

Monitoring National Emissions Standards: The Air Quality Management System

In October 2012, all Canadian provinces and territories – with the exception of Quebec – implemented the Air Quality Management System (AQMS) to reduce emissions and better protect the environment and human health across the country.

AQMS was developed by provincial, territorial and federal governments in conjunction with Indigenous, industry and non-governmental organizations. The goal of AQMS is to improve overall air quality across the country and minimize the impact of climate change.

Better air quality will help reduce hospital visits and the number of heart attacks and childhood asthma attacks recorded every year, and it will also result in cleaner surface water and less damage to forests, crops and infrastructure (buildings and roads) across Canada.

AQMS takes the differences in regional air quality into account and establishes national industrial emissions and ambient air quality standards (the amount of a pollutant that can exist in the air). It consists of four key parts:

1. Canadian Ambient Air Quality Standards (CAAQS);
2. The development of regional and local air quality monitoring and management practices through airsheds and air zones;
3. Base-level Industrial Emissions Requirements (BLIERs); and
4. An intergovernmental working group to improve emission rates in mobile sources, such as cars and trucks.

CAAQS determine what level of pollutants can safely exist in the air without causing harm to the environment, humans and animals. CAAQS levels have been established for key pollutants, such as sulphur dioxide (SO₂), nitrogen dioxide (NO₂), ozone (O₃) and fine particulate matter. These levels are regularly reviewed to ensure their accuracy and are adjusted as necessary.

With support from the federal government, the provinces and territories monitor air pollution in their respective air zones and report to the public on current air quality conditions and how the AQMS system is being implemented in their region. The Great Plains Air Zone is one of six air zones that have been established in Saskatchewan, with a focus on Regina and its surrounding area.

BLIERs are designed to reduce overall emissions, and they are targeted toward specific larger emitting industries. BLIERs help ensure that all AQMS industry sectors achieve a minimum environmental performance, regardless of where their facility is located. However, provincial and territorial governments have the right to place even stricter environmental standards on industrial emitters in order to ensure their local CAAQS standards are met.

The industry sectors and equipment groups that are regulated through BLIERs include base metal smelting, upstream oil and gas, potash, cement, chemicals, fertilizers, aluminum/alumina, pipelines, paper and pulp products, petroleum refineries, electricity, iron/steel/ilmenite, natural gas-fueled stationary combustion turbines, stationary spark-ignition gaseous-fuel-fired engines and gaseous-fuel fired boilers and heaters.

AQMS is also working to improve emissions standards of mobile emitters, such as personal and industrial vehicles, by building upon federal, provincial and territorial initiatives that are currently being implemented across the country.

Learn More *(Note: link to*

<https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/overview-multi-sector-air-pollutants-regulations.html>)