"Begin each day asking what thing you could do differently that would be good for the environment, and good for you too. And then do that thing."

-Sandra Postel

## Fugitive Dust (PM<sub>10</sub>) Outreach & Education Program

**STAPPA/ALAPCO/EPA Meeting** 

**Communicating Air Quality and Communities in Motion** 

**December 1-3, 2004** 

Pima County Department of Environmental Quality, Tucson, Arizona Beth Gorman, Program Manager Karen Wilhelmsen, Program Coordinator

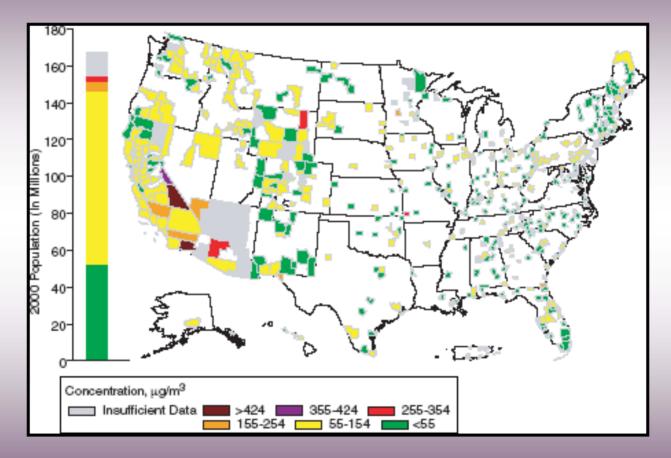
## Agenda

### Background information

### PM<sub>10</sub> Outreach & Education

- Target Markets
- Materials Development
- Outreach Methods
- Media
- Program Evaluation
- Budget
- Resources

# **PM<sub>10</sub> Problem in Western States**



Highest second maximum 24-hour PM<sub>10</sub> concentration, 2001 Map courtesy of www.epa.gov/airtrends/pm2.html

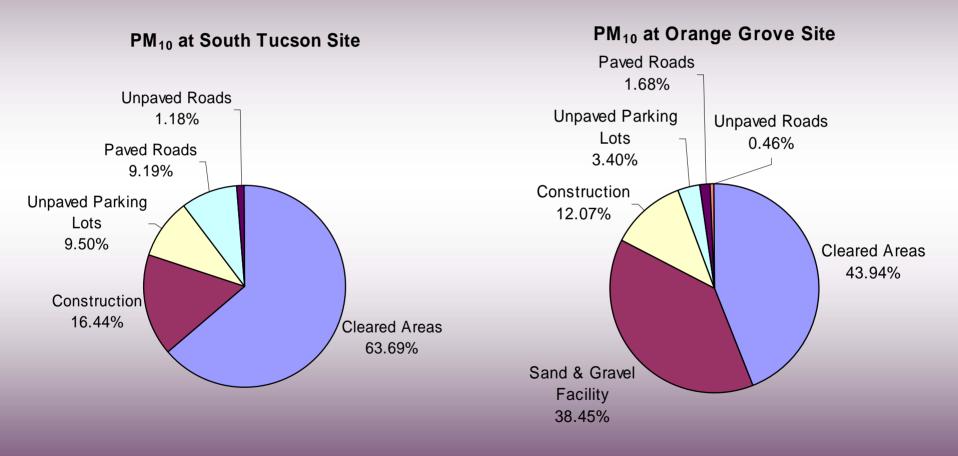
## Pima County, Arizona Greater Tucson Area

Pima County violated national air quality health standards for airborne dust (Particulate Matter, fugitive dust) in 1999 due to high winds and drought

Non-Attainment vs. Natural Events Action Plan (NEAP)

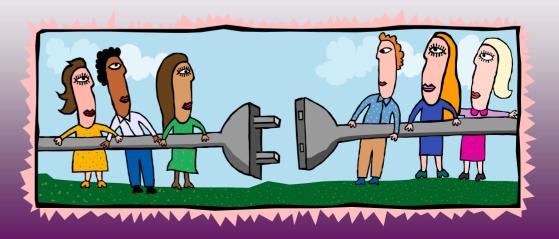


## **PM<sub>10</sub>** Emissions Inventory



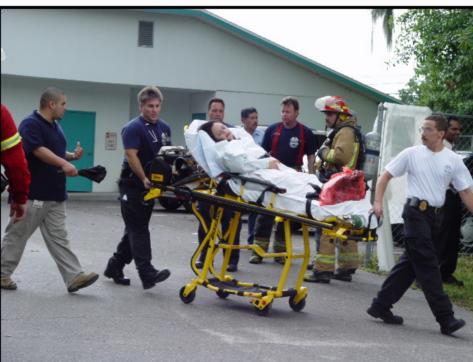
## **NEAP Process**

 NEAP stakeholders meetings 2000-2002
 Board of Supervisors approval Dec 2002
 Fee increase July 2003
 New inspectors, education program underway Sept 2003



### Why Educate About PM10?

Regulatory requirements IN HEALTH **EFFECTS** Breathing difficulties Heart attacks Premature death



"Nothing strengthens the judgment and quickens the conscience like individual responsibility."

-Elizabeth Cady Stanton

# **Target Markets**

#### Landowners

- Contractors/subcontractors/developers
- Off-road vehicle enthusiasts
- Landscape companies, apartment complexes
- Haul and street cleaning companies
- Government agencies
- Schools/youth
- General public





## **Materials Development**





## **Outreach Events**

### Direct Mail

 Off-road vehicle clubs, sales & service shops, tour companies

Landscape companies

- Hauling companies
- Street cleaning companies
- Government jurisdictions

### Presentations

- Construction
- Landscape maintenance
- Building, homeowner associations
- City, county, state government
- Community groups
  School/youth groups



### Booths at Community or Business Events

- Employee benefit's fairs at businesses
- Public Works events
- Community events like Earth Day, Clean Air Fair, sports & recreation events



## Media Involvement

#### News releases

- TV interviews
- Radio interviews
- Newspaper articles
- Newsletter articles
- TV & radio commercials



DEPARTMENT OF ENVIRONMENTAL QUALITY 150 W. Congress Street Tucson, Arizona **953D1** (520) **743**040 FAX (520) **822**09

#### NEWS RELEASE

For Immediate Release

Contact: Beth Ger(man) 7343043

Landscapers Required to Control Airborne Dust

Tucson, AGJUly 20, 2004)protect miummalth, Pima County Code Title 17 requires lands landscape maintenance businesses to take reasonable precautions to control excess pollution from becoming airborne. Many companies may not be awaimstihatoitims within health implications that increased levels of particulate matter in the air pose f neighbors. Methods to reduce airborne dust pollution include effective use of wat controls, ang assubstitute-growergads leaf blowers.

"Children, the elderly, and people with respiratory or heart disease are most at pollution, but healthy people working under dusty conditions can be confinenced as we Program Manager for PDEQ. "Particulate pollution can cause breathing difficulties lung function, heart attacks, and even premature death," she continued.

If soil is left undisturbed, it natural by binnistingentherestanting wind. When the soil disturbed, dust particles can become airborne more easily during high wind events up dust from disturbed areas long after the activity was completed.

Landscaping activations through the oduce excessive airborne dust include: digging or trend storage piles; tracking out dirt or mud onto roads; and using leaf blowers. "Optiinclude: applying water effectively throughogtworphathetabeks, sutilizisine cing or tree gravel pads or shoulders to keep dirt from tracking onto paved roads, and using r vacuum blowers, insteapbording alseaf blowers, "Gorman stated. "If leaf, blowers mus operators should use them appropriately, that is, to blow leaves, and not dirt or

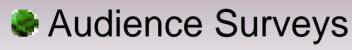
"We make every effort to ensure our employees are trained in the proper dust abat Charlie Allen, Senior Project RAhadgendscape. "Steps we take include properly wett construction material being processed, minimizing the use of blowers where possib operations, keeping all construction haul roads properly wateingd handlscomparted, a transporting trash and green waste," he continued.

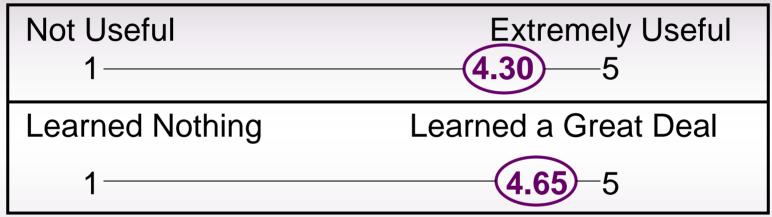
"The Groundskeeper strives to meet or exceed governmental requirements regarding Ramsze, Vice President of The Groundskeeper. "We do this were using instrands dto susing gamswered blowers whenever possible, equipping staff with new blowers every of the latest efficient models, and tarping or wetting loads to prevent blowing of

Additional information cambibyobthNing Pima County4&to540by visiting www.deg.pima. Current air quality information can be found at www.AirInfoNow.org . ###

Visit our webswww.adeq.pima.gov

# **Program Evaluation**





Research results: 42% public aware of PDEQ's efforts to reduce dust

No PM<sub>10</sub> exceedence since education program began

## Budget First Year Start-Up Costs

| Item                   | Expense   |
|------------------------|-----------|
| Advertising            | \$43,000  |
| Educational Literature | \$11,000  |
| Promotional Materials  | \$5,500   |
| Presentation Supplies  | \$4,500   |
| Personnel              | \$60,000  |
| Total                  | \$124,000 |

#### Resources



 Resources



Pima County Dept. of Environmental Quality 150 W. Congress St. Tucson, AZ 85701 520.740.3340 www.deq.pima.gov/air

www.deq.pima.gov/air/pcneap/Dust\_info.htm

## "You must be the change you wish to see in the world."

-Mohandes Karamchand Ghandi