

2020 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. Go to our website's AQHI page for more information. Seven of FAP's 10 continuous air monitoring stations monitor substances whereby the AQHI can be calculated.

FAP – 2020 Q	Risk Level (% of time in each)					
Station Name	Hours Monitored	Low	Moderate	High	Very High	
Bruderheim	2,112	84.23%	15.67%	0.09%	-	
Chipman	2,073	95.90%	4.10%	-	-	
Elk Island	2,082	96.06%	3.94%	-	-	
Fort Saskatchewan	2,053	84.36%	15.25%	0.39%	-	
Gibbons	2,058	80.47%	19.48%	0.05%	-	
Lamont County	2,100	96.33%	3.67%	-	-	
Redwater	1,954	92.48%	7.52%	-	-	
Total hours	14,432	12,985	1,436	11	-	

Hours with a High or Very High Risk AQHI Rating

FAP Continuous Air Quality Monitoring Station																
Event Dates	Bruderheim		Chipman		Elk Island		Fort Sask.		Gibbons		Lamont County		Redwater		Total	Attributed
	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	Hours	Cause
Jan. 25	2	-	-	-	-	-	3	-	-	-	-	-	-	-	5	
Jan. 26	-	-	-	-	-	-	2	-	-	-	-	-	-	-	2	Wintertime inversion
Jan. 27	-	-	-	-		-	-	-	1	-	-	-	-	-	1	
Jan. 29	-	-	-	1	1	1	3	-	-	-	-	-	-	-	3	
Total Hours	2	-	-	-	-	-	8	-	1	-	-	-	-	-	11	

Summary of Exceedances

Air quality measurements are compared continuously to both 1 and 24-hour <u>Alberta Ambient Air Quality Objectives</u> (AAAQO). Any exceedance of an AAAQO is reported to the Alberta Government and the likely cause of the exceedance investigated. The following table details what substances exceeded an AAAQO, when they occurred and if it can be determined, the likely cause.

One Hour Exceedances							
Parameter	Exceedances	Date	Attributed Cause				
Fine Particulate (PM _{2.5})	1	January 27	Wintertime inversion				

24-Hour Exceedances							
Parameter	Exceedances	Date	Attributed Cause				
	7	January 25					
Fine Particulate (PM _{2.5})	2	January 26					
	1	January 27	Wintertime inversion				
	2	January 28					
	1	January 29					