ADEQ
Arizona Department of Environmental Quality

AQI AIR QUALITY INDEX

200	VERY UNHEALTHY (201-300)
150	UNHEALTHY (151-200)
100	UNHEALTHY FOR SENSITIVE GROUPS (101-150)
50	MODERATE (51-100)
	GOOD (0-50)

AIR QUALITY FORECAST FOR Tuesday, July 7, 2015

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 NOTICES (*SEE BELOW FOR DETAILS) AIR POLLUTANT	YESTERDAY Sun 07/05/2015 Highest AQI Reading/Site (*Preliminary data only*)	TODAY Mon 07/06/2015	TOMORROW Tue 07/07/2015	EXTENDED Wed 07/08/2015
O3*	41 Pinnacle Peak	77 *Moderate*	51 *Moderate*	54 *Moderate*
CO*	5 Greenwood	7 *Good*	6 *Good*	7 *Good*
PM-10*	34 West 43rd	45 *Good*	32 *Good*	33 *Good*
PM-2.5*	25 North Phoenix	32 *Good*	22 *Good*	23 *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 Statements	
Monday, 07/06/2015	**Unusually sensitive people should consider reducing prolonged or heavy exertion outdoors.**
Tuesday, 07/07/2015	**Unusually sensitive people should consider reducing prolonged or heavy exertion outdoors.**

SYNOPSIS AND DISCUSSION

Last year saw the first ever exceedance of the PM-2.5 health standard in Phoenix due to commercial fireworks. This year saw levels considerably lower, though there were a few spikes in concentrations between 9 and 11 pm. Since then, air quality levels have improved immensely with all pollutants remaining in the Good range on Sunday.

Monday morning has already busted the forecast models. No solution predicted the beautiful thunderstorms that rolled across the Valley between 5 and 6 am. Showers were brief but heavy in some spots. Nearly an inch was recorded at 103rd Ave and Glendale. Over a half an inch was collected at 16th Street and Missouri. All other locations were generally less than a quarter of an inch. Still, the downpours were enough to produce brief street flooding.

Skies have cleared and the Valley is headed for a high of 104°F. The upper-level weather pattern has shifted out of the southwest. This will keep most of the thunderstorm development over the higher terrain north and east of the Valley the next several days. Of course, since the models were a bust this morning, we can't rule out some surprise storms later this afternoon. Look for ozone to be in the lower Moderate range this week. PM-10 concentrations should remain in the Good range.

Check back tomorrow for the latest. Until then, have a good day! -J.Paul

MONITORING SITE MAPS	
INTERACTIVE MAPS	http://alert.fcd.maricopa.gov/alert/Google/v3/air.html http://www.airnow.gov/

POLLUTION MONITOR READINGS FOR Sunday, July 5, 2015

O3 (OZONE)

SITE NAME	MAX 8-HR VALUE (PPB)	MAX AQI	AQI COLOR CODE
Alamo Lake	32	27	
Apache Junction	41	35	
Blue Point	44	37	
Buckeye	39	33	
Casa Grande	41	35	
Cave Creek	41	35	
Central Phoenix	43	36	
Dysart	41	35	
Falcon Field	44	37	
Fountain Hills	45	38	
Glendale	42	35	
Humboldt Mountain	43	36	
Phoenix Supersite	45	38	
Mesa	44	37	
North Phoenix	47	40	
Pinal Air Park	41	35	
Pinnacle Peak	48	41	
Queen Valley	NOT AVBL	NOT AVBL	NOT AVBL
Rio Verde	39	33	
South Phoenix	42	35	

South Scottsdale	43	36	
Tempe	NOT AVBL	NOT AVBL	NOT AVBL
Tonto Nat'l Mon.	45	38	
West Chandler	40	34	
West Phoenix	42	35	
Yuma	34	29	

CO (CARBON MONOXIDE)

SITE NAME	MAX 8-HR VALUE (PPM)	MAX AQI	AQI COLOR CODE
Central Phoenix	0.2	2	
Greenwood	0.4	5	
Phoenix Supersite	NOT AVBL	NOT AVBL	NOT AVBL
West Phoenix	0.1	1	

PM-10 (PARTICLES)

SITE NAME	MAX 24-HR VALUE (µg/m3)	MAX AQI	AQI COLOR CODE
Buckeye	23.5	22	
Central Phoenix	30.4	28	
Combs School (Pinal County)	20.8	19	
Durango	23.9	22	
Dysart	19.1	18	
Glendale	19.8	18	
Greenwood	31.5	29	
Higley	NOT AVBL	NOT AVBL	NOT AVBL
Maricopa (Pinal County)	38.5	36	
Phoenix Supersite	29.1	27	
Mesa	10.3	10	
North Phoenix	20.9	19	
South Phoenix	27.3	25	
South Scottsdale	18.1	17	
Tempe	NOT AVBL	NOT AVBL	NOT AVBL
West Chandler	20.0	19	
West Forty Third	37.1	34	
West Phoenix	21.4	20	
Zuni Hills	23.2	21	

PM-2.5 (PARTICLES)

SITE NAME	MAX 24-HR VALUE (µg/m3)	MAX AQI	AQI COLOR CODE
Diablo	4.2	18	
Durango	4.4	18	
Glendale	5.3	22	
Phoenix Supersite	3.3	14	
Mesa	4.2	18	
North Phoenix	6.0	25	
South Phoenix	5.7	24	
Tempe	NOT AVBL	NOT AVBL	NOT AVBL
West Phoenix	5.7	24	

DESCRIPTION OF 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 12/19/2011**}