

# 2018 (January-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 [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.

Station Name	Hours Monitored	Risk Level (% at each level)			
		Low	Moderate	High	Very High
Bon Accord (portable)*	1,519	88.01%	11.98%	-	-
Bruderheim	4,238	89.88%	10.10%	0.02%	-
Elk Island	3,991	88.52%	11.25%	0.23%	-
Fort Saskatchewan	4,209	79.47%	20.38%	0.14%	-
Gibbons	4,267	80.95%	18.77%	0.28%	-
Lamont County	4,274	89.66%	10.34%	-	-
Redwater	4,179	86.17%	13.83%	-	-

Station Name	Hours Monitored	Risk Level (hours at each level)			
		Low	Moderate	High	Very High
Bon Accord (portable)*	1,519	1,337	182	-	-
Bruderheim	4,238	3,809	428	1	-
Elk Island	3,991	3,533	449	9	-
Fort Saskatchewan	4,209	3,345	858	6	-
Gibbons	4,267	3,454	801	12	-
Lamont County	4,274	3,832	442	-	-
Redwater	4,179	3,601	578	-	-
<b>Total hours</b>	<b>26,677</b>	<b>22,911</b>	<b>3,738</b>	<b>28</b>	<b>-</b>

\*FAP's new portable station was placed in Bon Accord and began reporting the AQHI on April 26.

### 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 the first six months of 2018, when they occurred and the likely cause. The stations at Lamont County, Redwater, and Bon Accord recorded no high or very high AQHI events during this period of time.

Fort Air Partnership Continuous Air Quality Monitoring Station										
Event Dates	Bruderheim		Elk Island		Fort Sask.		Gibbons		Total Hours	Event Cause
	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
March 5	-	-	2	-	-	-	-	-	2	Wintertime Inversion
March 8	-	-	-	-	-	-	2	-	2	Wintertime Inversion
March 12-14	-	-	7	-	6	-	9	-	22	Wintertime Inversion
May 14	1	-	-	-	-	-	-	-	1	Grass fires
<b>Total Hours</b>	<b>1</b>	<b>-</b>	<b>9</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>28</b>	

### 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 <sub>2</sub> S	2	January 20	Local industry
	14	May 5, 11, 14, 16, 19, 23, 27	Naturally occurring, from nearby wetlands
Respirable Particulate PM <sub>2.5</sub>	1	January 20	Unknown local source
	1	March 14	Wintertime inversion
	1	May 14	Grass fires

24 Hour Exceedances			
Parameter	Exceedances	Dates	Attributed Cause
Respirable Particulate PM <sub>2.5</sub>	2	March 8	Wintertime inversion
	1	March 12	Wintertime inversion
	4	March 13	Wintertime inversion
	1	March 17	Wintertime inversion
Hydrogen Sulphide H <sub>2</sub> S	4	May 11, 14, 23, 27	Naturally occurring, from nearby wetlands