

## **Monitoring Air Quality in Alberta's Industrial Heartland**

*August 2011*

Air quality is an important aspect of environmental sustainability and is affected by both natural and human sources. This includes windblown dust and forest fires, as well as vehicles and businesses. In Alberta's Industrial Heartland and other similar centres around the world, industrial emissions also impact air quality.

For over three decades, Canada has used an index to report air quality to the general public. Recent changes by Environment Canada to the air quality index is now designed to help the public understand what air quality means to health. Across the province, the revamped **Alberta Air Quality Health Index (AQHI)** is reported in 22 communities. The Alberta AQHI incorporates the pollutants included in the federal AQHI as well as four additional pollutants because of our province's energy based economy.

Fort Air Partnership is the organization responsible for collecting and reporting ambient air quality data in the Heartland region. Fort Air Partnership maintains a network of eight continuous and 62 passive monitoring stations throughout Alberta's Industrial Heartland and surrounding areas. The continuous stations collect one-minute data and provide hourly averages. Four of the eight continuous monitoring stations collect the data required to calculate the AQHI. These four monitoring stations are located at Fort Saskatchewan, Lamont, Bruderheim, and Elk Island National Park.

Once the data is collected and reported to Alberta Environment, the AQHI value is calculated using a formula combining the hourly readings of air pollutants. This value is reported on an hourly basis using a scale of 1 – 10+. Occasionally, if the amount of air pollution is abnormally high, the number may exceed 10, such as air quality associated with wild fire smoke.

Health risk categories within the AQHI scale were created to help easily and quickly identify levels of health risk associated with local air quality.

- 1 – 3 : Low health risk
- 4 – 6 : Moderate health risk
- 7 – 10 : High health risk
- 10+ : Very high health risk

To view the AQHI at any time for these locations and others across Alberta, visit [www.airquality.alberta.ca](http://www.airquality.alberta.ca). To view air quality data from the other locations monitored in Alberta's Industrial Heartland, visit [www.fortair.org](http://www.fortair.org).

*Brought to you by **Life in the Heartland**, a partnership aimed at improving access to information, resources, and contacts for residents in and around Alberta's Industrial Heartland. For more information, visit [www.lifeintheheartland.com](http://www.lifeintheheartland.com) or email [info@lifeintheheartland.com](mailto:info@lifeintheheartland.com).*