2021 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 rated as low, moderate, high or very high risk. Risk to health increases as the index level rises. Go to <u>the FAP website's AQHI page</u> for more information. Seven of FAP's 10 continuous air monitoring stations monitor substances that enable the calculation of the AQHI.

FAP – 2021 Q	Risk Level (% of time in each)						
Station Name	Hours Monitored	Low	Moderate	High	Very High		
Bruderheim	2,003	96.06%	3.94%	-	-		
Elk Island	1,999	98.80%	1.20%	-	-		
Fort Saskatchewan	1,951	89.85%	10.15%	-	-		
Gibbons	2,003	89.87%	10.13%	-	-		
Lamont County	2,014	98.11%	1.89%		-		
Redwater	1,818	97.96%	1.98%	0.06%	-		
Sturgeon County	1,751	97.72%	2.28%	-	-		
Total hours	13,539	12,920	618	1	-		

Hours with a High or Very High Risk AQHI Rating

FAP Continuous Air Quality Monitoring Station																
	Bruderheim		Elk Island			Fort Sask. Gi		Gibbons		Lamont County		Redwater		Sturgeon County		Attributed
Event Dates	High Risk	Very High Risk	Total Attributed Hours Cause													
Jan. 29	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	Wintertime inversion
Total Hours	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	

Summary of Exceedances

Air quality measurements are compared continuously to both 1 and 24-hour <u>Alberta Ambient Air Quality</u> <u>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 29	Wintertime inversion				

24-Hour Exceedances							
Parameter	Exceedances	Date	Attributed Cause				
Fine 2 Particulate		January 29	Wintertime inversion				
(PM _{2.5})	2	January 30	white the liversion				