2020 Q3 (July-Sept)
Air Quality Monitoring Results

FORT AIR PARTNERSHIP
We Monitor the Air You Breathe

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 Q3		Risk Level (% of time in each)			
Station Name	**Hours Monitored**	**Low**	**Moderate**	**High**	**Very High**
Bruderheim	2,134	99.39%	0.61%		
Elk Island	2,086	99.28%	0.72%	-	-
Fort Saskatchewan	2,078	99.76%	0.24%	-	-
Gibbons	2,115	99.05%	0.90%	0.05%	-
Lamont County	2,146	99.39%	0.61%	-	-
Redwater	2,111	99.95%	0.05%	-	-
Sturgeon County*	1,425	99.58%	0.42%		
Total hours	**14,095**	**14,022**	**72**	**1**	**-**

**The portable monitoring station in Sturgeon County began reporting AQHI data on August 1, 2020.*

Hours with a High or Very High Risk AQHI Rating

In Q3 of 2020, there were no very high risk AQHI hours and only one hour that was high risk. That occurred on September 27 in Gibbons. The attributed cause was the burning of residential yard waste near the station.

Summary of Exceedances

Air quality measurements are compared continuously to both one and 24-hour Alberta Ambient Air Quality Objectives (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**
Hydrogen Sulphide (H_2S)	1	July 24	Natural due to wetlands
	3	July 31	
	1	August 5	Local Industry
	1	August 23	Natural due to wetlands
	1	September 19	Town wastewater lagoons
Fine Particulate ($PM_{2.5}$)	1	September 27	Local residential yard waste burning

24-Hour Exceedances			
Parameter	**Exceedances**	**Date**	**Attributed Cause**
Hydrogen Sulphide (H_2S)	1	July 31	Natural due to wetlands
Fine Particulate ($PM_{2.5}$)	6	Sept 19	Smoke from U.S. wildfires