

Air Monitoring

Ben Davis

Air Monitoring Manager



WALK MORE USE CFLS MORE CARPOOL MORE
BIKE MORE RAKE MORE TELECOMMUTE
MORE DRIVE HYBRIDS MORE CONSOLIDATE
ERRANDS MORE RIDE PUBLIC TRANSPORTATION
MORE USE ENERGY EFFICIENT APPLIANCES
MORE CARRY REUSABLE TOTE BAGS MORE
CONSIDER SOLAR MORE RUN COLD WATER
CYCLES MORE USE REUSABLE CONTAINERS
MORE CONSERVE ELECTRICITY MORE REDUCE
WOODBURNING MORE RECYCLE MORE USE
ELECTRIC LAWN AND GARDEN EQUIPMENT
MORE REFUEL AFTER DARK MORE RIDE
THE BUS MORE RIDE THE LIGHT RAIL MORE
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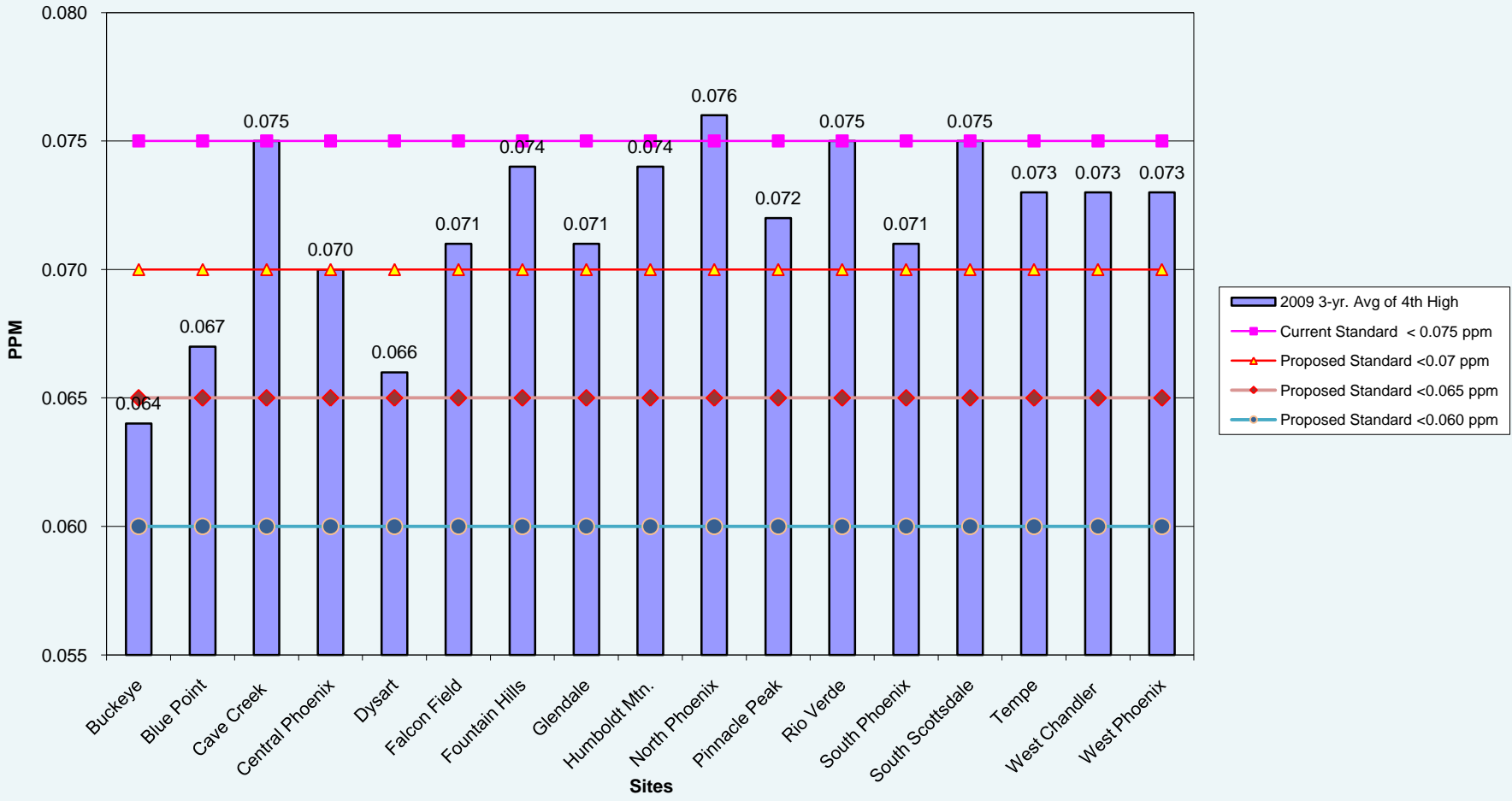
**CLEAN AIR
MAKE
MORE**



- 2009 Data Summary
- 2009 Network Plans
- Mobile Monitoring
- Questions



2009 Official Ozone Violations Compared to Current and Proposed NAAQS Standards



2009 PM-10 Violations

Site	2007		2008		2009		Rate of Expected Exceedances
	24-hr Max. ($\mu\text{g}/\text{m}^3$)	Expected Exceedances	24-hr Max. ($\mu\text{g}/\text{m}^3$)	Expected Exceedances	24-hr Max. ($\mu\text{g}/\text{m}^3$)	Expected Exceedances	
Buckeye	195*	2	223*	4	439	3	3.3
Central Phoenix	267*	1	133	0	153	0	0.3
Coyote Lakes	313#*	2#	187	2	57#	0	N/A#
Durango Complex	155*	1	248	2	277	3	2.0
Dysart	111	0	75	0	227	6.6	2.2
Glendale	92	0	80	0	196	6.6	2.2
Greenwood	124	0	133	0	229	1	0.3
Higley	230*	5.1	133	0	275	2.1	2.4
Mesa	110	0	71	0	87	0	0.0
North Phoenix	78	0	88	0	69	0	0.0
South Phoenix	171*	7.5	230	2	250	3	4.2
South Scottsdale	73	0	92	0	135	0	0.0
West Chandler	104	0	67	0	220	7.7	2.6
West 43rd Avenue	227*	6	279*	6	317	7	6.3
West Phoenix	124	0	119	0	210	1	0.3
Zuni Hills	N/A	N/A	N/A	N/A	27#	0#	N/A#

• ■ Indicates violation of the standard.

Indicates <75% data available.

* Indicates Exceptional Events occurred at this site. The listed value is the highest official AQS reading at time of publication.

Lead Monitoring

- In conjunction with the recent strengthening of the lead NAAQS, EPA is improving the existing national lead monitoring network by requiring monitors to be placed in areas with sources such as industrial facilities that emit one ton or more per year (tpy) of lead and in urban areas with more than 500,000 people.



Lead Monitoring continued

- The department will operate a minimum of two lead monitors within the county
 - Deer Valley Airport - federal emissions inventories indicate this area emits more than one ton per year of lead.
 - currently looking for a suitable site near this airport.
 - source oriented monitor needs to be operating by Jan. 1, 2010
 - start date is July 1, 2010
 - West Phoenix monitoring site - population coverage requirement
 - not excepted to be operating until 2011



Network Assessment

- A five year evaluation of the entire Maricopa County Network
- Due July 1, 2010



Mobile Monitoring Program

- Case Studies
 - participation in studies to determine the effectiveness of current rules and regulations
 - will aid in quantifying the need for new rules in Maricopa County
- Complaint Investigations
 - investigation of specific areas based on past and present air pollution complaint and concerns at the discretion of the air pollution control officer
- Educational outreach
 - schools, environmental associations and inter-governmental programs



Truck

- All Criteria pollutants and Meteorology
- 2-3 days self powered (more if needed) or requires electricity for longer monitoring period
- 24/7 video camera
- **GCMS**
- Wireless communication

Trailer

- All Criteria pollutants and Meteorology
- Requires electricity
- 24/7 video camera
- Wireless communication

Portable Particulate Monitors TEOM (2-3)

- Continuous PM-10, 2.5
- Requires electricity
- Wireless communication



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Maricopa County
Air Quality Department

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