



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

805 Memorial Drive
Fort McMurray, AB T9K 0K4
P: 780.799.4420 E: info@wbea.org
wbea.org

Ongoing Air Quality Events Impacting Our Region – WBEA Monitoring 24/7

July 14, 2023

This week, WBEA Community Air Monitoring Stations within the Regional Municipality of Wood Buffalo (RMWB) reported Air Quality Health Index (AQHI) numbers indicating a “very high” risk to individuals with prolonged exposure to outside air.

The ongoing smoke event can be attributed to wildfire activity across northern Alberta, British Columbia, and the Northwest Territories.

“The WBEA is continually committed to providing everyone in our region with exceptional air quality data 24/7” says WBEA Executive Director, Sanjay Prasad. “ We are pleased to deliver our stakeholders, rightholders, and the public comprehensive data, as well as concise at-a-glance Air Quality Health Index information on our website.”

The AQHI is a number from 1 to 10 that indicates the relative health risk associated with local air quality. A low AQHI number means that it is a good time to be active outdoors. A high AQHI number means that precautions should be taken to limit exposure to the air, especially for ‘at risk’ individuals—including children, seniors, and those with lung conditions. AQHI is comprised of particulate matter less than 2.5µm (PM_{2.5}), ground-level ozone (O₃), and nitrogen dioxide (NO₂).

Wildfire smoke carries with it particulate matter, which consists of a mixture of solid particles and aerosols formed during combustion. A high presence of PM_{2.5} in the region results in poor outdoor air quality and reduced visibility.

Alberta Ambient Air Quality Objectives and Guidelines (AAAQO&G) are set by the Province for several compounds. For PM_{2.5}, an AAAQO exceedance occurs when levels are above 29 micrograms per meters cubed (µg/m³) over a 24-hour period, and an AAAQG exceedance occurs when levels are above 80µg/m³ over a 1-hour period.

Between April 1st, 2023 and today, the number of AAAQO PM_{2.5} exceedances reported by WBEA Community Air Monitoring Stations has totalled 197. This compares to 68 PM_{2.5} AAAQO exceedances reported for all of 2016 beginning on April 1st. The PM_{2.5} AAAQG was implemented in 2019. To date, the WBEA has reported the most guideline exceedances in a year, with almost 4,000 in 2023.



About the WBEA:

The WBEA is a multi-stakeholder, consensus-based, not-for-profit organization that leads in state-of-the-art environmental monitoring to enable informed decision-making. The WBEA monitors the ambient air quality of the Regional Municipality of Wood Buffalo (RMWB) 24 hours a day, 365 days a year.

Its environmental monitoring work is the most integrated and has the most intensive focus on air and deposition monitoring in any one area, anywhere in Canada. Established in 1985 as the Air Quality Task Force, the WBEA was set up to address environmental concerns raised by the communities in the RMWB.

Additional Information:

The following table compares the total number of AAAQO exceedances of PM_{2.5} at the WBEA's community air monitoring stations in 2016 and 2023:

Number of AAAQO Exceedances Threshold: 29 µg/m ³ (24-hour average)		
Community Air Monitoring Station	April 1 – December 31, 2016	April 1 – July 14, 2023
Anzac	13	28
Bertha Ganter – Fort McKay	7	28
Conklin	8	29
Fort Chipewyan	5	25
Janvier	0*	26
Athabasca Valley – Fort McMurray	18	32
Patricia McInnes – Fort McMurray	17	29

**Please Note: The Janvier Air Monitoring Station did not come online until December 2016*

For more information, please visit wbea.org

To view the location of all WBEA Air Monitoring Stations, including our seven community stations, please visit wbea.org/data/network-map-station-data

For information related to Ambient Air Quality Objectives and Guidelines, please visit wbea.org/monitoring-programs/monitoring-objectives-and-requirements

All media inquiries may be directed to:

Stuart McIntosh

Communications Coordinator

T: (780) 799-4420 | C: (780) 742-7788

smcintosh@wbea.org