MONTHLY 8-HR OZONE FORECAST PROGRAM REPORT FOR JUNE 2003

AQI COLOR SCALE (ppb)

GOOD	MODERATE	UNHEALTHY FOR SENSITIVE GROUPS	UNHEALTHY
0-64	65-84	85-104	105-124

Calendar of maximum 8-Hr values for June 2003 (ppb)

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1 66	2 70	3 67	4 64	5 62	6 57	7 70
8 67	9 63	10 45	11 63	12 62	13 72	14 71
15 67	16 68	17 67	18 65	19 60	20 61	21 63
22 75	23 64	24 69	25 75	26 77	27 67	28 76
29 80	30 72					

Exceedance days in June- **Total= 0** **Date** **Max ppb/AQI** **Site/s**

Total number of exceedance days since April 1: 4
Total number of exceedance sites since April 1: 13

Health Watches issued in June: **Total= 3**
(forecast max value 80-84 ppb)

Date	Max ppb/AQI	Site/s
6/15	67/56	West Chandler
6/29	80/90	Blue Point
		Queen Valley
6/30	72/69	Blue Point
		Queen Valley

Health Watches issued since April 1: **Total= 10**

Health Warnings issued in June: **Total= 0**
(forecast max value 85+ppb)

Health Warnings issued since April 1: **Total= 5**

Concentration Recap:

Days in the Good category:	11
Days in the Moderate category:	19
Days in the Unhealthy for Sensitive Groups category:	0
Days in the Unhealthy category:	0
Total Forecast Days:	30

Maximum 8-Hr value:	Date	Hour	Site	ppb/AQI	DOW
	6/29	1100	Blue Point	80/90	Sun
	6/29	1200	Queen Valley	80/90	Sun

Maximum 1-Hr value:	Date	Hour	Site	ppb/AQI	DOW
	6/30	1500	Blue Point	100/77	Mon

Average daily max 8-Hr concentration (ppb):	66.8
Deviation from 1996-2002 average (ppb):	-7.0

June Climatology: (1996-2002)

Average number of 8-Hr exceedances:	7
Maximum number of 8-Hr exceedances:	9 in 1998, 2002
Minimum number of 8-Hr exceedances:	1 in 1999, 2000
Average daily max 8-Hr concentration (ppb):	73.8
Record high max 8-Hr concentration (ppb):	102 on the 1st, 1996
Record low max 8-Hr concentration (ppb):	49 on the 25th, 2001

Forecast Verification:

Days maximum concentration was over-forecast:	24
Days maximum concentration was under-forecast:	4
June forecast accuracy (ppb):	6.8
June forecast bias (ppb):	+5.4

Narrative:

Preliminary data indicates that no exceedances of the 8-Hr average ozone standard occurred within the local forecast area during June 2003 despite being warmer than average (+3 deg F) and nearly devoid of cloud cover (99 percent of possible sunshine). In fact, the average daily maximum concentration of just below 67ppb (parts per billion) was the lowest in the past eight years and far below the next lowest of 70ppb in 2000. The 45ppb reading on June 10 was the lowest recorded for the month and the 11 days with values in the "good" category was the most for the month during the same period. The weather pattern no doubt played a major role in these events. The long-wave trough position was over the western U.S. for many days and a series of short-wave troughs were in the vicinity from time to time as they migrated eastward. This time of year these features mean wind in a big way; on every afternoon but two south to west afternoon wind gusts exceeded 20 mph at Sky Harbor Airport. (In the vast majority of cases these winds usher in air that has lower ozone concentrations than the air it is replacing). Even wind-driven import of high ozone levels from Southern California did not impact the area significantly, although it does appear to have been instrumental in an exceedance in Yuma on June 28.

8-Hr Ozone Maximum Concentrations
ADEQ Forecast Area