



Air Quality Report

September 16, 2020

1. Lead in Air:

Second quarter average for lead in air at Butler Park was $0.056 \mu\text{g}/\text{m}^3$, which is significantly lower than previous years and the lowest quarterly average ever recorded. Third quarter results to date continue to follow this trend with monthly averages for July and August of 0.059 and $0.064 \mu\text{g}/\text{m}^3$, respectively. The low ambient air concentrations likely reflect increased dust control measures along with a wetter spring.

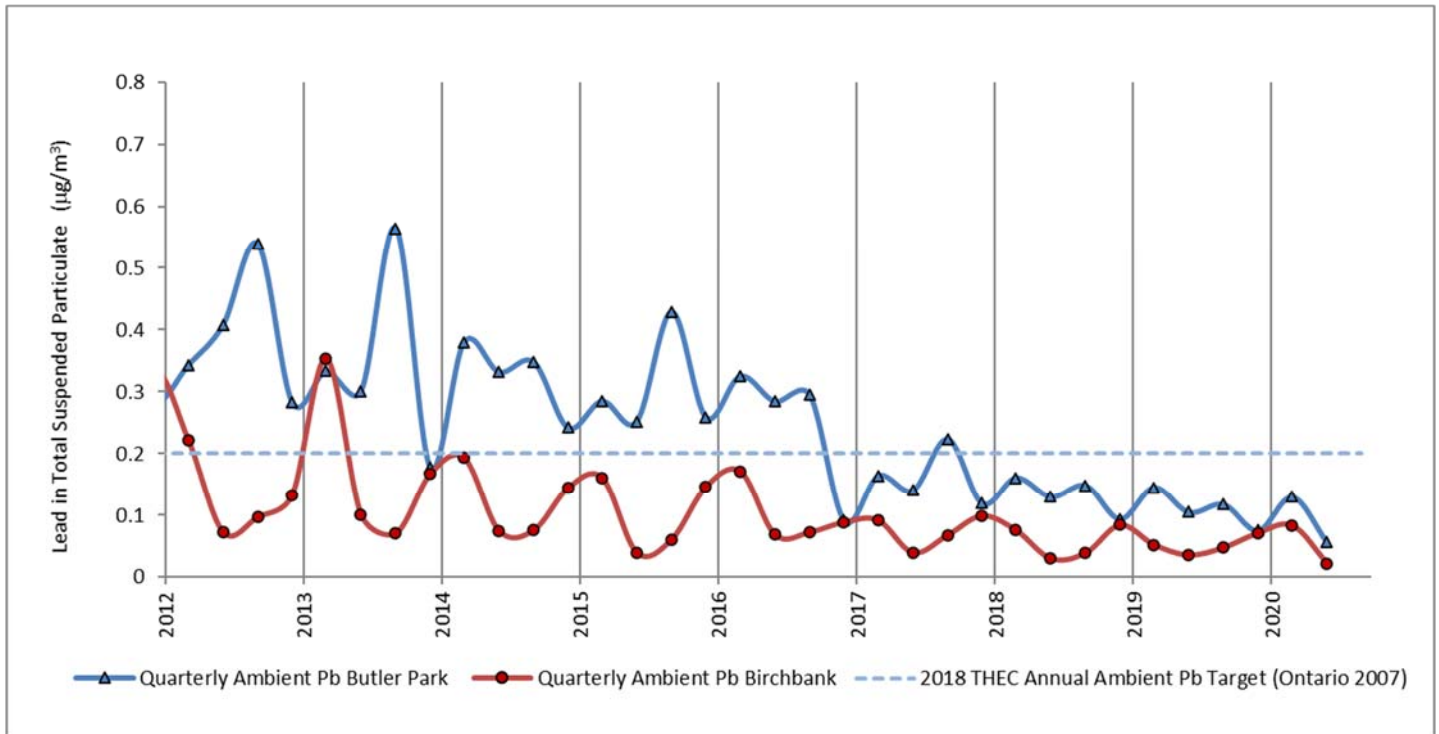


Figure 1: Quarterly monthly average lead at Butler Park and Birchbank stations (as total suspended particulate measured bi-daily)

The chart in Figure 1 shows quarterly averages for Lead in air for Butler Park (dark blue) and Birchbank (red), in comparison to the 2018 THEC Annual Ambient Lead in Air Objective (dashed line).

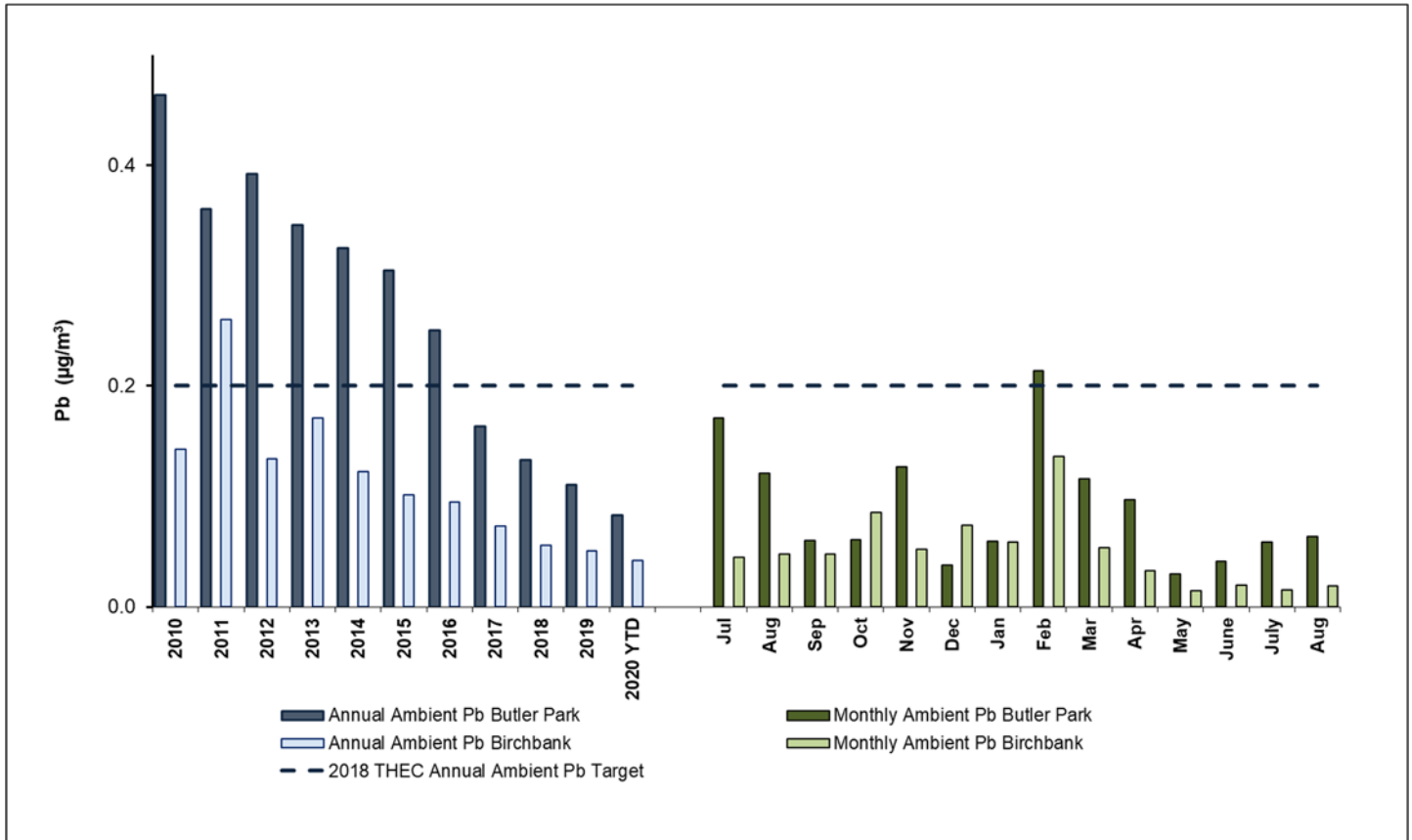


Figure 2: Annual and monthly average lead at Butler Park and Birchbank stations (as total suspended particulate measured bi-daily)

The chart in Figure 2 shows annual and monthly averages for Lead in air for Butler Park. Annual averages are shown on the left for Butler Park (dark blue) and Birchbank (light blue). Monthly averages for the past year are shown on the right for Butler Park (dark green) and Birchbank (light green). The 2018 THEC Annual Ambient Lead in Air Objective is shown as a dashed line. Monthly averages for Lead in ambient air are expected to have some variability due to season, weather, predominant wind direction and operational variance.

2. Arsenic in Air:

Second quarter average for arsenic in air at Butler Park was $0.002 \mu\text{g}/\text{m}^3$, which is significantly lower than previous years and the lowest quarterly average ever recorded. Third quarter results to date are also trending lower than historical with monthly averages for July and August of 0.002 and $0.003 \mu\text{g}/\text{m}^3$, respectively.

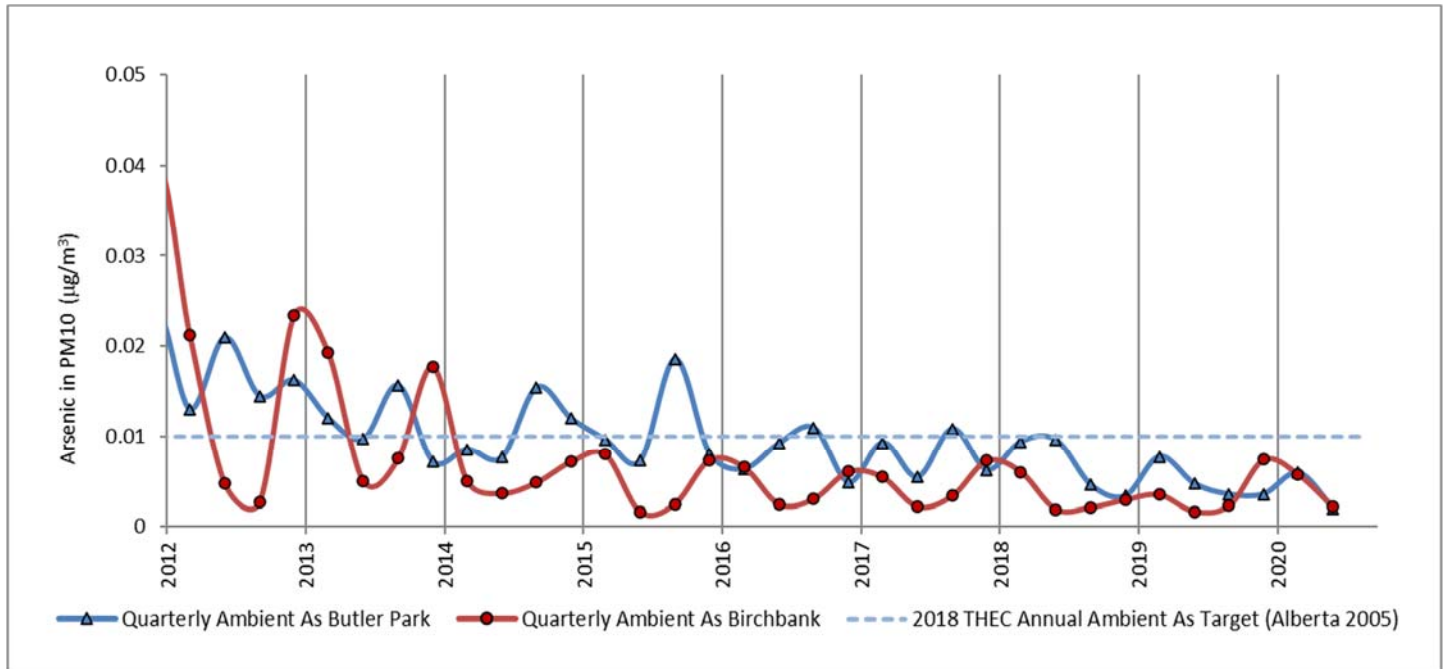


Figure 3: Quarterly average arsenic at Butler Park and Birchbank stations (as inhalable PM₁₀ fraction measured weekly)

The chart in Figure 3 shows the annual average for Arsenic in air (measured as inhalable PM₁₀ fraction) at Butler Park (blue) and Birchbank (red) in comparison to the 2018 THEC Air Quality Objective (blue line).

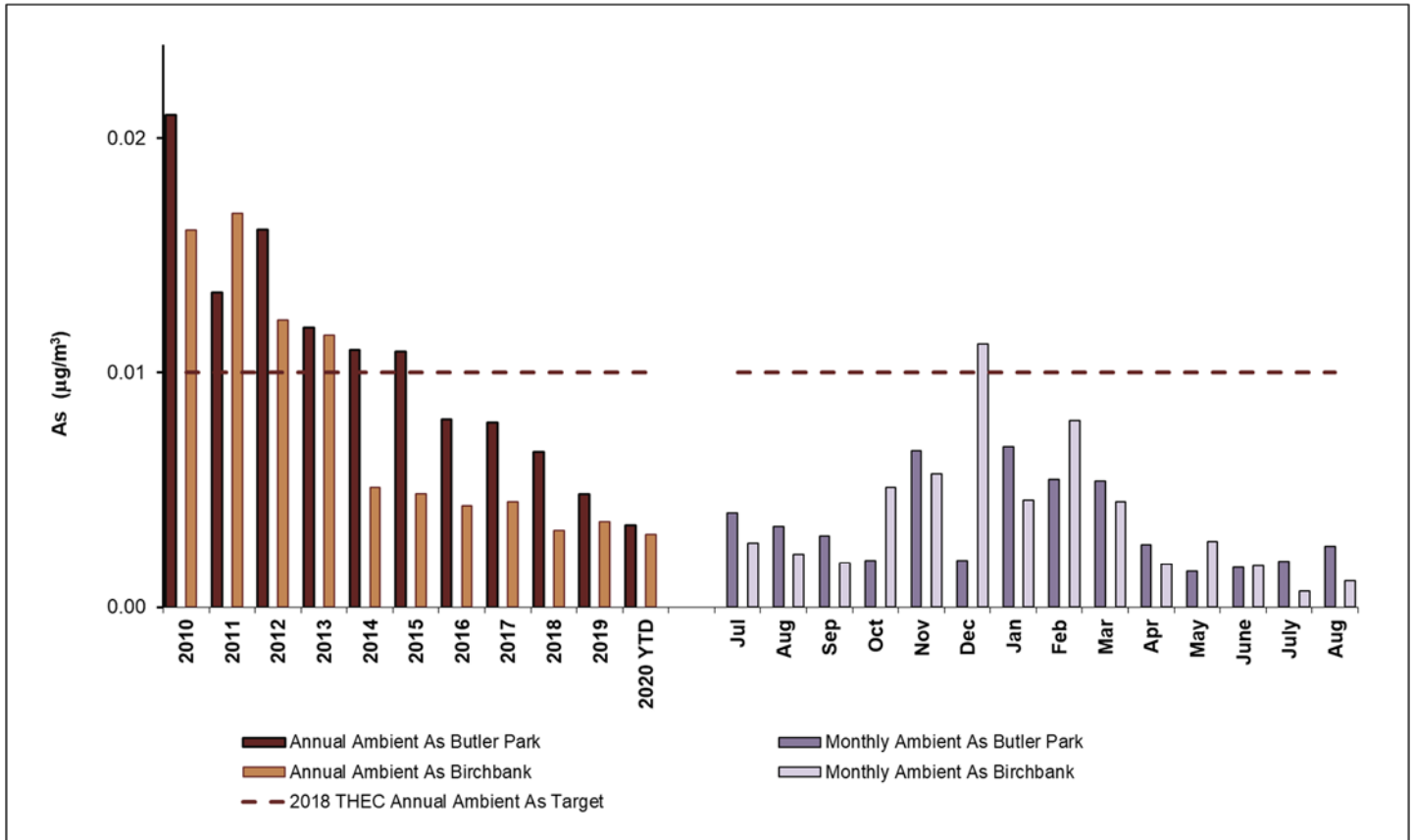


Figure 4: Annual and monthly average arsenic at Butler Park and Birchbank stations (as inhalable PM10 fraction measured weekly)

The chart in Figure 4 shows annual and monthly averages for Arsenic in air at Butler Park and Birchbank. Annual averages are shown on the left for Butler Park (dark brown) and Birchbank (light brown). Monthly averages for the past year are shown on the right for Butler Park (dark purple) and Birchbank (light purple). The 2018 THEC Air Quality Objective is shown as a dashed line. Monthly averages for Arsenic in ambient air are expected to have some variability due to season, weather, predominant wind direction, operational variance and sampling frequency.

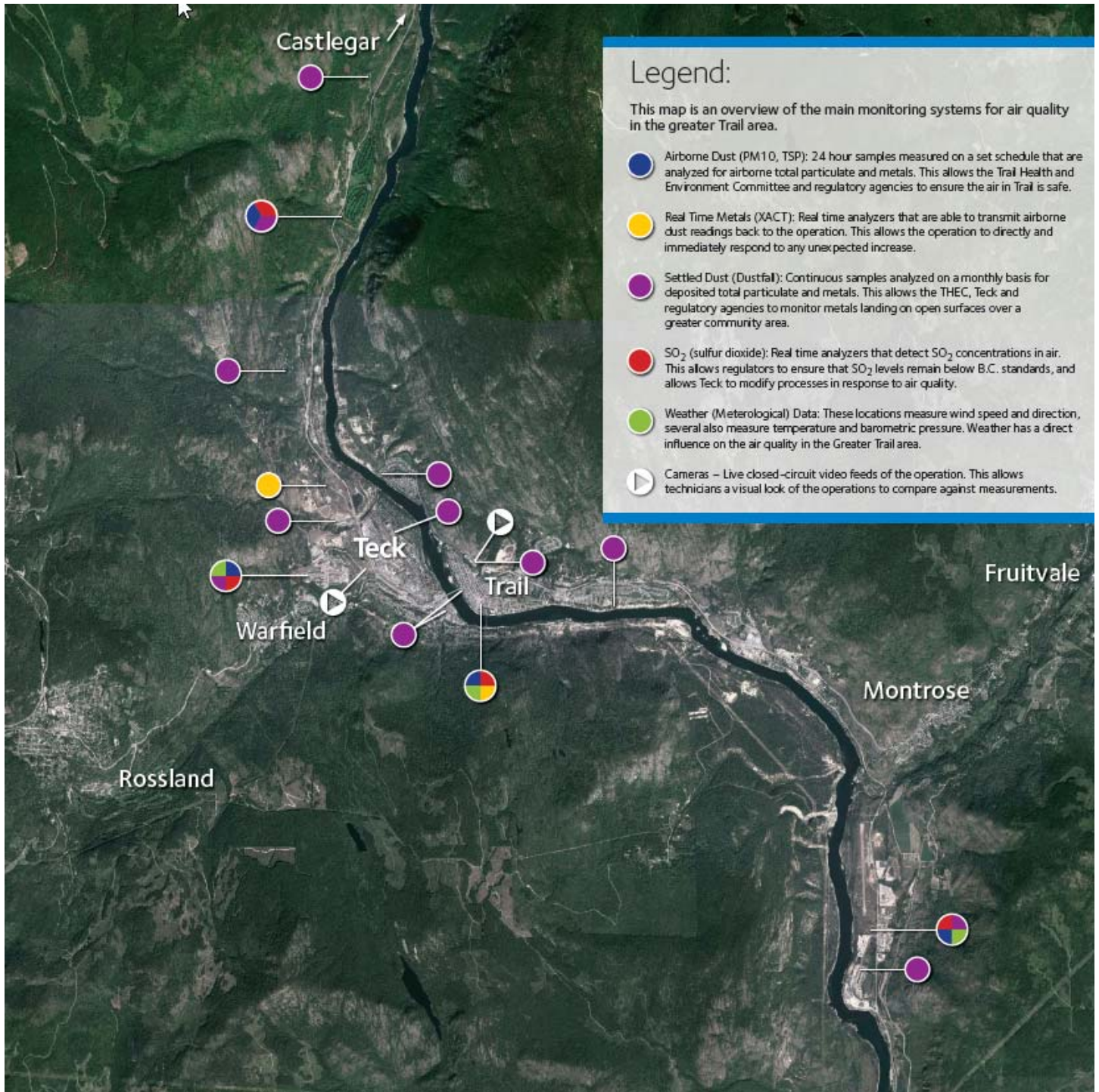


Figure 5: Teck Community Air Monitoring Stations