



Pima County Department of Environmental Quality
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Got Dust? Keep it Down!

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The Dirt on Dust

The *Dirt on Dust* newsletter provides information about regulations and airborne dust control methods to protect the health of our community and keep Pima County in compliance with national air quality standards. Please share this information with your co-workers and/or employees in your company newsletters, safety meetings, payroll enclosures or e-mail distribution for company-wide awareness of this very important topic.

Educate Equipment Operators

Two of the top five reasons PDEQ enforcement actions are taken regarding airborne dust stem from the failure of employers to educate equipment operators regarding dust issues. The lack of understanding of airborne dust control regulations, and the inability to take action at the equipment operator level are major contributors to excessive dust violations. Giving equipment operators the responsibility to recognize non-compliant dust problems, and take action to correct them, will reduce the chances of violating Title 17 ordinances.

Here is a scenario: *Joe is operating a loader. He is told to move dirt from a storage pile to haul trucks, and, with the exception of the haul trucks, is on site alone without any water hose or water truck. While digging into a dry storage pile, dust gets kicked up into the air. While moving from the dirt pile to the haul vehicles, his tires kick up dirt from the ground. And, while dumping the dirt into the bed of the haul truck, thick plumes of dust rise up. Joe knows he is causing dust to become airborne, and shrugs it off believing this to be expected when you move dirt around. He doesn't really like breathing the dust-laden air, but continues moving the dirt because that is what he is being paid to do.*

Are your equipment operators knowledgeable about airborne dust regulations? What can equipment operators and site superintendents do to keep dust down?

- Educate equipment operators about dust control regulations. Discuss regulations during safety meetings, distribute PDEQ brochures, or schedule a presentation from PDEQ about dust control.
- Allow equipment operators to stop or alter activity until effective dust control methods are in place.
- Make sure equipment operators know how to keep dust down. In Joe's case, besides using water, he might be able to keep dust down if he moved the loader slower while digging into the stockpile and while driving on the site. He might also control dust better if he dumped the load closer to the truck bed.
- Have water ready and available at all times during activities. Water at the end of the day as well, to make sure dust will stay down overnight, and will also be moist when operations start up the next day.
- Ensure that equipment operators have a way to communicate with others on- and off-site (i.e. radios, cell phones, walkie talkies).

Keeping dust down is not only necessary to avoid Pima County ordinance violations, but is important for the health of equipment operators and that of our community, and to keep Pima County in "Attainment" status of national air quality health standards. Do your part to Keep Dust Down.

Please Contact Us to Save Taxpayer \$\$ or for More Info

- Save Taxpayer Money: Receive articles by e-mail**
Send us your e-mail address for electronic distribution (saves time, paper, and postage)
- Schedule a free presentation**
- Request more information on health effects, regulations, control methods**
- Provide feedback on newsletter**
- Remove yourself from distribution list**



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RETURN SERVICE REQUESTED

Airborne Dust is Particulate Matter Pollution

Particulate Matter is a major air pollutant in Pima County that is of great concern due to the serious health effects, and the potential for being designated a *Non-Attainment* area for this criteria pollutant. A *Non-Attainment* status would result in more stringent regulations and higher fines for violations.

Construction activity is one source of airborne dust. Any type of earthmoving, hauling, and driving activity, as well as storage piles and unstabilized soil surfaces can contribute to unhealthy levels of particulates. Contractors, sub-contractors, developers, and construction workers need to take reasonable action to control airborne dust on work sites.

FREE "Smoke School"

**March 28 & 29, 2006
Kino Community Center,
Room 103**

Learn EPA Method 9 and how to
read opacity of dust plumes.

**Contact Fred Ellis
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Environmental Quality
800.234.5677x4851
ellis.fred@ev.state.as.us
www.azdeq.gov/environ/air/
compliance/smoke.html**

How Does Airborne Dust Affect Human Health?

Children, the elderly, and people with respiratory or heart disease are most at risk from breathing airborne dust. Healthy people are at risk as well, especially outdoor workers and exercisers. It is estimated that about 200 people in the Metropolitan Tucson area will die this year from breathing particulates. Over 60,000 people throughout the U.S. are expected to die prematurely from this as well.

Airborne dust can cause:

- Eye, nose, and throat irritations
- Reduced lung function
- Chest pain and heart attacks
- Increased hospitalizations
- Stroke
- Difficulty breathing
- Asthma attacks
- Weakened immune system
- Increased absences from work and school
- Premature death (by 1-8 years)

Please, take reasonable precautions to Keep Dust Down!