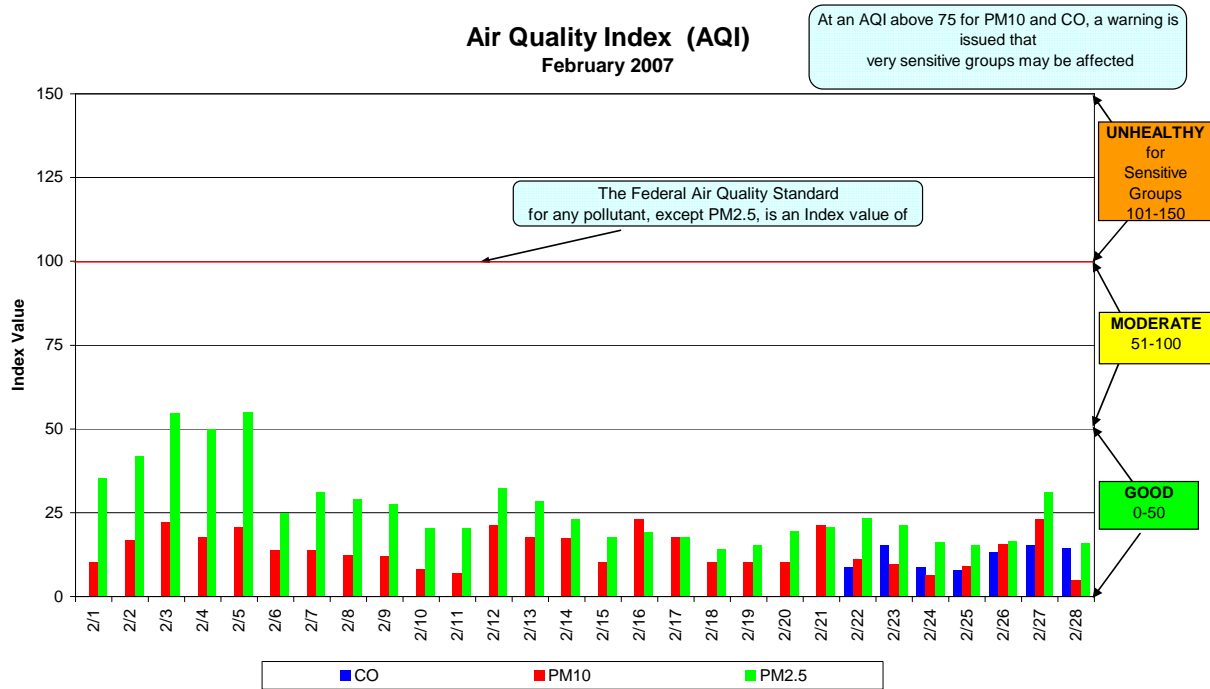


## Air Quality Report February 2007

The chart below shows the daily maximum Air Quality Index (AQI) for February 2007. Carbon Monoxide (CO), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and ozone (O<sub>3</sub>) are the criteria air pollutants defined by the US EPA that are monitored in the Spokane area. The AQI information is updated hourly on the SCAPCA web page ([http://www.scapca.org/air\\_quality.asp](http://www.scapca.org/air_quality.asp)). There were no measured exceedances of federal air quality standards in February. The Washington Department of Ecology lost much of the CO data for the month to errors that occurred while replacing their system for storing and transmitting data. Ozone monitoring will resume May 1, 2007.



The following tables contain the maximum AQI values for each pollutant for February and for the year to date. A table summarizing the year to date daily AQIs by category follows on the next page.

### Maximum for this reporting period

Pollutant	AQI/Concentration	Location	Date
CO	16/1.4 ppm	3 <sup>rd</sup> & Washington	2/23/07 and 2/27/07
PM <sub>10</sub>	23/25 µg/m <sup>3</sup>	Freya & Ferry	2/16/07 and 2/27/07
PM <sub>2.5</sub>	55/17.5 µg/m <sup>3</sup>	Freya & Ferry	2/3/07

### Maximum for the current year

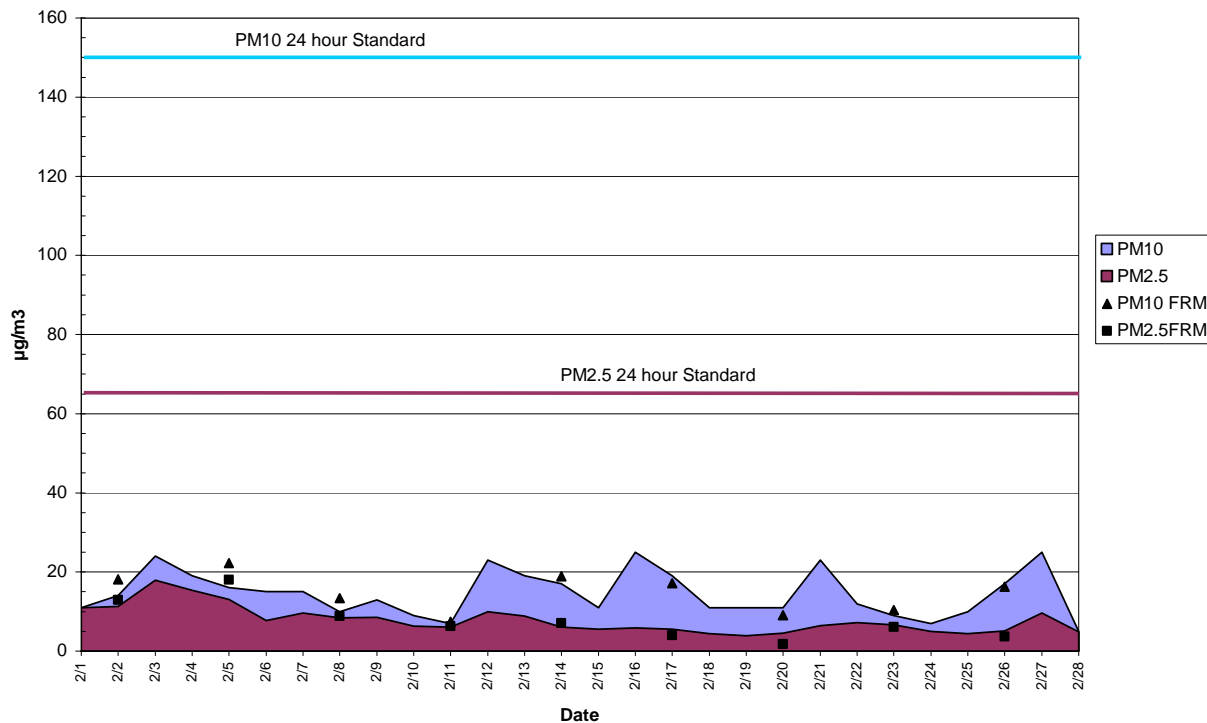
Pollutant	AQI/Concentration	Location	Date
CO	34/3.1 ppm	3 <sup>rd</sup> & Washington	1/19/07
PM <sub>10</sub>	44/41 µg/m <sup>3</sup>	Freya & Ferry	1/15/07
PM <sub>2.5</sub>	79/30 µg/m <sup>3</sup>	Freya & Ferry	1/15/07
O <sub>3</sub>	No Data		

**AQI Summary as of February 28, 2007**

Category	Number of Days This Year	Last Year to Date
Good (0-50)	44	49
Moderate (51-100)	15	10
Unhealthy for Sensitive Groups (101-150)	0	0
Unhealthy (151-200)	0	0
Very Unhealthy (201-300)	0	0
Hazardous (>300)	0	0

The next chart is a comparison between the concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> measured at the Freya & Ferry monitoring site. The site is located in a commercial, light industrial area on the east edge of the City of Spokane. The data shown in solid colors were measured using Tapered Element Oscillating Microbalance (TEOM) continuous analyzers. The TEOM is an automated method and provides “real time” data, which SCAPCA uses in its day-to-day programs. A Federal Reference Method (FRM) provides a more accurate measurement of PM and meets the requirements for demonstrating attainment of federal air quality standards, but samples must be collected manually and analyzed in the laboratory. The accuracy of continuous monitoring data can be verified by comparison with FRM data. The correlation ( $r^2$ ) between the continuous monitor and FRM data is 0.83 for PM<sub>10</sub> for February. The Washington Department of Ecology analyzes the PM<sub>2.5</sub> FRM samples and has not reported the data for February. All PM<sub>10</sub> and PM<sub>2.5</sub> data reported here are 24 hour averages.

**Freya & Ferry Particulate Matter Data  
24hr Average Daily Maximum**



February 2007 Air Quality Report

The table below summarizes the air quality data for February from all of the analyzers operated in Spokane County. The CO data are 8-hour maximums and the PM data are 24-hour averages. Errors associated with the replacement of the Washington Department of Ecology's system for storing and transmitting air quality data resulted in incomplete records for CO at 3<sup>rd</sup> & Washington and the PM<sub>2.5</sub> TEOM at Monroe & College.

Date	CO 3rd & Washington	PM10 Freya & Ferry TEOM	PM2.5 Freya & Ferry FRM	PM10 Monroe & College TEOM	PM2.5 Monroe & College FRM	PM10 Turnbull Wildlife Refuge	PM2.5 Turnbull Wildlife Refuge	PM10 Garland & Market	PM10 Liberty Lake	PM2.5 Liberty Lake					
2/1/2007		11		11											
2/2/2007		14	18	11	12.9	7									
2/3/2007		24		18		16									
2/4/2007		19		15		12									
2/5/2007		16	22	13	18.0	10	18	13.8	12	9.8	18	15	4	10.7	
2/6/2007		15		8		6									
2/7/2007		15		10		9									
2/8/2007		10	13	8	8.9	7									
2/9/2007		13		9		6									
2/10/2007		9		6		5									
2/11/2007		7	7	6	6.3	4	7	4.6	4	2.1	8	6	3	3.1	
2/12/2007		23		10		11									
2/13/2007		19		9		11									
2/14/2007		17	19	6	7.1	7									
2/15/2007		11		6		5									
2/16/2007		25		6		13		5							
2/17/2007		19	17	6	4.0	10	13	4	2.8	3	1.4	12	10	2	7.4
2/18/2007		11		4		9		4							
2/19/2007		11		4		4		5							
2/20/2007		11	9	5	1.8	6		6							
2/21/2007		23		6				5							
2/22/2007	0.8	12		7		2		6							
2/23/2007	1.4	9	10	7	6.1	5	7	6	4.8	5	3.3	8	7	3	3.3
2/24/2007	0.8	7		5		5		5							
2/25/2007	0.7	10		4		5		5							
2/26/2007	1.2	17	16	5	3.6	8		4							
2/27/2007	1.4	25		10		9		7							
2/28/2007	1.3	5		5		5		4							

A wind rose diagram showing wind speed and direction at the Freya and Ferry site for the month is usually displayed in this report. The Washington Department of Ecology provides these data, but none are available for February because of problems encountered during work to replace their system for storing and transmitting data.