

# August 8, 2006

## 2006 Louisville, MSA 8-Hr Ozone Monitoring Report

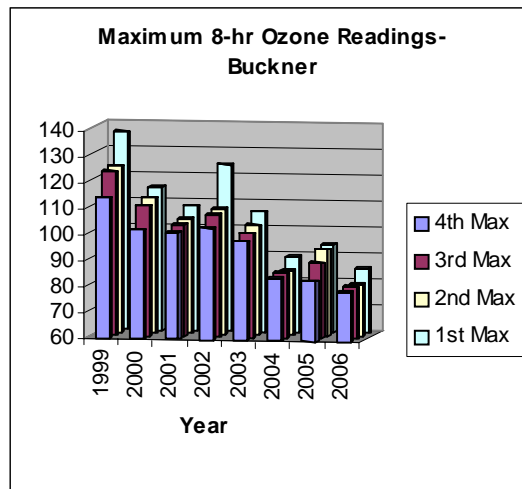
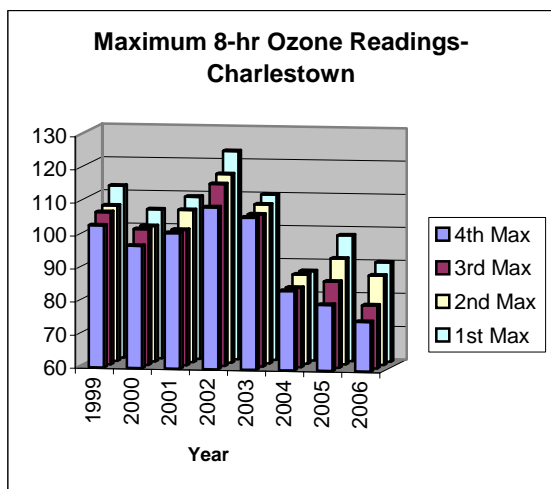
*(Data are not quality assured)*

**Table 1: 2006 8-Hr Ozone Monitoring Summary Report**

➤ 8-hour exceedances - 6 exceedances with the highest reading of 101 ppb at New Albany on July 18

8-Hour FCST /Max. ppb	# 8-Hour Exceedances	# of Day with Exceedances	Date	Charlestown (CH) Clark Co. IN	New Albany (NA) Floyd Co. IN	Bates (BA) Jefferson Co. KY	Watson (WS) Jefferson Co. KY	WLKY-TV (WK) Jefferson Co. KY	Buckner (BK) Oldham Co. KY	Shepherdsville (SH) Bullitt Co. KY	# AQA
67/77			5/24/06	42	71	<u>68</u>	<u>77</u>	69	73	71	
78/59			6/6/06	48	59	64	55	56	78	59	
75/80			6/17/06	79	74	68	73	67	80	71	
52/82			6/26/06	68	70	60	82	61	72	63	
74/79			7/1/06	<u>75</u>	<u>76</u>	78	78	<u>67</u>	<u>79</u>	73	
73/78			7/2/06	74	75	76	72	67	67	78	
79/82			7/8/06	63	82	54	72	58	59	62	
85 /75			7/16/06	60	62	55	75	51	61	67	1
88 /80	1	1	7/17/06	<b>87</b>	69	61	54	66	80	66	2
87/101	3	1	7/18/06	<b>90</b>	<b>101</b>	60	<b>89</b>	70	60	72	3
85/74			7/19/06	67	74	52	65	53	66	57	4
80/85	1	1	7/25/06	73	64	74	58	50	<b>85</b>	50	
73/86	1	1	7/31/06	67	61	54	54	51	<b>86</b>	No data	
87/66			8/1/06	52	50	50	47	36	66	48	5
85/65			8/2/06	56	56	46	38	38	65	44	6
4 <sup>th</sup> Max.				75	76	68	77	67	79	71	
Total- 4 days / 6 Exceedances	6	4	0	2	1	0	1	0	2	0	6

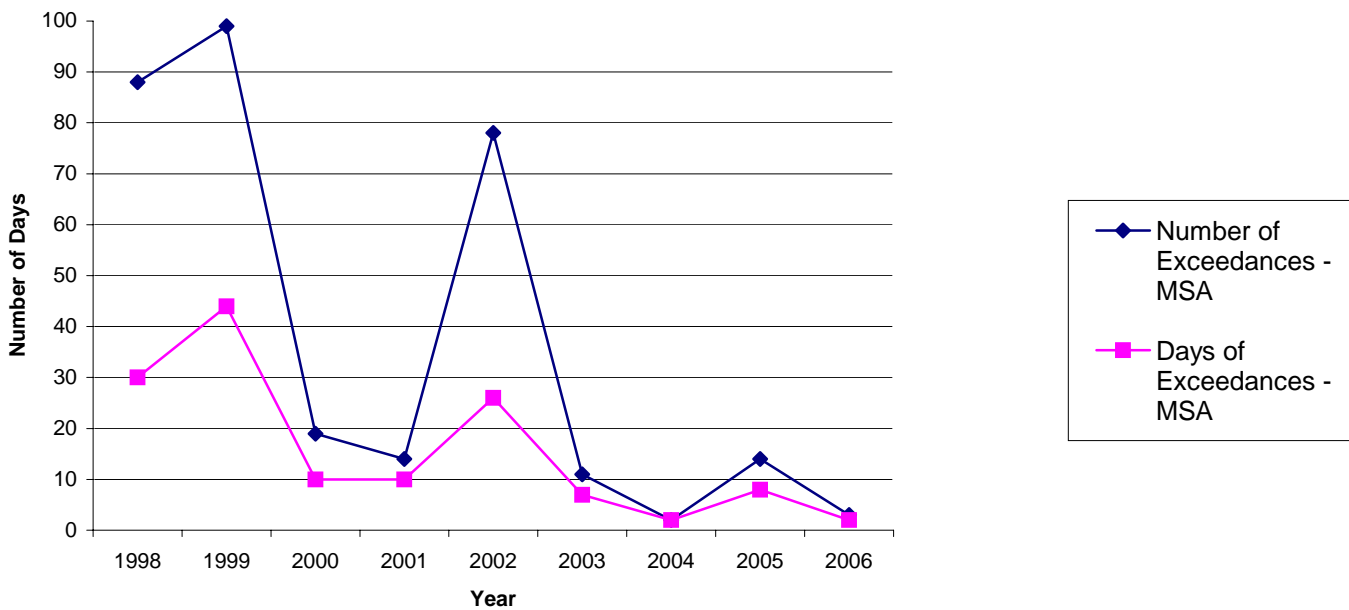
Notes: An 8-hour average of 85 ppb or greater exceeds the new ozone standard. AQA: Air Quality Alert. FCST – Forecast. Bold – greater than 84 ppb. Underline – 4<sup>th</sup> Max.



**Table 2: Louisville 1998 – 2005 8-Hr Exceedance Summary**

Year	Charlestown	New Albany	Bates	Watson	WLKY-TV	Buckner	Shep.	Louisville MSA Total		Jefferson County Total	
								Exceedances	Days	Exceedances	Days
1998	22	14	10	11	7	12	12	88	30	28	15
1999	11	10	16	13	4	34	11	99	44	33	22
2000	4	0	5	1	3	4	2	19	10	9	6
2001	4	0	2	1	1	4	2	14	10	4	3
2002	17	13	4	15	7	12	10	78	26	26	19
2003	4	4	1	0	0	2	0	11	7	1	1
2004	0	0	1	0	0	0	1	2	2	1	1
2005	3	2	0	4	1	4	0	14	8	5	4
2006	0	1	0	1	0	1	0	2	1	1	1

**8-hr Ozone Exceedances**



**Table 3: 8-Hr Ozone 4<sup>th</sup> Maximum**

Year	Louisville, MSA	Charles-Town (CH)	New Albany (NA)	Bates (BA)	Watson (WS)	WLKY-TV (WK)	Buckner (BK)	Shepherds-ville (SH)
2006	78	75	76	68	77	67	78	71
2005	89	80	80	79	85	74	89	80
2004	76	74	71	70	70	68	76	68
2003	90	90	86	72	75	73	82	72
2002	100	100	97	85	96	88	91	91
2001	86	86	76	81	81	77	86	82
2000	90	85	77	90	76	84	85	82
1999	103	89	94	97	100	86	103	93

8-Hr Ozone Annual 4th Maximum Reading for Metro Louisville

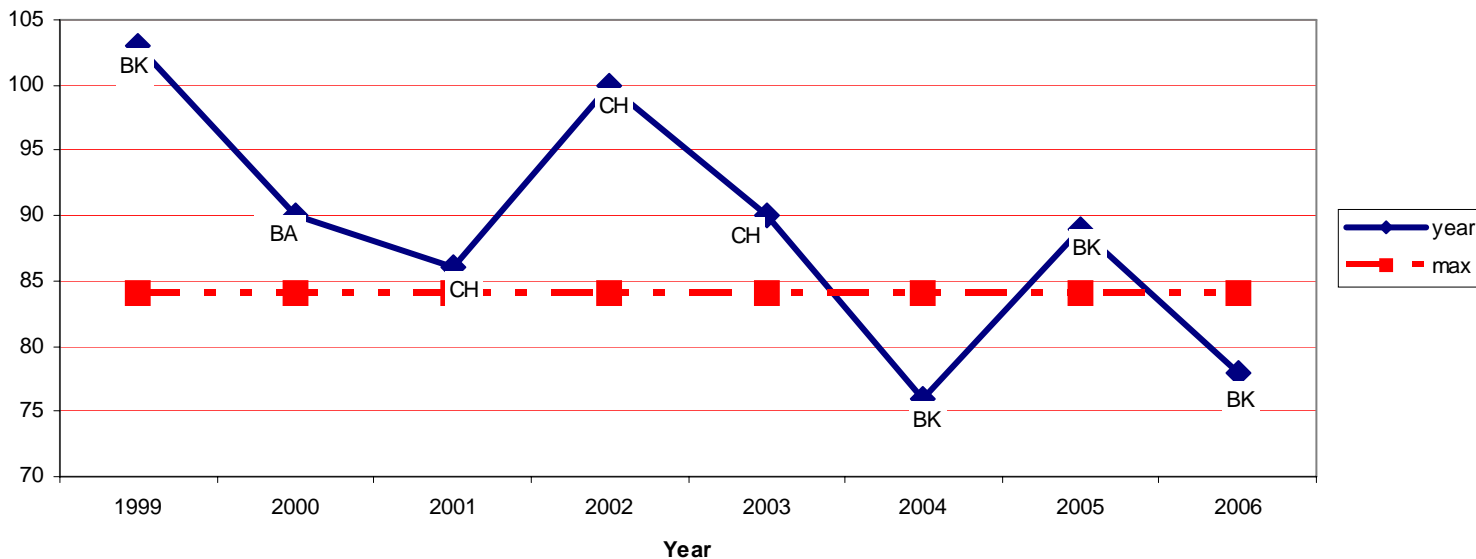
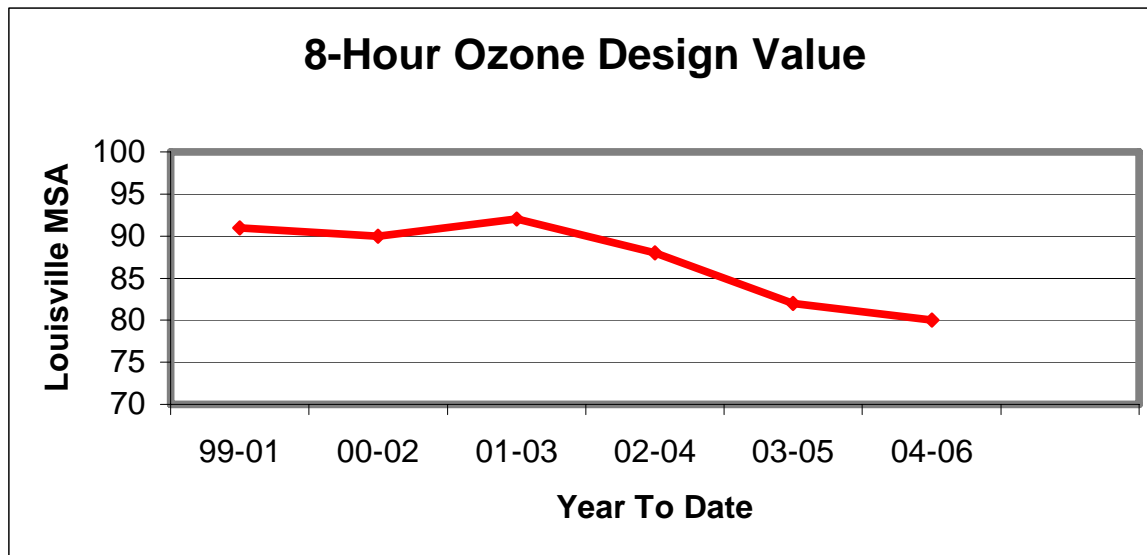


Table 4: 8-Hour Ozone Design Value Summary

Year	Louisville, MSA	Charles-town	New Albany	Bates	Watson	WLKY-TV	Buckner	Shepherds-ville
04-06 Avg.	<b>80</b>	75	76	72	77	71	80	73
03-05 Avg.	<b>82 BK</b>	81	79	73	76	71	82	73
02-04 Avg.	<b>88 CH</b>	88	84	74	80	76	82	77
01-03 Avg.	<b>92 CH</b>	92	86	77	84	79	86	81
00-02 Avg.	<b>90 CH</b>	90	83	85	84	83	87	85
99-01 Avg.	<b>91 BK</b>	86	82	89	85	82	91	85

Bold –Design Value Sites for respective periods.

**8-Hr NAAQS:** Attainment of the 8-Hr Ozone National Ambient Air Quality Standard (NAAQS) at an individual monitor is achieved when the three-year average of the annual fourth-highest daily maximum (4<sup>th</sup> maximum) 8-hr average ozone concentration is less than or equal to 84 ppb. This three-year average is the design value for that monitor.



## INTEROFFICE MEMORANDUM

Date: August 04, 2006  
 To: Arthur L. Williams, Director  
 From: Arthur Chang, Technical Services Supervisor  
 Re: July 2006 FRM PM<sub>2.5</sub> Monitoring Update Report

This is a report of July 2006 Federal Reference Method PM<sub>2.5</sub> monthly averages, annual averages, 3-year annual design values, and year-to-year comparison data summaries. (These data are subject to further quality assurance and are not final.)

### July 2006

**Table 1. PM<sub>2.5</sub> Monthly Data Summary (µg/m<sup>3</sup>)**

	<b>Daily Maximum</b>	<b>Daily Minimum</b>		<b>Monthly</b>
<b>Site Name</b>	<b>Conc. &amp; Date</b>	<b>Conc. &amp; Date</b>	<b>Run Time</b>	<b>Average</b>
Southwick	48.2 (07/20)	8.2 (07/23)	90.0 %	23.3
Wyandotte	48.9 (07/20)	7.8 (07/23)	90.0 %	24.9
Barret	40.7 (07/18)	15.7 (07/11)	100.0 %	27.0
Watson	32.8 (07/04)	10.1 (07/22)	100.0 %	20.6
<b>Overall</b>				<b>23.9</b>

The 24-hour average standard is 65 µg/m<sup>3</sup>.

**Table 2. PM<sub>2.5</sub> Design Values and Year-to-Date Annual Mean Comparisons**

<b>Site Name</b>	<b>Annual Mean (ug/m<sup>3</sup>)</b>							<b>Annual Design Values (2000-2002)</b>	<b>Annual Design Values (2001-2003)</b>	<b>Annual Design Values (2002-2004)</b>	<b>Annual Design Values (2003-2005)</b>	<b>Annual Design Values (2004-2006)<sup>3</sup></b>
	<b>2006<sup>3</sup></b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>					
Southwick/ <i>Firearms Trn<sup>1</sup></i>	14.4	16.7	14.6	15.4	17.2	17.1/ 18.7 <sup>1</sup>	17.3	N/A	N/A	<b>15.9<sup>2</sup></b>	<b>15.6<sup>2</sup></b>	<b>15.2<sup>2</sup></b>
Wyandotte	15.1	16.6	14.1	15.2	17.5	17.7	16.7	<b>17.3<sup>2</sup></b>	<b>16.8<sup>2</sup></b>	15.6	15.3	<b>15.2<sup>2</sup></b>
Barret	14.6	16.8	14.0	15.2	16.3	16.9	16.7	16.6	16.1	15.2	15.3	15.1
Watson	13.9	16.5	12.7	15.1	15.3	16.3	16.8	16.1	15.5	14.4	14.7	14.3

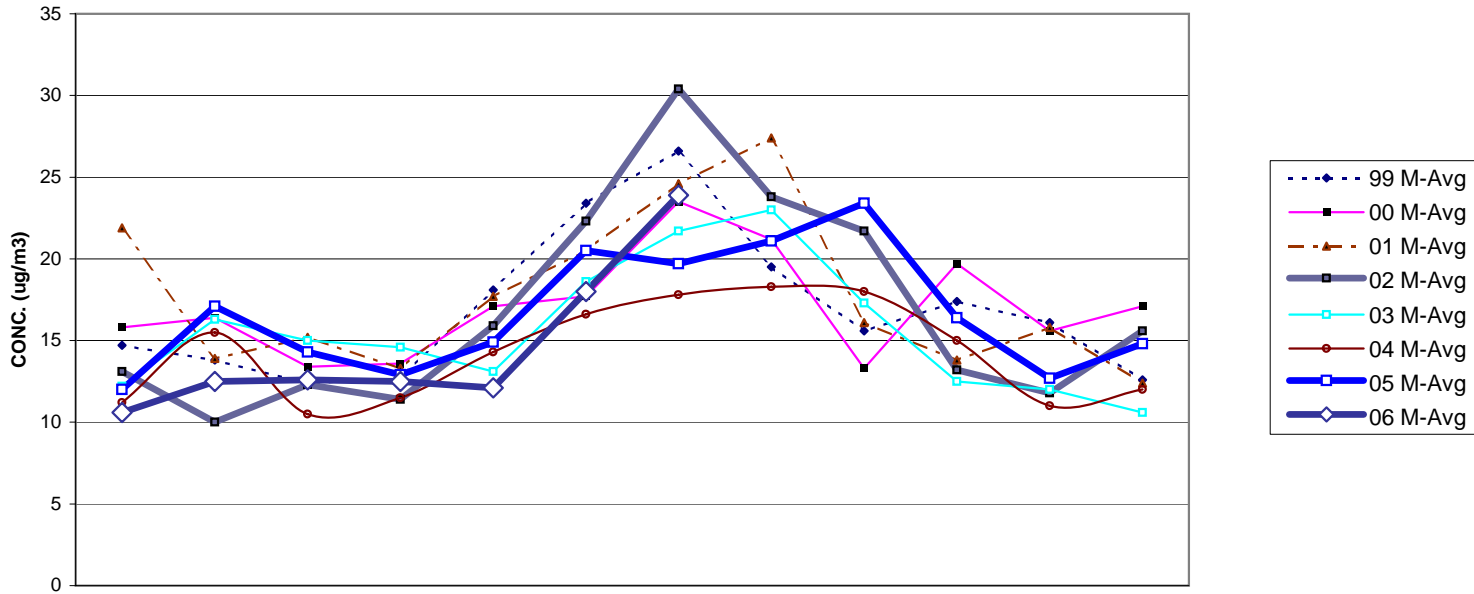
The annual average standard is 15.0 µg/m<sup>3</sup>.

<sup>1</sup> *Firearms Training* temporarily replaced Southwick Community Center monitoring during 2001, due to renovation. Twelve quarters of contiguous data are unavailable.

<sup>2</sup> Design value site for Louisville.

<sup>3</sup> Year-to-date data for 2006.

LOUISVILLE METRO FRM PM2.5 MONTHLY AVERAGES TRENDS FOR 1999 - 2006



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Est. An Avg
Ann Std	15	15	15	15	15	15	15	15	15	15	15	15	
99 M-Avg	14.7	13.8	12.4	12.7	18.1	23.4	26.6	19.5	15.6	17.4	16.1	12.6	
00 M-Avg	15.8	16.4	13.4	13.6	17.1	17.7	23.5	21.2	13.3	19.7	15.6	17.1	
01 M-Avg	21.9	13.9	15.2	13.3	17.7	20.5	24.6	27.4	16.1	13.8	15.8	12.4	
02 M-Avg	13.1	10	12.3	11.4	15.9	22.3	30.4	23.8	21.7	13.2	11.8	15.6	
03 M-Avg	12.2	16.3	15	14.6	13.1	18.6	21.7	23	17.3	12.5	12	10.6	
04 M-Avg	11.2	15.5	10.5	11.5	14.3	16.6	17.8	18.3	18	15	11	12	
05 M-Avg	12	17.1	14.3	12.9	14.9	20.5	19.7	21.1	23.4	16.4	12.7	14.8	
06 M-Avg	10.6	12.5	12.6	12.5	12.1	18	23.9						
													Est. An Avg
7-Yr mean	10.6	12.5	12.6	12.5	12.1	18	23.5	22.0	17.9	15.4	13.6	13.6	15.4
7-Yr Max.	10.6	12.5	12.6	12.5	12.1	18	30.4	27.4	23.4	19.7	16.1	17.1	17.7
7-Yr Min.	10.6	12.5	12.6	12.5	12.1	18	17.8	18.3	13.3	12.5	11.0	10.6	13.5
7-Yr 2nd Min.	10.6	12.5	12.6	12.5	12.1	18	19.7	19.5	15.6	13.2	11.8	12	14.2
7-Yr 3rd Min.	10.6	12.5	12.6	12.5	12.1	18	21.7	21.1	16.1	13.8	12	12.4	14.6
7-Yr 4th Min.	10.6	12.5	12.6	12.5	12.1	18	23.5	21.2	17.3	15	12.7	12.6	15.1
7-Yr 5th Min.	10.6	12.5	12.6	12.5	12.1	18	24.6	23	18	16.4	15.6	14.8	15.9

## 2006 Attainment Forecast Chart - Metro Total

