



NEW!!! CLICK HERE FOR UPDATED 2008 OZONE SEASON STATS NEW!!!

AIR QUALITY FORECAST FOR SATURDAY, SEPTEMBER 6, 2008

This report is updated by 1:00 p.m. Sunday thru Friday and is valid
for areas within and bordering Maricopa County in Arizona

FORECAST DATE	YESTERDAY <u>THU 09/04/2008</u>	TODAY <u>FRI 09/05/2008</u>	TOMORROW <u>SAT 09/06/2008</u>	EXTENDED <u>SUN 09/07/2008</u>
NOTICES (*SEE BELOW FOR DETAILS)	OZONE HEALTH WATCH	OZONE HEALTH WATCH		
AIR POLLUTANT	Highest AQI Reading/Site (Preliminary data only)			
O3*	77 NORTH PHOENIX	100 MODERATE	87 MODERATE	87 MODERATE
CO*	10 PHOENIX SUPERSITE	9 GOOD	9 GOOD	11 GOOD
PM-10*	52 COYOTE LAKES	35 GOOD	37 GOOD	40 GOOD
PM-2.5*	36 DURANGO	36 GOOD	35 GOOD	37 GOOD

* O3 = Ozone CO = Carbon Monoxide PM-10 = Particles 10 microns & smaller PM-2.5 = Particles smaller than 2.5 microns

**"Ozone Health Watch" means that the highest concentration of OZONE may approach the federal health standard.

"PM-10 or PM-2.5 Health Watch" means that the highest concentration of PM-10 or PM-2.5 may approach the federal health standard.

"High Pollution Advisory" means that the highest concentration of OZONE, PM-10, or PM-2.5 may exceed the federal health standard.

"DUST" means that short periods of high PM-10 concentrations caused by outflow from thunderstorms are possible.

Health message for Friday, September 5: Unusually Sensitive People should consider limiting prolonged exertion outdoors.

Health message for Saturday, September 6: Unusually Sensitive People should consider limiting prolonged exertion outdoors.

Synopsis and Discussion

An Ozone Health Watch remains in effect for Friday, September 5, 2008

There's not much change expected in the weather the next several days. It will be a gorgeous weekend with sunny skies, light winds and no rain. With afternoon desert temperatures topping out at 108 on Saturday and 107 on Sunday, it should be a great weekend to spend by the pool if you can. Again, models are bringing some moisture back to the region by early next week, dropping those temperatures a bit. I don't think we will see any rain next week as a result of the moisture, but that could change.

Air quality-wise, Ozone has been steadily increasing the past several day across the forecast area, prompting two days in a row of Health Watches. We still haven't seen nearly as high of concentrations as the NOAA model has been suggesting. As mentioned yesterday, there's not doubt that ozone and precursors are being imported into Arizona from southern California as evident by the Yuma increase yesterday. We're just not seeing enough to warrant a High Pollution Advisory. Thus, we will allow the **Ozone Health Watch to expire** at the end of the day on Friday with no extension or further health statements at this time. Particulates still remain mostly in the "Good" range with the occasional isolated one-hour spike that skews the daily average for one or two of the sites. Everything will be revisited on Sunday. Until then, have a great weekend! -J.Paul

MONITORING SITE MAPS: STATIC MAP - <http://www.azdeq.gov/environ/air/monitoring/images/map.jpg>

INTERACTIVE MAPS - <http://aqwww.maricopa.gov/AirMonitoring/SitePollutionMap.aspx>
<http://www.airnow.gov/>



POLLUTION MONITOR READINGS FOR THURSDAY, SEPTEMBER 4, 2008



O3 (OZONE)

For facts on new 8-hr ozone standard go to: http://www.epa.gov/air/ozonepollution/pdfs/2008_03_aqi_changes.pdf

For maps go to: <http://www.airnow.gov/index.cfm?action=airnow.currentconditions>

SITE NAME	MAX 8-HR VALUE (PPB)	MAX AQI	AQI COLOR CODE
Alamo Lake (La Paz County)	52	44	Green
Apache Junction (Pinal County)	62	58	Yellow
Blue Point	53	45	Green
Buckeye	57	48	Green
Casa Grande (Pinal County)	57	48	Green
Cave Creek	65	67	Yellow
Central Phoenix	64	64	Yellow
Combs School (Pinal County)	56	47	Green
Dysart	51	43	Green
Falcon Field	63	61	Yellow
Fountain Hills	62	58	Yellow
Glendale	65	67	Yellow
Humboldt Mountain	63	61	Yellow
Maricopa (Pinal County)	54	46	Green
North Phoenix	66	71	Yellow
Phoenix Supersite	66	71	Yellow
Pinal Air Park (Pinal County)	55	47	Green
Pinnacle Peak	65	67	Yellow
Queen Valley (Pinal County)	59	50	Green
Rio Verde	46	39	Green
South Phoenix	66	71	Yellow
South Scottsdale	68	77	Yellow
Tempe	52	44	Green
Tonto Nat'l Mon. (Gila County)	56	47	Green

West Chandler	63	61	
West Phoenix	67	74	
Yuma (Yuma County)	63	61	

CO (CARBON MONOXIDE)

SITE NAME	MAX 8-HR VALUE (PPM)	MAX AQI	AQI COLOR CODE
Central Phoenix	0.5	6	
Greenwood	0.6	7	
Phoenix Supersite	0.9	10	
West Indian School	0.6	7	
West Phoenix	0.6	7	

PM-10 (PARTICLES)

SITE NAME	MAX 24-HR VALUE (ug/m3)	MAX AQI	AQI COLOR CODE
Buckeye	33.6	31	
Central Phoenix	34.5	31	
Combs School (Pinal County)	63.0	54	
Coyote Lakes	56.5	52	HIGHEST LOCALLY
Durango	41.1	37	
Greenwood	41.9	38	
Higley	33.7	31	
Maricopa (Pinal County)	39.4	36	
Phoenix Supersite	26.1	24	
South Phoenix	37.0	34	
West Forty Third	46.1	42	
West Phoenix	33.5	31	

PM-2.5 (PARTICLES)

(Some data derived from light-scattering equipment)

For maps go to: <http://www.airnow.gov/>

SITE NAME	MAX 24-HR VALUE (ug/m3)	MAX AQI	AQI COLOR CODE
Durango	11.0	36	
Dysart	6.8	22	
Estrella Mountain Park	4.8	16	
Phoenix Supersite	8.7	28	
Vehicle Emissions Lab	6.2	20	
West Phoenix	9.3	30	

LOCAL AIR POLLUTANTS IN DETAIL



O3 (OZONE):

Description – This is a secondary pollutant that is formed by the reaction of other primary pollutants (precursors) such as VOCs (volatile organic compounds) and NOx (Nitrogen Oxides) in the presence of heat and sunlight.

Sources – VOCs are emitted from motor vehicles, chemical plants, refineries, factories, and other industrial sources. NOx is emitted from motor vehicles, power plants, and other sources of combustion.

Potential health impacts – Exposure to ozone can make people more susceptible to respiratory infection, result in lung inflammation, and aggravate pre-existing respiratory diseases such as asthma. Other effects include decrease in lung function, chest pain, and cough.

Unit of measurement – Parts per billion (ppb).

Averaging interval – Highest eight-hour period within a 24-hour period (midnight to midnight).

Reduction tips – Curtail daytime driving, refuel cars and use gasoline-powered equipment as late in the day as possible.

CO (CARBON MONOXIDE):

Description – A colorless, odorless, poisonous gas formed when carbon in fuels is not burned completely.

Sources – In cities, as much as 95 percent of all CO emissions emanate from automobile exhaust. Other sources include industrial processes, non-transportation fuel combustion, and natural sources such as wildfires. Peak concentrations occur in colder winter months.

Potential health impacts – Reduces oxygen delivery to the body's organs and tissues. The health threat is most serious for those who suffer from cardiovascular disease.

Unit of measurement – Parts per million (ppm).

Averaging interval – Highest eight-hour period within a 24-hour period (midnight to midnight)

Reduction tips – Keep motor vehicle tuned properly and minimize nighttime driving.

PM-10 & PM-2.5 (PARTICLES):

Description – The term “particulate matter” (PM) includes both solid particles and liquid droplets found in air. Many manmade and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM. Particles less than 10 micrometers in diameter tend to pose the greatest health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter are referred to as “fine” particles and are responsible for many visibility degradations such as the “Valley Brown Cloud” (see <http://www.phoenixvis.net/>). Particles with diameters between 2.5 and 10 micrometers are referred to as “coarse”.

Sources – Fine = All types of combustion (motor vehicles, power plants, wood burning, etc.) and some industrial processes. Coarse = crushing or grinding operations and dust from paved or unpaved roads.

Potential health impacts – PM can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases, such as asthma and chronic bronchitis.

Units of measurement – Micrograms per cubic meter (ug/m³)

Averaging interval – 24 hours (midnight to midnight).

Reduction tips – Stabilize loose soils, slow down on dirt roads, carpool, and use public transit.

{Updated 08/14/2007}