What activities cause dust at our work sites?

- Earth moving
- Land stripping
- Road building
- Trenching
- Storage piles
- Paved road trackout
- Screening operations
- Diesel fueled vehicle use
- Disturbing surface areas
- Driving on haul roads
- Loading and unloading haul trucks
- Untarped and overloaded haul trucks
- High winds

The desert is naturally dusty. What’s the problem?

If left alone, the soils of undisturbed desert land naturally bind together forming a crust. This crust resists wind and helps prevent dust from becoming airborne. When disturbed, small particles get into the air during high wind events and create problems with human health and the environment.

For Pima County Dust Rules, Complaints, or Air Information:

Pima County Department of Environmental Quality
33 N. Stone Ave, Suite 700
Tucson, AZ 85701
520.724.7400 • Fax: 520.838.7432
www.deq.pima.gov
www.AirInfoNow.org

Pima County Board of Supervisors
Ann Day, Supervisor, District 1
Ramón Valadez, Supervisor, District 2
Sharon Bronson, Supervisor, District 3
Ray Carroll, Supervisor, District 4
Richard Elias, Supervisor, District 5

County Administrator
C.H. Huckleberry

Title 17 of the Pima County Code

Article III, Section 17.16.050 states in part:

“No person shall allow activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.”

What are dust suppressants?

There are many types of dust suppressants, or palliatives, available from companies throughout the U.S. Basic categories of suppressants include: water, water absorbing products, petroleum based products, organic non-petroleum based products, electrochemical products, polymer products, and clay additive products.

Contact PDEQ for more information on product selection and manufacturers.
Dust Control Issues

What is Particulate Matter?
Particulate Matter (PM) is one of the most significant air pollutants in Pima County. PM is made up of tiny particles (a fraction of the thickness of a human hair) that float in the air we breathe. The fine particles can pass through your body’s defense system, travel into the deepest parts of your lungs, and cause damage.

What can Particulate Matter cause?
- Breathing difficulties
- Respiratory pain
- Reduced lung function
- Weakened immune systems
- Increased severity of acute bronchitis, pneumonia, asthma, and emphysema
- Heart attacks
- Premature death (1-8 years)

PM also reduces visibility which can be hazardous while driving, and interferes with beautiful views.

What are major sources of Particulate Matter?
- Disturbed vacant or open lands
- Off-road vehicle activity
- Construction and mining activity
- Unpaved roads
- Paved roads
- Industrial sources
- Diesel exhaust
- Unpaved parking lots
- Diesel exhaust

What are the rules?
Title 17 of the Pima County Code lists many regulations with which you must comply. These rules basically state that you must take reasonable precautions to control dust at all times, whether or not the site is active, at night time, on weekends, or on holidays. You must also not let airborne dust cross property boundaries, and the opacity of dust plumes must be 20% or less. (Completely obscured visibility = 100% opacity, clear = 0%).

What happens if we don’t control dust on our project sites?
Pima County violated the Environmental Protection Agency’s national PM health standards in 1999. Currently, we are maintaining the air quality standards under new Pima County rules and regulations. If airborne PM is not controlled, we risk having more stringent federal rules, more costly fines, and losing federal monies for transportation projects.

Pima County Department of Environmental Quality (PDEQ) employs inspectors who are dedicated to respond to complaints, and also provide routine surveillance on active and inactive operations (including weekends). If you are found to be in violation, PDEQ will contact you requesting that you take effective action to control dust. If you fail to take reasonable measures, escalated enforcement may be necessary, including fines.

The Following Actions May Help Control Dust:
- Get an Activity Permit from PDEQ.
- Plan responsibly:
  - Locate entrance, exit, and trailer to minimize traffic.
  - Post and enforce lower speed limits.
  - Locate haul roads and storage piles away from existing housing.
  - Grade each phase separately timed to coincide with construction phase.
  - Have an appropriate number of water trucks available.
  - Educate and empower equipment operators to control dust.
  - Monitor wind conditions.
- Water at sufficient frequency, quantity, and depth, including pre-soaking.
- Use chemical stabilizers.
- Use windbreaks like fences or trees.
- Cover haul material.
- Do not overload haul vehicle.
- Use grizzlies, gravel, or paving to prevent trackout.
- Have vehicles stay on established routes, and keep these routes moist.
- If all else fails, stop vehicle and work activities temporarily.
- Plant vegetation after active operations have ceased.

Take Action Now!
Avoid Fines Later.