

# 2024 Q1 (January-March) Air Quality Monitoring Results



## Air Quality Health Index (AQHI) Ratings

The AQHI is calculated by the Government of Alberta using data collected at FAP air monitoring stations. The AQHI is a measure of air quality as it pertains to human health.

AQHI levels are low, moderate, high or very high. Risk to health increases as the index level rises.

Visit our [Alberta Quality Health Index](#) more information. Seven of FAP's 10 continuous air monitoring stations monitor substances whereby the AQHI can be calculated.

FAP – 2024 Q1		Risk Level (% of time in each)			
Station Name	Hours Monitored	Low	Moderate	High	Very High
Bruderheim	2108	91.46%	8.54%	0.00%	0.00%
Elk Island	2135	93.96%	5.90%	0.14%	0.00%
Fort Saskatchewan	2127	79.31%	20.45%	0.24%	0.00%
Gibbons	2142	85.29%	14.66%	0.05%	0.00%
Lamont	2142	91.78%	8.22%	0.00%	0.00%
Redwater	2075	93.16%	6.70%	0.14%	0.00%
Newbrook*	732	94.95%	5.05%	0.00%	0.00%
<b>Total hours</b>	<b>13461</b>	<b>12042</b>	<b>1407</b>	<b>12</b>	<b>0</b>

\*The Keith Purves Portable station near Newbrook was shut down February 1 in preparation for the move to the next site.

## Hours with a High or Very High Risk AQHI Rating

FAP Continuous Air Quality Monitoring Station																
Event Dates	Bruderheim		Elk Island		Fort Sask.		Gibbons		Lamont		Redwater		Newbrook		Total Hours	Attributed Cause
	High Risk	Very High Risk	High Risk	Very High Risk	High Risk	Very High Risk	High Risk	Very High Risk	High Risk	Very High Risk	High Risk	Very High Risk	High Risk	Very High Risk		
Jan 5	-	-	-	-	1	-	1	-	-	-	3	-	-	-	5	Wintertime inversion
Jan 25	-	-	-	-	4	-	-	-	-	-	-	-	-	-	4	Wintertime inversion
Feb 2	-	-	3	-	-	-	-	-	-	-	-	-	-	-	3	Wintertime inversion
<b>Total Hours</b>			3		5		1				3				<b>12</b>	

## Summary of Exceedances

There were five exceedances of the 1-hr, and 19 exceedances of the 24-hour objective in the first 3 months of 2024.

One Hour Exceedances			
Parameter	Exceedances	Date	Attributed Cause
PM <sub>2.5</sub>	2	January 5	Wintertime inversion
PM <sub>2.5</sub>	3	January 5	Wintertime inversion and local brush burning

24-Hour Exceedances			
Parameter	Exceedances	Date	Attributed Cause
PM <sub>2.5</sub>	4	January 5	Wintertime inversion
PM <sub>2.5</sub>	1	January 5	Wintertime inversion and local brush burning
PM <sub>2.5</sub>	14	January 23-25	Wintertime inversion