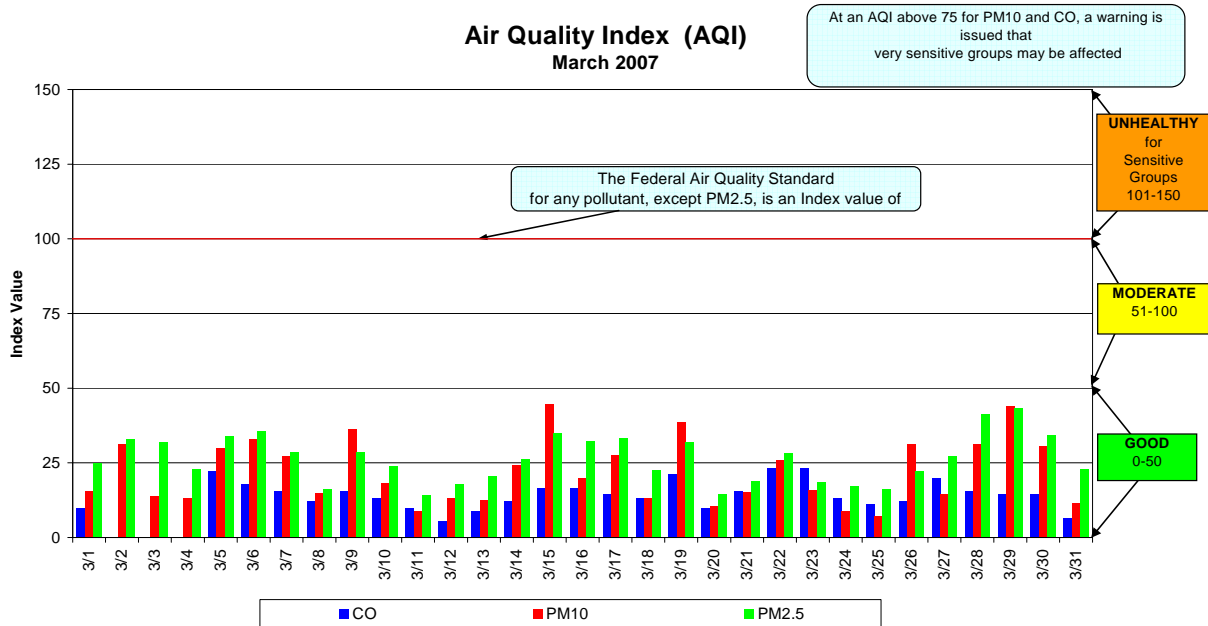


## Air Quality Report March 2007

The chart below shows the daily maximum Air Quality Index (AQI) for March 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. Air quality 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 March. Ozone monitoring will resume May 1, 2007.



The following tables contain the maximum AQI values for each pollutant for March 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	23/2.1 ppm	3 <sup>rd</sup> & Washington	3/22/07 and 3/23/07
PM <sub>10</sub>	45/48 µg/m <sup>3</sup>	Freya & Ferry	3/15/07
PM <sub>2.5</sub>	43/14 µg/m <sup>3</sup>	Freya & Ferry	3/29/07

### Maximum for the current year

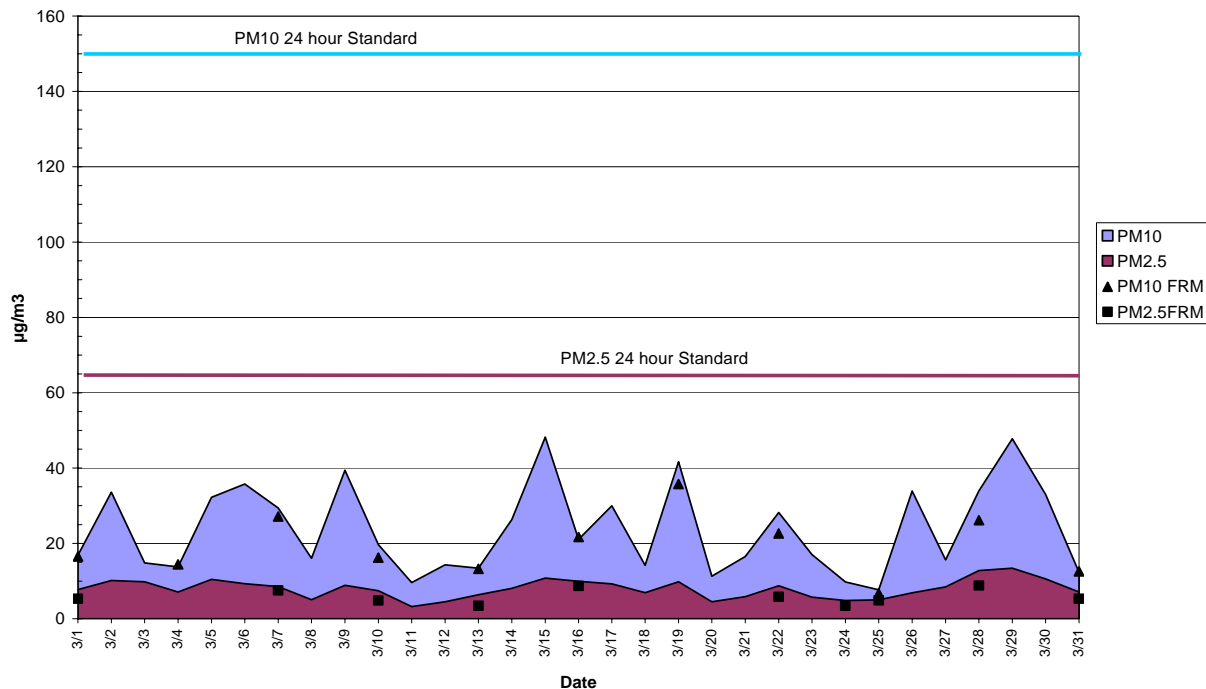
Pollutant	AQI/Concentration	Location	Date
CO	34/3.1 ppm	3 <sup>rd</sup> & Washington	1/19/07
PM <sub>10</sub>	45/48 µg/m <sup>3</sup>	Freya & Ferry	3/15/07
PM <sub>2.5</sub>	79/30 µg/m <sup>3</sup>	Freya & Ferry	1/15/07
O <sub>3</sub>	No Data		

**AQI Summary as of March 31, 2007**

Category	Number of Days This Year	Last Year to Date
Good (0-50)	75	78
Moderate (51-100)	15	12
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. The manually-operated Federal Reference Method (FRM) provides a more accurate measurement of the 24-hour average particulate matter concentration than the TEOM and meets the requirements for demonstrating attainment of federal air quality standards. The accuracy of the TEOM sample data can be verified by comparison with co-located FRM data. The correlation ( $r^2$ ) between the TEOM and FRM data is 0.98 for PM<sub>10</sub> and 0.88 for PM<sub>2.5</sub> for March.

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



March 2007 Air Quality Report

The table below summarizes the air quality data for March from all of the analyzers operated in Spokane County. The CO data are 8-hour maximums and the PM data are 24-hour averages.

Date	CO 3rd & Washington	PM10 Freya & Ferry TEOM	PM10 Freya & Ferry FRM	PM2.5 Freya & Ferry TEOM	PM2.5 Freya & Ferry FRM	PM10 Monroe & College TEOM	PM10 Monroe & College FRM	PM2.5 Monroe & College TEOM	PM2.5 Monroe & College FRM	PM10 Turnbull Wildlife Refuge	PM2.5 Turnbull Wildlife Refuge	PM10 Garland & Market	PM10 Liberty Lake	PM10-2.5 Liberty Lake	PM2.5 Liberty Lake
3/1/2007	0.9	17	17	8	5.3	11	10	5	2.7	4	1.1	15	7	5	1.9
3/2/2007		34		10		19		9							
3/3/2007		15		10		9		10							
3/4/2007		14	14	7		6		6							
3/5/2007	2	32		10		12		9							
3/6/2007	1.6	36		9		28		11							
3/7/2007	1.4	29	27	9	7.5	15	18	9	6.7	8	4.3	21	12	7	5.3
3/8/2007	1.1	16		5		10		4							
3/9/2007	1.4	39		9		23		8							
3/10/2007	1.2	20	16	7	4.8	10		6							
3/11/2007	0.9	10		3		5		4							
3/12/2007	0.5	14		4		9		6							
3/13/2007	0.8	13	13	6	3.4	10	10	5	2.9	6	2.0	13	8	6	2.4
3/14/2007	1.1	26		8		13		6							
3/15/2007	1.5	48		11		22		8							
3/16/2007	1.5	21	22	10	8.7	15		9							
3/17/2007	1.3	30		9		17		10							
3/18/2007	1.2	14		7		10		6							
3/19/2007	1.9	42	36	10		21	21	8	6.0	7	3.8	21	14	9	5.0
3/20/2007	0.9	11		5				4							
3/21/2007	1.4	17		6		7		5							
3/22/2007	2.1	28	23	9	5.8	14		9							
3/23/2007	2.1	17		6		9		6							
3/24/2007	1.2	10		5	3.4	6		5							
3/25/2007	1	8	7	5	4.9	6	6	5	1.8	4	0.9	6	5	4	1.4
3/26/2007	1.1	34		7		19		6							
3/27/2007	1.8	16		8		8		7							
3/28/2007	1.4	34	26	13	8.8	14		7							
3/29/2007	1.3	48		13		22		7							
3/30/2007	1.3	33		11		20		9							
3/31/2007	0.6	12	13	7	5.3	9	11	6	4.9	8	4.5	12	11	6	4.7

# March 2007 Air Quality Report

The wind rose below summarizes hourly average wind speeds (mph) and directions (degrees) measured at the Freya and Ferry Site in March. The predominant wind direction for higher wind speeds was south to southwest. For lower wind speeds it was east to northeast.

