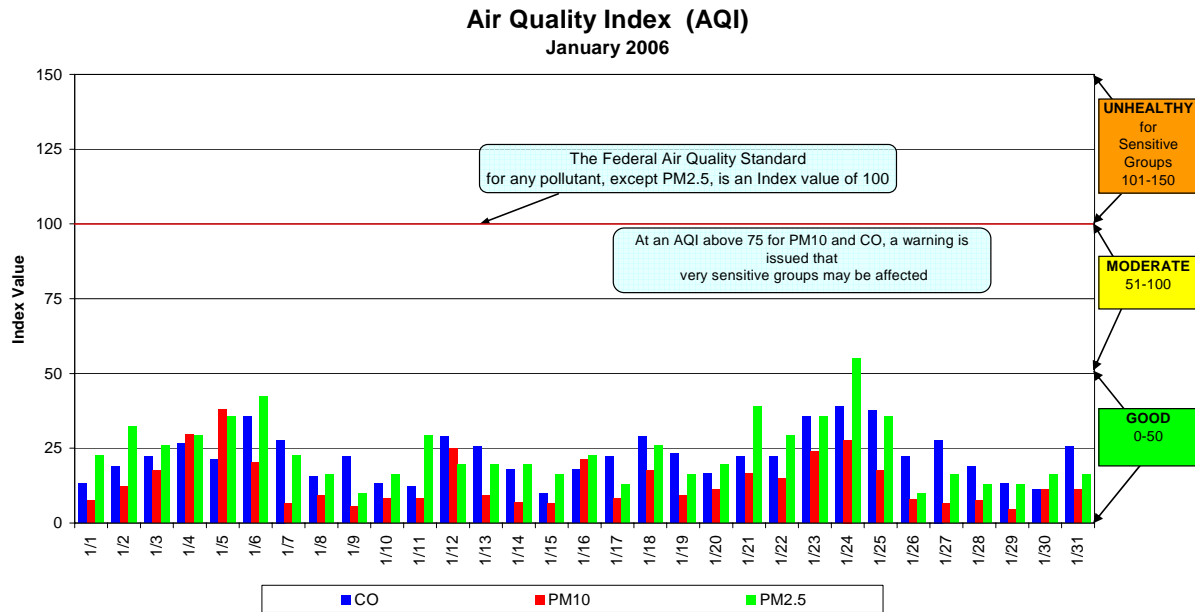


## Air Quality Report January 2006

Below is the maximum Air Quality Index (AQI) for the period January 1 through January 31, 2006. The AQI data are now reported on the day the value occurred. The AQI information is updated hourly on the Department of Ecology and SCAPCA web page ([http://www.scapca.org/air\\_quality.asp](http://www.scapca.org/air_quality.asp)).



### Maximum for this reporting period

Pollutant	AQI/Concentration	Location	Date
CO	39 / 3.5 ppm	Hamilton & Sharp	01/24/06
PM <sub>10</sub>	38 / 41 µg/m <sup>3</sup>	Freya & Ferry	01/05/06
PM <sub>2.5</sub>	55 / 18 µg/m <sup>3</sup>	Freya & Ferry	01/24/06

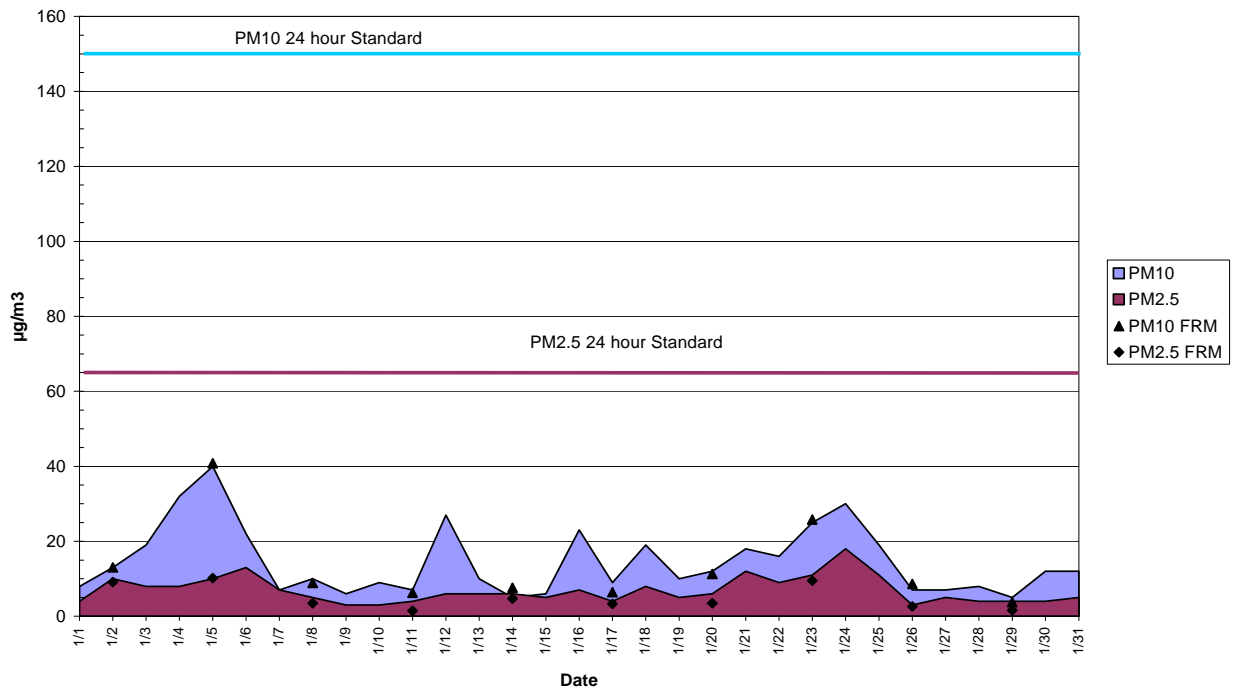
Note: Ozone monitoring will resume May 1, 2006.

### AQI Summary as of January 31, 2006

Category	Number of Days This Year	Last Year to Date
Good (0-50)	30	22
Moderate (51-100)	1	9
Unhealthy for Sensitive Groups (101-150)	0	0
Unhealthy (151-200)	0	0
Very Unhealthy (201-300)	0	0
Hazardous (>300)	0	0

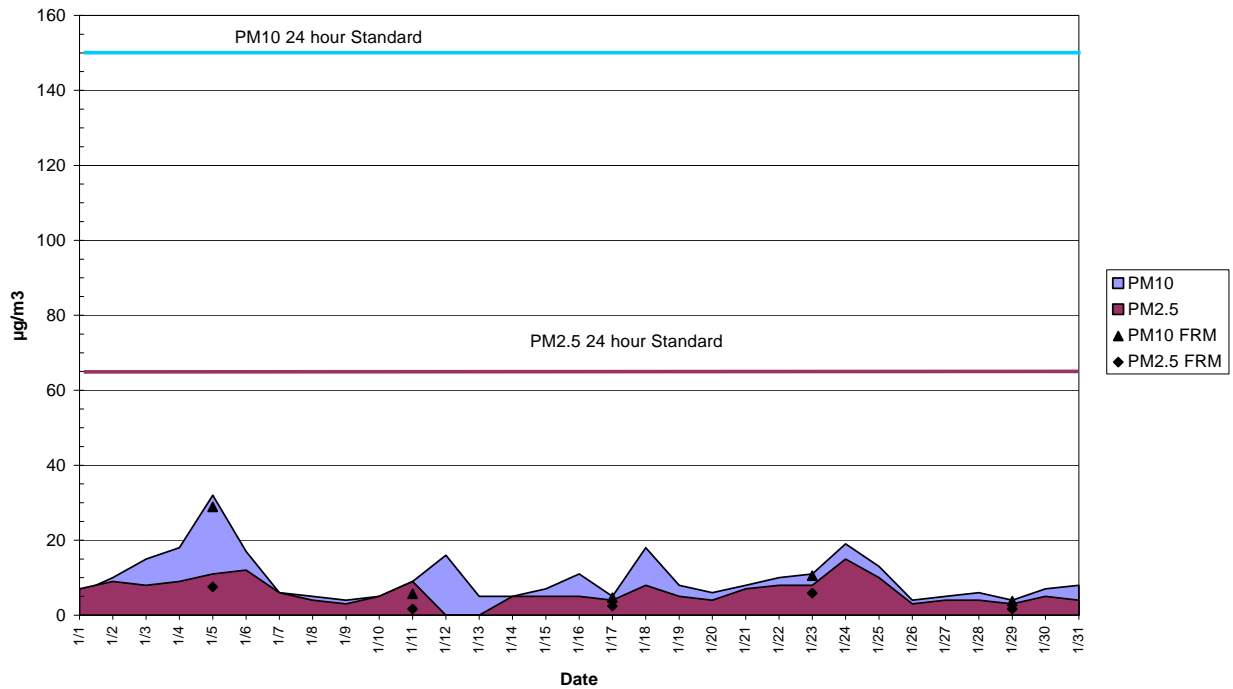
The next chart is a comparison between the concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> measured at the Freya & Ferry monitoring site. The site is located in a commercial, light industrial area on the east edge of the City of Spokane. Data on the chart are shown with the result of continuous monitors in solid colors and the Federal Reference Method (FRM) filter-based samplers as points. The correlation is 0.99 for PM<sub>10</sub> for the month. The PM<sub>2.5</sub> correlation is 0.96.

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



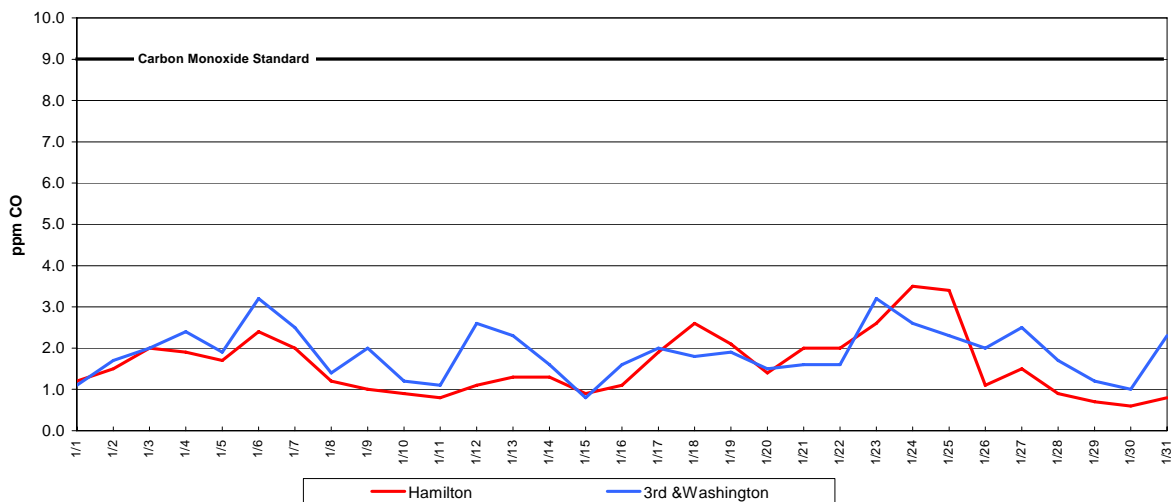
The data below are from the Monroe & College site located on the north side of the river just northwest of downtown. The correlation was 0.99 for PM<sub>10</sub> for the month. The PM<sub>2.5</sub> FRM correlation with the TEOM was 0.69. The FRM samplers are run on a one in six schedule so that only five points are available for a monthly correlation calculation.

### Monroe & College Particulate Matter Data 24hr Average Daily Maximum

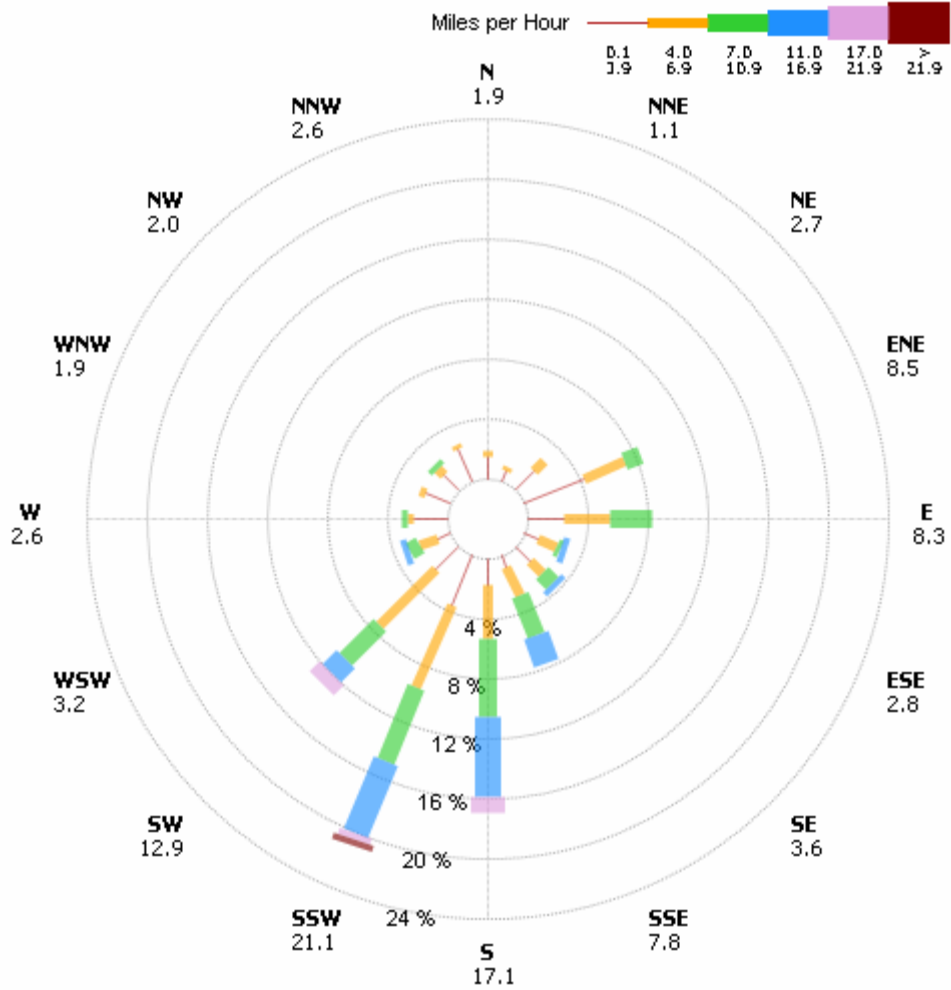


Below is a chart showing the daily maximums at Spokane's CO monitoring sites for this reporting period.

### Comparison of Maximum Daily 8 Hour Average CO Values



Wind data from the Freya and Ferry Site (Crown Z) for the reporting period.



**Hour Average Wind Speed**  
 Spokane E Ferry ~ 744 Observations  
 01 Jan 2006 through 31 Jan 2006

A device called an Aethalometer is used to measure black carbon in  $PM_{2.5}$  particulate matter. Black carbon is used as a surrogate for diesel particulate. This is not the total impact of diesel smoke on  $PM_{2.5}$ ; there are other components that don't show up as black carbon. Below are the results from January 2006.  $PM_{2.5}$  is in the back and black carbon (BC) in front. In the middle is the UV channel of the aethalometer. The UV channel indicates the presence of other organic compounds.

**Aethalometer Data**  
January 2006

