

2018 Q1 (January - March) 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 describes the level of health risk associated with AQHI levels. The levels are low, moderate, high or very high. The higher the index, the greater the health risk. Go to [our website's AQHI page](#) for more information. Six of FAP's nine continuous air monitoring stations monitor substances whereby the AQHI can be calculated.

Station Name	Hours Monitored	Risk Level (% of time in each)			
		Low	Moderate	High	Very High
Bruderheim	2,118	85.60%	14.40%	-	-
Elk Island	2,064	86.39%	13.18%	0.44%	-
Fort Saskatchewan	2,128	73.83%	25.89%	0.28%	-
Gibbons	2,126	76.58%	22.86%	0.56%	-
Lamont County	2,133	88.47%	11.53%	-	-
Redwater	2,059	83.97%	16.03%	-	-
Total hours	12,628	10,411	2,190	27	0

Hours with a High or Very High Risk AQHI Rating

This table shows the number of hours of high or very high AQHI rating during Q1 of 2018, when they occurred and the likely cause.

Fort Air Partnership Continuous Air Quality Monitoring Station														
Event Dates	Bruderheim		Elk Island		Fort Sask.		Lamont County		Gibbons		Redwater		Total Hours	Event 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		
Jan 20	-	-	-	-	-	-	-	-	1	-	-	-	1	Wintertime Inversion
Mar 5	-	-	2	-	-	-	-	-	-	-	-	-	2	Wintertime Inversion
Mar 8	-	-	-	-	-	-	-	-	2	-	-	-	2	Wintertime Inversion
Mar 12-14	-	-	7	-	6	-	-	-	9	-	-	-	22	Wintertime Inversion
Total Hours	-	-	9	-	2	-	-	-	12	-	-	-	27	

Summary of Exceedances

Air quality measurements are compared hourly to the [Alberta Ambient Air Quality Objectives](#) (AAAQO). Any exceedance of an AAAQO is reported to the Alberta Government and the cause of the exceedance investigated.

One Hour Exceedances			
Parameter	Exceedances	Dates	Attributed Cause
Hydrogen Sulphide H ₂ S	2	January 20	Local industry
Respirable Particulate PM _{2.5}	1	January 20	Unknown local source
	1	March 14	Wintertime inversion

24 Hour Exceedances			
Parameter	Exceedances	Dates	Attributed Cause
Respirable Particulate PM _{2.5}	2	March 8	Wintertime inversion
	1	March 12	Wintertime inversion
	4	March 13	Wintertime inversion
	1	March 17	Wintertime inversion