

Apache Junction Nonattainment Area Construction Dust

Objective Standards

Sites

A. Opacity Limitations. Opacity (something reduces passage of light) directly related to development activity or resulting from any disturbed areas caused by development activity will not exceed any of the following limitations:

1. 0% Property Line Opacity Limitation

Subject to the exemptions below, the net opacity contribution from any development activity or disturbed areas caused by development activity shall not violate a 0% opacity standard at the boundary of the parcel for more than 30 seconds in any continuous six-minute period.

a. This limitation does not apply to earthmoving operations conducted within 25 feet of a parcel boundary.

b. For purposes of this property line opacity standard, opacity is determined based on a time-gathered method. (EPA Reference Method 22—“Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares”), 2000 edition.

2. Continuous Plume Limitation. Opacity will not exceed 20% opacity for any continuous plume, as assessed by a time-averaging method, based on observations every 15 seconds over a 3-minute span. [Article 9, §4-9-340.E.](#)

3. Intermittent Plume Limitation. Opacity will not exceed 20% opacity for any intermittent plume, as assessed by the average of a set of six paired observations, spaced by five seconds and conducted within a one-hour period.

[Article 9, §4-9-340.C and §4-9-340.D.](#)

4. Wind Events. The opacity limitations of this rule applies to wind-driven emissions, provided that an owner and/or operator may have an affirmative defense to any violation upon making a showing. [Article 7, §4-7-222.](#)

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B. Trackout Limitations

1. Basic Limitation. Continuous visible trackout from any site onto a paved public road way shall not exceed 25' in length or exhibit a trackout pack-depth greater than 0.25".

2. On-site Trackout Control System. For any period of time when a project has more than two acres of area disturbed, or on any day that more than 100 cubic yards of bulk material is shipping in or out of the site, install and maintain a trackout control system that prevents trackout.

3. Trackout control System Options.

Where a trackout control system is required, install and maintain at least one of the following system options.

a. Most likely acceptable systems.

The following systems shall be acceptable options in a dust mitigation plan:

i. Rumble strips—25 foot length. For use of grizzlies or other similar devices designed to remove dirt/mud from tires, the devices shall extend from the intersection with the public paved road surface for a distance of at least 25 feet, and cover the full width of the unpaved exit surface for at least 25 feet.

ii. Gravel pads—50 foot length. For use of gravel pads, coverage with gravel shall be at least one inch or larger in diameter and at least 3 inches deep, shall extend from the intersection with the public paved road surface for a distance of at least 50 feet, and cover the full width of the unpaved exit surface for at least 50 feet. Any gravel deposited onto a public paved road travel lane or shoulder must be removed at the end of the workday or immediately following the last vehicle using the gravel pad, or at least once every 24 hours, whichever occurs first.

iii. Internal paving—100 feet. For use of paving, paved surfaces shall extend from the intersection with the paved public road surface for a distance of at least 100 feet, and cover the full width of the unpaved access road for that distance to allow mud and dirt to drop off of vehicles before exiting the site. Mud and dirt deposits accumulating on paved interior roads shall be removed

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with sufficient frequency, but not less frequently than once per workday, to prevent carryout and trackout onto a paved public road.

iv. Wheel wash system. At all exits onto paved areas accessible to the public, install a wheel wash system.

b. Alternative Systems

As an alternative, the site permit dust control plan may propose some other system for controlling trackout, provided that visible trackout from such system shall not exceed 5' in length onto a paved public road.

C. Active Area Stabilization Requirements

1. Affected Areas

Active area stabilization requirements apply to disturbed areas affected by on-site parking, vehicular traffic, equipment traffic, material transport, or equipment transport.

2. Objective Standards. Comply with each of the following requirements:

a. Every disturbed parking area and/or working area will show compliance at all times with one of the following objective standards.

Article 9, §4-9-320.A:

- i. Silt loading will not exceed 0.33 oz/ft²; or
- ii. Silt content will not exceed 8% for parking and working areas.

b. Every disturbed roadway area will show compliance at all times with one of the following objective standards. **Article 9, §4-9-320.A:**

- i. Silt loading will not exceed 0.33 oz/ft²; or
- ii. Silt content will not exceed 6% for roads.

c. All disturbed areas other than parking areas, working areas or roadway areas affected under this active area stabilization requirement will be stabilized and show compliance at all times with the drop ball test.

Article 9, §4-9-320.A.1.

3. Maintenance Obligation. Maintain active area stabilization to meet the foregoing standards until the activity ceases and the affected area of the site has been stabilized to meet the post-operation stabilization standards.

Article 7, §4-7-226.D.

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D. Stabilization Requirement for Inactive and Post-operation Areas

Any disturbed surface area on which no activity is occurring shall meet at least one of the standards described below. If areas of the site exhibit visibly distinguishable surface characteristics, each area will be separately assessed for stability. Stability shall be assessed with the appropriate test methods described.

[Article 9, §4-9-320.B.](#)

Failure to maintain a disturbed surface area on which no activity is occurring will be considered in violation of this rule unless the area is maintained in a manner that meets at least one of the standards listed below, as applicable.

1. Drop Ball Test. Maintain stabilization or a soil crust adequate to pass the drop ball test;
2. Maintain 100cm/sec. threshold friction velocity. Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;
3. Maintain 50% flat vegetative cover. Maintain a flat vegetative cover (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%;
4. Maintain 30% standing vegetative cover. Maintain a standing vegetative cover (vegetation that is rooted with a predominant vertical orientation) that is equal to or greater than 30%;
5. Maintain 10% standing vegetative cover and 43 cm/sec. TFV. Maintain a standing vegetative cover (vegetation that is 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;
6. Minimum non-erodible element cover. Maintain a percent cover that is equal to or greater than 10% for non-erodible elements as measured by the "rock test"; or
7. Implement an approved alternative. Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator.

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E. Duration of Stabilization Obligation

1. Unpermitted Sites. For any unpermitted site, maintain the stabilization standards of §4-7-226.D. [Article 7, §4-7-226.D.](#)
2. Sites Subject to a Block Permit. For any unpermitted site, maintain the stabilization standards of §4-7-226.D until development activity is complete.
3. Other Permitted Sites. For any other site subject to permit requirement, maintain the stabilization standards of Article 7, §4-7-226.D until the Control Officer approves closure of the site permit. [Article 7, §4-7-238.](#)

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Work Practice Standards

Sites

Define, clearly mark, and enforce entry and exit points for traffic.

Dust Suppression for Inactive and Post-operation Areas and Roadways

1. Restrict access, and pave, apply gravel or apply a suitable dust suppressant other than water.
2. 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
3. Establish a vegetative cover.

Bulk Material Stacking and Stockpiling Operations

1. At least one of the following control measures will be implemented during bulk material stacking, loading and unloading operations:
 - a. Spray material with water, as necessary, prior to stacking, loading and unloading and/or while stacking, loading and unloading; or
 - 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.
2. When not conducting stacking, loading or unloading operations, implement at least one of the following control measures with respect to a stockpile:
 - a. Cover all open storage piles with a tarp, plastic, or other material to prevent wind from removing the covering
 - b. Apply water to maintain a soil moisture content at a minimum of 12%
 - c. Maintain a soil crust
 - d. 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

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pile, whose distance from the pile is not more than twice the height of the pile, whose height is equal to the pile height, and whose absorption is no more than 50%.

Trackout; Monitoring and Cleanup

1. Monitor trackout length at each exit point.
2. Immediately clean up any trackout that violates the length or pack-thickness limitations.
3. Remove all visible trackout at the close of each workday and/or each work shift.

Signage

At any site that is five acres or larger, erect a project information sign at the main entrance that is visible to the public or at each end of the construction site road. The sign is to be a minimum of 24 inches tall by 30 inches wide, have a white background, and have the words "DUST CONTROL" shown in black block lettering which is at least four inches high, and will contain the following information:

1. Project Name
2. Name and phone number of person responsible for conducting project
3. Text stating: "Dust complaints? Call Pinal County Air Quality Control District at (520) 866-6929."

Training

1. Dust Coordinator

On any site having five acres or more of disturbed area, assure that at all times during earthmoving activity, have on-site at least one individual qualified under a Control Officer approved Dust Control Coordinator training program.

2. Superintendent & Water Pull Drivers

Assure that the site superintendent or other designated representative have successfully completed a Control Officer approved Basic Dust Control Training Class.

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Complying with Project Access Control

Drivers, contractors, subcontractors, and materialmen will only use the entrance and exit points as defined by the Owner and/or Operator.

Dust Suppression for Active Working Areas, Parking Areas and Roadways

To manage dust from working areas, including disturbed areas affected by on-site parking, vehicular traffic, equipment traffic, material transport, or equipment transport and roadways, at least one of the following measures will be implemented:

1. Apply water so that the surface is visibly moist
2. Apply and maintain a suitable dust suppressant other than water
3. Limit speed to 15 mph and traffic to no more than 20 trips/day, provided this measure requires the Dust Management Plan include a traffic management plan that details how speed and daily trips will be limited
4. Apply gravel, recycled asphalt or other suitable material
5. Pave

Dust Suppression During Bulk Excavation Operations

1. Pre-watering will be applied before starting any earthmoving operation
2. Water will be applied during activity as required to limit particulate emissions

Project-internal Load Stabilization

Load stabilization will be required during haulage of bulk excavated materials internally within a site and not crossing a paved public road by implementing at least one of the following measures:

1. Limit speed to 15 miles per hour
2. Stabilize loads with water or a dust suppressant
3. Cover the load with a tarp or other suitable material

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Roadway-Crossing Load-Stabilization

Load stabilization will be required during haulage of bulk excavated materials across a paved public road, by implementing all of the following limitations:

1. Load all haul trucks so that the freeboard is not less than three inches.
2. Load all haul trucks so that at no time will 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).
4. When crossing and/or accessing a paved 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 travel within the site.

Demolition

Should demolition activities include development activity, implement all of the following measures:

1. Apply water to demolition debris immediately following demolition activity
2. apply water to all disturbed soil surfaces to establish a crust and to prevent wind erosion.

Weed Reduction

Should weed reduction activity be a part of a particular project, implement all of the following control measures:

1. Should discing or blading occur for weed reduction, apply water.
2. While discing or blading for weed reduction, apply water.
3. After discing or blading, pave, apply gravel, apply water, apply a suitable dust suppressant other than water or establish a vegetative ground cover.

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Blasting

All of the following control measures will be implemented for blasting operations at a site:

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

Subcontractor Registration Verification

Assure that any subcontractors engaged in earthmoving activity on the site have registered with Pinal County Air Quality as a subcontractor.