



**MONTHLY AIR QUALITY REPORT FOR  
FEBRUARY 2008**

AOI COLOR SCALE

<b>GOOD</b>  0-50	<b>MODERATE</b>  51-100	<b>UNHEALTHY FOR SENSITIVE GROUPS</b>  101-150	<b>UNHEALTHY</b>  151-200
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Calendar of maximum AQI values & their corresponding color for February 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		TUE		WED		THU		FRI		SAT								
										1	27	18	2	33	24					
											48	58		35	70					
3	29	19	4	29	09	5	26	18	6	26	19	7	27	22	8	27	20	9	30	25
	44	52		20	18		27	48		36	56		49	64		55	80		42	83
	31	33	11	30	18	12	33	25	13	32	22	14	34	10	15	33	16	16	27	15
	36	75		64	79		57	74		61	60		69	32		20	31		16	48
	34	15	18	31	15	19	33	17	20	34	16	21	35	13	22	32	14	23	38	13
	21	74		44	75		52	79		56	49		29	30		44	32		22	44
24	35	15	25	34	17	26	37	18	27	40	18	28	38	19	29	42	20			
	28	45		40	43		37	34		56	40		58	55		59	45			

**Calendar of High Pollution Advisories and Health Watches issued during February 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		E	20			21			22						23					
24			25			26			27			28			29											

**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 February 2008**

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

**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 FEB 2008-**

Total= 0      Date      Max AQI      Pollutant      Site/s

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**Health Watches issued during FEB 2008-**

Total= 4      Date      Max AQI      Pollutant      Site/s  
02/19      79      PM-2.5      Durango

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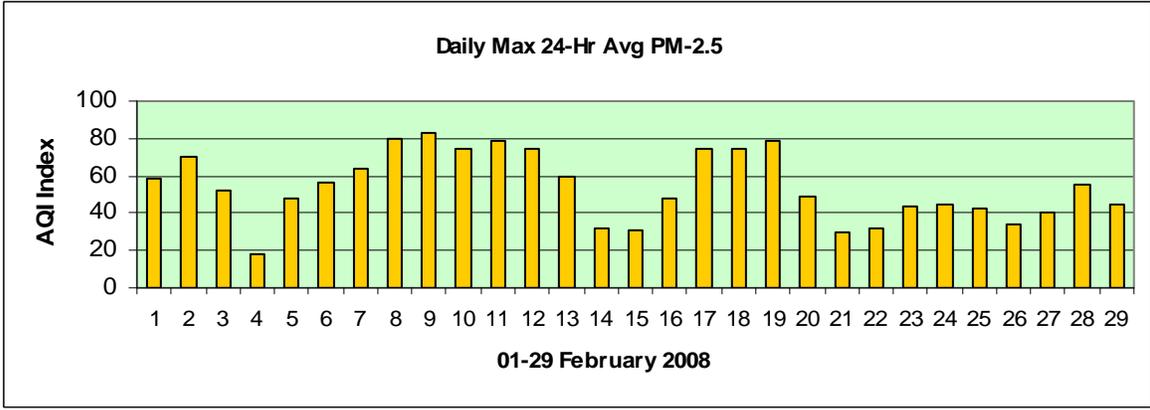
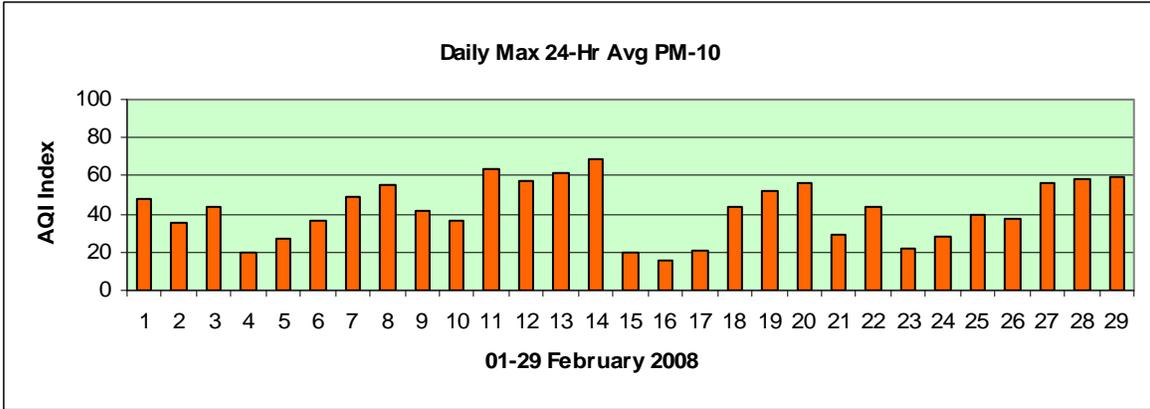
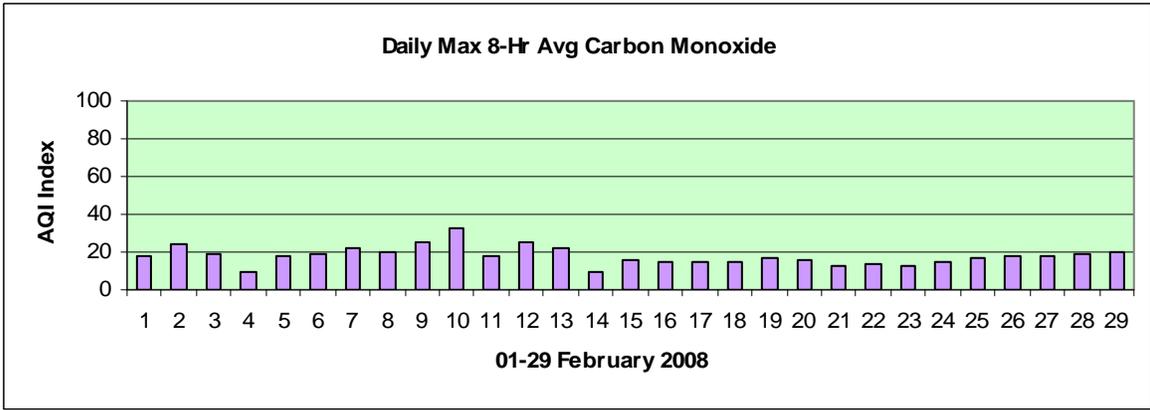
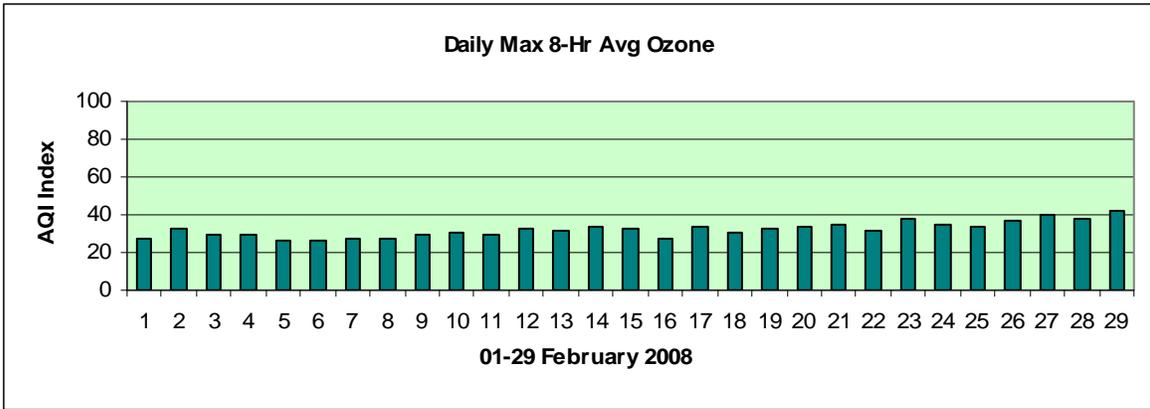
**High Pollution Advisories issued during FEB 2008-**

Total= 0      Date      Max AQI      Pollutant      Site/s

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**Concentration Recap:**      Days in the **Good** category:      10  
Days in the **Moderate** category:      19  
Days in the **Unhealthy for Sensitive Groups** category:      0  
Days in the **Unhealthy** category:      0  
Total Forecast Days:      29

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Narrative:

February 2008 was another relative “down” month for air pollutant concentrations in the Phoenix metropolitan area. Highest levels of ozone and carbon monoxide remained in the good range of the Air Quality Index (AQI) thru the month while those of PM-10 (coarse particles) were in the good to low-moderate range of the AQI. The main reason for such low PM-10 readings was the continuation of an active mid-latitude storm track that managed to steer rain-producing upper level troughs and surface cold fronts over the local forecast area at critical intervals. The episodes of measurable precipitation that occurred on the 4th, 15th, 20th, and 22nd of the month helped to keep local soil stabilization largely intact – an extremely important factor in keeping dust particles from becoming airborne. This was all the more critical in that strong morning radiation inversions (5 deg C or greater) occurred on eight days and poor to marginal dispersion characteristics were present during 12 days; mixing heights of <4K’ were calculated on nearly half of the days. Since rainfall has little or no long term impact on PM-2.5 concentrations, there were still a number of days when fine particle concentrations reached uncomfortably close to unhealthy levels – the highest was an 83 AQI on the 9th. That day was characterized by moderate to thick haze, mostly light or calm winds, and elevated relative humidity levels. -Reith