2019 Q2 (April-June) 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. Risk to health increases as the index level rises. Go to <u>our website's AQHI page</u> for more information. Six of FAP's 10 continuous air monitoring stations monitor substances whereby the AQHI can be calculated.

Q2 - 2019	Risk Level					
Station Name	Hours Monitored	Low	Moderate	High	Very High	
Bruderheim	2,152	91.45%	7.71%	0.65%	0.19%	
Elk Island	2,037	92.00%	7.46%	0.29%	0.25%	
Fort Saskatchewan	2,062	91.80%	7.43%	0.58%	0.19%	
Gibbons	2,139	92.24%	6.70%	0.80%	0.28%	
Lamont County	2,156	93.09%	6.41%	0.33%	0.19%	
Redwater	2,129	89.71%	8.86%	1.18%	0.28%	
Total hours	12,675	11,625	940	81	29	

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 Q2 of 2019, when they occurred and the likely cause.

Fort Air Partnership Continuous Air Quality Monitoring Station														
	Bruderheim		Elk Island		Fort Sask.		Gibbons		Lamont County		Redwater		Total	A de tribunt e d
Event Dates	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
May 28	-	-	4	-	-	2	-	-	-	-	-	-	6	Summertime smog
May 30,31	12	4	2	5	4	4	11	6	5	4	16	6	79	
June 1	2	-	-	-	3	-	3	-	1	-	5	-	14	Smoke from wildfires
June 8	-	-	-	-	3	-	3	-	-	-	3	-	9	
Total Hours	14	4	6	5	10	6	17	6	6	4	24	6	108	

Summary of Exceedances

Air quality measurements are compared hourly to the <u>Alberta Ambient Air Quality Objectives</u> (AAAQO). Any exceedance of an AAAQO is reported to the Alberta Government and the cause of the exceedance investigated. From May 30 to June 1 most of the province was affected by smoke from wildfires burning in northwestern Alberta. Air monitoring stations in the entire Edmonton Metropolitan Region, including FAP, measured the highest levels of particulate matter ever recorded in the area. FAP's Redwater station recorded a level 19 times the AAAQO.

One Hour Exceedances							
Parameter	Exceedances Dates		Attributed Cause				
Hydrogen Sulphide H ₂ S	1	May 22	Local Industry				
	1	May 26					
Ozone O ₃	24	May 28	Summertime smog				
Fine Particulate PM _{2.5}	47	May 30					
	30	May 31	Smoke from wildfires				
	5	June 1					
Hydrogen Sulphide H ₂ S	1	June 1	Local Industry				
Fine Particulate PM _{2.5}	9	June 8	Smoke from wildfires				

24 Hour Exceedances						
Parameter	Exceedances	Dates	Attributed Cause			
Fine Particulate PM _{2.5}	6	May 30				
	4	May 31	Smoke from wildfires			
	6	June 1				