



**MONTHLY AIR QUALITY REPORT FOR**  
**OCTOBER 2008**

AOI COLOR SCALE

<b>GOOD</b>	<b>MODERATE</b>	<b>UNHEALTHY FOR SENSITIVE GROUPS</b>	<b>UNHEALTHY</b>
<b>0-50</b>	<b>51-100</b>	<b>101-150</b>	<b>151-200</b>

Calendar of maximum AQI values & their corresponding color for October 2008\*

\*Preliminary data

SAMPLE POLLUTANT REPORTING BOX

<b>1</b> (day of month)	<b>O3</b>	<b>CO</b>
	<b>PM10</b>	<b>PM2.5</b>

SUN			MON			TUES			WED			THU			FRI			SAT		
						1	74	14	2	64	15	3	43	10	4	28	11			
							56	59		66	58		62	39		53	26			
5	42	08	6	45	10	7	44	09	8	48	14	9	47	16	10	46	05	11	47	04
	56	40		54	37		65	55		65	49		57	45		56	24		104	45
12	40	05	13	42	09	14	48	07	15	51	13	16	47	18	17	46	22	18	47	19
	32	15		42	25		51	29		62	49		68	51		69	55		55	44
19	36	26	20	31	13	21	39	11	22	42	14	23	42	14	24	42	19	25	47	27
	38	52		62	39		67	38		107	50		64	50		67	57		59	52
26	64	27	27	42	18	28	43	18	29	46	22	30	47	27	31	45	23			
	58	56		85	66		62	54		64	58		74	66		73	59			

**Calendar of High Pollution Advisories and Health Watches issued during October 2008**

SUN			MON			TUE			WED			THU			FRI			SAT		
									1			2			3			4		
5			6			7			8			9			10			11		
12			13			14			15			16			17			18		
19			20			21			22			23			24			25		
26			27			28			29			30			31					

**LEGEND**

**HIGH POLLUTION ADVISORIES**

- A** = PM-10 High Pollution Advisory
- B** = PM-2.5 High Pollution Advisory
- C** = Ozone High Pollution Advisory

**HEALTH WATCHES**

- D** = PM-10 Health Watch
- E** = PM-2.5 Health Watch
- F** = Ozone Health Watch

**Calendar of Meteorological Conditions observed in Metro Phoenix during October 2008**

SUN			MON			TUE			WED			THU			FRI			SAT		
									1			2			3			4		
5			6			7			8			9			10			11		
12			13			14			15			16			17			18		
19			20			21			22			23			24			25		
26			27			28			29			30			31					

**LEGEND**

**ELECTROMETEORS**

- A** = Thunderstorm

**HYDROMETEORS**

- B** = Rain/Drizzle/Hail/Snow
- C** = Fog

**LITHOMETEORS**

- D** = Blowing Dust
- E** = Haze (vsby <10SM)
- F** = Smoke

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**Exceedance days during OCT 2008-**

<u>Total=</u>	<u>Date</u>	<u>Max AQI</u>	<u>Pollutant</u>	<u>Site/s</u>
2	10/11	104	PM-10	South Phoenix
	10/22	107	PM-10	Coyote Lakes

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**Health Watches issued during OCT 2008-**

<u>Total=</u>	<u>Date</u>	<u>Max AQI</u>	<u>Pollutant</u>	<u>Site/s</u>
3	10/04	53	PM-10	West Forty Third
	10/10	56	PM-10	Higley
	10/27	85	PM-10	Buckeye West Forty Third

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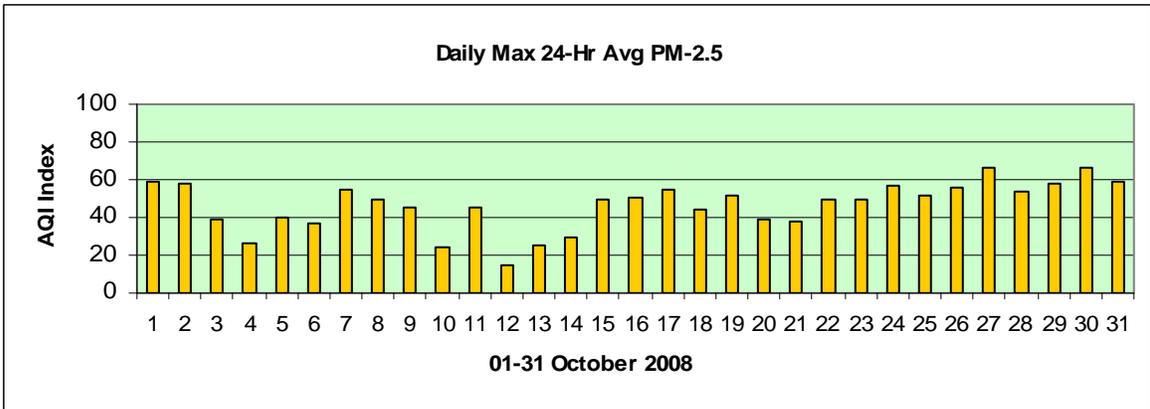
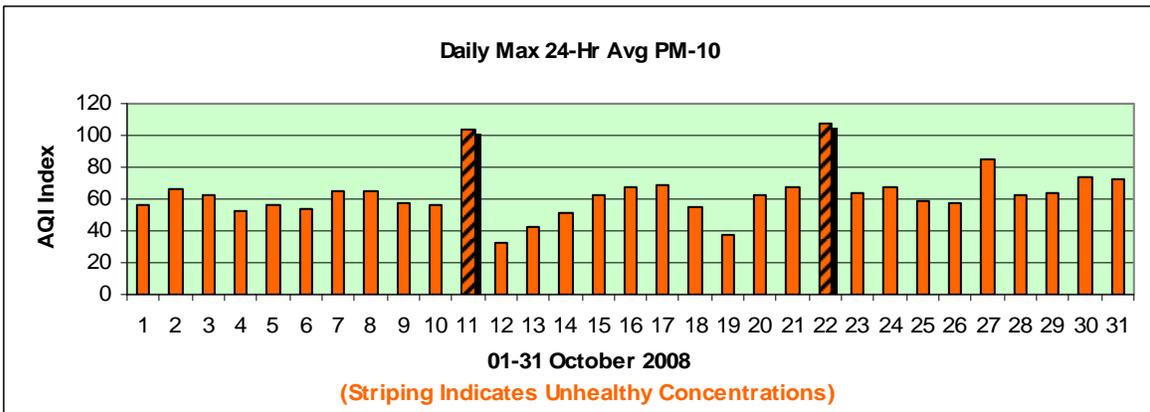
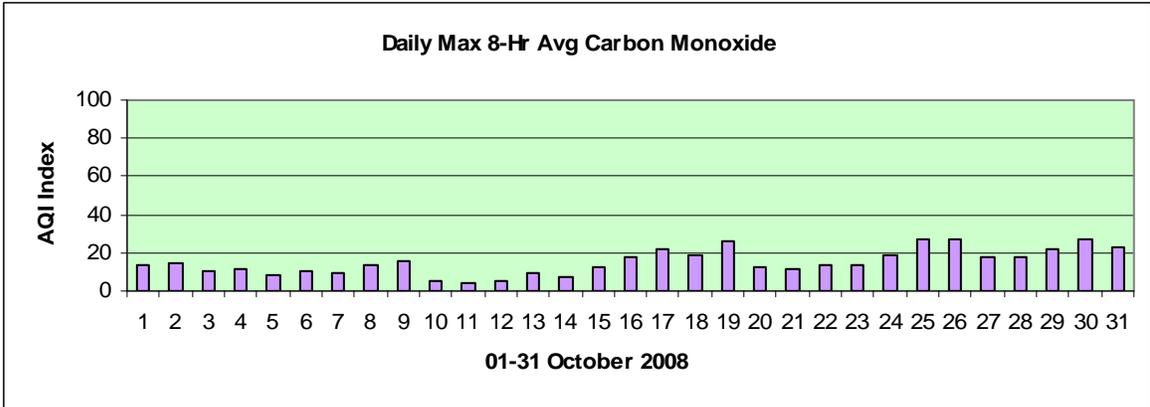
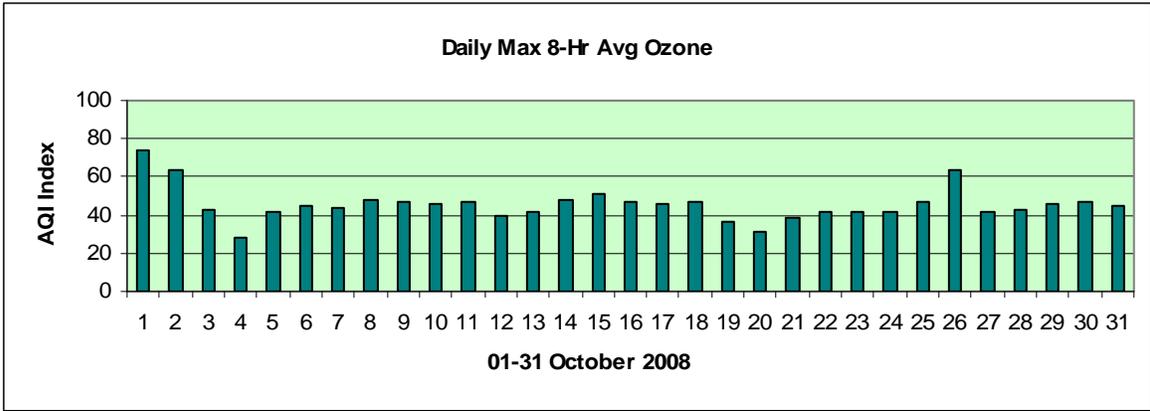
**High Pollution Advisories issued during OCT 2008-**

<u>Total=</u>	<u>Date</u>	<u>Max AQI</u>	<u>Pollutant</u>	<u>Site/s</u>
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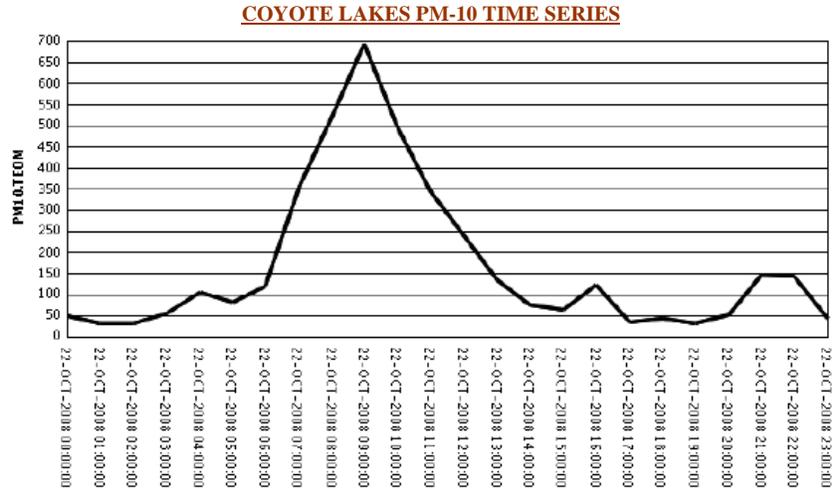
<b><u>Concentration Recap:</u></b>	Days in the <b>Good</b> category:	2
	Days in the <b>Moderate</b> category:	27
	Days in the <b>Unhealthy for Sensitive Groups</b> category:	2
	Days in the <b>Unhealthy</b> category:	<u>0</u>
	Total Forecast Days:	31

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The second PM-10 exceedance event occurred on October 22 and was unusual in that the directional wind component (from the N-E) was virtually opposite of that on October 11 (from the S-NW). This was due to a strong surface pressure and low-level contour gradient associated with a “back-door” cold front that was situated over the AZ/NM border. This too was a regional event in that thick dust that was transported over most of southern Arizona during the pre-dawn period arrived over the Phoenix metro area around daybreak. Even though local winds at 7:00 a.m. were mostly light, suspended dust aloft became denser with time. Winds that then gusted between 20 and 32 mph between 8:00 a.m. and 10:00 p.m. managed to raise additional dust – mainly over the northwest Valley – where the Coyotes Lakes monitoring site is located. The time series from that location is as follows:



Current long-range forecasts call for a continuation of the local dry spell; if so, this will increase the potential for additional wind-related PM-10 exceedances as well as the onset of unhealthy stagnation events. -Reith