

# Dust Control Methods for Landscaping



Landscapers must take reasonable precautions to limit excessive amounts of dust from becoming airborne.

The following are suggested dust control methods that may be used to control fugitive dust from the sources listed. *Please note: Use of these control methods DOES NOT automatically assure compliance with the fugitive dust standards in Chapter 17.16 Articles II and III of the Pima County Code. Use of more than one method may be necessary.*

## Earthmoving Activities (Digging, Trenching, etc.)

Control Method	Description
Planning	Grade, trench, or dig each phase separately; time to coincide with development phase.
Watering	<ol style="list-style-type: none"> <li>1. Application of water by means of trucks, hoses, and/or sprinklers at sufficient frequency and quantity prior to conducting, during, and after earthmoving operation.</li> <li>2. Pre-application of water to the depth of the proposed cuts or equipment penetration.</li> </ol>
Chemical stabilizers	<ol style="list-style-type: none"> <li>1. Most effective in areas not subject to daily disturbances.</li> <li>2. Apply per manufacturer's recommendations.</li> </ol>
Wind fencing	<ol style="list-style-type: none"> <li>1. Three- to five-foot barriers with 50% or less porosity, adjacent to roadways or urban areas.</li> <li>2. Normally used in conjunction with watering or chemical stabilization.</li> <li>3. Use trees and shrubs for long-term sites.</li> </ol>
Operate on-road haul vehicles appropriately	<ol style="list-style-type: none"> <li>1. Cover entire surface of hauled material once vehicle is full.</li> <li>2. Mix material with water prior to loading, and/or water entire surface of material after loading.</li> <li>3. Do not overload haul vehicle. Freeboard should not be less than 3 inches.</li> <li>4. Remove spillage from body of truck before/after loading or unloading.</li> <li>5. Empty loader slowly and keep bucket close to the truck while dumping.</li> <li>6. Apply water as necessary during loading operation.</li> </ol>
Operate off-road haul vehicles appropriately	<ol style="list-style-type: none"> <li>1. Mix material with water prior to loading, and/or water entire surface of material after loading.</li> <li>2. Empty loader slowly and keep bucket close to the truck while dumping.</li> <li>3. Apply water as necessary during loading operation.</li> </ol>
During periods of high winds	<ol style="list-style-type: none"> <li>1. Apply chemical stabilizers per manufacturer's directions, and prior to expected wind events.</li> <li>2. Apply water as necessary, and prior to expected wind events.</li> <li>3. Stop work activities temporarily.</li> </ol>

## Storage Piles

Control Method	Description
Watering	<ol style="list-style-type: none"> <li>1. Application methods include spray bars, hoses, and water trucks.</li> <li>2. Frequency of application will vary with site-specific conditions.</li> </ol>
Wind sheltering	Install three-sided barriers, with no more than 50% porosity, equal to material height.
Chemical stabilizers	Best for use on storage piles subject to infrequent disturbances.
Altering loading and unloading procedures	<ol style="list-style-type: none"> <li>1. Confine loading and unloading procedures to the downwind side of storage piles.</li> <li>2. May need to be used in conjunction with wind sheltering.</li> </ol>
Coverings	<ol style="list-style-type: none"> <li>1. Tarps, plastic, or other material can be used as a temporary covering.</li> <li>2. When used, coverings must be anchored to prevent wind from removing them.</li> </ol>
During periods of high winds	<ol style="list-style-type: none"> <li>1. Apply chemical stabilizers per manufacturer's directions, and prior to expected wind events.</li> <li>2. Apply water as necessary, and prior to expected wind events.</li> <li>3. Install temporary covers.</li> </ol>

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## Unpaved Roads and Shoulders

Control Method	Description
Reduce speed	May need to be used with watering or chemical stabilization.
Eliminate unnecessary travel	Restrict access or redirect traffic to reduce vehicle trips.
Site access improvements	Stay on established routes.
During periods of high winds	Stop work and vehicle activity temporarily.

## Paved Road Track-Out

Control Method	Description
Wheel washers	<ol style="list-style-type: none"> <li>Should be placed where vehicles exit unpaved areas onto paved areas.</li> <li>May be adjusted to spray entire vehicle including bulk-stored material in haul vehicles.</li> </ol>
Sweep/Clean roadways	<ol style="list-style-type: none"> <li>Either manual or power sweeping may be used.</li> <li>Liquids used for dust control must be managed according to the site's Storm Water Pollution Prevention Plan.</li> </ol>
Cover haul vehicles	Entire surface should be covered with water or tarps once vehicle is fully loaded.
Site access improvements	<ol style="list-style-type: none"> <li>Install a gravel pad or grizzly at the access point to your site.</li> <li>Designate a single site entrance and exit.</li> <li>Stay on established routes.</li> </ol>
During periods of high winds	<ol style="list-style-type: none"> <li>Cover all haul vehicles.</li> <li>Water streets prior to sweeping.</li> </ol>

## Leaf Blowing Activities

Control Method	Description
Manual rakes and brooms	<ol style="list-style-type: none"> <li>Eliminates motorized emissions.</li> <li>Raises less soil and dust, and keeps it localized compared to motorized equipment.</li> </ol>
Electric leaf vacuum	<ol style="list-style-type: none"> <li>Collects leaves and dust rather than blows them around only to return later.</li> <li>Eliminates displacement of debris across property boundaries.</li> <li>Generates no volatile organic compound (VOC) emissions.</li> <li>Condensed organic material may be used as mulch.</li> </ol>
Water, wetting agents, chemical stabilizers	Use to stabilize exposed soils after debris has been removed.
Limit power or air speed	Blows leaves while keeping dirt from blowing.
Four-stroke engines	Eliminates dense clouds of oily smoke produced by two-stroke engines.
Proper oil-gas mixture on two-stroke engines	<ol style="list-style-type: none"> <li>Use manufacturer recommendations.</li> <li>Reduces smoke generation, and extends engine life.</li> </ol>
Minimize use	Use leaf blowers less in residential and business areas.
During periods of high winds	<ol style="list-style-type: none"> <li>Use vacuum blowers.</li> <li>Stop work activities temporarily.</li> </ol>

## Why Do We Need to Keep Dust Down?

Particulate Matter is hazardous to human health. Elevated levels can result in aggravated respiratory and heart disease, reduced lung function, lower immune systems, heart attacks, and even premature death.

In 1999, Pima County violated national air quality health standards for Particulate Matter (airborne dust). As a result of this violation, Pima County adopted a plan to help keep particulate levels down. If we become designated as a "non-attainment" area, we will have stricter Federal rules, higher fines, and may lose funding for transportation projects. Please do your part to keep dust down.

**Thank You for Keeping Our Air Healthy to Breathe!**

***Questions? Call or Click:***

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