

# INTEROFFICE MEMORANDUM

Date: January 08, 2007  
 To: Arthur L. Williams, Director  
 From: Larry Garrison, Air Monitoring Unit Supervisor  
 Re: December 2007 FRM PM<sub>2.5</sub> Monitoring Update Report

This is a report of December 2007 Federal Reference Method PM<sub>2.5</sub> monthly averages, annual averages, and 3-year annual design values data summaries. (These data are subject to further quality assurance and are not final.)

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

	Daily Maximum	Daily Minimum	Sample	Monthly
Site Name	Conc. & Date	Conc. & Date	Recovery	Average
Southwick	21.1 (12/30)	4.2 (12/23)	96.8 %	13.0
Wyandotte	25.8 (12/30)	3.5 (12/23)	93.5 %	13.4
Barret	19.9 (12/20)	3.4 (12/23)	100.0 %	13.8
Watson	20.1 (12/08)	11.9 (12/14)	100.0 %	16.3
<b>Overall</b>	<b>25.8 (12/30)</b>	<b>3.4 (12/23)</b>	<b>97.6%</b>	<b>14.1</b>

The 24-hour average standard is 35µg/m<sup>3</sup>. Ref: 40 CFR Part 50, National Ambient Air Quality Standards for Particulate Matter.

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

Site Name	Annual Mean (µg/m <sup>3</sup> )							Annual Design Values (2001-2003)	Annual Design Values (2002-2004)	Annual Design Values (2003-2005)	Annual Design Values (2004-2006)	Annual Design Values (2005-2007) <sup>3</sup>
	2007 <sup>3</sup>	2006	2005	2004	2003	2002	2001					
Southwick <i>Firearms Trn</i> <sup>1</sup>	15.0	15.0	16.7	14.5	16.0	17.2	17.1/ 18.7 <sup>1</sup>	N/A	15.9 <sup>2</sup>	15.7 <sup>2</sup>	15.4 <sup>2</sup>	15.6 <sup>2</sup>
Wyandotte	14.9	15.2	16.5	14.1	15.4	17.5	17.7	16.8 <sup>2</sup>	15.7	15.3	15.3	15.5
Barret	15.2	14.0	16.8	13.7	15.5	16.4	16.9	16.3	15.2	15.3	14.8	15.3
Watson	15.7	13.7	16.5	12.6	14.9	15.7	16.3	15.6	14.4	14.7	14.3	15.3

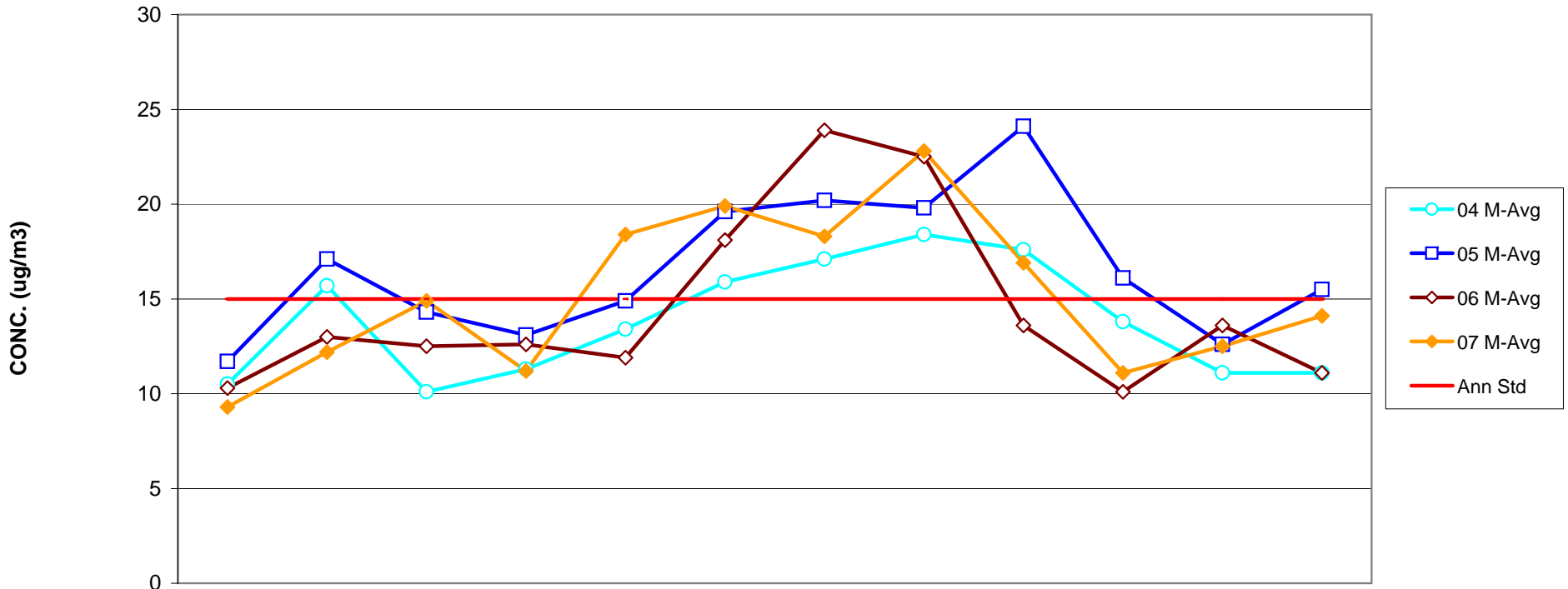
The annual average standard is 15.0µg/m<sup>3</sup>.

<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 2007.

**Table 3. Louisville Metro FRM PM<sub>2.5</sub> Monthly Averages Tracking Table for 1999-2007**

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Months > 15.0 µg/m <sup>3</sup>
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	7
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	9
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	8
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	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	5
04 M-Avg	10.5	15.7	10.1	11.3	13.4	15.9	17.1	18.4	17.6	13.8	11.1	11.1	5
05 M-Avg	11.7	17.1	14.3	13.1	14.9	19.6	20.2	19.8	24.1	16.1	12.6	15.5	7
06 M-Avg	10.3	13.0	12.5	12.6	11.9	18.1	23.9	22.5	13.6	10.1	13.6	11.1	3
07 M-Avg	9.3	12.2	14.9	11.2	18.4	19.9	18.3	22.8	16.9	11.1	12.5	14.1	5

LOUISVILLE METRO FRM PM2.5 MONTHLY AVERAGES TRENDS FOR 2004 - 2007



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
04 M-Avg	10.5	15.7	10.1	11.3	13.4	15.9	17.1	18.4	17.6	13.8	11.1	11.1
05 M-Avg	11.7	17.1	14.3	13.1	14.9	19.6	20.2	19.8	24.1	16.1	12.6	15.5
06 M-Avg	10.3	13	12.5	12.6	11.9	18.1	23.9	22.5	13.6	10.1	13.6	11.1
07 M-Avg	9.3	12.2	14.9	11.2	18.4	19.9	18.3	22.8	16.9	11.1	12.5	14.1
Ann Std	15	15	15	15	15	15	15	15	15	15	15	15

MONTH