this section of this rule, the owner and/or operator shall provide to the Control Officer the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

**305.8 Weed Abatement by Discing or Blading:** The owner and/or operator of a dust-generating operation that involves weed abatement by discing or blading shall comply with all of the following control measures:

- a. Before weed abatement by discing or blading occurs, apply water;
- b. While weed abatement by discing or blading is occurring, apply water; and
- c. After weed abatement by discing or blading occurs, pave, apply gravel, apply water, apply a suitable dust suppressant other than water, or establish vegetative ground cover.

**305.9 Blasting Operations:** The owner and/or operator of a dust-generating operation that involves blasting operations shall ~~implement all of the following control measures:~~ pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

- ~~a. In wind gusts above 25 miles per hour, discontinue/cease blasting; and~~
- ~~b. Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.~~

**305.10 Demolition Activities:** The owner and/or operator of a dust-generating operation that involves demolition activities shall implement all of the following control measures:

- a. Apply water to demolition debris immediately following demolition activity; and
- b. Apply water to all disturbed soils surfaces to establish a visible crust and to prevent wind erosion.

**305.11 Disturbed Surface Areas:** The owner and/or operator of a dust-generating operation that involves disturbed surface areas shall implement the following control measures, as applicable:

- a. Before disturbed surface areas are created, implement one of the following control measures:
  - (1) Pre-water site to depth of cuts, allowing time for penetration; or
  - (2) Phase work to reduce the amount of disturbed surface areas at any one time.

- b.** While disturbed surface areas are being created, implement one of the following control measures:
- (1) Apply water or other suitable dust suppressant other than water, ~~as necessary~~ to keep the soil visibly moist throughout the process;
  - (2) Apply water ~~as necessary~~ to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent method as approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content; or
  - (3) Implement control measure described in Section 305.11(b)(1) or Section 305.11(b)(2) of this rule and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of wind-blown material leaving a site.
- c.** When the dust-generating operation is finished for a period of 30 days or longer: For longer than temporary pauses that occur during a dust-generating operation, the owner and/or operator shall implement one or more of the following control measures within ten days following the completion of such dust-generating operation:
- (1) Pave, apply gravel, or apply a suitable dust suppressant other than water;
  - (2) Establish vegetative ground cover ~~in sufficient quantity;~~
  - (3) Implement control measures described in Section 305.11(c)(1) or Section 305.11(c)(2) of this rule and restrict vehicle access to the area;
  - (4) Apply water and prevent access by fences, ditches, vegetation, berms, or other suitable barrier or means sufficient to prevent trespass as approved by the Control Officer; or
  - (5) Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions.

**305.12 Easements, Rights-of-Way, and Access Roads for Utilities (Transmission of Electricity, Natural Gas, Oil, Water, and Gas) Associated With Sources That Have a Non-Title V Permit, a Title V Permit, and/or a General Permit Under These Rules:**

The owner and/or operator of a dust-generating operation that involves an easement, right-of-way, and access road for utilities (transmission of electricity, natural gas, oil, water, and gas ) associated with sources that have a Title V permit, a Non-Title V permit, and/or a General permit under these rules shall implement at least one of the following control measures:

- a. Inside Area A, limit vehicle speed to 15 miles per hour or less and vehicle trips to no more than 20 per day per road;
- b. Outside Area A, limit vehicle trips to no more than 20 per day per road; or
- c. Implement control measures described in Section 305.7 of this rule.

**306 TRACKOUT, CARRY-OUT, SPILLAGE, AND/OR EROSION:** The owner and/or operator of a dust-generating operation shall prevent and control trackout, carry-out, spillage, and/or erosion.

**306.1 Trackout Control Device:**

a. **Criterion for Trackout Control Device:** Install, maintain and use a suitable trackout control device that prevents and controls trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site at all exits onto paved areas accessible to the public from both of the following:

- (1) All work sites with a disturbed surface area of two acres or larger, and
- (2) All work sites where 100 cubic yards of bulk materials are hauled on-site and/or off-site per day.

b. **Control Measures:** For those work sites identified in Section 306.1(a) of this rule, prevent trackout, carry-out, spillage, and/or erosion by implementing one of the following control measures:

- (1) At all exits onto paved areas accessible to the public, install a wheel wash system;

- (2) At all exits onto ~~paved~~ areas accessible to the public, install a gravel pad to comply with Section 217 of this rule;
- (3) At all exits onto ~~paved~~ areas accessible to the public, install a grizzly or rumble grate that consists of raised dividers (rails, pipes, or grates) a minimum of three inches tall, six inches apart, and 20 feet long, to allow a vibration to be produced such that dust is shaken off the wheels of a vehicle as the entire circumference of each wheel of the vehicle passes over the grizzly or rumble grate; or
- (4) Pave starting from the point of intersection with a ~~paved~~ an area accessible to the public and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.

**306.2 Clean Up of Trackout:**

**a. Criterion for Clean Up of Trackout:** Clean up, trackout, carry-out, spillage, and/or erosion from ~~paved~~ areas accessible to the public including curbs, gutters, and sidewalks, on the following time-schedule:

- (1) Immediately, when trackout, carry-out, or spillage extends a cumulative distance of 25 linear feet or more; and
- (2) At the end of the workday, for all other trackout, carry-out, spillage, and/or erosion.

**b. Control Measures:**

- (1) Operate a street sweeper or wet broom with sufficient water, including but not limited to kick broom, steel bristle broom, Teflon broom, vacuum, at the speed recommended by the manufacturer and at the frequency(ies) described in this section of this rule; or
- (2) Manually sweep up deposits to comply with this section of this rule.

**307 SOIL MOISTURE:** If water is the chosen control measure in an approved Dust Control Plan, the owner and/or operator of a dust-generating operation shall operate a water application system on-site (e.g., water truck, water hose) while conducting any earthmoving operations on disturbed surface areas 1 acre or larger, unless a ~~soil~~ visible crust is maintained or the soil is sufficiently damp to prevent loose grains of soil from becoming dislodged.

**308 PROJECT INFORMATION SIGN FOR DUST-GENERATING OPERATIONS:** For all sites with a Dust Control permit that are five acres or larger, except for routine maintenance and repair done under a Dust Control Block permit, the owner and/or operator shall erect and maintain a project information sign at the main entrance such that members of the public can easily view and read the sign at all times. Such sign shall have a white background, have black block lettering that is at least four inches high, and shall contain at least all of the following information:

**308.1** Project name and permittee's name;

**308.2** Current Dust Control permit number ~~and expiration date~~;

**308.3** Name and local phone number of person(s) responsible for dust control matters;

**308.4** Text stating: "Dust complaints? Call Maricopa County Air Quality Department – (Insert the accurate Maricopa County Air Quality Department complaint line telephone number)."

**309 DUST CONTROL TRAINING CLASSES FOR DUST-GENERATING OPERATIONS:**

**309.1 Basic Dust Control Training Class:**

a. ~~At least once every three years, the site superintendent or other designated on site representative of the permit holder, if present at a site that has more than one acre of disturbed surface area that is subject to a permit issued by the Control Officer requiring control of PM<sub>10</sub> emissions from dust generating operation, shall successfully complete a Basic Dust Control Training Class conducted or approved by the Control Officer.~~ At least once every three years, the persons specified in Section 309.1(b) or Section 309.1(c) of this rule shall successfully complete a Basic Dust Control Training Class conducted or approved by the Control Officer.

b. ~~At least once every three years, water truck and water pull drivers shall successfully complete a Basic Dust Control Training Class conducted or approved by the Control Officer. The following persons present at a site that is subject to a permit issued by the Control Officer requiring control of PM<sub>10</sub> emissions from dust-generating operations shall complete a Basic Dust Control Training Class as specified in Section 309.1(a) of this rule:~~

(1) Water truck drivers.

(2) Water-pull drivers.

(3) The site superintendent or other designated on-site representative of the permit holder, if present at a site that has more than one acre of disturbed surface area.

- c. A Dust Control Block Permit permittee/holder shall have, at a minimum, one individual trained in accordance with the Basic Dust Control Training Class as specified in Section 309.1(a) of this rule, if present at a site that has more than one acre of disturbed surface area.
- e- d. All persons having successfully completed training during the 2006 and 2007 calendar years shall be deemed to have satisfied the requirement to successfully complete the Basic Dust Control Training Class, if the training that was completed was conducted or approved by the Control Officer. Completion of the Comprehensive Dust Control Training Class, as required in Section 309.2 of this rule, shall satisfy the requirement of this section of this rule.
- e. The Control Officer may suspend or revoke for cause including, but not limited to, inappropriate ethical activities or conduct associated with the dust control program or repeated failure to follow the training requirements, a certification issued to a person having successfully completed a Basic Dust Control Training Class conducted or approved by the Control Officer. The Control Officer will provide written notification to such person regarding such suspension or revocation.

**309.2 Comprehensive Dust Control Training Class:**

- a. At least once every three years, the Dust Control Coordinator, who meets the requirements of Section 310 of this rule, shall successfully complete the Comprehensive Dust Control Training Class conducted or approved by the Control Officer.
- b. All persons having successfully completed training during the 2006 and 2007 calendar years shall be deemed to have satisfied the requirement to successfully complete the Comprehensive Dust Control Training Class, if the training that was completed was conducted or approved by the Control Officer.
- c. The Control Officer may suspend or revoke for cause including, but not limited to, inappropriate ethical activities or conduct associated with the dust control program or repeated failure to follow the training requirements, a certification issued to a person having successfully completed a Comprehensive Dust Control Training Class conducted or approved

by the Control Officer. The Control Officer will provide written notification to such person regarding such suspension or revocation.

**310 DUST CONTROL COORDINATOR FOR DUST-GENERATING OPERATIONS:**

- 310.1** The permittee for any site of five acres or more of disturbed surface area subject to a permit issued by the Control Officer requiring control of PM<sub>10</sub> emissions from dust-generating operations shall have on-site at least one Dust Control Coordinator trained in accordance with Section 309.2 of this rule at all times during primary dust-generating operations related to the purposes for which the Dust Control permit was obtained.
- 310.2** The Dust Control Coordinator shall have full authority to ensure that dust control measures are implemented on-site, including conducting inspections, deployment of dust suppression resources, and modifications or shut-down of activities as needed to control dust.
- 310.3** The Dust Control Coordinator shall be responsible for managing dust prevention and dust control on the site.
- 310.4** At least once every three years, the Dust Control Coordinator shall successfully complete a Comprehensive Dust Control Training Class conducted or approved by the Control Officer.
- 310.5** The Dust Control Coordinator shall have a valid dust training certification identification card readily accessible on-site while acting as a Dust Control Coordinator.
- 310.6** The requirement for a Dust Control Coordinator shall lapse when all of the following actions/events/procedures occur:
- a.** The area of disturbed surface area becomes less than five acres;
  - b.** The previously disturbed surface areas have been stabilized in accordance with/in compliance with the standards and/or requirements of this rule; and
  - c.** The Dust Control permit holder provides notice to the Control Officer of acreage stabilization.
- 310.7** ~~The permittee, who is required to obtain a single permit for multiple non-contiguous sites in accordance with Section 404 of this rule, shall~~ The Dust Control Block Permit permittee/holder shall have on sites ~~with greater~~ that have more than one acre of disturbed surface area ~~at least one~~

~~individual who is designated by the permittee as a Dust Control Coordinator trained in accordance with Section 309.1 Basic Dust Control Training Class of this rule.~~ at least one individual, who has been trained in accordance with the requirements of Section 309.1(c) of this rule. One such individual shall be designated by the Dust Control Block Permit permittee/holder as the Dust Control Coordinator. The Dust Control Coordinator shall be present on-site at all times during primary dust-generating activities that are related to the purposes for which the permit was obtained.

## **SECTION 400 – ADMINISTRATIVE REQUIREMENTS**

### **401 DUST CONTROL PERMIT REQUIREMENTS:**

**401.1** To apply for a Dust Control permit, an applicant shall complete a permit application in the manner and form prescribed by the Control Officer. At a minimum, such application shall contain the following information:

- a.** Applicant information;
- b.** Project information, which shall include a project site drawing and, if the site is one acre or larger, soil designations; and
- c.** Dust Control Plan, which shall meet the specifications described in Section 402 of this rule.

**401.2** A Dust Control permit shall be granted subject to, but not limited to, the following conditions:

- a.** The permittee shall be responsible for ensuring that all persons abide by the conditions of the Dust Control permit and these regulations;
- b.** The permittee shall be responsible for supplying complete copies of the Dust Control permit including the Dust Control Plan, to all project contractors and subcontractors;
- c.** The permittee shall be responsible for all permit conditions, until a Permit Cancellation Request form has been submitted by the owner and/or operator and approved by the Control Officer;

- d. The permittee shall be responsible for providing Dust Control Coordinator's/ Coordinators' name(s) and dust control training certification information/number(s) to the Control Officer and for keeping such information updated.

**401.3** The signature of the permittee on the Dust Control permit application shall constitute agreement to accept responsibility for meeting the conditions of the Dust Control permit and for ensuring that control measures are implemented throughout the project site and during the duration of the project.

**402 DUST CONTROL PLAN REQUIREMENTS:**

**402.1** The owner and/or operator of a dust-generating operation shall submit to the Control Officer a Dust Control Plan with any permit applications that involve dust-generating operations with a disturbed surface area that equals or exceeds 0.10 acre (4,356 square feet) including both of the following situations:

- a. When submitting an application for a Dust Control permit involving dust-generating operations that would equal or exceed 0.10 acre (4,356 square feet), and
- b. Before commencing any routine dust-generating operation at a site that has obtained or must obtain a Title V, Non-Title V, or General permit under Regulation II (Permits and Fees) of these rules.

**402.2** The owner and/or operator of a dust-generating operation shall submit to the Control Officer a Dust Control Plan with any application for a Dust Control permit. Applicants shall describe, in a Dust Control Plan, all control measures to be implemented before, after, and while conducting any dust-generating operation, including during weekends, after work hours, and on holidays.

**402.3** A Dust Control Plan shall, at a minimum, contain all of the following information:

- a. Name(s), address(es), and phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operation.

- b. A drawing, on 8½" x 11" paper, that shows:

- (1) Entire project site/facility boundaries, including boundaries of areas to be disturbed if less than entire project site/facility boundaries.

- (2) Acres to be disturbed with linear dimensions or certification by a licensed engineer or surveyor showing the total square footage to be disturbed.
  - (3) Nearest public roads,
  - (4) North arrow, ~~and~~
  - (5) Planned exit locations onto ~~paved~~ areas accessible to the public, and
  - (6) Unpaved parking lot(s).
- c. Appropriate control measures, or a combination thereof, as described in Sections 305 and 306 of this rule, for every actual and potential dust-generating operation.
- (1) Control measures must be implemented before, after, and while conducting any dust-generating operation, including during weekends, after work hours, and on holidays.
  - (2) All required control measures and at least one contingency control measure must be identified for all dust-generating operations.
  - (3) A control measure that is not listed in Section 305 or in Section 306 of this rule may be chosen provided that such control measure is implemented to comply with the requirements ~~described in Section 304~~ of this rule.
  - (4) If complying with ~~Section 305.7, Control Measures for Dust-Generating Operations- Unpaved Haul/Access Roads~~ Section 305.7(e) of this rule, the Dust Control Plan must include the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks).
- d. Dust suppressants to be applied, including all of the following product specifications or label instructions for approved usage:
- (1) Method, frequency, and intensity of application;
  - (2) Type, number, and capacity of application equipment; and

(3) Information on environmental impacts and approvals or certifications related to appropriate and safe use for ground application.

e. Specific surface treatment(s) and/or control measures utilized to control material trackout and sedimentation where unpaved roads and/or access points join paved areas accessible to the public.

**402.4** The Control Officer shall approve, disapprove, or conditionally approve the Dust Control Plan, in accordance with the criteria used to approve, disapprove or conditionally approve a permit, as described in Rule 200: Permit Requirements of these rules. ~~Failure to comply with the provisions of an approved Dust Control Plan is deemed a violation of this rule.~~

**402.5** For construction projects one acre or larger, except for routine maintenance and repair done under a Dust Control Block Permit, a statement disclosing which of the four designated texture(s) of soil described in Appendix F of these rules is naturally present at or will be imported to the dust-generating operation. The measured soil content at a particular site shall take precedence over any mapped soil types, and whenever soils have been tested at a particular site, the test results should be relied on rather than the map in Appendix F of these rules.

**402.6** Should any primary control measure(s) prove ineffective, the owner and/or operator shall immediately implement the contingency control measure(s). If the identified contingency control measure is effective to comply with all of the requirements of this rule, the owner and/or operator need not revise the Dust Control Plan.

**403 DUST CONTROL PLAN REVISIONS:**

**403.1 If Required by the Control Officer:**

a. If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any dust-generating operation still exceed the standards of this rule, then the Control Officer shall issue a written notice to the owner and/or operator of the dust-generating operation explaining such determination.

b. The owner and/or operator of a dust-generating operation shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time

period is extended by the Control Officer, upon request, for good cause. During the time that such owner and/or operator is preparing revisions to the approved Dust Control Plan, such owner and/or operator must still comply with all requirements of this rule.

**403.2 If Requested by the Permittee:**

- a. If the acreage of a project changes, the owner and/or operator shall request a Dust Control Plan revision. Such Dust Control Plan revision shall be filed in the manner and form prescribed by the Control Officer.
- b. If the permit holder changes, the owner and/or operator shall request a Dust Control Plan revision. Such Dust Control Plan revision shall be filed in the manner and form prescribed by the Control Officer.
- c. If the name(s), address(es), or phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operation change, the owner and/or operator shall request a Dust Control Plan revision. Such Dust Control Plan revision shall be filed in the manner and form prescribed by the Control Officer.
- d. If the activities related to the purposes for which the Dust Control permit was obtained change, the owner and/or operator shall request a Dust Control Plan revision. Such Dust Control Plan revision shall be filed in the manner and form prescribed by the Control Officer.

**403.3 If Rule 310 Is Revised:**

- a. If any changes to a Dust Control Plan are necessary as a result of the most recent revisions of this rule, such changes to the Dust Control Plan shall not be required until the associated Dust Control permit is required to be renewed.
- b. If any changes to a Dust Control Plan associated with a Title V permit or with a Non-Title V permit are necessary as a result of the most recent revisions of this rule, then the owner and/or operator shall submit a revised Dust Control Plan to the Control Officer, according to the minor permit revision procedures described in Rule 210 or in Rule 220 of these rules respectively, no later than six months after the effective date of the most recent revisions to this rule.

**404 DUST CONTROL BLOCK PERMIT REQUIREMENTS:**

**404.1** A Dust Control Block Permit application may be submitted to the Control Officer, if one or more of the activities listed in this section of this rule are conducted and if such activities occur at more than one site (i.e., projects that involve multiple small areas scattered throughout Maricopa County including, but not limited to, fiber optic cable installation and natural gas line extension). New construction shall obtain a separate Dust Control permit.

- a.** Routine operation (i.e., municipalities, governmental agencies, and utilities that are responsible for the repeat maintenance of infrastructure including, but not limited to, weed control around a prison, canal bank and road grading, and road shoulder grading).
- b.** Maintenance (i.e., municipalities, governmental agencies, and utilities that are responsible for the repeat maintenance of infrastructure including, but not limited to, weed control around a prison, canal bank and road grading, and road shoulder grading).
- c.** Expansion or extension of utilities, paved roads, unpaved roads, road shoulders, alleys, and public rights-of-way at non-contiguous sites by municipalities, governmental agencies, and utilities.

**404.2** When completing and submitting a Dust Control Block Permit application, the owner and/or operator shall comply with the following requirements:

- a.** A Dust Control Plan that meets the criteria described in Section 402 of this rule and applies to all sites shall be submitted to the Control Officer with the Dust Control Block Permit application.
- b.** A description or map of the owner's and/or operator's service areas and a list of all sites that are 0.10 acre (4,356 square feet) or greater, including the location and size of each site, shall be submitted to the Control Officer with the Dust Control Block Permit application.
- c.** For any project that is 0.10 acre (4,356 square feet) or greater and not listed in the Dust Control Block Permit application, the applicant shall notify the Control Officer in writing at least three working days prior to commencing the dust-generating operation. The notice shall include the site location, size, type of activity, and start date.

**404.3** The Dust Control Block Permit will cover crews that work for the municipalities, governmental agencies, and utilities, including subcontractors. However, municipalities, governmental agencies, and utilities shall retain overall authority for dust control on the project.

**405 APPROVAL OR DENIAL OF PERMIT APPLICATIONS FOR DUST-GENERATING OPERATIONS:** The Control Officer shall take final action on a Dust Control permit application, a Dust Control permit revision, or a Dust Control Block Permit within 14 calendar days of the filing of the complete application. The Control Officer shall notify the applicant in writing of his approval or denial.

**406 TERMS FOR PERMITS FOR DUST-GENERATING OPERATIONS:** A Dust Control permit issued according to this rule shall be issued for a period of one year from the date of issuance. Should the project last longer than one year from the date the permit was issued, the permittee shall re-apply for a Dust Control Permit at least 14 calendar days prior to the expiration date of the original permit. For the purpose of this section, a permit is considered expired, if a permit renewal is not applied for at least 14 calendar days prior to the expiration date of the original permit.

**407 DEFACING, ALTERING, FORGING, COUNTERFEITING, OR FALSIFYING PERMITS FOR DUST-GENERATING OPERATIONS:** A person shall not willfully deface, alter, forge, counterfeit, or falsify any Dust Control permit issued under the provisions of this rule.

**408 FEES FOR PERMITS FOR DUST-GENERATING OPERATIONS:** No Dust Control permit is valid until the applicable Dust Control permit fee has been received and until the Dust Control permit is issued by the Control Officer.

**409 POSTING OF PERMITS FOR DUST-GENERATING OPERATIONS:** A Dust Control permit and a Dust Control Plan, as approved by the Control Officer, shall be posted in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise be kept available on-site at all times.

**410 COMPLIANCE SCHEDULE:** The newly amended provisions of this rule shall become effective upon adoption of this rule. An owner and/or operator of a dust-generating operation subject to this rule shall meet all applicable provisions of this rule upon adoption of the newly amended provisions of this rule and according to the following schedule:

**410.1 Basic Dust Control Training Class:** No later than December 31, 2008, a site superintendent or other designated on-site representative of the permit holder and water truck and water pull drivers

for each site shall have successfully completed the Basic Dust Control Training Class, as described in Section 309.1 of this rule.

**410.2 Dust Control Coordinator:** No later than June 30, 2008, any site and/or any contiguous site under common control of five acres or more of disturbed surface area subject to a permit shall, at all times during primary dust-generating operations related to the purposes for which the Dust Control permit was obtained, have on-site at least one individual designated by the permit holder as a Dust Control Coordinator, as described in Section 310 of this rule.

## **SECTION 500 – MONITORING AND RECORDS**

**501 COMPLIANCE DETERMINATION:** To determine compliance with the visible emissions requirements in Section 303 of this rule and with the stabilization requirements in Section 304 of this rule, the following test methods shall be followed:

### **501.1 Opacity Observations:**

- a. Dust-Generating Operations:** Opacity observations of dust-generating operations shall be conducted in accordance with Appendix C, Section 3, Visual Opacity Determination of Emissions from Dust-Generating Operations of these rules.
- b. Unpaved Parking Lot:** Opacity observations of any unpaved parking lot shall be conducted in accordance with Appendix C, Section 2.1, Test Methods for Stabilization for Unpaved Roads and Unpaved Parking Lots of these rules.
- c. Unpaved Haul/Access Road:** Opacity observations of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1, Test Methods for Stabilization for Unpaved Roads and Unpaved Parking Lots of these rules.
- d. Visible Emissions Beyond the Property Line:** Opacity observations of any visible emissions beyond the property line shall be conducted in accordance with EPA Reference Method 22.

### **501.2 Stabilization Observations:**

- a. Unpaved Parking Lot:** Stabilization observations for unpaved parking lots shall be conducted in accordance with Appendix C, Section 2.1, Test Methods for Stabilization for

Unpaved Roads and Unpaved Parking Lots of these rules. When more than one test method is permitted for a determination, an exceedance of the limits established in this rule determined by any of the applicable test methods shall constitute a violation of this rule.

**b. Unpaved Haul/Access Road:** Stabilization observations for unpaved haul/ access roads (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1, Test Methods for Stabilization for Unpaved Roads and Unpaved Parking Lots of these rules. When more than one test method is permitted for a determination, an exceedance of the limits established in this rule determined by any of the applicable test methods shall constitute a violation of this rule.

**c. Disturbed Surface Area:** Stabilization observations for any disturbed surface area on which no activity is occurring (whether at a work site that is under construction, at a work site that is temporarily or permanently inactive) shall be conducted in accordance with at least one of the techniques described in Section 501.2(c)(1) through Section 501.2(c)(7) below, as applicable. The owner and/or operator of such inactive disturbed surface area shall be considered in violation of this rule if such inactive disturbed surface area is not maintained in a manner that meets at least one of the standards described in Section 304.3 of this rule, as applicable.

(1) Appendix C, Section 2.3, Test Methods for Stabilization: Soil Crust Determination: the Drop Ball Test of these rules for a ~~visible~~ soil crust; or

(2) Appendix C, Section 2.4, Test Methods for Stabilization: Determination of Threshold Friction Velocity (TFV): Sieving Field Procedure of these rules for threshold friction velocity (TFV) corrected for non-erodible elements of 100 cm/second or higher; or

(3) Appendix C, Section 2.5, Test Methods for Stabilization: Determination of Flat Vegetative Cover of these rules for flat vegetation cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or

(4) Appendix C, Section 2.6, Test Methods for Stabilization: Determination of Standing Vegetative Cover of these rules for standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or

- (5) Appendix C, Section 2.6, Test Methods for Stabilization: Determination of Standing Vegetative Cover of these rules for standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or
- (6) Appendix C, Section 2.7, Test Methods for Stabilization: Rock Test Method of these rules for a percent cover that is equal to or greater than 10%, for non-erodible elements; or
- (7) An alternative and equivalent test method approved in writing by the Control Officer and the Administrator.

**502 RECORDKEEPING:**

**502.1** Any person who conducts dust-generating operations that require a Dust Control Plan shall keep a written record of self-inspection on each day dust-generating operations are conducted. Self-inspection records shall include daily inspections for crusted or damp soil, trackout conditions and clean-up measures, daily water usage for dust control measures, and dust suppressant application. Such written record shall also include the following information:

- a. Method, frequency, and intensity of application or implementation of the control measures;
- b. Method, frequency, and amount of water application to the site;
- c. Street sweeping frequency;
- d. Types of surface treatments applied to and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps;
- e. Types and results of test methods conducted;
- f. If contingency control measures are implemented, actual application or implementation of contingency control measures and why contingency control measures were implemented;
- g. List of subcontractors' names and registration numbers updated when changes are made; and

- h.** Names of employee(s) who successfully completed dust control training class(es) required by Section 309 of this rule, date of the class(es) that such employee(s) successfully completed, and name of the agency/representative who conducted such class(es).

**502.2** Any person who conducts dust-generating operations that do not require a Dust Control Plan shall compile and retain records (including records on any street sweeping, water applications, and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps) that provide evidence of control measure application, by indicating the type of treatment or control measure, extent of coverage, and date applied.

**502.3** Upon verbal or written request by the Control Officer, the log or the records and supporting documentation shall be provided as soon as possible but no later than 48 hours, excluding weekends. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

**503** **RECORDS RETENTION:** Any person who conducts dust-generating operations that require a Dust Control Plan shall retain copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation for at least six months following the termination of the dust-generating operation and for at least two years from the date such records were initiated. If a person has obtained a Title V Permit and is subject to the requirements of this rule, then such person shall retain records required by this rule for at least five years from the date such records are established.

**504** **TEST METHODS ~~ADOPTED~~ INCORPORATED BY REFERENCE:** The test methods listed in this section are ~~adopted~~ incorporated by reference. These ~~adoptions~~ incorporations by reference include no future editions or amendments. Copies of the test methods listed in this section are available for review at the Maricopa County Air Quality Department, 1001 North Central Avenue, Phoenix, AZ, 85004-1942.

**504.1** ASTM Method C136-06 (“Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates”), 2006 edition.

**504.2** ASTM Method D2216-05 (“Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass”), 2005 edition.

**504.3** ASTM Method D1557-02e1 (“Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>))”), 2002 edition.

- 504.4** EPA Reference Method 22 (“Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares”), 2000 edition.

**REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 310.01**

**FUGITIVE DUST FROM NON-TRADITIONAL SOURCES OF FUGITIVE DUST**

**INDEX**

**SECTION 100 – GENERAL**

- 101 PURPOSE
- 102 APPLICABILITY
- 103 EXEMPTIONS

**SECTION 200 – DEFINITIONS**

- 201 ANIMAL WASTE
- 202 AREA A
- 203 AREA ACCESSIBLE TO THE PUBLIC
- 204 BULK MATERIAL
- 205 CHEMICAL/ORGANIC STABILIZER
- 206 CONTROL MEASURE
- 207 DISTURBED SURFACE AREA
- 208 DUST-GENERATING OPERATION
- 209 DUST SUPPRESSANT
- 210 EMERGENCY
- 211 EMERGENCY ACTIVITY
- 212 FEED LANE ACCESS AREAS
- 213 FUGITIVE DUST
- 214 GRAVEL PAD
- 215 GRIZZLY
- 216 LIVESTOCK ACTIVITIES
- 217 MOTOR VEHICLE
- 218 NON-TRADITIONAL SOURCE OF FUGITIVE DUST
- 219 NORMAL FARM CULTURAL PRACTICE
- 220 OFF-ROAD VEHICLE
- 221 OPEN AREAS AND VACANT LOTS

- 222 OWNER AND/OR OPERATOR
- 223 PAVE
- 224 PM<sub>10</sub> NONATTAINMENT AREA
- 225 PROPERTY LINE
- 226 PUBLIC ROADWAYS
- 227 TRACKOUT/CARRYOUT
- 228 TRACKOUT CONTROL DEVICE
- 229 UNPAVED ACCESS CONNECTIONS
- 230 UNPAVED PARKING LOT
- 231 UNPAVED ROADWAY (INCLUDING ALLEYS)
- 232 VACANT LOT

**SECTION 300 – STANDARDS**

- 301 GENERAL REQUIREMENTS FOR NON-TRADITIONAL SOURCES OF FUGITIVE DUST
- 302 CONTROL MEASURES FOR NON-TRADITIONAL SOURCES OF FUGITIVE DUST

**SECTION 400 – ADMINISTRATIVE REQUIREMENTS (NOT APPLICABLE)**

**SECTION 500 – MONITORING AND RECORDS**

- 501 COMPLIANCE DETERMINATION
- 502 RECORDKEEPING
- 503 RECORDS RETENTION

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**MARICOPA COUNTY**  
**AIR POLLUTION CONTROL REGULATIONS**  
**REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 310.01**  
**FUGITIVE DUST FROM NON-TRADITIONAL SOURCES OF FUGITIVE DUST**

**SECTION 100 – GENERAL**

**101 PURPOSE:** To minimize the amount of fugitive dust entrained into the ambient air from non-traditional sources of fugitive dust by requiring measures to prevent, reduce, or mitigate fugitive dust emissions.

**102 APPLICABILITY:**

**102.1** The provisions of this rule shall apply to non-traditional sources of fugitive dust that are conducted in Maricopa County, except for those dust-generating operations listed in Section 103 of this rule.

**102.2** The provisions of this rule shall apply to any open area or vacant lot that is not defined as agricultural land and is not used for agricultural purposes according to Arizona Revised Statutes (A.R.S.) § 42-12151 and A.R.S. § 42-12152.

**103 EXEMPTIONS:**

**103.1** The provisions of this rule shall not apply to normal farm cultural practices according to A.R.S. § 49-457 and A.R.S. § 49-504.4.

**103.2** The provisions of this rule shall not apply to dust-generating operations that are subject to the standards and/or requirements described in Rule 310: Fugitive Dust from Dust-Generating Operations of these rules.

**103.3** The provisions of this rule shall not apply to emergency activities that may disturb the soil conducted by any utility or government agency in order to prevent public injury or to restore critical utilities to functional status.

~~103.4 An area is considered to be a disturbed surface area until the activity that caused the disturbance has been completed and the disturbed surface area meets the standards described in this rule.~~

~~103.5~~ **103.4** ~~Establishing~~ The provisions of this rule do not apply to the establishment of initial landscapes without the use of mechanized equipment, conducting landscape maintenance without the use of mechanized equipment, and playing on or maintaining a field used for non-motorized sports ~~shall not be considered a dust-generating operation.~~ However, establishing initial landscapes without the use of mechanized equipment and conducting landscape maintenance without the use of mechanized equipment shall not include grading, or trenching, performed to establish initial landscapes or to redesign existing landscapes.

~~103.6 Fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers, and does not include emissions from process and combustion sources that are subject to other rules in Regulation III (Control of Air Contaminants) of these rules.~~

**SECTION 200 – DEFINITIONS:** ~~See Rule 100 General Provisions and Definitions of these rules for definitions of terms that are used but not specifically defined in this rule.~~ For the purpose of this rule, the following definitions shall apply, in addition to those definitions found in Rule 100: General Provisions and Definitions of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

**201 ANIMAL WASTE** – Any animal excretions and mixtures containing animal excretions.

**202 AREA A** – As defined in A.R.S. § 49-541(1), the area in Maricopa County delineated as follows:

Township 8 North, Range 2 East and Range 3 East  
Township 7 North, Range 2 West through Range 5 East  
Township 6 North, Range 5 West through Range 6 East  
Township 5 North, Range 5 West through Range 7 East  
Township 4 North, Range 5 West through Range 8 East  
Township 3 North, Range 5 West through Range 8 East  
Township 2 North, Range 5 West through Range 8 East  
Township 1 North, Range 5 West through Range 7 East  
Township 1 South, Range 5 West through Range 7 East  
Township 2 South, Range 5 West through Range 7 East  
Township 3 South, Range 5 West through Range 1 East  
Township 4 South, Range 5 West through Range 1 East

**203 AREA ACCESSIBLE TO THE PUBLIC** – Any paved parking lot or paved ~~public~~ roadway that can be entered or used for public travel primarily for purposes unrelated to the dust-generating operation.

**204 BULK MATERIAL** – Any material, including, but not limited to, the following materials that are capable of producing fugitive dust:

- 204.1** Earth.
- 204.2** Rock.
- 204.3** Silt.
- 204.4** Sediment.

- 204.5 Sand.
  - 204.6 Gravel.
  - 204.7 Soil.
  - 204.8 Fill.
  - 204.9 Aggregate less than 2 inches in length or diameter (i.e., aggregate base course [ABC]).
  - 204.10 Dirt.
  - 204.11 Mud.
  - 204.12 Demolition debris.
  - 204.13 Cotton.
  - 204.14 Trash.
  - 204.15 Cinders.
  - 204.16 Pumice.
  - 204.17 Saw dust.
  - 204.18 Feeds.
  - 204.19 Grains.
  - 204.20 Fertilizers.
  - 204.21 Fluff from shredders.
  - 204.22 Dry concrete.
- 205 **CHEMICAL/ORGANIC STABILIZER** – Any non-toxic chemical or organic dust suppressant, other than water, which meets any specifications, criteria, or tests required by any federal, state, or local water agency and is not prohibited for use by any applicable law, rule, or regulation.
- 206 **CONTROL MEASURE** – A technique, practice, or procedure used to prevent or minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust.
- 207 **DISTURBED SURFACE AREA** – A portion of the earth's surface or material placed on the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed native condition if the potential for the emission of fugitive dust is increased by the movement, destabilization, or modification.
- 208 **DUST-GENERATING OPERATION** – Any activity capable of generating fugitive dust, including but not limited to, the following activities:
- 208.1 Land clearing, maintenance, and land cleanup using mechanized equipment.
  - 208.2 Earthmoving.
  - 208.3 Weed abatement by discing or blading.
  - 208.4 Excavating.

- 208.5 Construction.
  - 208.6 Demolition.
  - 208.7 Bulk material handling (e.g., bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations).
  - 208.8 Storage and/or transporting operations (e.g., open storage piles, ~~bulk material hauling and/or transporting, bulk material stacking, loading, and unloading operations~~).
  - 208.9 Operation of any outdoor equipment.
  - 208.10 Operation of motorized machinery.
  - 208.11 Establishing and/or using staging areas, parking areas, material storage areas, or access routes to and from a site.
  - 208.12 Establishing and/or using unpaved haul/access roads to, from, and within a site.
  - 208.13 Disturbed surface areas associated with a site.
  - 208.14 Installing initial landscapes using mechanized equipment.
- 209 **DUST SUPPRESSANT** – Water, hygroscopic material, solution of water and chemical surfactant, foam, non-toxic chemical stabilizer, or any other dust palliative, which is not prohibited for ground surface application by the Environmental Protection Agency (EPA) or the Arizona Department of Environmental Quality (ADEQ), or any applicable law, rule, or regulation, as a treatment material for reducing fugitive dust emissions.
- 210 **EMERGENCY** – A situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a limitation in this rule, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include any noncompliance due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- 211 **EMERGENCY ACTIVITY** – Repairs that are a result of an emergency which prevents or hinders the provision of electricity, the distribution/collection of water, and the availability of other utilities due to unforeseen circumstances that are beyond the routine maintenance and repair due to normal wear conducted by a utility or municipality.
- 212 **FEED LANE ACCESS AREAS** – Roads providing access from the feed preparation areas to and including feed ~~lane~~ and lane areas at a livestock activity. These access roads are typically used to distribute feed from feed trucks to the animals.

- 213 FUGITIVE DUST** – The particulate matter not collected by a capture system, that is entrained in the ambient air and is caused from human and/or natural activities, such as, but not limited to, movement of soil, vehicles, equipment, blasting, and wind. For the purpose of this rule, fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers, and does not include emissions from process and combustion sources that are subject to other rules in Regulation III-Control of Air Contaminants of these rules.
- 214 GRAVEL PAD** – A layer of washed gravel, rock, or crushed rock that is at least one inch or larger in diameter, that is maintained at the point of intersection of a ~~paved an~~ unpaved area accessible to the public and a ~~work site entrance exit~~ unpaved surface exit to dislodge mud, dirt, and/or debris from the tires of motor vehicles ~~and/or haul trucks~~, prior to leaving the work site. ~~A gravel pad shall consist of one inch to 3 inches rough diameter, clean, well graded gravel or crushed rock.~~ Minimum dimensions must be 30 feet wide by 3 inches deep; ~~and, at minimum,~~ 50 feet long or the length of the longest ~~haul truck~~ motor vehicle, whichever is greater. If an unpaved surface exit does not have adequate width to install a 30-foot wide gravel pad, then the width of the gravel pad must cover the full width of the unpaved surface exit and such shorter width shall be adequate to prevent trackout.
- 215 GRIZZLY** – A device (i.e., rails, pipes, or grates) used to dislodge mud, dirt, and/or debris from the tires and undercarriage of motor vehicles ~~and/or haul trucks~~ prior to leaving the work site.
- 216 LIVESTOCK ACTIVITIES** – Any activity directly related to feeding animals, displaying animals, racing animals, exercising animals, and/or for any other such activity including, but not limited to, livestock arenas, horse arenas, ~~and~~ feed lots, and residential activities related to feeding or raising animals.
- 217 MOTOR VEHICLE** – A self-propelled vehicle for use on the public roads and highways of the State of Arizona and required to be registered under the Arizona State Uniform Motor Vehicle Act, including any non-motorized attachments, such as but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.
- 218 NON-TRADITIONAL SOURCE OF FUGITIVE DUST** – A source of fugitive dust that is located at a source that does not require any permit under these rules. The following non-traditional sources of fugitive dust are subject to the standards and/or requirements described in Rule 310.01: Fugitive Dust from Non-Traditional Sources of Fugitive Dust of these rules:
- 218.1** Vehicle use in open areas and vacant lots.
- 218.2** Open areas and vacant lots.

- 218.3 Unpaved parking lots.
  - 218.4 Unpaved roadways (including alleys).
  - 218.5 Livestock activities.
  - 218.6 Erosion-caused deposition of bulk materials onto paved surfaces.
  - 218.7 Easements, rights-of-way, and access roads for utilities (electricity, natural gas, oil, water, and gas transmission).
- 219 **NORMAL FARM CULTURAL PRACTICE** – All activities by the owner, lessee, agent, independent contractor, and/or supplier conducted on any facility for the production of crops and/or nursery plants. Disturbances of the field surface caused by turning under stalks, tilling, leveling, planting, fertilizing, or harvesting are included in this definition.
- 220 **OFF-ROAD VEHICLE** – Any self-propelled conveyance specifically designed for off-road use, including, but not limited to, off-road or all-terrain equipment, trucks, cars, motorcycles, motorbikes, or motorbuggies.
- 221 **OPEN AREAS AND VACANT LOTS** – Any of the following described in Sections 221.1 through 221.3 of this rule. For the purpose of this rule, vacant portions of residential or commercial lots that are immediately adjacent and owned and/or operated by the same individual or entity are considered one vacant open area or vacant lot.
- 221.1 An unsubdivided or undeveloped tract of land adjoining a developed or a partially developed residential, industrial, institutional, governmental, or commercial area.
  - 221.2 A subdivided residential, industrial, institutional, governmental, or commercial lot that contains no approved or permitted buildings or structures of a temporary or permanent nature.
  - 221.3 A partially developed residential, industrial, institutional, governmental, or commercial lot.
- 222 **OWNER AND/OR OPERATOR** – Any person who owns, leases, operates, controls, or supervises a fugitive dust source subject to the requirements of this rule.
- 223 **PAVE** – To apply and maintain asphalt, concrete, or other similar material to a roadway surface (i.e., asphaltic concrete, concrete pavement, chip seal, or rubberized asphalt).
- 224 **PM<sub>10</sub> NONATTAINMENT AREA** – An area designated by the EPA as exceeding National Ambient Air Quality Standards based upon data collected through air quality monitoring. The geographical boundary of Maricopa County's PM<sub>10</sub> nonattainment area is defined as the rectangle determined by and including the following townships and ranges: T6N, R3W; T6N, R7E; T2S, R3W; T2S, R7E; and T1N, R8E. Maricopa

County's PM<sub>10</sub> nonattainment area includes the following cities: Surprise, Peoria, Glendale, Phoenix, Scottsdale, Tempe, Mesa, Gilbert, Chandler, Avondale, Buckeye, and Goodyear.

- 225 PROPERTY LINE** – The boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- 226 PUBLIC ROADWAYS** – Any roadways that are open to public travel.
- 227 TRACKOUT/CARRYOUT** – Any and all bulk materials that adhere to and agglomerate on the surfaces of motor vehicles, haul trucks, and/or equipment (including tires) and that have fallen or been deposited onto ~~a paved~~ an area accessible to the public.
- 228 TRACKOUT CONTROL DEVICE** – A gravel pad, grizzly, wheel wash system, or a paved area, located at the point of intersection of an unpaved area and ~~a paved~~ an area accessible to the public that controls or prevents vehicular trackout.
- 229 UNPAVED ACCESS CONNECTIONS** – Any unpaved road connection with a paved public road.
- 230 UNPAVED PARKING LOT** – Any area that is not paved and that is used for parking, maneuvering, material handling, or storing motor vehicles and equipment. An unpaved parking lot includes, but is not limited to, automobile impound yards, wrecking yards, automobile dismantling yards, salvage yards, material handling yards, and storage yards. For the purpose of this ~~definition~~ rule, maneuvering shall not include military maneuvers or exercises conducted on federal facilities.
- 231 UNPAVED ROADWAY (INCLUDING ALLEYS)** – A road that is not paved and that is owned by federal, state, county, municipal, or other governmental or quasi-governmental agencies. For the purpose of this rule, an unpaved roadway (including alleys) is not a horse trail, hiking path, bicycle path, or other similar path used exclusively for purposes other than travel by motor vehicles. An unpaved roadway (including alleys) includes designated or opened trail systems and service roads regardless of surface composition, ~~and any other property dedicated or otherwise reserved for public or private street uses, as evidenced by a recorded document, or having thereon a public easement for such use.~~
- 232 VACANT LOT** – The definition of vacant lot is included in Section 221-Definition of Open Areas and Vacant Lots of this rule.

## **SECTION 300 – STANDARDS**

### **301 GENERAL REQUIREMENTS FOR NON-TRADITIONAL SOURCES OF FUGITIVE DUST:**

**301.1** An owner and/or operator of a non-traditional source of fugitive dust shall be subject to the standards and/or requirements described in this rule. Failure to comply with any such standards and/or requirements is deemed a violation of this rule.

**301.2** When an owner and/or operator of a non-traditional source of fugitive dust fails to stabilize disturbed surfaces of vacant lots as required in Section 302.4 and Section 302.5 of this rule, the Control Officer shall commence enforcement of those rule provisions regarding the stabilization of disturbed surfaces of vacant lots that include the following:

- a.** Reasonable written notice to the owner or the owner's authorized agent or the owner's statutory agent that the unpaved disturbed surface of a vacant lot is required to be stabilized. The notice shall be given not less than 30 days before the day set for compliance and shall include a legal description of the property and the estimated cost to the county for the stabilization if the owner does not comply. The notice shall be either personally served or mailed by certified mail to the owner's statutory agent, to the owner at the owner's last known address or to the address to which the tax bill for the property was last mailed.
- b.** Authority to enter upon any said land/property where such non-traditional source of fugitive dust exists/where such disturbed surface area exists and to take remedial and/or corrective action as may be deemed appropriate to cope with and relieve, reduce, remedy, and/or stabilize such non-traditional source of fugitive dust/such disturbed surface area. Any cost incurred in connection with any such remedial or corrective action by the Maricopa County Air Quality Department or any person acting for the Maricopa County Air Quality Department shall be reimbursed by the owner and/or operator of such non-traditional source of fugitive dust.

### **302 CONTROL MEASURES FOR NON-TRADITIONAL SOURCES OF FUGITIVE DUST:**

**302.1** When engaged in the activities described in Sections 302.4 through 302.10 of this rule, the owner and/or operator of a non-traditional source of fugitive dust shall implement control measures as described in Sections 302.4 through 302.10 of this rule, as applicable.

- 302.2** Control measures shall be implemented to ~~achieve~~ meet the visible emissions requirements and stabilization requirements, as required for each activity, and to achieve the compliance determination in Section 501 of this rule.
- 302.3** Failure to implement control measures as required by this rule, as applicable, and/or failure to maintain stabilization of a non-traditional source of fugitive dust with adequate surface crusting to prevent wind erosion as measured by the requirements in this rule shall be deemed a violation of this rule.
- 302.4 Vehicle Use in Open Areas and Vacant Lots:** The owner and/or operator of a non-traditional source of fugitive dust that involves vehicle use in open areas and vacant lots shall be subject to the ~~visible emissions~~ requirements described in Section 302.4(a) of this rule and, unless otherwise specified and/or required, shall comply with the control measures described in Section 302.4(b) of this rule and the additional requirements described in Section 302.4(c) of this rule.
- a. Visible Emissions Requirements and Stabilization Requirements:** ~~The owner and/or operator of a non-traditional source of fugitive dust that involves vehicle use in open areas and vacant lots shall not cause, suffer, or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated.~~
- (1)** The owner and/or operator of a non-traditional source of fugitive dust that involves vehicle use in open areas and vacant lots shall not cause or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated.
- (2)** The owner and/or operator of a non-traditional source of fugitive dust that involves vehicle use in open areas and vacant lots shall stabilize the open areas and vacant lots on which vehicles are used to meet one of the following stabilization limitations:
- (a)** A soil crust; or
- (b)** A threshold friction velocity (TFV) corrected for non-erodible elements of 100 cm/second or higher; or
- (c)** Flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or

- (d) Standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or
- (e) Standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or
- (f) A percent cover that is equal to or greater than 10% for non-erodible elements; or
- (g) An alternative test method approved in writing by the Control Officer and the Administrator.

**b. Control Measures:**

- (1) Prevent motor vehicle and/or off-road vehicle trespassing, parking, and/or access by installing barriers, curbs, fences, gates, posts, shrubs, trees, or other effective control measures;
- (2) Prevent motor vehicle and/or off-road vehicle trespassing, parking, and/or access by posting that consists of one of the following:

  - (a) A sign written in compliance with ordinance(s) of local, County, State, or Federal sign standards.
  - (b) An order of a government land management agency.
  - (c) Most current maps approved by a government land management agency.
  - (d) Virtual posting a government land management agency.
- (3) Uniformly apply and maintain surface gravel or chemical/organic stabilizers to all areas disturbed by motor vehicles and/or off-road vehicles; or
- (4) Apply and maintain an alternative control measure approved in writing by the Control Officer and the Administrator.

**c. Additional Requirements:**

- (1) If open areas and vacant lots are 0.10 acre (4,356 square feet) or larger and have a cumulative of 500 square feet or more that are disturbed by being driven over and/or used by motor vehicles, by off-road vehicles, or for material dumping, then the owner and/or operator shall implement one or more of the control measures described in Section 302.4(b) of this rule within 60 calendar days following the initial discovery by the Control Officer of disturbance or vehicle use on open areas and vacant lots.
- (2) Within 30 calendar days following the initial discovery by the Control Officer of disturbance or vehicle use on open areas and vacant lots, the owner and/or operator shall provide in writing to the Control Officer a description and date of the control measure(s) to be implemented to prevent such disturbance or vehicle use on open areas and vacant lots.
- (3) The owner and/or operator shall implement all control measures necessary to limit the disturbance or vehicle use on open areas and vacant lots in accordance with the requirements of this rule. Control measure(s) shall be considered effectively implemented when the open areas and vacant lots ~~achieve the compliance determinations~~ meet the requirements described in Section 302.4(a) of this rule.
- (4) Once a control measure in Section 302.4(b) of this rule has been effectively implemented, then such open area or vacant lot is subject to the requirements of Section 302.5-Open Areas and Vacant Lots of this rule.
- (5) Use of or parking on open areas and vacant lots by the owner and/or operator of such open areas and vacant lots shall not be considered vehicle use in open areas and vacant lots and shall not be subject to the requirements of Section 302.4(b) and Sections 302.4(c)(1) through 302.4(c)(4) of this rule. Such open areas and vacant lots shall still ~~achieve the compliance determinations described in Section 501 of this rule~~ meet the requirements described in Section 302.5 of this rule.
- (6) Establishing initial landscapes without the use of mechanized equipment or conducting landscape maintenance without the use of mechanized equipment shall not be considered vehicle use in open areas and vacant lots and shall not be subject to the requirements of Section 302.4(b) and Sections 302.4(c)(1) through 302.4(c)(4) of this rule. Such open

areas and vacant lots shall still ~~achieve the compliance determinations described in Section 501 of this rule~~ meet the requirements described in Section 302.5 of this rule.

**302.5 Open Areas and Vacant Lots:** The owner and/or operator of a non-traditional source of fugitive dust that involves open areas and vacant lots shall be subject to the ~~visible emissions~~ requirements described in Section 302.5(a) of this rule and, unless otherwise specified and/or required, shall comply with the control measures described in Section 302.5(b) of this rule and the additional requirements described in Section 302.5(c) of this rule.

**a. Visible Emissions Requirements and Stabilization Requirements:** ~~The owner and/or operator of a non-traditional source of fugitive dust that involves open areas and vacant lots shall not cause, suffer, or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated.~~

(1) The owner and/or operator of a non-traditional source of fugitive dust that involves open areas and vacant lots shall not cause or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated.

(2) The owner and/or operator of a non-traditional source of fugitive dust that involves open areas and vacant lots shall stabilize the open areas and vacant lots to meet one of the following stabilization limitations:

(a) A soil crust; or

(b) A threshold friction velocity (TFV) corrected for non-erodible elements of 100 cm/second or higher; or

(c) Flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or

(d) Standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or

(e) Standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the

threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or

(f) A percent cover that is equal to or greater than 10% for non-erodible elements; or

(g) An alternative test method approved in writing by the Control Officer and the Administrator.

**b. Control Measures:**

(1) Establish vegetative ground cover on all disturbed surface areas. Such control measure(s) must be maintained and reapplied, if necessary. Stabilization shall be achieved, per this control measure, within eight months after the control measure has been implemented; or

(2) Apply a dust suppressant to all disturbed surface areas; or

(3) Restore all disturbed surface areas within 60 calendar days following the initial discovery by the Control Officer of the disturbance, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions. Such control measure(s) must be maintained and reapplied, if necessary. Stabilization shall be achieved, per such control measure, within eight months after such control measure has been implemented; or

(4) Uniformly apply and maintain surface gravel; or

(5) Apply and maintain an alternative control measure approved in writing by the Control Officer and the Administrator.

**c. Additional Requirements:**

(1) If open areas and vacant lots are 0.10 acre (4,356 square feet) or larger and have a cumulative of 500 square feet or more that are disturbed and if such disturbed area remains unoccupied, unused, vacant, or undeveloped for more than 15 days, then the owner and/or operator shall implement one or more of the control measures described in Section 302.5(b) of this rule within 60 calendar days following the initial discovery by the Control Officer of the disturbance on the open areas and vacant lots.

- (2) Within 30 calendar days following the initial discovery by the Control Officer of the disturbance on the open areas and vacant lots, the owner and/or operator shall provide in writing to the Control Officer a description and date of the control measure(s) to be implemented.
- (3) Control measure(s) shall be considered effectively implemented when the disturbance on the open areas and vacant lots ~~achieves the compliance determinations~~ meets the requirements described in Section 302.5(a) of this rule.

**302.6 Unpaved Parking Lots:** The owner and/or operator of a non-traditional source of fugitive dust that involves unpaved parking lots shall be subject to the requirements described in Section 302.6(a) of this rule and, unless otherwise specified and/or required, shall comply with one of the control measures described in Section 302.6(b) of this rule and the additional requirements described in Section 302.6(c) of this rule.

**a. Visible Emissions Requirements and Stabilization Requirements:**

- (1) The owner and/or operator of a non-traditional source of fugitive dust that involves unpaved parking lots shall not cause, ~~suffer~~, or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated.
- (2) The owner and/or operator of a non-traditional source of fugitive dust that involves unpaved parking lots shall not cause or allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>, and either Section 302.6(a)(2)(a) or Section 302.6(a)(2)(b) of this rule: However, if silt loading is equal to or greater than 0.33 oz/ft<sup>2</sup>, then the owner and/or operator shall not allow the silt content to exceed 8%.

~~(a) Shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>; or~~

~~(b) Shall not allow the silt content to exceed 8%.~~

**b. Control Measures:**

- (1) Pave; For parking, maneuvering, ingress, and egress areas at developments other than residential buildings with four or fewer units that are utilized for more than 35 days during the calendar year:
- (a) Install and maintain pavement; or
  - (b) Apply dust suppressant other than water and install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of motor vehicles that traverse the site; or
  - (c) Uniformly apply and maintain surface gravel.
- (2) For parking, maneuvering, ingress, and egress areas at developments other than residential buildings with four or fewer units that are utilized for 35 days or less during the calendar year:
- (a) Install and maintain one of the control measures listed in Section 302.6(b)(1) of this rule; or
  - (b) Apply water and install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of motor vehicles that traverse the site.
- (2) ~~(3)~~ Apply dust suppressants other than water and install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of motor vehicles that traverse the site; For parking, maneuvering, ingress, and egress areas 3,000 square feet or more in size at residential buildings with four or fewer units install and maintain a paving or stabilization method authorized by the city, town, or county by code, ordinance, or permit.
- (3) ~~Uniformly apply and maintain surface gravel; or~~
- (4) ~~Apply water and install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of motor vehicles that traverse the site.~~

**c. Additional Requirements:**

~~(1) The owner and/or operator of an unpaved parking lot shall implement one of the control measures described in Section 302.6(b) of this rule on any surface area(s) of the lot on which vehicles enter, park, and exit.~~

~~(a) If an unpaved parking lot is utilized for a period of 35 days or less during the calendar year, the owner and/or operator shall implement one or more of the control measures described in Section 302.6(b) of this rule during the period that the unpaved parking lot is utilized for vehicle parking and shall restrict vehicle access to only those areas upon which a control measure has been implemented.~~

~~(b) If an unpaved parking lot is utilized for more than 35 days during the calendar year, the owner and/or operator shall implement one or more of the control measures described in Section 302.6(b)(1) through Section 302.6(b)(3) of this rule during the period that the unpaved parking lot is utilized for vehicle parking and shall restrict vehicle access to only those areas upon which a control measure has been implemented.~~

~~(2) (1) Control measure(s) shall be considered effectively implemented when the unpaved parking lot achieves the compliance determinations meets the requirements described in Section 302.6(a) of this rule.~~

~~(3) (2) If trackout occurs, the owner and/or operator shall repair and/or replace the control measure(s) and shall clean-up immediately such trackout from paved areas accessible to the public including curbs, gutters, and sidewalks when trackout extends a cumulative distance of 25 linear feet or more and at the end of the day for all other trackout.~~

~~(4) Parking, maneuvering, ingress, and egress areas at developments other than residential buildings with four or fewer units shall be maintained with one or more of the following dustproof paving methods:~~

~~(a) Asphaltic concrete.~~

~~(b) Cement concrete.~~

~~(c) Penetration treatment of bituminous material and seal coat of bituminous binder and a mineral aggregate.~~

~~(d) A stabilization method approved in writing by the Control Officer and the Administrator.~~

~~(5) Parking, maneuvering, ingress, and egress areas 3,000 square feet or more in size at residential buildings with four or fewer units shall be maintained with a paving or stabilization method authorized by the county by code, ordinance, or permit.~~

**302.7 Unpaved Roadways (Including Alleys):** The owner and/or operator of unpaved roadways (including alleys) that are used by 150 vehicle trips or more per day in the PM<sub>10</sub> nonattainment area shall be subject to the ~~stabilization~~ requirements described in Section 302.7(a) of this rule and, unless otherwise specified and/or required, shall comply with one of the control measures described in Section 302.7(b) of this rule and the additional requirements described in Section 302.7(c) of this rule.

**a. Visible Emissions Requirements and Stabilization Requirements:** The owner and/or operator of unpaved roadways (including alleys) shall not cause or allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>, ~~and either Section 302.7(a)(1) or Section 302.7(a)(2) of this rule.~~ However, if silt loading is equal to or greater than 0.33 oz/ft<sup>2</sup>, then the owner and/or operator shall not allow the silt content to exceed 6%.

~~(1) Shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>; or~~

~~(2) Shall not allow the silt content to exceed 6%.~~

**b. Control Measures:**

(1) Pave;

(2) Apply dust suppressants other than water; or

(3) Uniformly apply and maintain surface gravel.

**c. Additional Requirements:**

- (1) If a person allows 150 vehicle trips or more per day on an unpaved roadway (including an alley) in the PM<sub>10</sub> nonattainment area, then such person shall first implement one of the control measures described in Section 302.7(b) of this rule.
- (2) A person, who allows 150 vehicle trips or more per day on an unpaved roadway (including an alley) in the PM<sub>10</sub> nonattainment area, shall be responsible for conducting vehicle counts/traffic counts to determine if 150 vehicle trips or more per day occur on an unpaved roadway (including an alley). A traffic count shall measure vehicular traffic over a 48-hour period, which may consist of two non-consecutive 24-hour periods. Vehicular traffic shall be measured continuously during each 24-hour period. The average vehicle counts/traffic counts on the highest trafficked days shall be recorded and provided to the Control Officer in writing within 60 days of verbal or written request by the Control Officer.
- (3) Control measure(s) shall be considered effectively implemented under the following conditions:
  - (a) When the unpaved roadway (including an alley) ~~achieves the compliance determinations~~ meets the requirements described in Section 302.7(a) of this rule.
  - (b) When one of the control measures described in Section 302.7(b) of this rule is implemented on 5 miles of unpaved roadways (including alleys) having vehicle traffic of 150 vehicle trips or more per day within one calendar year beginning in calendar year of 2008. If the control measure described in Section 302.7(b)(2) of this rule is implemented, the unpaved roadways (including alleys) must be maintained so as to comply with Appendix C of these rules.

**302.8 Livestock Activities:** The owner and/or operator of a non-traditional source of fugitive dust that involves livestock activities shall be subject to the ~~visible emissions~~ requirements described in Section 302.8(a) of this rule and, unless otherwise specified and/or required, shall comply with the control measures described in Section 302.8(b) of this rule and the additional requirements described in Section 302.8(c) of this rule.

**a. Visible Emissions Requirements:**

- (1) For unpaved access connections and unpaved feed lane access areas, the owner and/or operator shall not cause or allow visible fugitive dust emissions to exceed 20% opacity.
- (2) For corrals, pens, and arenas, the owner and/or operator shall not cause or allow visible fugitive dust emissions to exceed 20% opacity for a period aggregating more than three minutes in any 60-minute period.
- (3) The owner and/or operator shall not cause, ~~suffer~~, or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated.

**b. Control Measures:** The owner and/or operator of a non-traditional source of fugitive dust that involves livestock activities shall implement the control measures described in this section of this rule. When selecting a control measure, the owner and/or operator may consider site-specific logistics of the livestock activities. When doing so, some control measures may be more reasonable to implement than others. Any control measure that is implemented must achieve the applicable standards and requirements described in Sections 302.8(a) and (c) of this rule, as determined by the corresponding test methods, as applicable, and must achieve other applicable standards set forth in this rule. The owner and/or operator may submit a request to the Control Officer and the Administrator for the use of alternative control measure(s). The owner and/or operator may implement the alternative control measure only after the Control Officer and the Administrator have granted the petition.

(1) For unpaved access connections and unpaved feed lane access areas:

(a) ~~Apply and maintain dust suppressants other than water; or~~ Apply water and install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of motor vehicles that traverse the site;

(b) Apply and maintain pavement, gravel (maintained to a depth of four inches), or asphaltic roadbase; ~~;~~

(c) Apply and maintain dust suppressants other than water; or

(d) Limit vehicle trips to no more than 20 per day per road, limit vehicle speeds to no more than 15 miles per hour, and restrict public access to private roads by installing

barriers, curbs, fences, gates, posts, or signs written in compliance with ordinance(s) of local, County, State, or Federal sign standards.

~~(2)~~ For unpaved feed lane access areas:

~~(a) Apply and maintain dust suppressants other than water; or~~

~~(b) Apply and maintain pavement, gravel (maintained to a depth of four inches), or asphaltic roadbase.~~

~~(3)~~ **(2)** For bulk material hauling, including animal waste, off-site and crossing and/or accessing a paved an area accessible to the public:

**(a)** Load all vehicles used to haul bulk material, including animal waste, such that the freeboard is not less than three inches;

**(b)** Prevent spillage or loss of bulk material, including animal waste, from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s);

**(c)** Cover cargo compartment with a tarp or other suitable closure; and

**(d)** Install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of motor vehicles that traverse the site.

~~(4)~~ **(3)** For corrals, pens, and arenas:

**(a)** Apply water;

**(b)** Install shrubs and/or trees within 50 feet to 100 feet of corrals, pens, and arenas;

**(c)** Scrape and/or remove manure;

**(d)** Apply a fibrous layer (i.e., wood chips) in working areas; ~~or~~

**(e)** Provide shaded areas; or

- (f) Apply and maintain an alternative control measure approved in writing by the Control Officer and the Administrator.

**c. Additional Requirements:**

- (1) The owner and/or operator of livestock activities shall implement at least one of the control measures described in from each of the following three sections of this rule, as applicable: Section 302.8(b)(1), Section 302.8(b)(2), and Section 302.8(b)(3), and Section 302.8(b)(4) of this rule, as applicable. In lieu of implementing at least one control measure from each of the following three sections of this rule, as applicable: Section 302.8(b)(1), Section 302.8(b)(2), and Section 302.8(b)(3), the owner and/or operator of livestock activities shall implement an alternative control measure approved in writing by the Control Officer and the Administrator.
- (2) Control measure(s) shall be considered effectively implemented when the livestock activities ~~achieve the compliance determinations~~ meet the requirements described in Section 302.8(a) of this rule.
- (3) If trackout occurs, the owner and/or operator shall repair and/or replace the control measure(s) and shall clean up immediately such trackout from ~~paved~~ areas accessible to the public including curbs, gutters, and sidewalks when trackout extends a cumulative distance of 25 linear feet or more and at the end of the day for all other trackout.

**302.9 Erosion-Caused Deposition of Bulk Materials Onto Paved Surfaces:** The owner and/or operator of a non-traditional source of fugitive dust that involves erosion-caused deposition of bulk materials onto paved surfaces shall comply with the control measures described in Section 302.9(a) of this rule and the additional requirements described in Section 302.9(b) of this rule.

**a. Control Measures:**

- (1) Remove any and all such deposits by utilizing the appropriate control measures within 24 hours of the deposits' identification or prior to the resumption of traffic on pavement, where the pavement area has been closed to traffic; and
- (2) Dispose of deposits in such a manner so as not to cause another source of fugitive dust.

**b. Additional Requirements:**

- (1) In the event that erosion-caused deposition of bulk materials or other materials occurs on any adjacent paved roadway, paved parking lot, curb, gutter, or sidewalk, the owner and/or operator of the property from which the deposition eroded shall implement both of the control measures described in Section 302.9(a) of this rule.
- (2) Failure to comply with both of the control measures described in Section 302.9(a) of this rule shall constitute a violation of this rule.

**302.10 Easements, Rights-of-Way, and Access Roads for Utilities (Transmission of Electricity, Natural Gas, Oil, Water, and Gas):** The owner and/or operator of a non-traditional source of fugitive dust that involves easements, rights-of-way, and access roads for utilities (transmission of electricity, natural gas, oil, water, and gas) that are used by 150 vehicle trips or more per day in the PM<sub>10</sub> nonattainment area shall be subject to the ~~stabilization~~ requirements described in Section 302.10(a) of this rule and unless otherwise specified and/or required, comply with one of the control measures described in Section 302.10(b) of this rule and the additional requirements described in Section 302.10(c) of this rule.

**a. Visible Emissions Requirements and Stabilization Requirements:** The owner and/or operator of a non-traditional source of fugitive dust that involves easements, rights-of-way, and access roads for utilities (transmission of electricity, natural gas, oil, water, and gas) shall not cause or allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>. ~~and either Section 302.10(a)(1) or Section 302.10(a)(2) of this rule.~~ However, if silt loading is equal to or greater than 0.33 oz/ft<sup>2</sup>, then the owner and/or operator shall not allow the silt content to exceed 6%.

~~(1) Shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>; or~~

~~(2) Shall not allow the silt content to exceed 6%.~~

**b. Control Measures:**

- (1) Pave;
- (2) Apply dust suppressants other than water;
- (3) Uniformly apply and maintain surface gravel; or

(4) Install locked gates at each entry point.

**c. Additional Requirements:**

- (1) If an owner and/or operator allows 150 vehicle trips or more per day to use an easement, right-of-way, and access road for utilities (transmission of electricity, natural gas, oil, water, and gas) in the PM<sub>10</sub> nonattainment area, then such owner and/or operator shall first implement one of the control measures described in Section 302.10(b) of this rule.
- (2) A person, who allows 150 vehicle trips or more per day to use an easement, right-of-way, and access road for utilities (transmission of electricity, natural gas, oil, water, and gas) in the PM<sub>10</sub> nonattainment area, shall be responsible for conducting vehicle counts/traffic counts to determine if 150 vehicle trips or more per day occur on an easement, right-of-way, and access road for utilities (transmission of electricity, natural gas, oil, water, and gas). ~~Such person shall provide to the Control Officer written results of such vehicle counts/traffic counts within 60 days of verbal or written request by the Control Officer.~~ A traffic count shall measure vehicular traffic over a 48-hour period, which may consist of two non-consecutive 24-hour periods. Vehicular traffic shall be measured continuously during each 24-hour period. The average vehicle counts/traffic counts on the highest trafficked days shall be recorded and provided to the Control Officer in writing within 60 days of verbal or written request by the Control Officer.
- (3) Control measure(s) shall be considered effectively implemented when the easement, right-of-way, and access road for utilities (transmission of electricity, natural gas, oil, water, and gas) ~~achieves the compliance determination~~ meets the requirements described in Section 302.10(a) of this rule.

**SECTION 400 – ADMINISTRATIVE REQUIREMENTS (NOT APPLICABLE)**

**SECTION 500 – MONITORING AND RECORDS**

**501 COMPLIANCE DETERMINATION:** To determine compliance with this rule, the following test methods shall be followed:

**501.1 Opacity Observations:**

- a. Opacity observations to measure visible emissions shall be conducted in accordance with the techniques specified in EPA Reference Method 203B (Visual Determination of Opacity of Emissions from Stationary Sources for Time-Exception Regulations). Emissions shall not exceed the applicable opacity standards of this rule for a period aggregating more than three minutes in any 60-minute period.
  - b. Opacity observations to determine compliance with Sections 302.6, 302.7, 302.8(a)(1), 302.8(a)(2), and 302.10 of this rule shall be conducted in accordance with the techniques specified in Appendix C (Fugitive Dust Test Methods) of these rules.
- 501.2** Stabilization observations for unpaved parking lots and/or unpaved roadways (including alleys) shall be conducted in accordance with Appendix C, Section 2.1-Test Methods for Stabilization for Unpaved Roads and Unpaved Parking Lots of these rules.
- 501.3** Stabilization observations for ~~an open area and vacant lot shall~~ vehicle use in open areas and vacant lots and/or open areas and vacant lots shall be conducted in accordance with the following:
- a. Appendix C, Section 2.3-Test Methods for Stabilization: Soil Crust Determination: The Drop Ball Test of these rules; or
  - b. Appendix C, Section 2.4-Test Methods for Stabilization: Determination of Threshold Friction Velocity (TFV): Sieving Field Procedure of these rules, where the threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements is 100 cm/second or higher; or
  - c. Appendix C, Section 2.5-Test Methods for Stabilization: Determination of Flat Vegetative Cover of these rules, where flat vegetation cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) is equal to at least 50%; or
  - d. Appendix C, Section 2.6-Test Methods for Stabilization: Determination of Standing Vegetative Cover of these rules, where standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) is equal to or greater than 30%; or
  - e. Appendix C, Section 2.6-Test Methods for Stabilization: Determination of Standing Vegetative Cover of these rules, where the standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) is equal to or greater than 10% and

where the threshold friction velocity, corrected for non-erodible elements, is equal to or greater than 43 cm/second; or

- f. Appendix C, Section 2.7-Test Methods for Stabilization: Rock Test Method of these rules where a percent cover is equal to or greater than 10% for non-erodible elements.
- g. An alternative test method approved in writing by the Control Officer and the Administrator.

**502 RECORDKEEPING:** Any person subject to the requirements of this rule shall compile and retain records that provide evidence of control measure application (i.e., receipts and/or purchase records). Such person shall describe, in the records, the type of treatment or control measure, extent of coverage, and date applied. Upon verbal or written request by the Control Officer, such person shall provide the records and supporting documentation as soon as possible but no later than 48 hours, excluding weekends. If the Control Officer is at the site where requested records are kept, such person shall provide the records without delay.

**503 RECORDS RETENTION:** Copies of the records required by Section 502-Recordkeeping of this rule shall be retained for at least two years.