

Concerned about the air quality in your area?



Is the air being monitored in my area?

Air quality is important to Albertans. The

Clean Air Strategic Alliance, regional airsheds, Alberta Environment and other organizations are working together to improve air quality in Alberta. Air quality monitoring programs operate in most regions of Alberta. This pamphlet will tell you about air quality, who monitors it, what you can do if a monitoring program is not operating in your area, and how to find out more.

What is air quality?

The quality of the air is dependent on the rate that pollutants are emitted into the atmosphere and the ability of the atmosphere to disperse these pollutants.

Air pollutants such as carbon monoxide, oxides of nitrogen, ozone, sulphur dioxide, hydrogen sulphide, total reduced sulphur, particulate matter, dust and smoke, hydrocarbons, ammonia and carbon dioxide are monitored in Alberta.

Air pollutants come from many sources. Industrial sources such as energy facilities, and manufacturing facilities are considered point sources. Automobiles and residences are considered area sources.

How is air quality monitored?

Stations with monitoring equipment measure the outdoor ambient air quality. Data from a number of stations over time paints a picture of the air quality in a particular area. Continuous monitoring stations and passive monitoring stations are commonly used in Alberta.

Equipment in continuous monitoring stations draws air through an analyzer, which provides rapid measurements of ambient concentrations for one or several pollutants.

Unlike continuous monitors, passive monitors have no moving parts and require no electrical power and are therefore more suited to remote locations. Passive sampling involves the exposure of a reactive surface to the air. Samplers are typically exposed for periods of one month, and analysis is done in a laboratory.

Data from both types of monitoring stations undergoes quality control and quality assurance procedures. The data is then posted to the Alberta Ambient Air Data Management System web site at www.casadata.org.

Province-wide monitoring

The Alberta Permanent Monitoring Network provides core information for the evaluation of long-term trends and inter-relationships of air quality in the province. Alberta Environment conducts province-wide monitoring mostly using continuous and passive monitors.

Regional airshed monitoring

Airsheds are established as a means of dealing with air quality issues in a specific region. Many of Alberta's air quality issues are local, both in their cause and the solutions required. Stakeholders in a local area drive the establishment of an airshed, and the Clean Air Strategic Alliance provides the framework within which airsheds function yet each operates independently as a non-profit society or association.

Passive and/or continuous ambient air quality monitoring is conducted in each airshed and is funded by the emitters within the airshed.

There are five airsheds operating in Alberta and interest in forming new airsheds has been expressed in the Cold Lake area, the Wabamun-Edmonton area, the Bow Valley corridor, and the Lethbridge region.

Synergy groups

Synergy groups are collaborative efforts to address issues of industry impact on

communities for a number of environmental issues including air quality. Synergy groups do not usually operate air quality monitoring programs, but work to identify issues and find collaborative ways to solve the identified issues. Synergy groups may work on other issues like water and land use.

Complaint response

Alberta Environment is able to monitor air quality anywhere in Alberta accessible from a road through the use of its Mobile Air Monitoring Laboratory (MAML). The MAML responds to air quality concerns from a community and identifies potential problem areas.

Find out more

Clean Air Strategic Alliance

10035 108 ST NW FLR 10
EDMONTON AB T5J 3E1
Ph (780) 427-9793
Email casa@casahome.org
Web www.casahome.org
Web www.casadata.org (air quality data)

Alberta Environment

Information Centre
Ph (780) 944-0313
Email env.infocent@gov.ab.ca
Web www3.gov.ab.ca/env/air.html

Alberta Environment's Mobile Air Monitoring Laboratory (MAML)

Ph (780) 427-6225

Regional Airsheds

Fort Air Partnership

8534 100 AVE
FORT SASKATCHEWAN AB T8L 3B5
Web www.fortair.org
Email exd@fortairmail.org
Ph (780) 998-0851

Parkland Airshed Management Zone

PO BOX 1020
SUNDRE AB T0M 1X0
Web www.pamz.org
Email kwarren@pamz.org
Ph (403) 862-7046

Peace Airshed Zone Association

BOX 21135
GRANDE PRAIRIE AB T8V 6W7
Email jmeagher@mhr.ab.ca
Ph (780) 513-7516

West Central Airshed Society

PO BOX 7421
DRAYTON VALLEY AB T7A 1S6
Ph (780) 514-3533
Web www.wcas.com
Email wcas@telusplanet.net

Wood Buffalo Environmental Association

BOX 5567
FORT MCMURRAY AB T9H 3G5
Ph (780) 799-4420
Web www.wbea.org
Email wbea.ed@shawlink.ca

Synergy groups

A list of synergy groups is available on the CASA web site www.casahome.org under the *For Albertans* section.