

## Article 1 West Pinal PM10 Nonattainment Area Fugitive Dust

### 4-1-030 Standards

#### 1. GENERAL REQUIREMENTS

- A. The owner and/or operator of open areas/vacant lots, unpaved lots, unpaved roads and paved public roadways 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.
- B. The owner and/or operator shall implement applicable control measures.
- C. Control measures shall be implemented to meet the visible emissions requirements, stabilization requirements and compliance determinations for each applicable category.
- D. Failure to implement control measures as required by this rule, as applicable and/or failure to maintain stabilization in order to prevent wind erosion as measured by the requirements of this rule shall be deemed a violation of this rule.

#### 2. OPEN AREAS/VACANT LOTS

- A. Visible Emissions and Stabilization Requirements: The owner and/or operator of open areas/vacant lots shall not cause, suffer, allow, or permit fugitive dust emissions which result in opacity of the dust to exceed twenty percent (20%) as measured using an opacity method, as determined by the applicable test method in §4-9-340 or an equivalent test method approved in writing by the Control Officer and the EPA Administrator.
- B. Upon evidence of trespass in open areas/vacant lots, an owner and/or operator shall install and maintain one of the following:
  - i. No trespassing signs
  - ii. Physical barriers such as curbs, fences, gates, posts, shrubs, trees, or other effective control measures to effectively prevent access to the open areas/vacant lots.
- C. Owners and/or operators of open areas/vacant lots 1.0 acre (43,560 square feet) or larger and have a cumulative of 0.5 acre (21,780 square feet) or more disturbed surface area shall implement at least one control measure described below on the disturbed surface area in order to stabilize:
  - i. Apply and maintain water or dust suppressants; or
  - ii. Establish vegetation; or
  - iii. Install and maintain pavement; or
  - iv. Apply and maintain gravel uniformly; or
  - v. Apply and maintain chemical/organic stabilizers/suppressants; or
  - vi. Apply and maintain an alternative control measure approved in writing by the Control Officer and the EPA Administrator.

### Article 1 West Pinal PM10 Nonattainment Area Fugitive Dust

#### 4-1-030 Standards continued

D. For open areas/vacant lots 1.0 acre (43,560 square feet) or larger and have a cumulative of 0.5 acre (21,780 square feet) or more disturbed surface area, within 30 calendar days following the initial discovery of the disturbed surface area on the open areas/vacant lots, the owner and/or operator shall sign up to receive the Pinal County dust control forecast. The owner and/or operator shall ensure the open areas/vacant lots is stabilized the day leading up to and the day that is forecast to be high risk for dust emissions, as noticed by the Pinal County dust control forecast.

E. No person shall remove vegetation from any open areas/vacant lots by blading, disking, plowing under or any other means without implementing all of the following control measures to prevent or minimize fugitive dust.

- i. Apply a dust suppressant(s) to the total surface area subject to the disturbance immediately prior to or during the weed abatement.
- ii. Prevent or eliminate material trackout onto paved surfaces and access points adjoining paved surfaces through one of the control measures in 4-1-030.5.A.i.
- iii. Apply a dust suppressant(s), gravel, compaction or an alternative control measure immediately following weed abatement to the entire disturbed surface area such that the surface is stabilized.

F. Compliance with the stabilization requirement in paragraphs C, D and E shall be determined by one of the following:

- i. Observation of a visible crust as determined by the drop ball test in Article 9 (§4-9-320.B.1); or
- ii. A Threshold Friction Velocity (TFV), corrected for non-erodible elements, of 100 cm/second or higher as determined by the test method in Article 9 (§4-9-320.B.2); or
- iii. Flat vegetation cover equal to at least 50 percent as determined by the test method in Article 9 (§4-9-320.B.3); or
- iv. Standing vegetation cover equal to or greater than 30 percent as determined by the test method in Article 9 (§4-9-320.B.4); or
- v. Standing vegetation cover equal to or greater than 10 percent as determined by the test method in Article 9 (§4-9-320.B.4) where threshold friction velocity, corrected for non-erodible elements, is equal to or greater than 43 cm/second.

### Article 1 West Pinal PM10 Nonattainment Area Fugitive Dust

#### 4-1-030 Standards continued

##### 3. UNPAVED LOTS

A. The owner and/or operator of an unpaved lot greater than 5,000 square feet in size shall be subject to the requirements described in 4-1-030.3.A.i and shall comply with at least one of the control measures described in 4-1-030.3.A.ii:

i. Visible Emissions Requirements and Stabilization Requirements: The owner and/or operator of an unpaved lot shall not cause or allow visible fugitive dust emissions to exceed 20% opacity as measured using an opacity method, as determined by the applicable test method in §4-9-340 or an equivalent test method approved in writing by the Control Officer and the EPA Administrator, and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup> as determined by the applicable test method in §4-9-320.A.1. 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% ;

ii. CONTROL MEASURES:

a. Pave; or

b. Apply dust suppressant in sufficient quantity and frequency to maintain a stabilized surface; or

c. Apply and maintain surface gravel uniformly such that the surface is stabilized; or

d. Apply and maintain an alternative control measure approved in writing by the Control Officer and the EPA Administrator.

B. Control measure(s) in 4-1-030.3.A.ii shall be considered effectively implemented when the unpaved lot meets the requirements of 4-1-030.3.A.i.

##### 4. UNPAVED ROADS

A. The owner and/or operator of unpaved roads with average daily trips (ADT) greater than 150 (A traffic count shall measure motor vehicle traffic over a 48-hour period, which may consist of two non-consecutive 24-hour periods. Motor vehicle traffic shall be measured continuously during each 24-hour period.) shall be subject to the requirements described in 4-1-030.4.A.i and shall comply with one of the control measures described in 4-1-030.4.A.ii:

### Article 1 West Pinal PM10 Nonattainment Area Fugitive Dust

#### 4-1-030 Standards continued

i. Visible Emissions Requirements and Stabilization Requirements: The owner and/or operator of unpaved roads shall not cause or allow visible fugitive dust emissions to exceed 20% opacity as measured using an opacity method, as determined by the applicable test method in §4-9-340 or an equivalent test method approved in writing by the Control Officer and the EPA Administrator and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup> as determined by the applicable test method in §4-9-320.A.1. 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%;

ii. CONTROL MEASURES:

- a. Pave; or
- b. Apply and maintain dust suppressants other than water; or
- c. Uniformly apply and maintain surface gravel

B. Control measure(s) in 4-1-030.4.A.ii shall be considered effectively implemented when:

i. One of the control measures described in 4-1-030.4.A.ii is annually implemented on 15 miles per year of unpaved roads having ADT of 150 or more.

a. When the control measure is application and maintenance of dust suppressants other than water, the application and maintenance of the dust suppressants shall only be counted towards the 15 mile threshold when:

- 1. Done on unpaved roads previously untreated, and
- 2. Application and maintenance of dust suppressants on unpaved roads previously treated continues annually until the unpaved road is paved.

ii. For year 2019 and beyond, control measures applied on unpaved roads with less than 150 ADT can be used for compliance with 4-1-030.4.B.i through use of the following equivalency conversion.

Article 1 West Pinal PM10 Nonattainment Area Fugitive Dust

4-1-030 Standards continued

ADT Range	Mileage Equivalency (Miles of equivalent control / mileage of actual control)
0-14	0.000
14-62	0.121
62-103	0.514
103-146	0.531
146+	1.000

Example equivalency conversion calculation:

In year one, City or County “A” paves 10 miles of unpaved roads with ADT of 100.

$10 * 0.514 = 5.14$  miles of 150 ADT equivalent unpaved roads.

5. PAVED PUBLIC ROADWAY

A. Clean up of trackout, Erosion-Caused Deposition of Bulk Materials on paved public roadway: the owner and/or operator of the property from which the trackout or erosion caused deposition came from shall upon discovery of mud/dirt that extends 50 feet or more from the nearest unpaved surface exit onto the paved public roadway shall:

- i. Within 24 hours of discovery, remove the mud/dirt from paved public roadway with one of the following control measures. (If needed, restrict vehicles from traveling over said mud/dirt until such time as the material can be removed from the travel lanes of the paved public roadway)
  - a. Manually sweeping and picking up; or
  - b. Operating a rotary brush or broom accompanied or preceded by sufficient wetting to limit opacity to 20% or less; or
  - c. Operating a PM10 efficient street sweeper; or
  - d. Flushing with water, if curb and gutters are not present and where the use of water will not result as a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program.

### Article 1 West Pinal PM10 Nonattainment Area Fugitive Dust

#### 4-1-030 Standards continued

- ii. During removal of mud/dirt, do so in a manner that does not cause another source of fugitive dust.
  - iii. In the event unsafe travel conditions would result from restricting traffic pursuant to section A.i and removal of such material isn't possible within 72 hours due to a weekend or holiday condition, the provisions of section A.i can be extended upon notification to and approval by the Control Officer.
- B. The owner and/or operator of any existing paved public roadways shall take the following actions prior to, during and after work on unpaved road shoulders:
- i. Apply a dust suppressant(s) to the total surface area subject to the disturbance in sufficient quantity and frequency to maintain a stabilized surface.
  - ii. Prevent trackout by using one of the control measures listed in §4-1-030.5.A.i.