

# Air Quality

## Description

Air pollution is a concern because of its effects on health, odours, and visibility. A variety of contaminants and sources affect air quality, as do geography and weather that hinder pollutant dispersion.

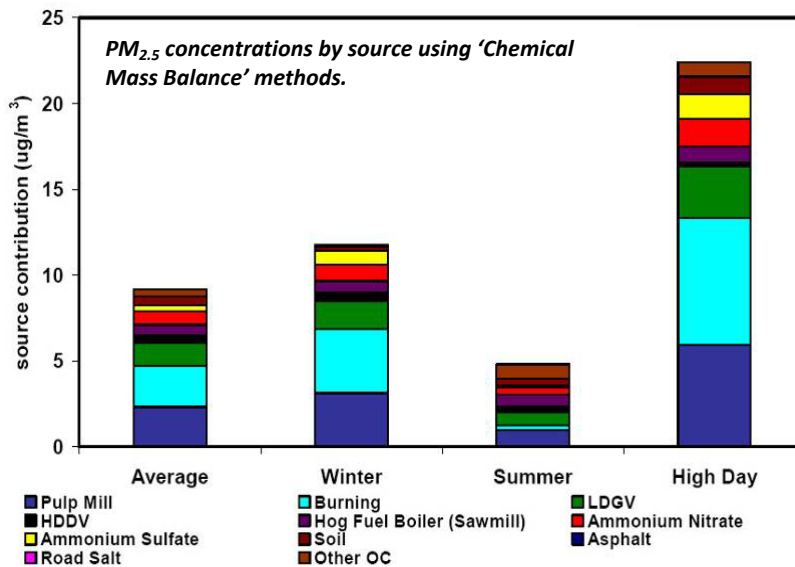
Many strategies to control air pollution dovetail with climate protection strategies, for example reducing vehicle emissions reduces GHGs and particulate matter that is bad for health.



Source: City of Prince George

## Status and Trends

Prince George's air quality has ranked among the worst of BC municipalities for many years, and has on occasion exceeded Federal and Provincial standards. The geography of the 'Bowl' combined with atmospheric thermal inversions can trap pollutants. Industrial sources, residential burning and transportation are major contributors to air pollution, as are some natural sources. The chart below shows contributions to one kind of air pollution as an example.



Source: Sonoma Technology Inc. 2008. Source Apportionment of PM<sub>2.5</sub> in Prince George, British Columbia. Note: HDDV = Heavy Duty Diesel Vehicle; LDGV = Light Duty Gas Vehicle)

Since 1995, a coordinated effort to measure and manage air quality has resulted in improvements to air quality. In particular, industry has made changes that have caused a large reduction in Total Reduced Sulfur (TRS), a measure related to the familiar “pulp mill smell.”

## Performance Measurement

**Of the potential measures listed below, which should we use to measure and communicate progress? Would you rather use another one? Why?**

The following are suggested as ways to measure performance in this area. Pollutant levels are monitored at a number of locations because levels vary a lot from place to place. Monitoring is overseen by the BC Ministry of Environment and paid for by large polluters and the City.

- The Air Quality Index (AQI) - reports current air quality based on a specific level of an individual air pollutant;
- PM10 and PM 2.5 - measures of particulate matter (PM) from both human and natural source, having impacts on health and visibility; and
- TRS - a measure of odour-causing sulfur compounds.

## Questions for Consideration

- What are your top concerns related to air quality?
- What barriers and opportunities do you see to improving air quality in Prince George, related to the contributing sources listed above?

## More Information

[Prince George Air Improvement Roundtable Website](#)

[Prince George Air Quality Management Background Report](#)

[Prince George Air Quality Management Plan Phase 1 Final Report](#)

[Prince George Air Quality Management Plan Phase 1 Progress Report](#)

[Prince George Air Quality Management Plan Phase 2](#)

[Final Report of the Prince George Mayor's Task Force on Air Quality Improvement](#)