Ozone Season Summary

MWAQC

July 27, 2005

Comparison of Ozone Standards

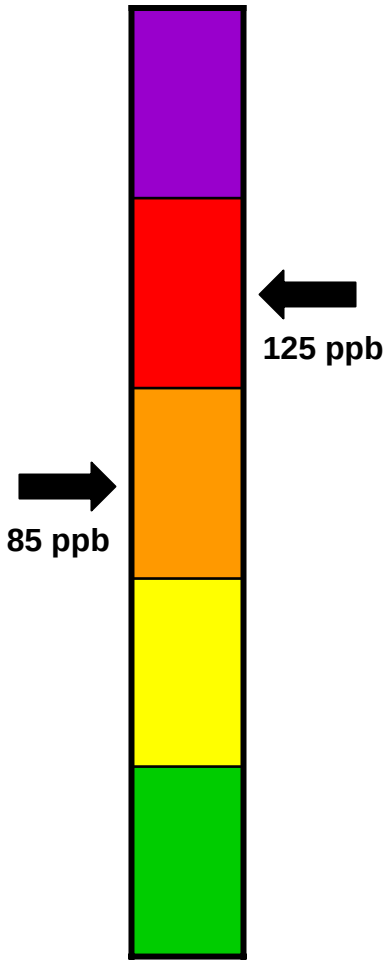
8-Hr Ozone Standard

Protects against chronic exposure

Lower limit over a longer period of time

Exceedance known at end of day

Designated in June, 2004



1-Hr Ozone Standard

Protects against short-term exposure

Higher limit over a shorter period of time

Exceedance known at end of hour

Revoked on June 15, 2005

8-Hour Ozone Summary

Daily Peak 8-Hour Ozone Concentration (ppb)

Washington Area-2005

MAY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
55	51	40	53	58	51	69
8	9	10	11	12	13	14
64	60	67	67	47	46	59
15	16	17	18	19	20	21
50	44	47	62	58	54	49
22	23	24	25	26	27	28
52	41	29	37	53	65	53
29	30	31				
53	58	63				

JUNE

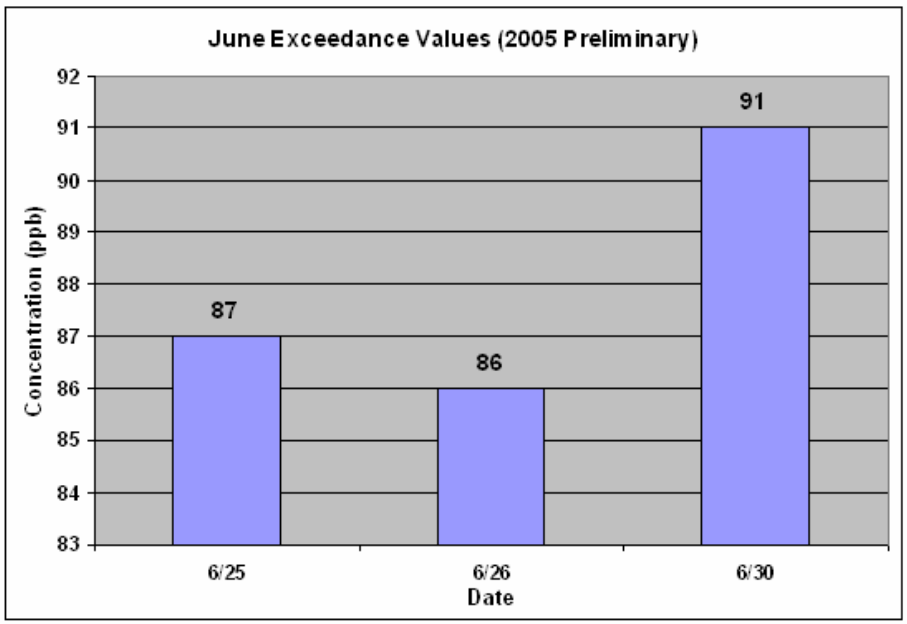
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
			78	45	32	49
5	6	7	8	9	10	11
81	75	80	83	63	41	52
12	13	14	15	16	17	18
48	41	75	66	60	53	69
19	20	21	22	23	24	25
49	48	78	73	70	81	87
26	27	28	29	30		
96	43	67	52	91		

JULY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					86	69
3	4	5	6	7	8	9
78	68	66	70	48	47	75
10	11	12	13	14	15	16
75	81	100	52	81	50	58
17	18	19	20	21	22	23
58	69	54	88	93	94	64
24	25	26	27	28	29	30
64	80					
31						

June Ozone Exceedences

2005 (Prelim data)			
Date	Monitor(s)	Concentration (ppbv)	Hour (LST)
6/25/05	Rockville	87	10 & 11
6/26/05	Frederick Cnty	86	11
6/30/05	Mt. Vernon	91	11 & 12

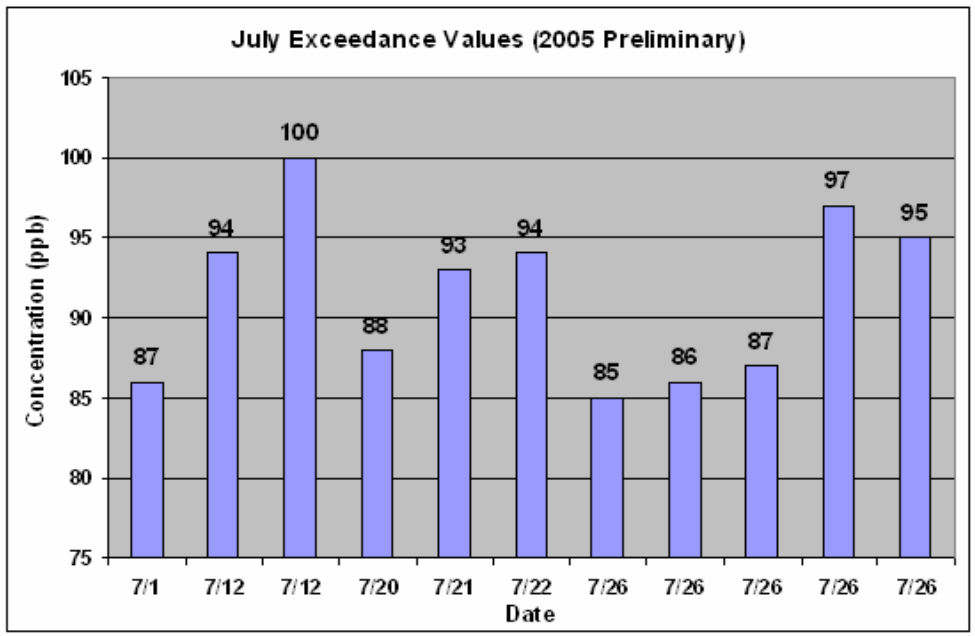


- June 30, 2005:
- 3 exceed. in June
- highest 8-hour ozone in June at Mt. Vernon
- Hours occurred: varied between 10-12 LST

July Ozone Exceedences

- 6 exceed. until July 26
- 3 Mt. Vernon exceeds
- Highest 8-hour ozone at Rockville so far (100 ppb)
- Hours occurred: from 9 to 12 LST
- Most exceedances after July 20th

2005 (Prelim data)			
Date	Monitor(s)	Concentration (ppbv)	Hour (LST)
7/1	Mt. Vernon	86	11
7/12	Beltsville	94	10
7/12	Rockville	100	10
7/20	S. Maryland	88	9
7/21	PG Equestrian	93	10
7/22	Mt. Vernon	94	10 & 11
7/26	Annandale	85	11 & 12
7/26	Aurora Hills	86	11
7/26	Mt. Vernon	87	10
7/26	PG Equestrian	97	11
7/26	S. Maryland	95	9



1-Hour Ozone Summary

Daily Peak One-Hour Ozone Concentration (ppb)

Washington Area-2005

MAY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
58	55	44	58	61	54	75
8	9	10	11	12	13	14
68	66	76	79	58	50	70
15	16	17	18	19	20	21
56	47	53	68	61	59	55
22	23	24	25	26	27	28
56	48	37	46	57	71	63
29	30	31				
56	67	67				

JUNE

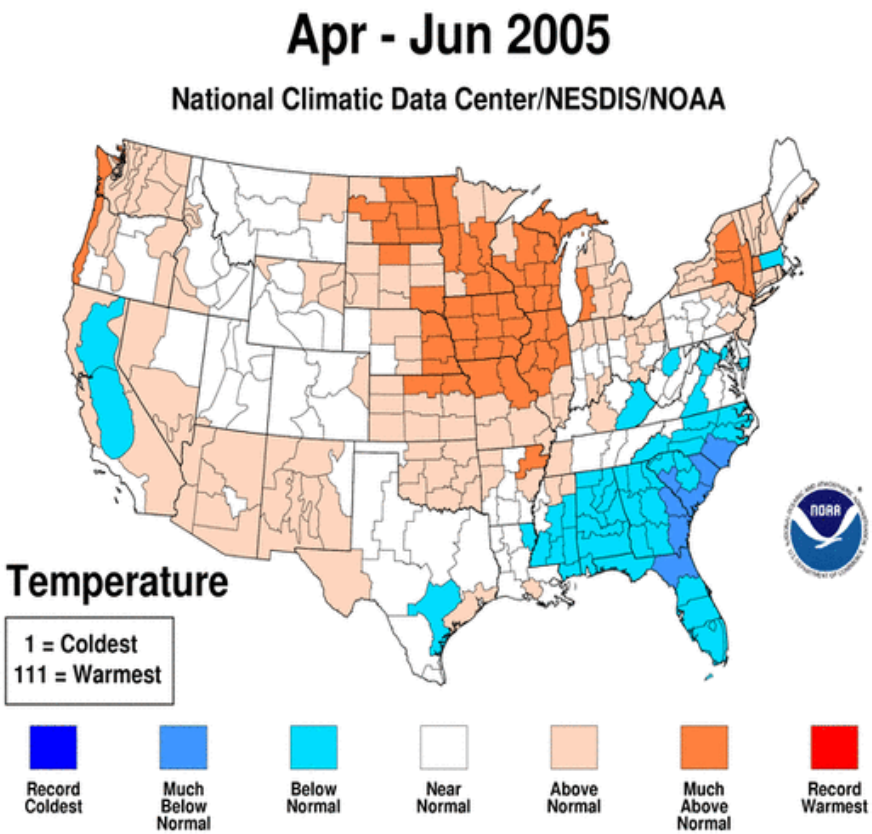
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
			87	57	36	59
5	6	7	8	9	10	11
87	98	98	96	70	49	62
12	13	14	15	16	17	18
45	49	80	70	69	56	75
19	20	21	22	23	24	25
61	60	84	86	89	92	100
26	27	28	29	30		
96	54	84	61	104		

JULY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					104	75
3	4	5	6	7	8	9
82	80	89	81	66	53	88
10	11	12	13	14	15	16
86	90	115	66	106	67	68
17	18	19	20	21	22	23
76	78	67	97	112	115	74
24	25	26	27	28	29	30
81	107					
31						

Draft

Why no Code Red?



Below normal temperatures during the first part of summer.

No typical Bermuda High off the NC coast.

Reduction in Transport?

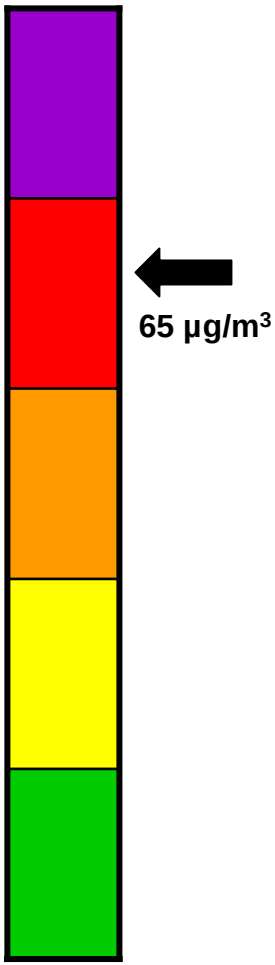
- Possible reduction in ozone and precursors transport from the west

  Evidence from Shenandoah National Park

Year	Top 1-Hour (ppb)	Top 8-Hour (ppb)
2003	116	105
2004	94	87
2005	86	81

- Detailed analysis needed.

Fine Particle Standard



24-Hr Fine Particle Standard

Fine particle are less than 2.5 µm in diameter.

Fine particles get stuck deep in the lungs or enter the bloodstream, causing severe health problems for asthmatics and people with lung or heart disease.

Designated in November, 2004

24-Hour Particle Summary

Daily Peak 24-Hour Particle Concentration (ug/m3)

Washington Area-2005

MAY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
11	8	8	13	16	12	13
8	9	10	11	12	13	14
8	5	8	14	7	4	12
15	16	17	18	19	20	21
10	9	12	20	22	4	6
22	23	24	25	26	27	28
10	12	8	3	5	13	14
29	30	31				
7	13	12				

JUNE

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
			18	9.5	1.6	11
5	6	7	8	9	10	11
24	24	12	21	19	13	15
12	13	14	15	16	17	18
8.5	8.3	23	13	8.3	9	14
19	20	21	22	23	24	25
5.3	8.5	16	22	8	15	21
26	27	28	29	30		
19	5.3	14	9.1	26		

JULY

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
					21	17
3	4	5	6	7	8	9
12	21	20	23	24	3	15
10	11	12	13	14	15	16
15	34	33	24	18	24	23
17	18	19	20	21	22	23
17	23	21	27	30	34	12
24	25	26	27	28	29	30
9	31					
31						

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