



## Air

### Status of Fine Particulate Matter in B.C. (2016-2018)

British Columbia operates a network of air monitoring stations that measure fine particulate matter and other air pollutants. This indicator reports on the concentration of fine particulate matter from 2016-2018 and compares it to the Canadian Ambient Air Quality Standards established by the Canadian Council of Ministers of the Environment.

#### Fine Particulate Matter (PM<sub>2.5</sub>): Canadian Ambient Air Quality Standard

PM<sub>2.5</sub> levels are calculated using **two** statistical forms called the annual and the 24-hour metrics. The Canadian Ambient Air Quality Standard value for PM<sub>2.5</sub> annual is **10.0 micrograms per cubic metre** and the standard value for PM<sub>2.5</sub> 24-hour is **28 micrograms per cubic metre (µg/m<sup>3</sup>)**.

PM<sub>2.5</sub> standards are achieved when annual levels are  $\leq 10 \mu\text{g}/\text{m}^3$  and 24-hour levels are  $\leq 28 \mu\text{g}/\text{m}^3$ .

#### What is an Air Zone?

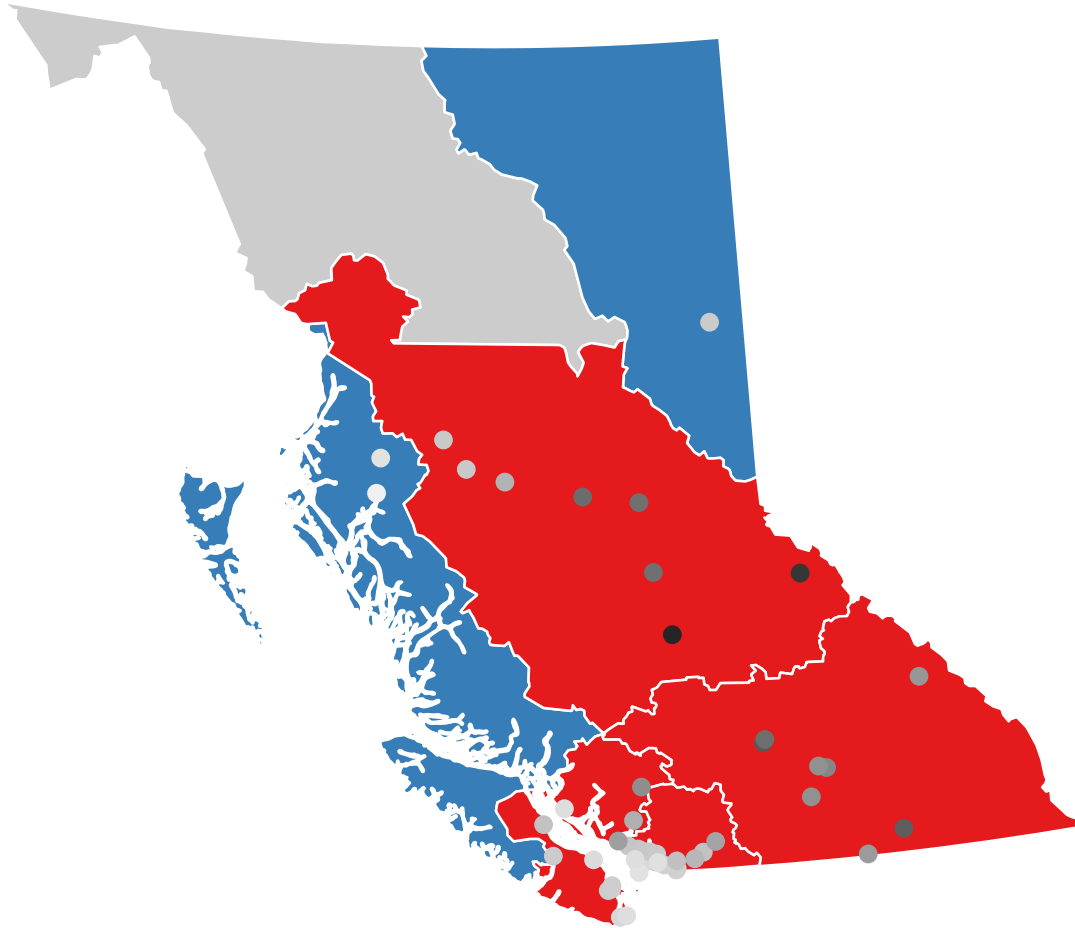
British Columbia is divided up into seven air zones, which are areas that typically exhibit similar air quality characteristics, issues, and trends.

- **Fine particulate matter is an air pollutant.** Solid or liquid particles floating in the air are called particulate matter. The smallest of these particles—those that are 2.5 microns or less in diameter, or less than 1/20th the width of a human hair—are called fine particulate matter (PM<sub>2.5</sub>). Fine particulate matter comes from many natural and human activities, including wildfires and emissions from prescribed burning, forestry operations, residential woodstoves, and transportation.<sup>1</sup>
- **Fine particulate matter can be harmful to humans.** Exposure to fine particulate matter has been associated with several serious health effects including heart and lung disease.<sup>1</sup> Both short-term (24-hour) and longer-term (a year or more) exposure to fine particulate matter can have negative effects on human health.
- **Fine particulate matter levels met the Canadian Ambient Air Quality Standards at 42 percent of assessed monitoring stations in B.C.** There are two standards for PM<sub>2.5</sub>—an annual standard and a 24-hour standard (see sidebar). The annual standard was met at 41 of the 52 stations (79%) for which valid data was obtained, while the 24-hour standard was met at 22 of the 52 stations (42%) with sufficient data for analysis.

- **Fine particulate matter levels met both of the Canadian Ambient Air Quality Standards in two of B.C.'s seven air zones.** The Coastal, Northeast, Lower Fraser Valley, and Georgia Strait air zones met the PM<sub>2.5</sub> annual standard, while the Central Interior and Southern Interior air zones exceeded it. The Coastal and Northeast air zones met the PM<sub>2.5</sub> 24-hour standard, while the Central Interior, Southern Interior, Lower Fraser Valley, and Georgia Strait air zones exceeded it. Many of the exceedances were due to the influence of smoke from wildfires, especially during the summers of 2017 and 2018. Currently, there are no air monitoring stations in the Northwest air zone.
- **Fine particulate matter levels are used to set management levels for each air zone.** Four management levels (green, yellow, orange, and red) are each associated with a suite of actions that become more rigorous as fine particulate matter levels approach the Canadian Ambient Air Quality Standards.

The maps and chart below summarise the Canadian Ambient Air Quality Standard achievement status for fine particulate matter in B.C. air zones, as well as both the annual and 24-hour PM<sub>2.5</sub> levels at individual monitoring stations. Summaries are given for each monitoring station where sufficient data was available for the 2016-2018 reporting period.

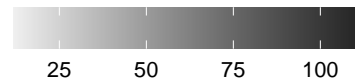
### Status of 24-hour PM<sub>2.5</sub> Levels in B.C. Air Zones (2016-2018)



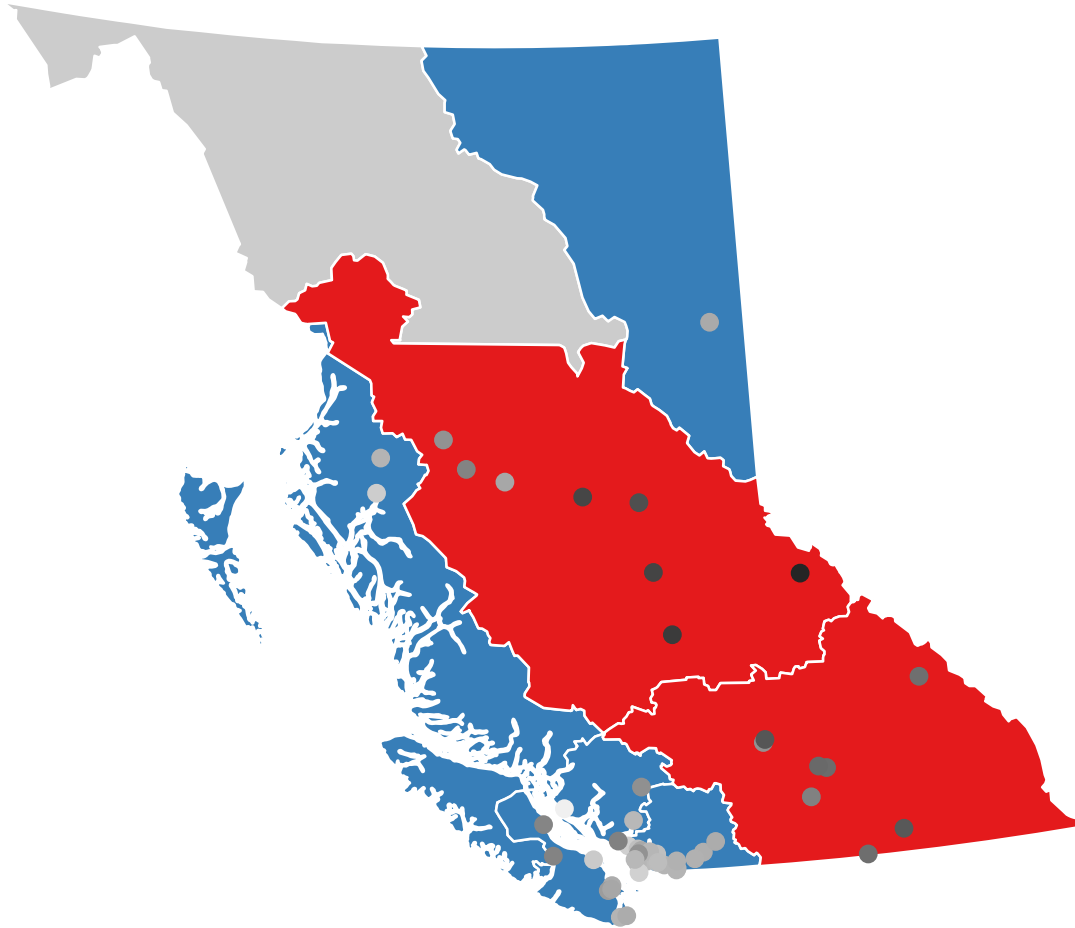
Airzones:  
PM2.5 24h Air Quality Standard

Insufficient Data Achieved Not Achieved

Monitoring Stations:  
PM2.5 24h Metric (ug/m3)



### Status of Annual PM<sub>2.5</sub> Levels in B.C. Air Zones (2016-2018)



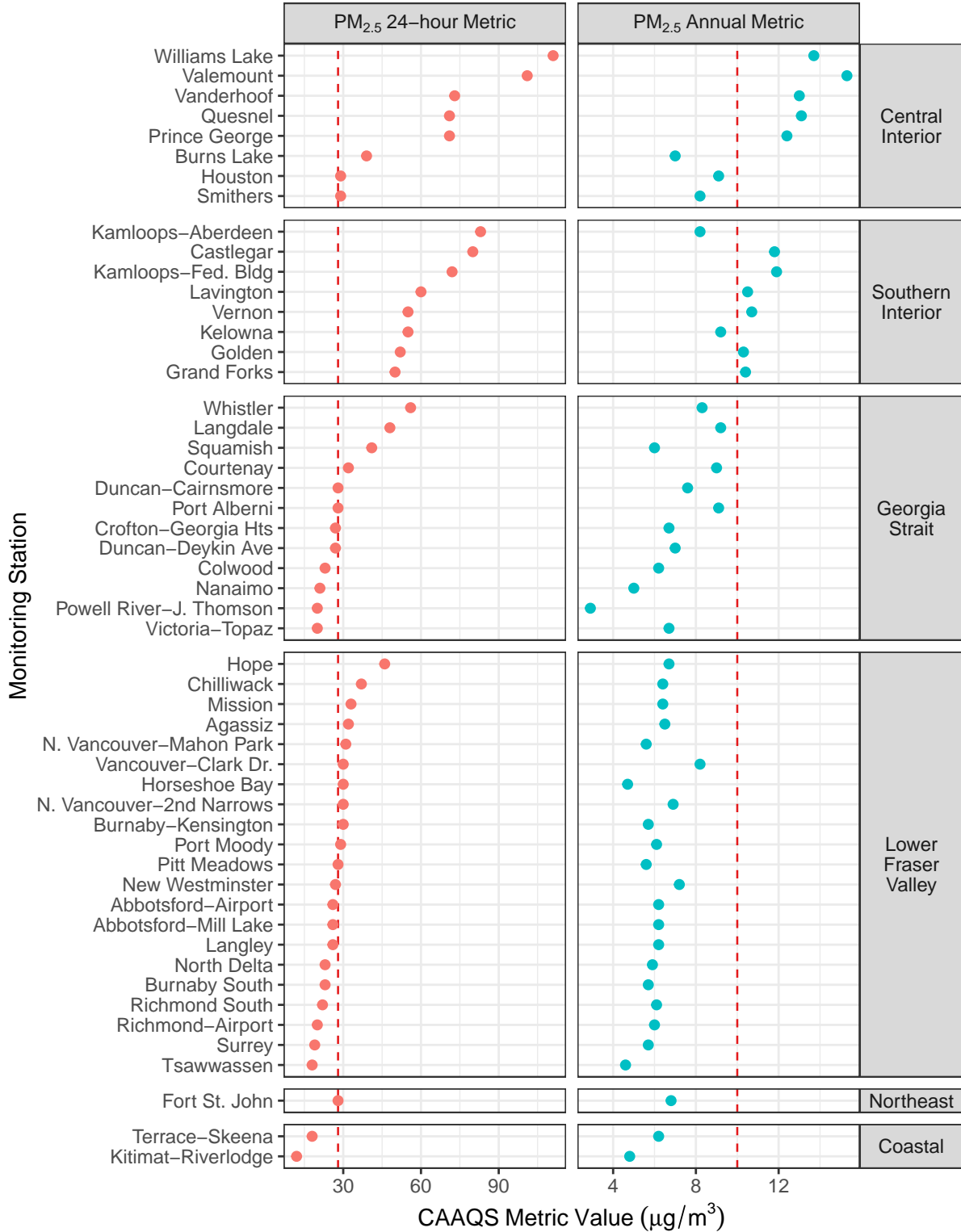
Airzones:  
PM2.5 Annual Air Quality Standard

Insufficient Data Achieved Not Achieved

Monitoring Stations:  
PM2.5 Annual Metric (ug/m3)



### PM<sub>2.5</sub> Metrics for Air Monitoring Stations within B.C. Air Zones (2016-2018)



## More about the Canadian Ambient Air Quality Standard fine particulate matter metrics:

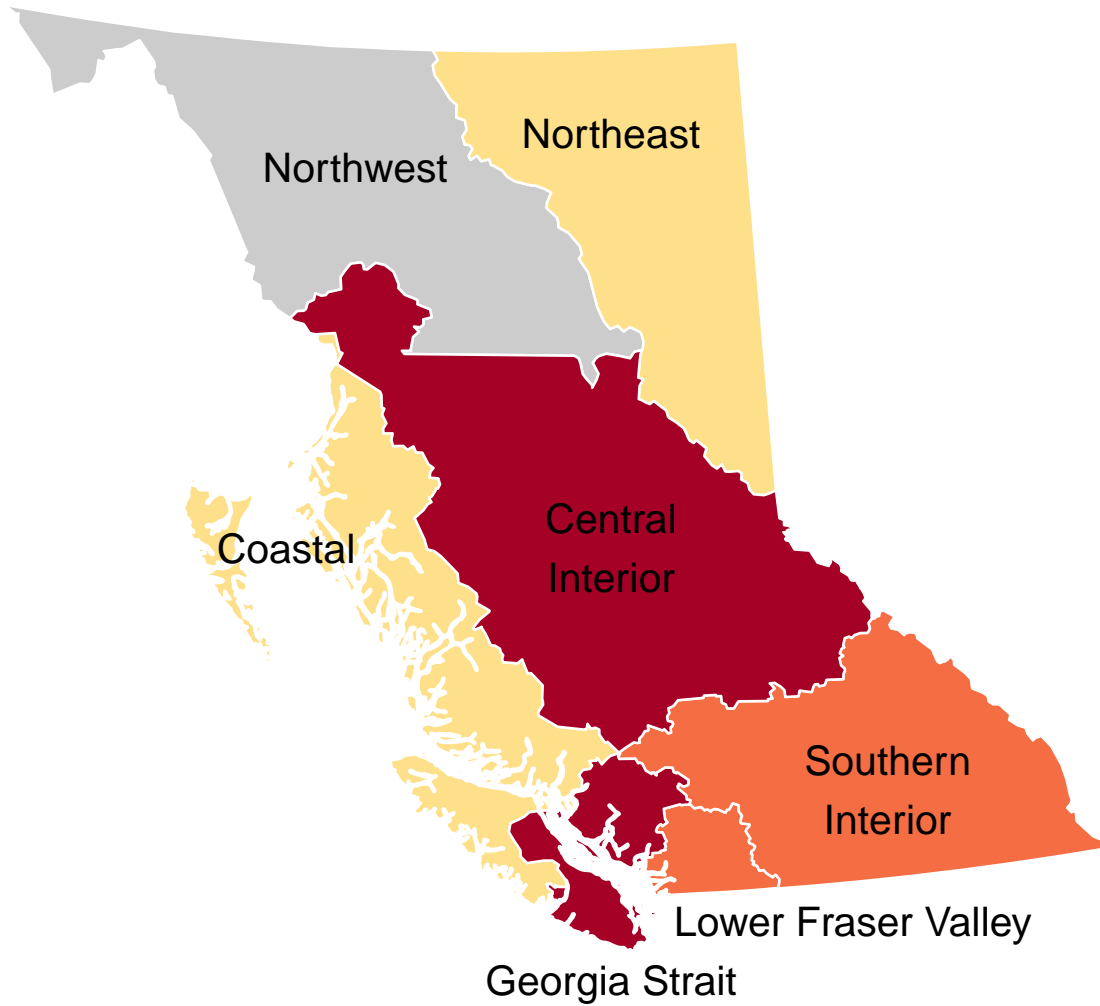
- There are two Canadian Ambient Air Quality Standards for fine particulate matter (PM<sub>2.5</sub>). The statistical form of the PM<sub>2.5</sub> annual metric is the 3-year average of the annual average concentration of PM<sub>2.5</sub>. The statistical form of the PM<sub>2.5</sub> 24-hour metric is the 3-year average of the annual 98th percentile of the daily average concentrations of PM<sub>2.5</sub>.
- The PM<sub>2.5</sub> metric for an air zone is the highest PM<sub>2.5</sub> metric value reported from monitoring stations within the air zone. Air zone metric values are only taken from stations reporting on two years of data when there are no available three-year reporting stations in the air zone.
- Only air monitoring stations with sufficient data on fine particulate matter concentrations for the 2016-2018 reporting period were included in this indicator. Visit Current Air Quality Data for a complete list of air monitoring stations across B.C.
- Data completeness and sufficiency criteria for the two PM<sub>2.5</sub> metrics are described in the Guidance Document on Achievement Determination: Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone (2012).

## Canada-wide Air Quality Management System






The Air Quality Management System is Canada's approach for protecting air quality. Under the Air Quality Management System, provinces and territories monitor, report and manage local air quality within air zones, with the goal of continuously improving air quality and keeping pollutants below the Canadian Ambient Air Quality Standards.

- There are seven air zones in British Columbia: Coastal, Georgia Strait, Lower Fraser Valley, Southern Interior, Central Interior, Northeast and Northwest.
- The Air Zone Management Framework defines air zone management levels for fine particulate matter based on the higher of the annual and 24-hour fine particulate matter levels reported from monitoring stations within the air zone.
- The four management levels are (1) green (actions for keeping clean areas clean); (2) yellow (actions for preventing air quality deterioration); (3) orange (actions for preventing Canadian Ambient Air Quality Standard exceedance); and (4) red (actions for achieving air zone Canadian Ambient Air Quality Standard). Each management level is associated with a suite of actions that become more rigorous as fine particulate matter levels approach the standard. Actions for each management level are detailed in the Guidance Document on Air Zone Management (2019) (PDF).
- The Central Interior and Georgia Strait air zones were assigned to a red management level, the Southern Interior and Lower Fraser Valley to an orange management level, and the Coastal and Northeast air zones were assigned to a yellow management level. There are currently no air monitoring stations in the Northwest air zone.

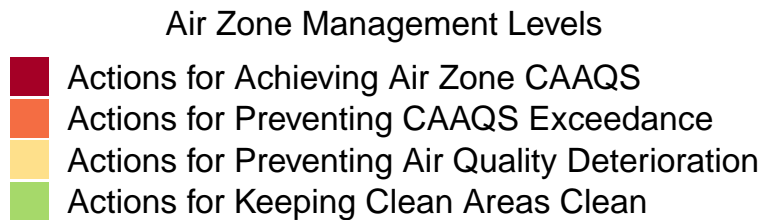
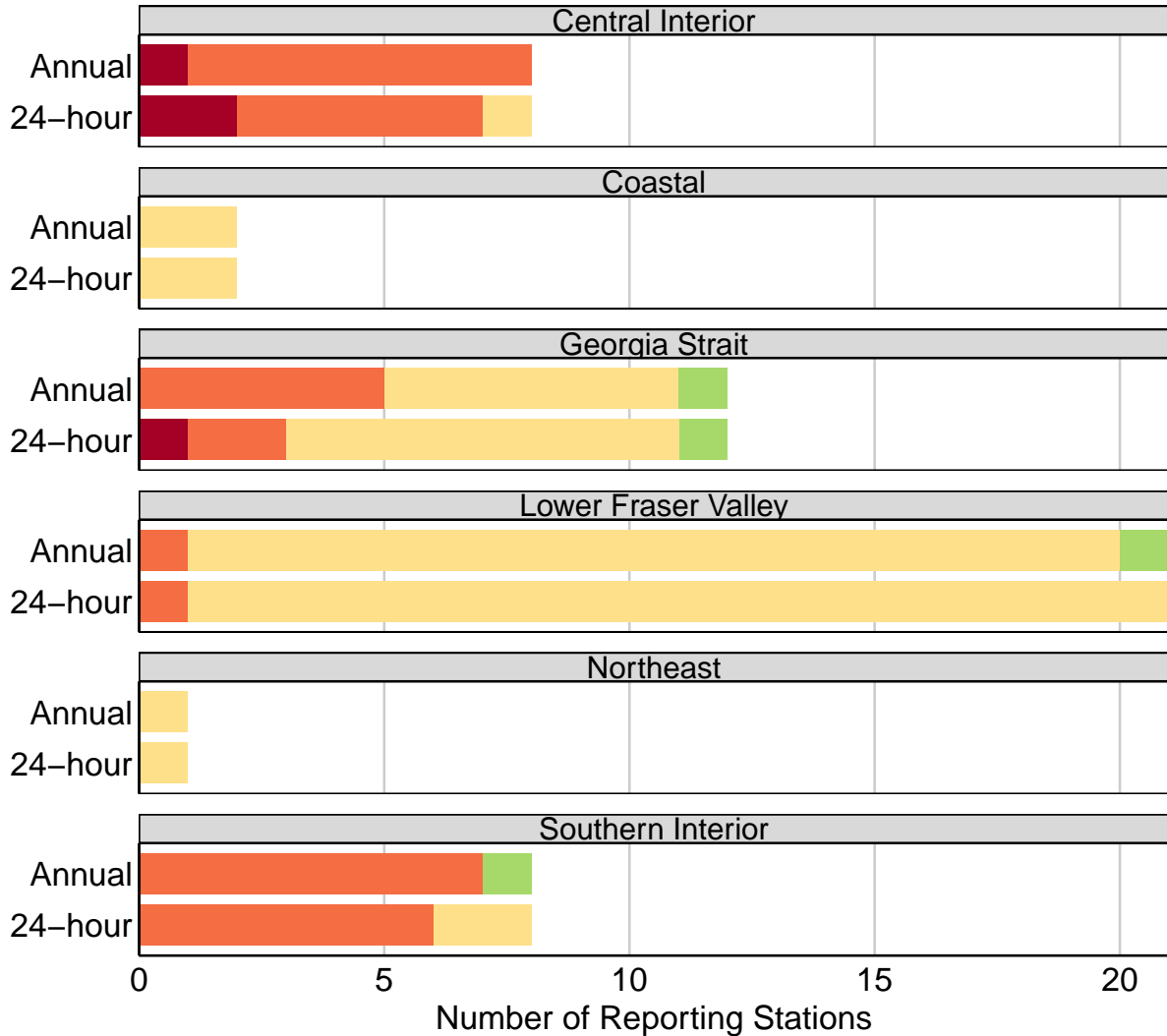
## Air Quality Management Levels in B.C. Air Zones



### Air Zone Management Levels

-  Actions for Achieving Air Zone CAAQS
-  Actions for Preventing CAAQS Exceedance
-  Actions for Preventing Air Quality Deterioration
-  Actions for Keeping Clean Areas Clean
-  Insufficient Data

### Station-Level Air Quality Management Levels Within Air Zones



#### More about the Air Quality Management System management levels:

- There can be cases when an air zone does not achieve a given Canadian Ambient Air Quality Standard because of sources over which jurisdictions have little or no control, such as those related to transboundary flows and exceptional events, like forest fires.
- Prior to determining management levels, jurisdictions have the option of adjusting their air zone metric values to remove such external influences. These arrangements aim to



ensure that jurisdictions are responsible for managing only the emissions sources they can control.

- Wildfires are generally the largest contributor to transboundary flows and exceptional events in B.C. Over the 2016-2018 reporting period, 52 stations had one or more days during the wildfire season (May-September) where the daily fine particulate matter concentration was determined to be influenced by smoke from wildfires and exceeded the 24-hour standard of  $28 \mu\text{g}/\text{m}^3$ . The majority of wildfire influences occurred in 2017 and 2018. Those daily concentrations were removed from the calculations of management levels, resulting in a change from red to orange for the Southern Interior management level and Lower Fraser Valley management level for fine particulate matter.

## Methods

The methods used to develop this indicator—including procedures, data requirements, and calculation of the Canadian Ambient Air Quality Standard fine particulate matter metrics—are detailed in the Guidance Document on Achievement Determination: Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone (2012) published by the Canadian Council of Ministers of the Environment.

**R package and code:** We have developed an R package to facilitate the calculation of air quality metrics according to the Canadian Ambient Air Quality Standards. Download the 'rcaqs' package from GitHub. The source code for repeating the analysis presented on this page is also available on GitHub.

## References and Other Useful Links

- Read individual Air Zone reports on the achievement of the Canadian Ambient Air Quality Standards for ground-level ozone and fine particulate matter in B.C.
- Learn more about the implementation of the Air Quality Management System in British Columbia
- Access B.C.'s real-time data on air pollutants and find locations of all provincial air monitoring stations in B.C.
- BC Lung Association's BC State of the Air Reports
- Canadian Environmental Sustainability Indicators: Air Indicators
- <sup>1</sup>Canadian Smog Science Assessment: Highlights and Key Messages

## Data

\*By accessing these datasets, you agree to the licence associated with each file, as indicated in parentheses below.

- Indicator data: BC Fine Particulate Matter Canadian Ambient Air Quality Standards 2016-2018 (Open Government Licence - British Columbia)
- BC PM<sub>2.5</sub> Hourly Data & Air Monitoring Station locations (Open Government Licence - British Columbia)
- BC Air Zones (Open Government Licence - British Columbia)

Published and Available On-Line at Environmental Reporting BC (April 2021): [http://www.env.gov.bc.ca/soe/indicators/air/fine\\_pm.html](http://www.env.gov.bc.ca/soe/indicators/air/fine_pm.html)

Email correspondence to: [envreportbc@gov.bc.ca](mailto:envreportbc@gov.bc.ca)

*Suggested Citation:*

Environmental Reporting BC. 2021. Status of Fine Particulate Matter in B.C. (2016-2018). State of Environment Reporting, Ministry of Environment and Climate Change Strategy, British Columbia, Canada.

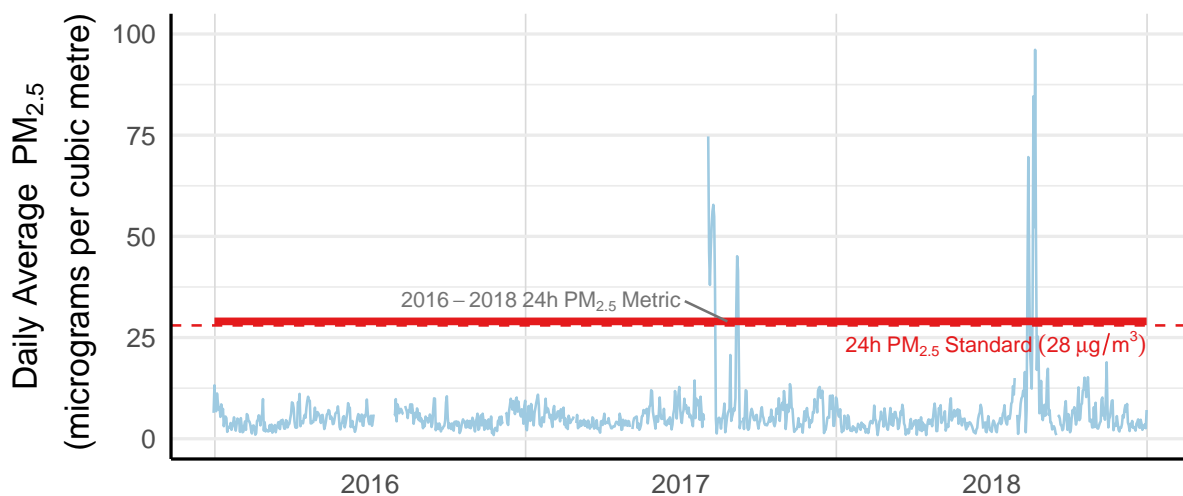
## Appendix: Detailed fine particulate matter Canadian Ambient Air Quality Standard results for each monitoring station within air zones in B.C.

### Lower Fraser Valley Air Zone

#### Port Moody monitoring station

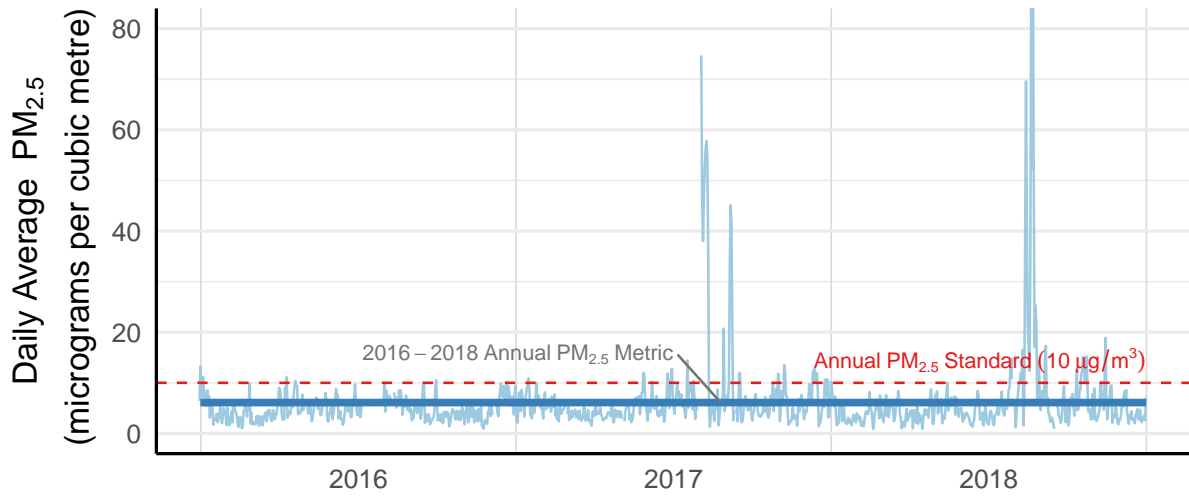
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 29 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

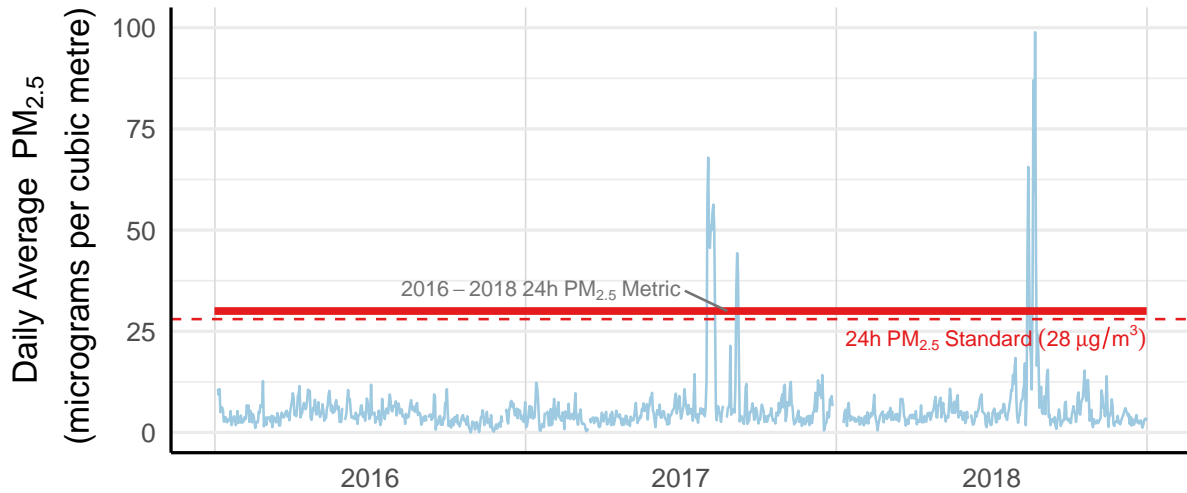
**PM<sub>2.5</sub> Annual Metric: 6.1 µg/m<sup>3</sup> (3 year average)**



**Burnaby-Kensington monitoring station**

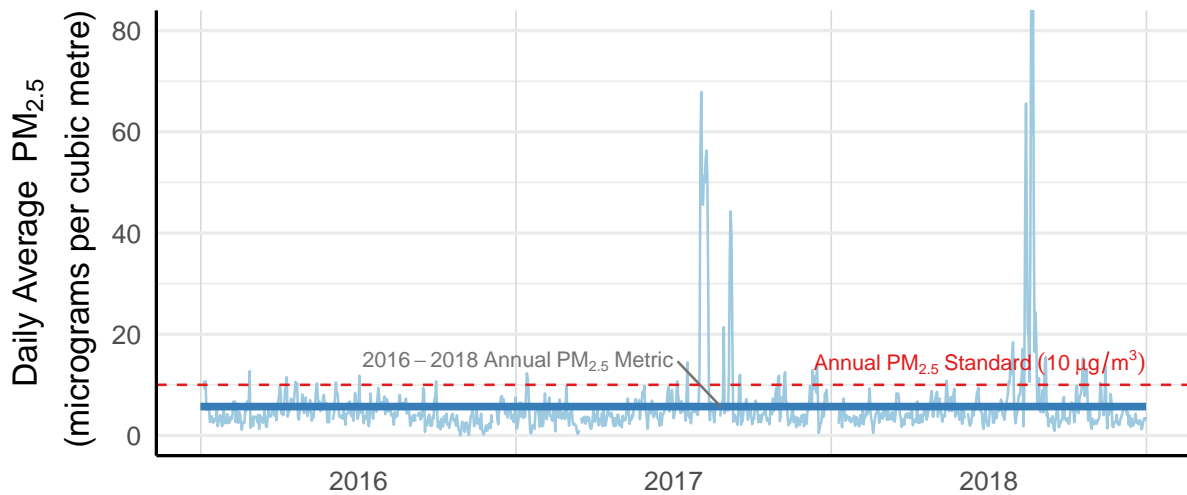
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 30 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

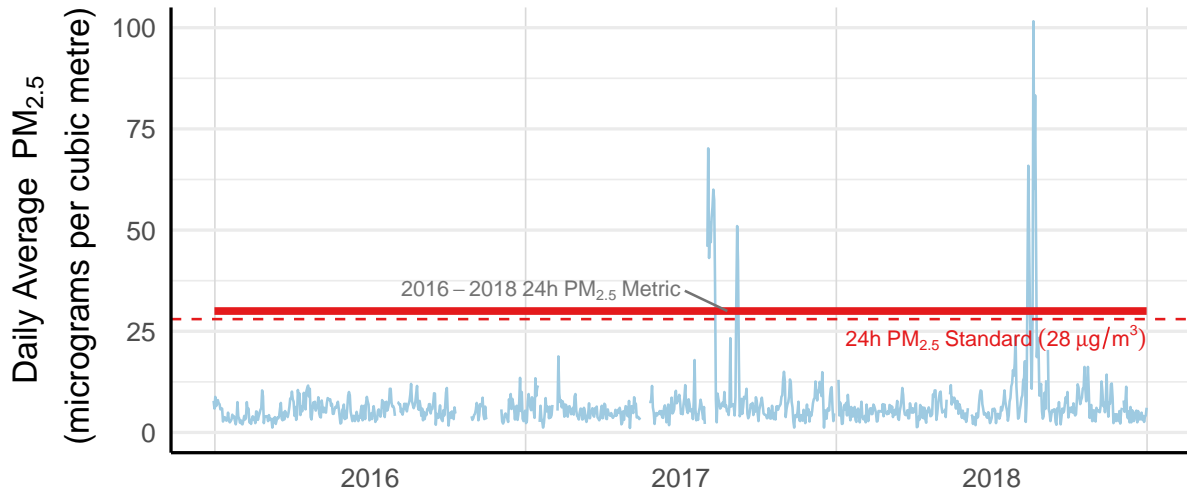
**PM<sub>2.5</sub> Annual Metric: 5.7 µg/m<sup>3</sup> (3 year average)**



**N. Vancouver-2nd Narrows monitoring station**

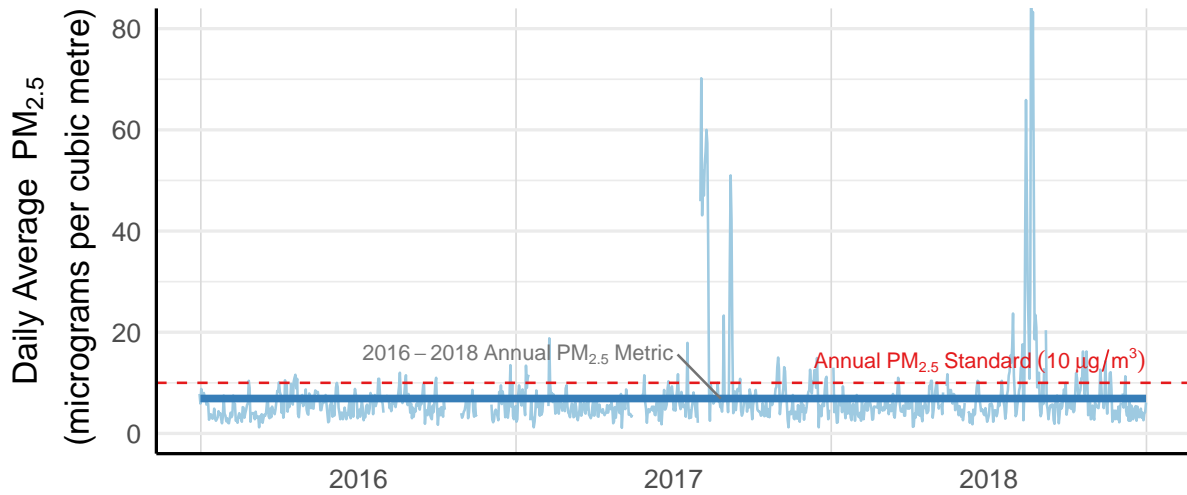
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 30 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

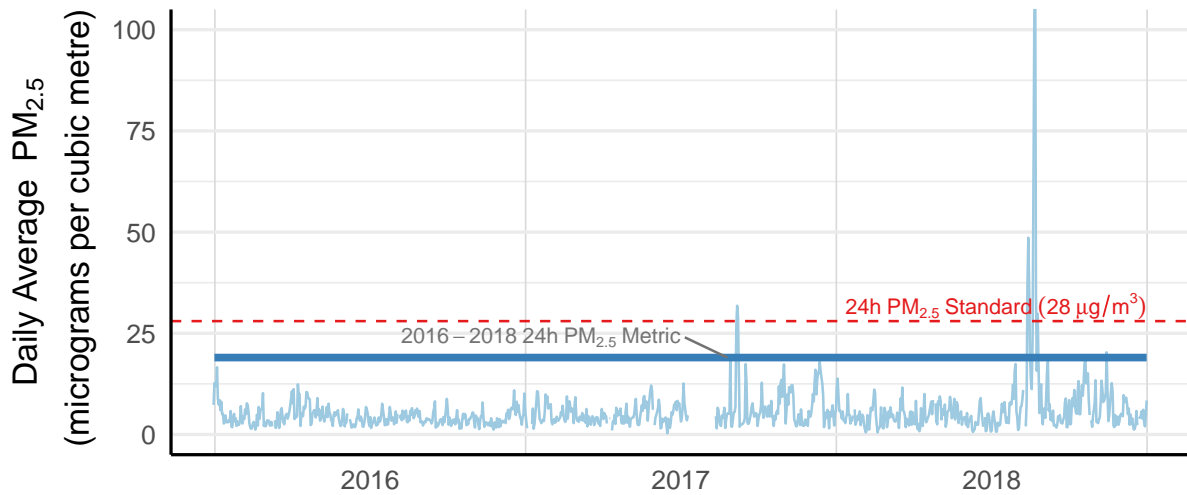
**PM<sub>2.5</sub> Annual Metric: 6.9 µg/m<sup>3</sup> (3 year average)**



**Surrey monitoring station**

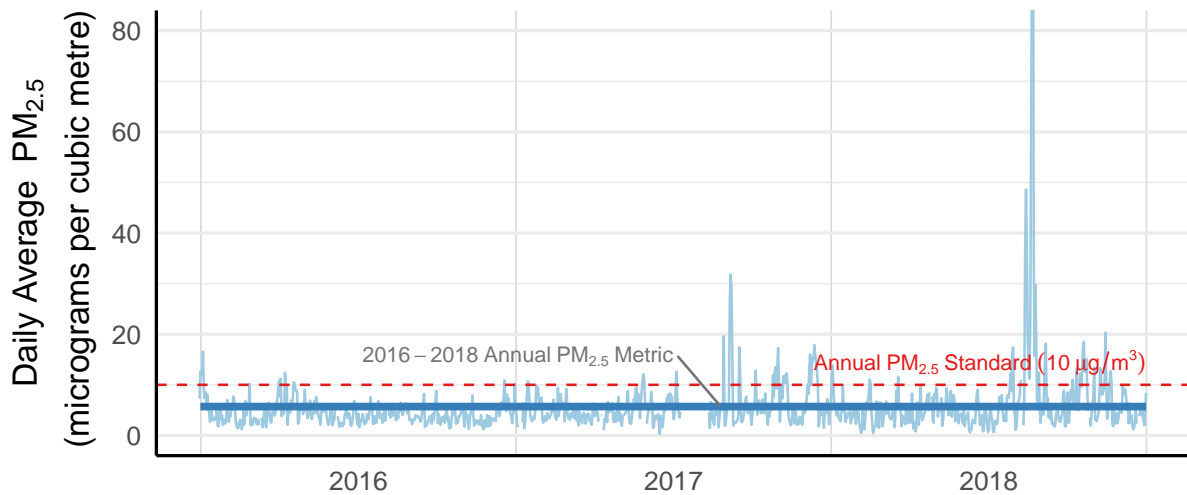
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 19 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

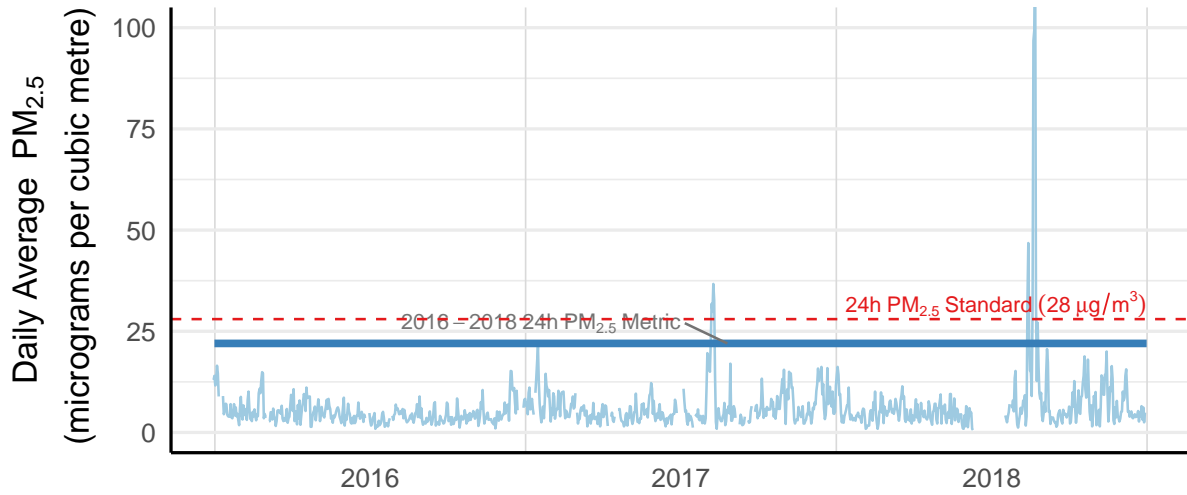
**PM<sub>2.5</sub> Annual Metric: 5.7 µg/m<sup>3</sup> (3 year average)**



**Richmond South monitoring station**

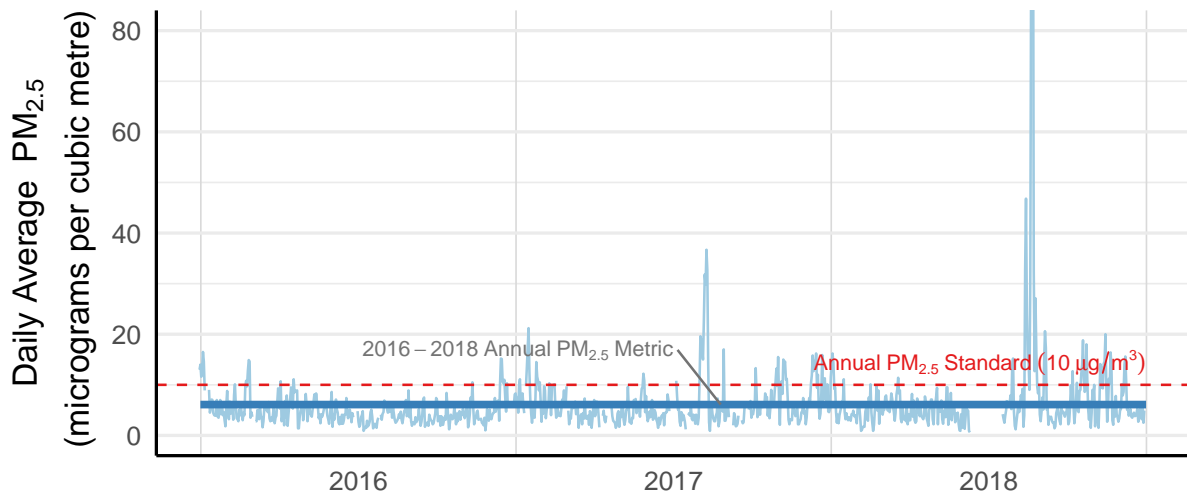
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 22 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

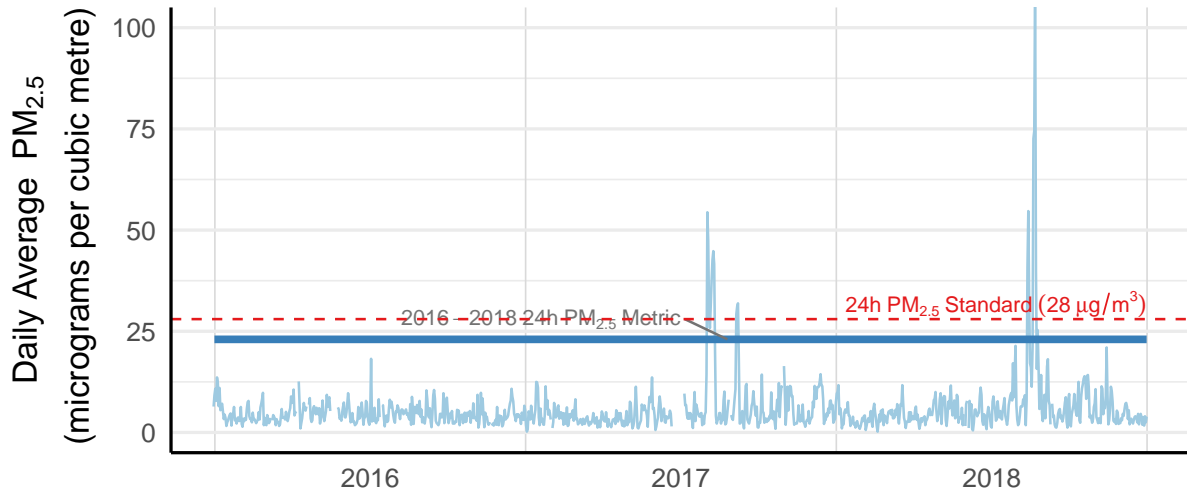
**PM<sub>2.5</sub> Annual Metric: 6.1 µg/m<sup>3</sup> (3 year average)**



**Burnaby South monitoring station**

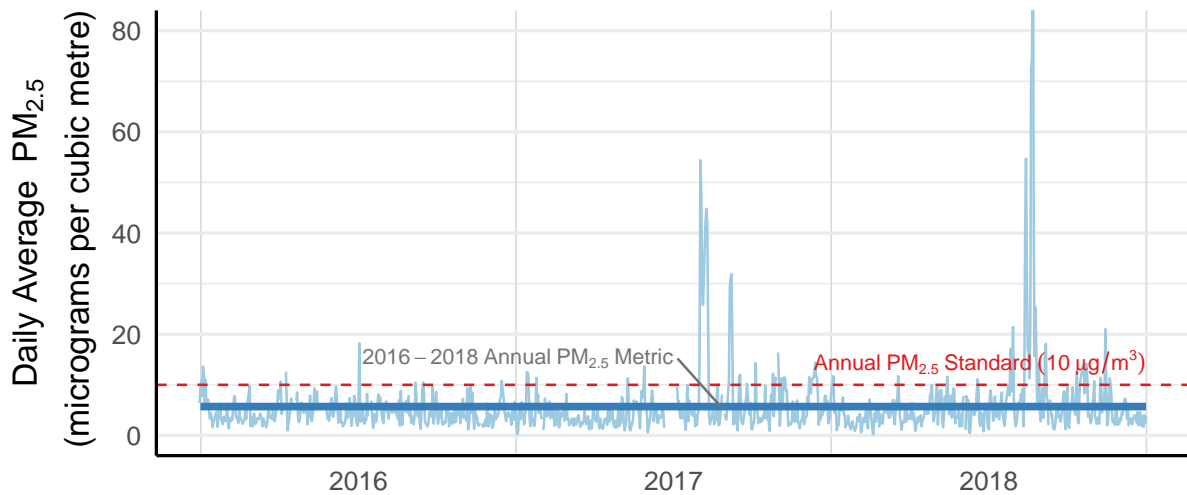
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 23 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 5.7 µg/m<sup>3</sup> (3 year average)**

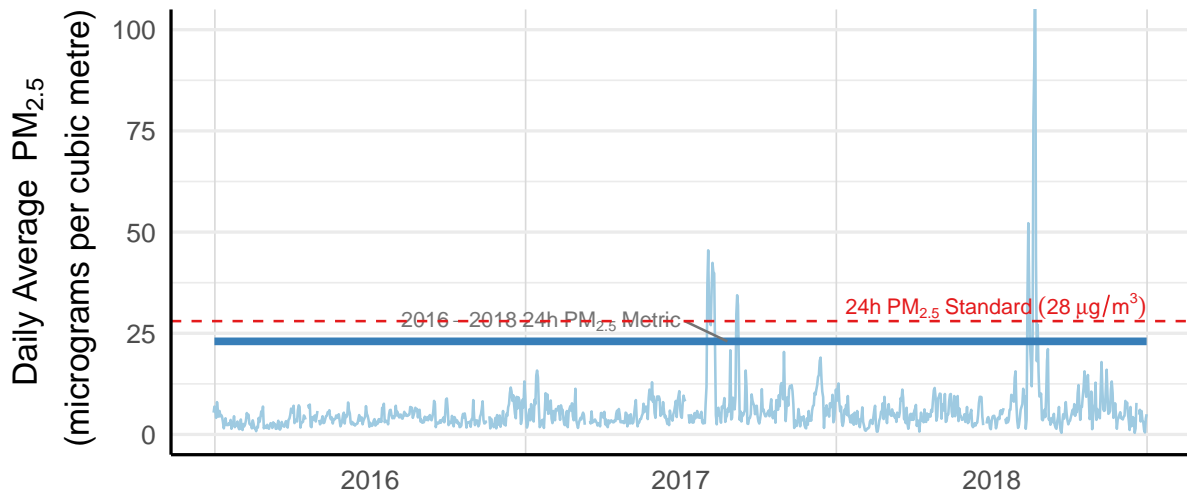




**North Delta monitoring station**

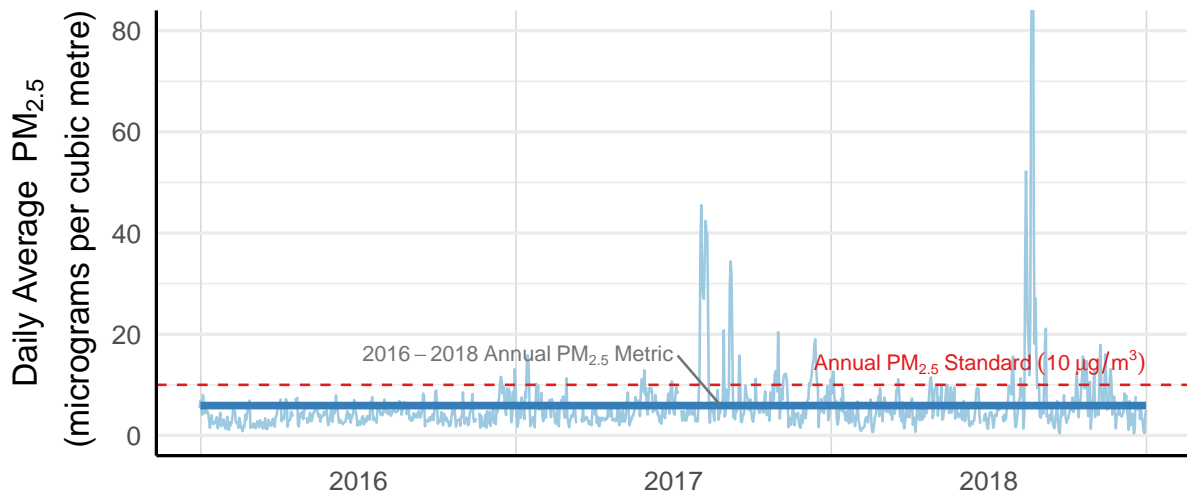
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 23 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

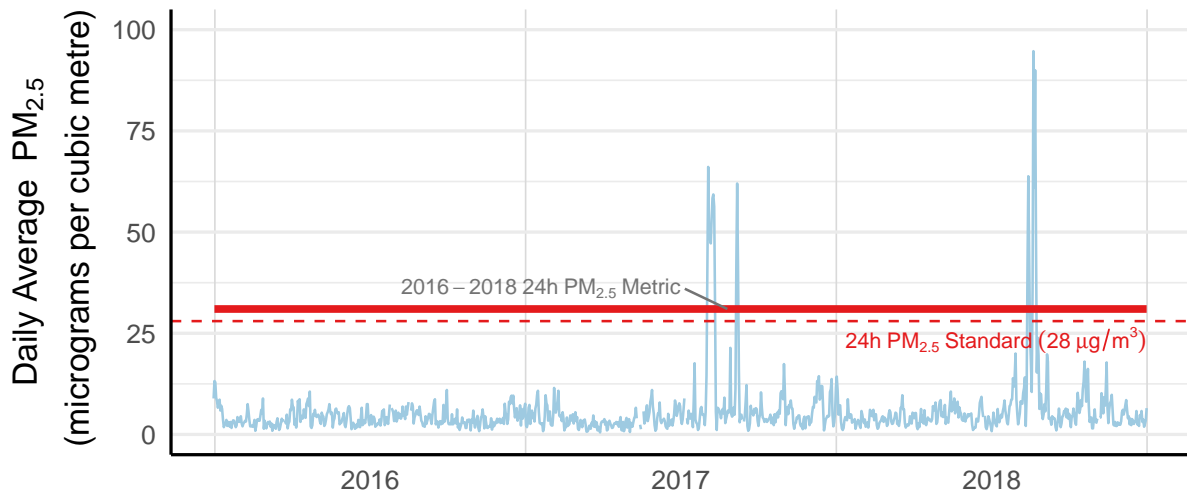
**PM<sub>2.5</sub> Annual Metric: 5.9 µg/m<sup>3</sup> (3 year average)**



**N. Vancouver-Mahon Park monitoring station**

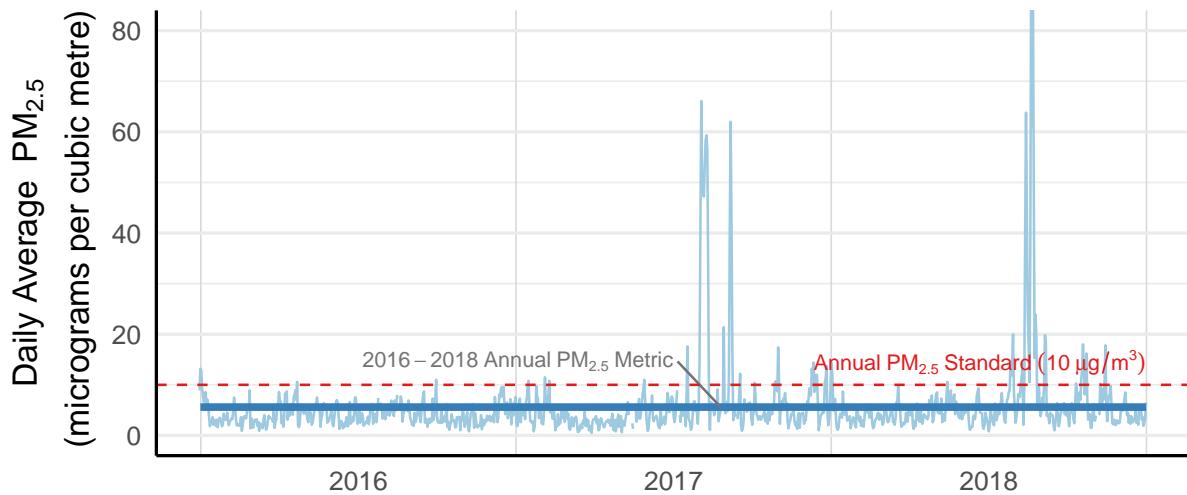
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 31 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

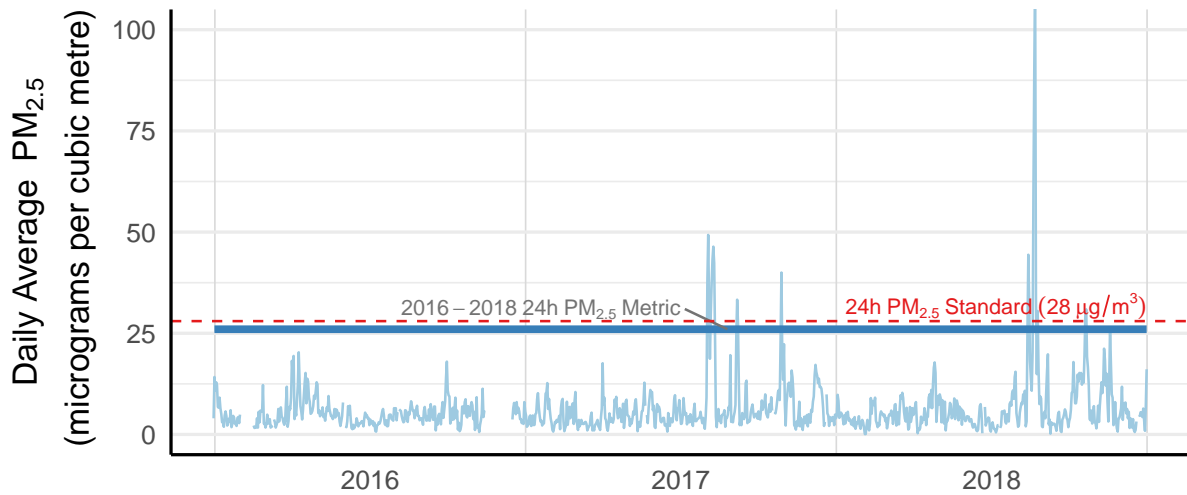
**PM<sub>2.5</sub> Annual Metric: 5.6 µg/m<sup>3</sup> (3 year average)**



**Langley monitoring station**

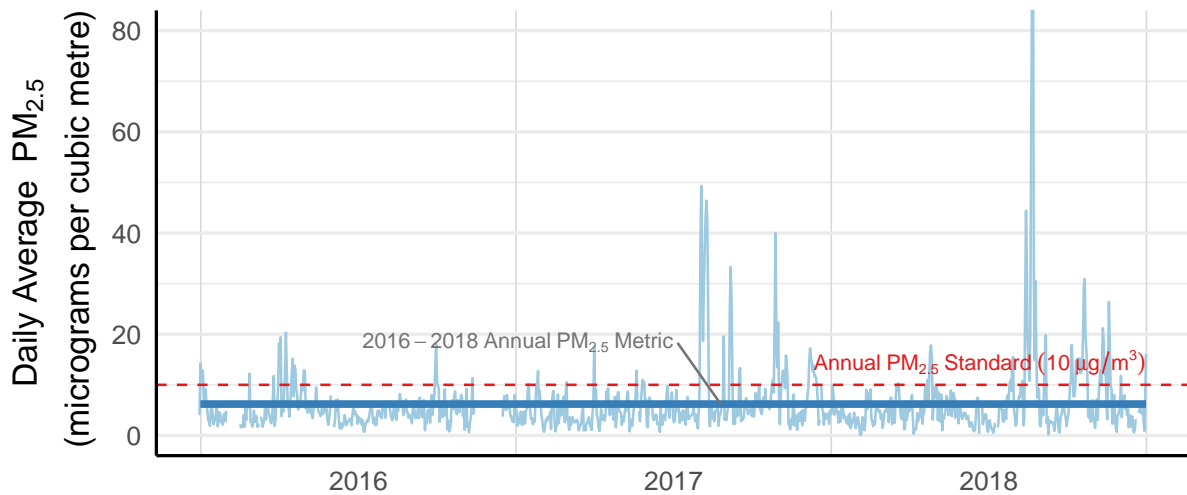
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 26 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

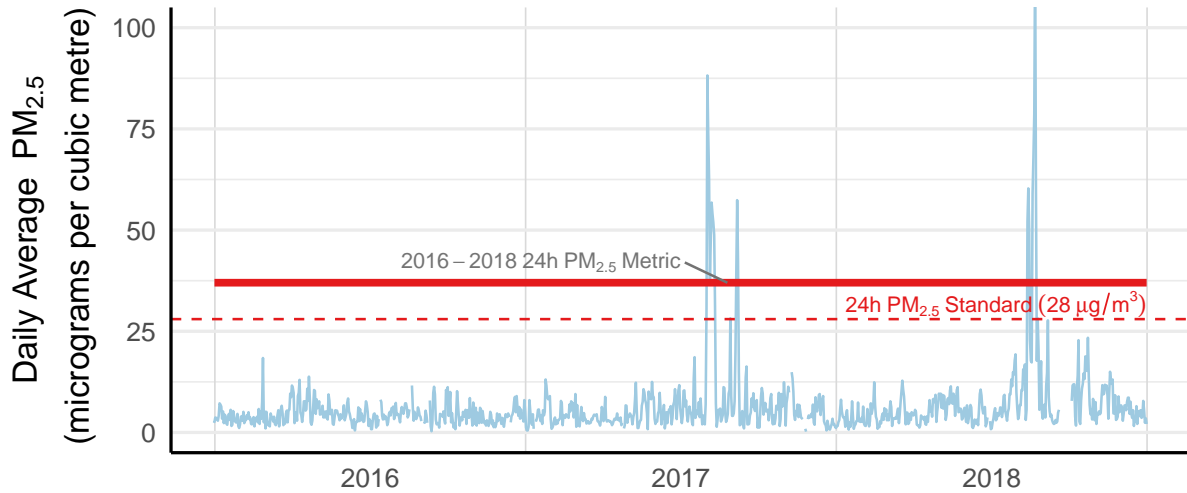
**PM<sub>2.5</sub> Annual Metric: 6.2 µg/m<sup>3</sup> (3 year average)**



**Chilliwack monitoring station**

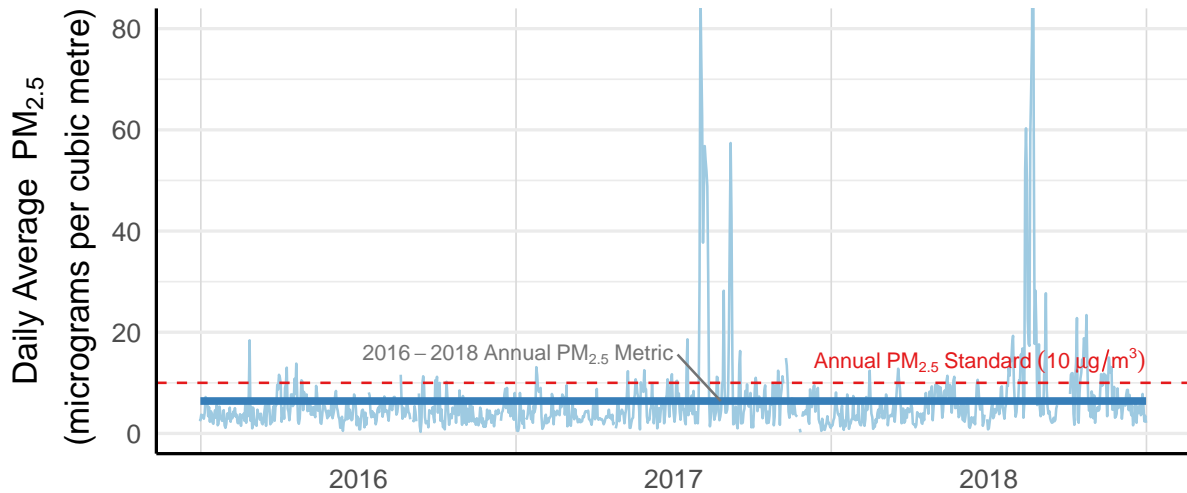
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 37 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

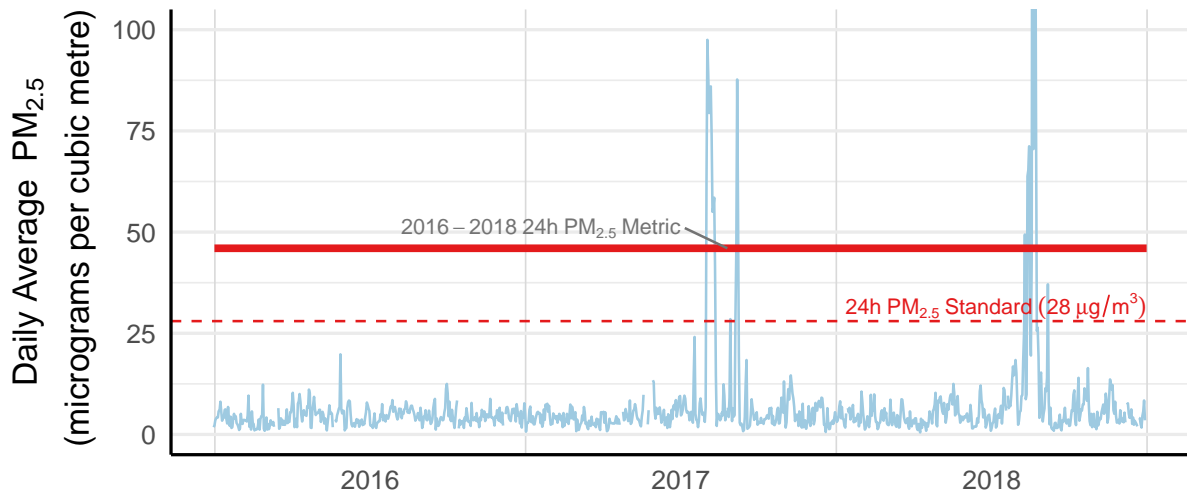
**PM<sub>2.5</sub> Annual Metric: 6.4 µg/m<sup>3</sup> (3 year average)**



Hope monitoring station

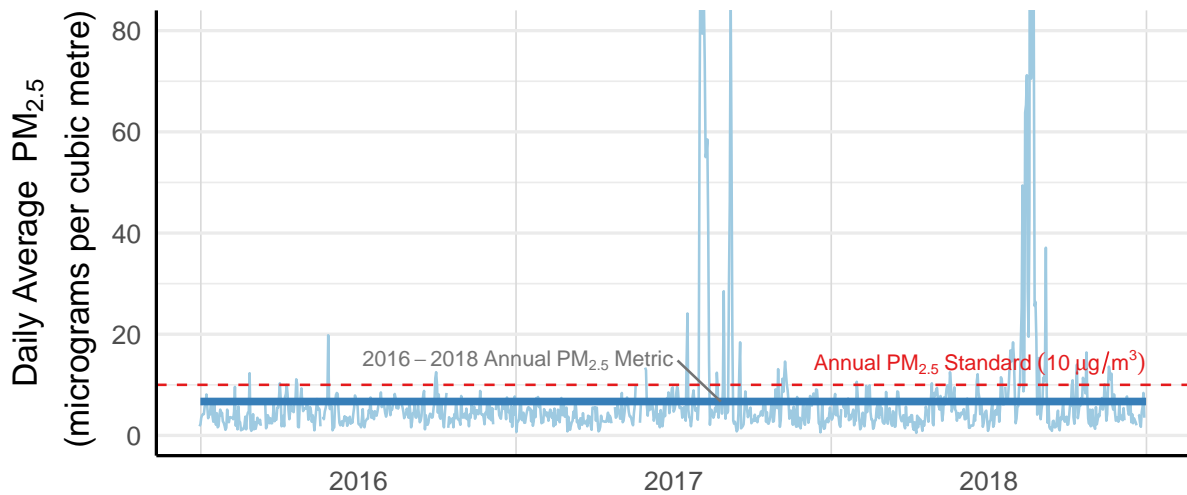
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 46 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

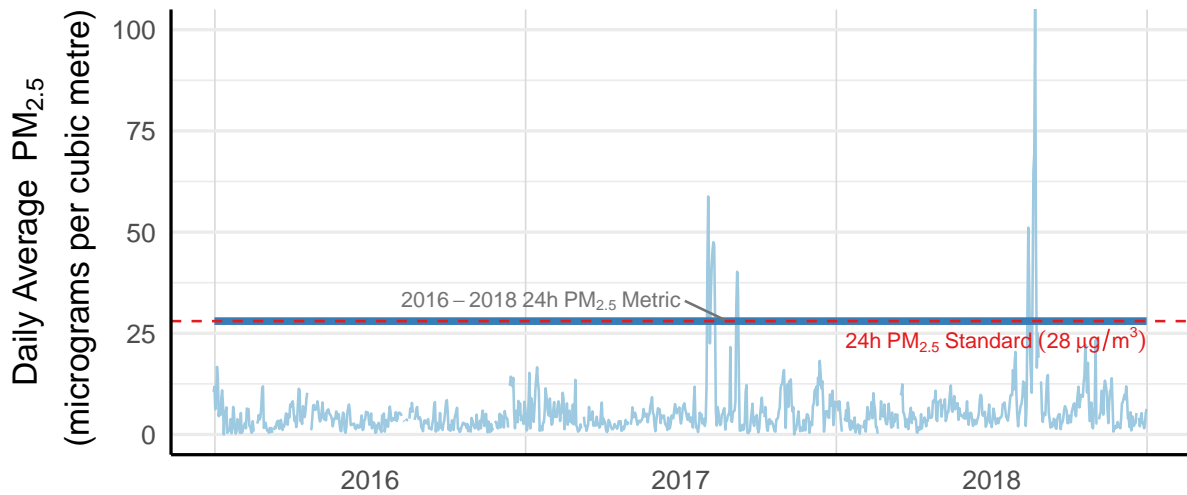
**PM<sub>2.5</sub> Annual Metric: 6.7 µg/m<sup>3</sup> (3 year average)**



**Pitt Meadows monitoring station**

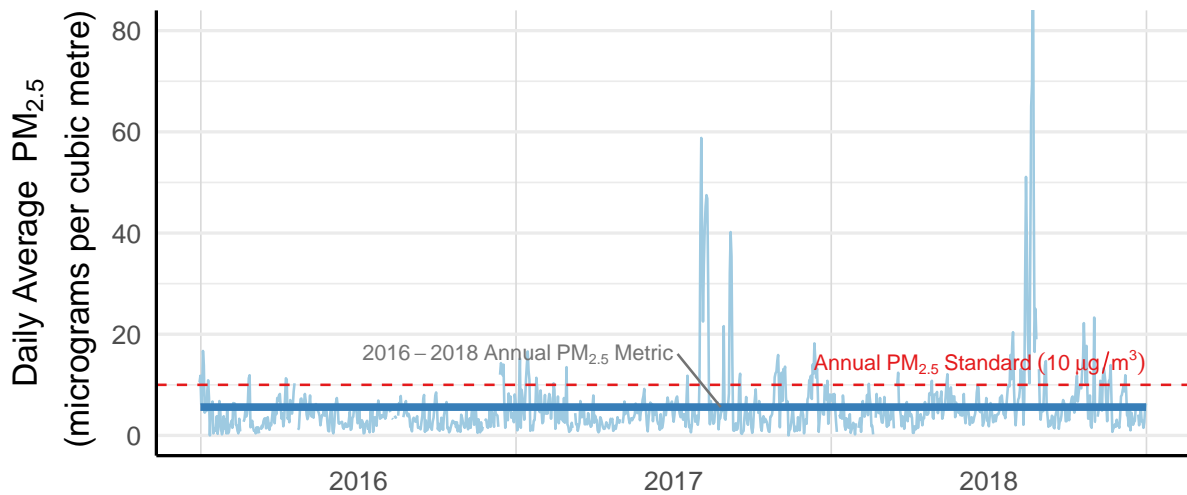
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 28 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

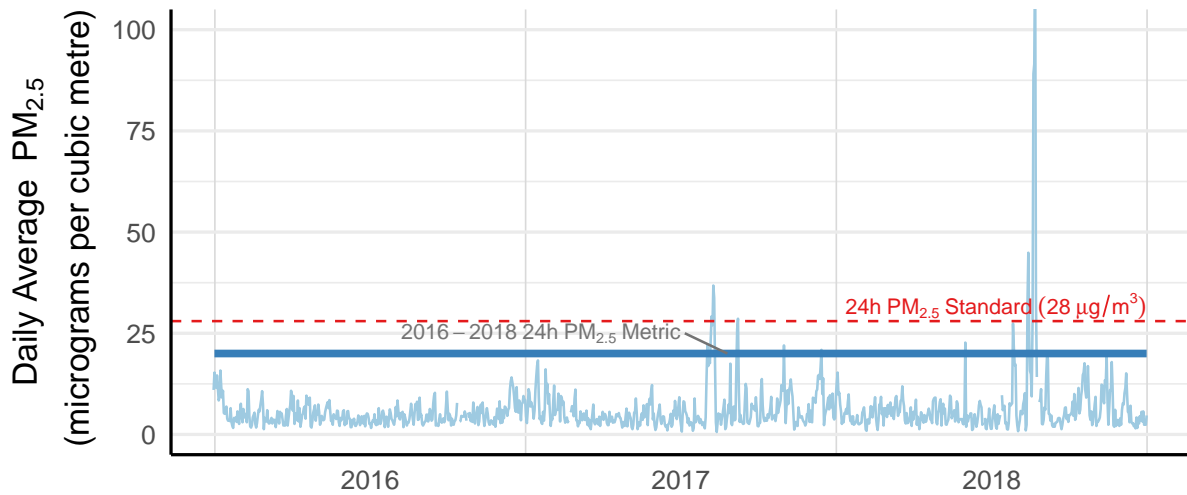
**PM<sub>2.5</sub> Annual Metric: 5.6 µg/m<sup>3</sup> (3 year average)**



**Richmond-Airport monitoring station**

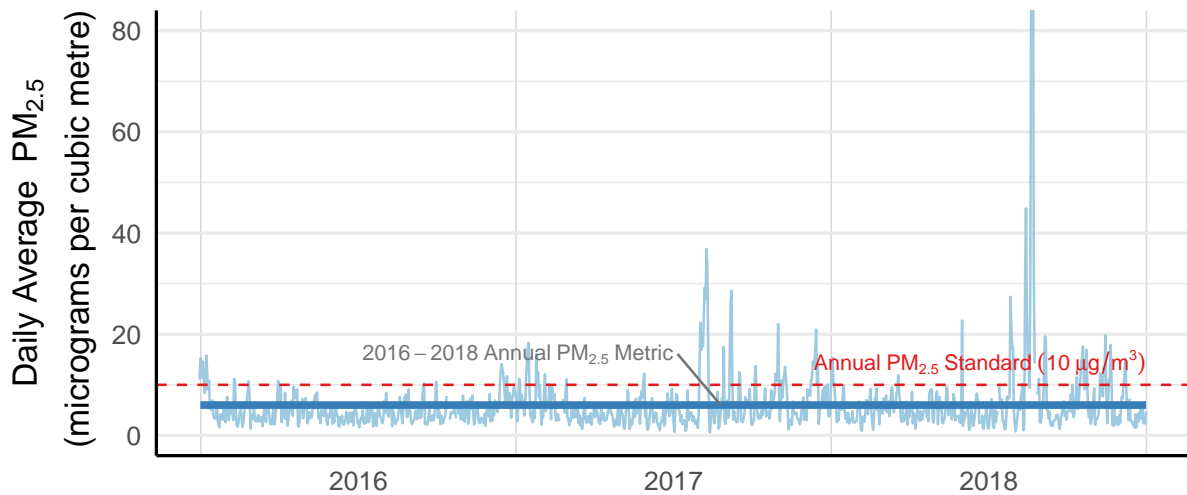
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 20 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

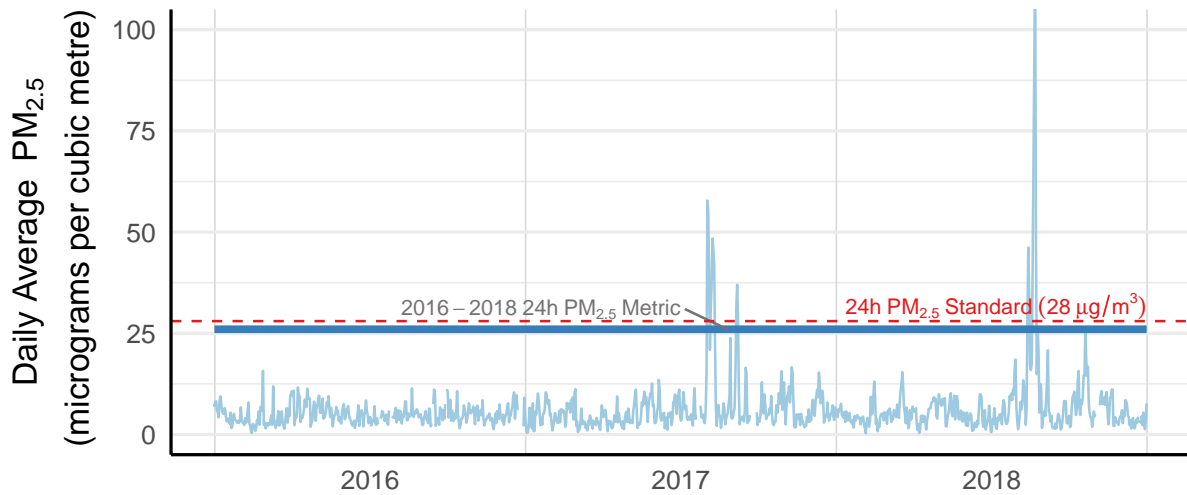
**PM<sub>2.5</sub> Annual Metric: 6 µg/m<sup>3</sup> (3 year average)**



**Abbotsford-Mill Lake monitoring station**

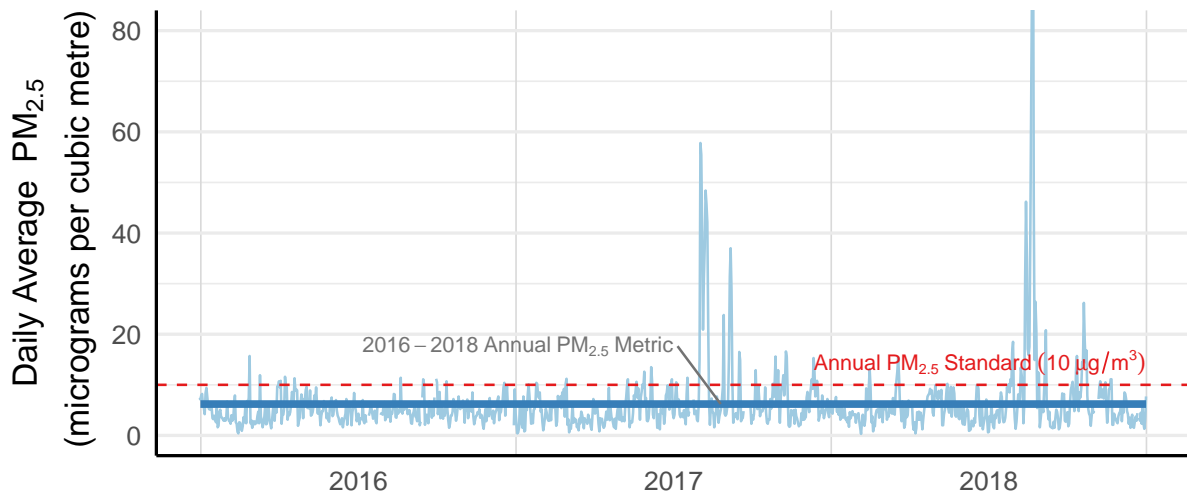
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 26 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 6.2 µg/m<sup>3</sup> (3 year average)**

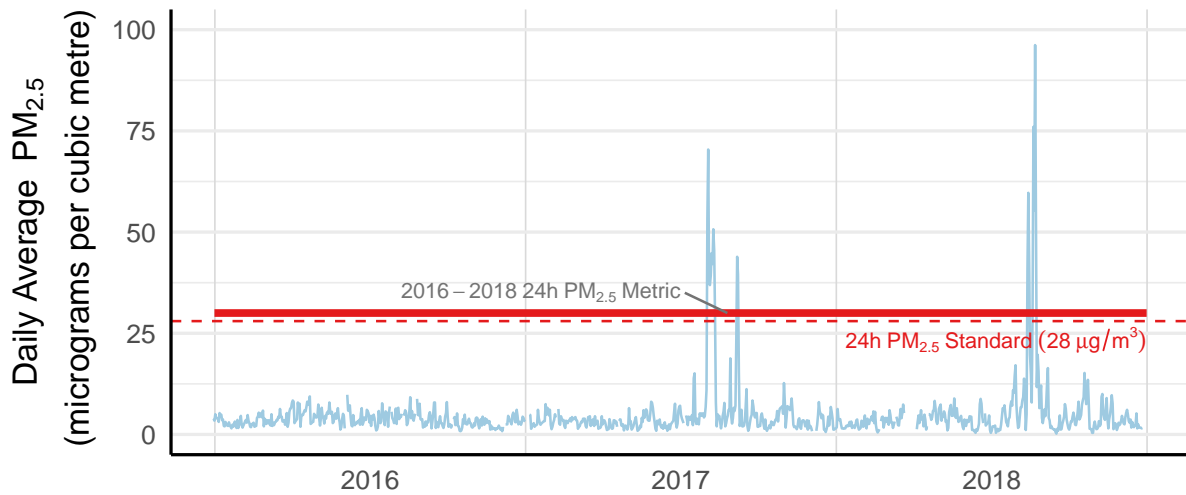




**Horseshoe Bay monitoring station**

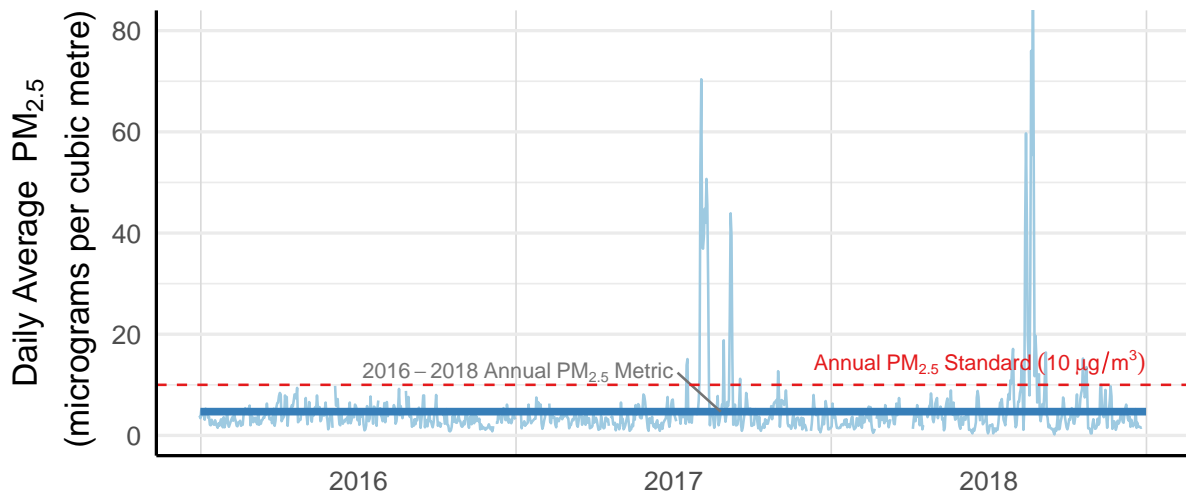
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 30 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

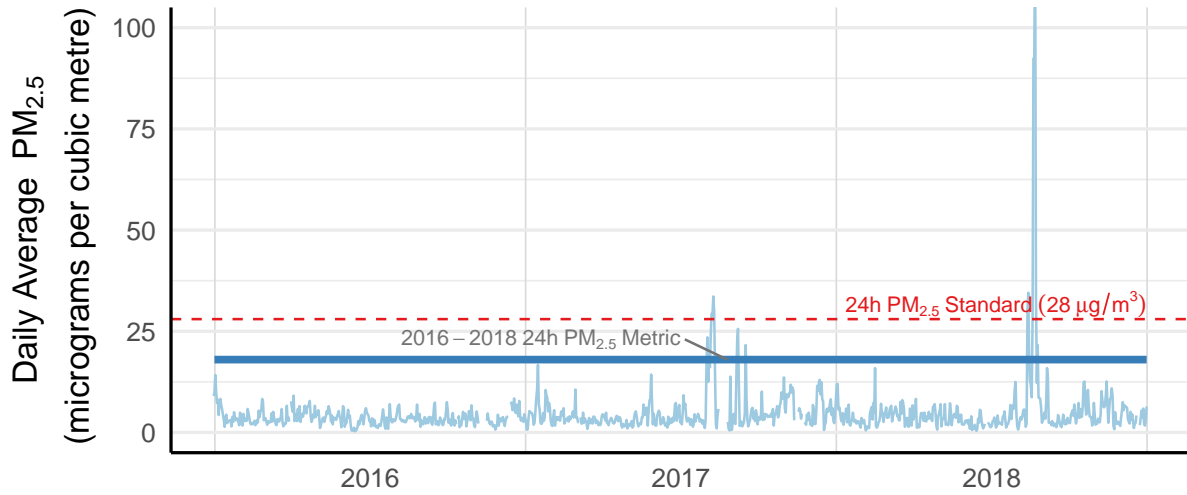
**PM<sub>2.5</sub> Annual Metric: 4.7 µg/m<sup>3</sup> (3 year average)**



**Tsawwassen monitoring station**

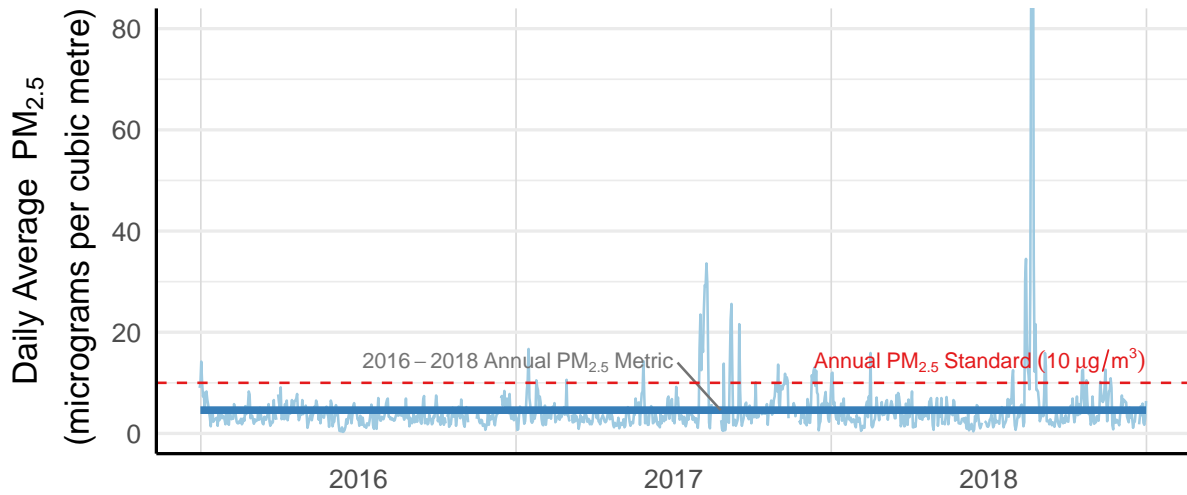
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 18 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

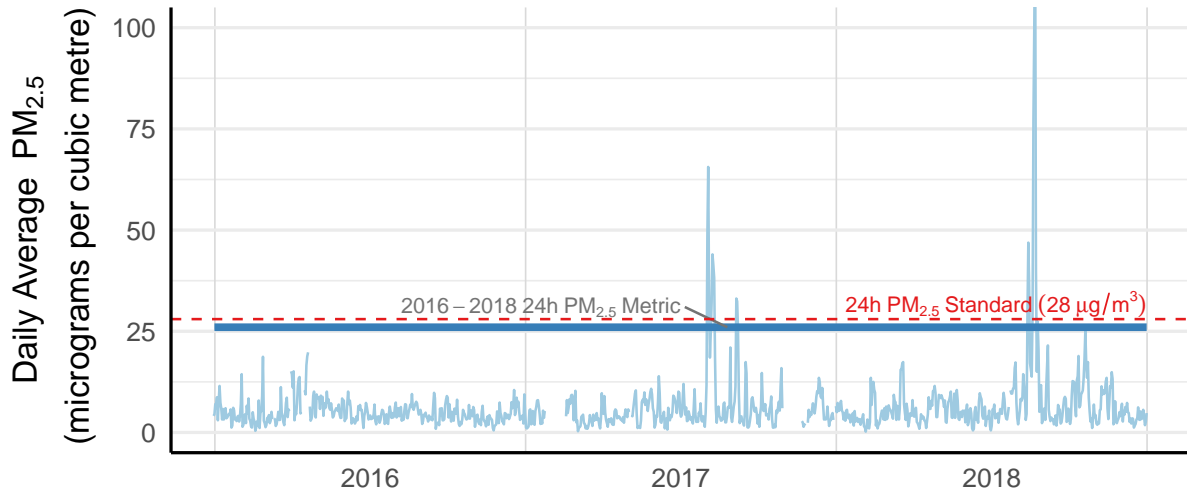
**PM<sub>2.5</sub> Annual Metric: 4.6 µg/m<sup>3</sup> (3 year average)**



**Abbotsford-Airport monitoring station**

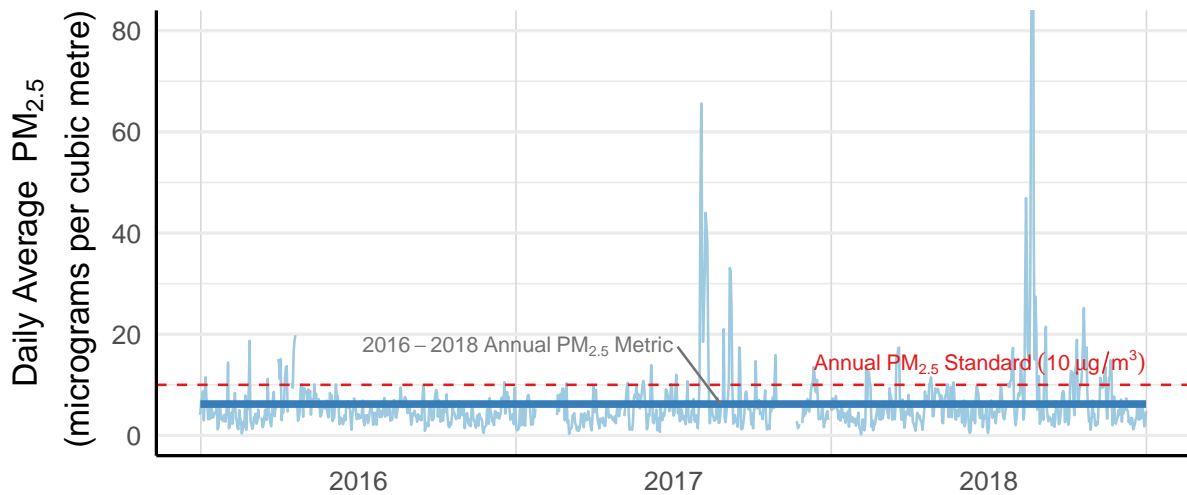
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 26 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

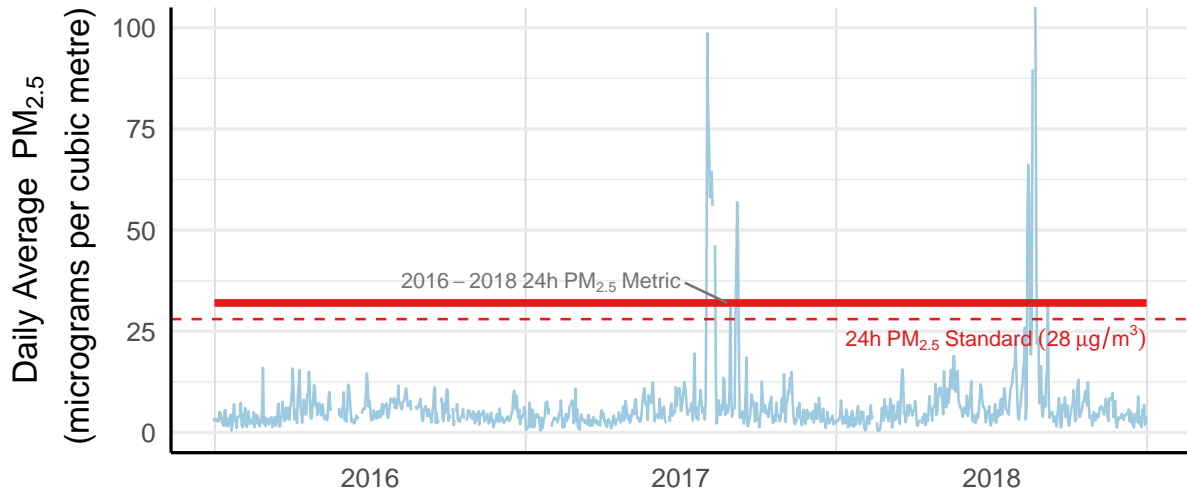
**PM<sub>2.5</sub> Annual Metric: 6.2 µg/m<sup>3</sup> (3 year average)**



**Agassiz monitoring station**

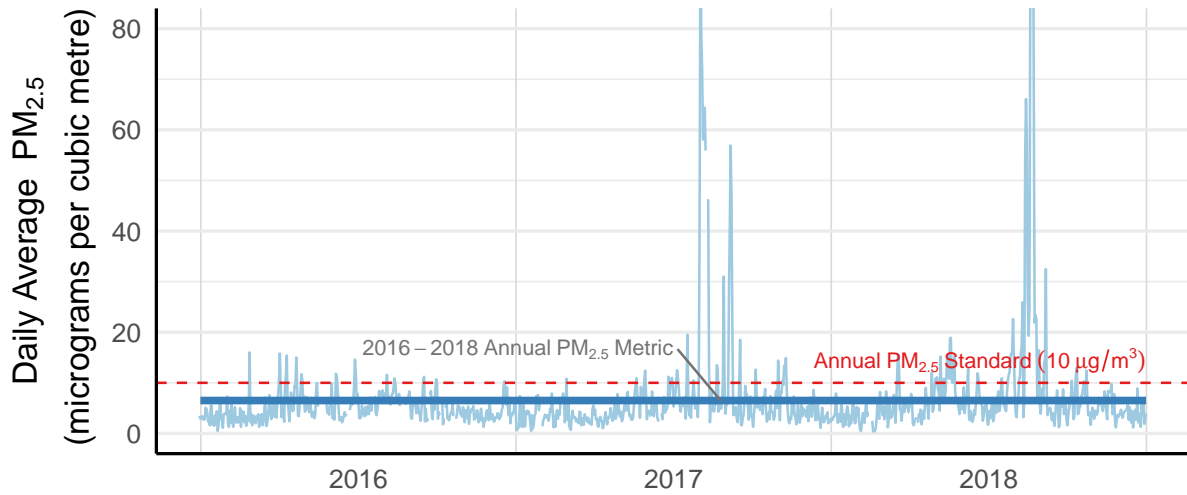
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 32 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

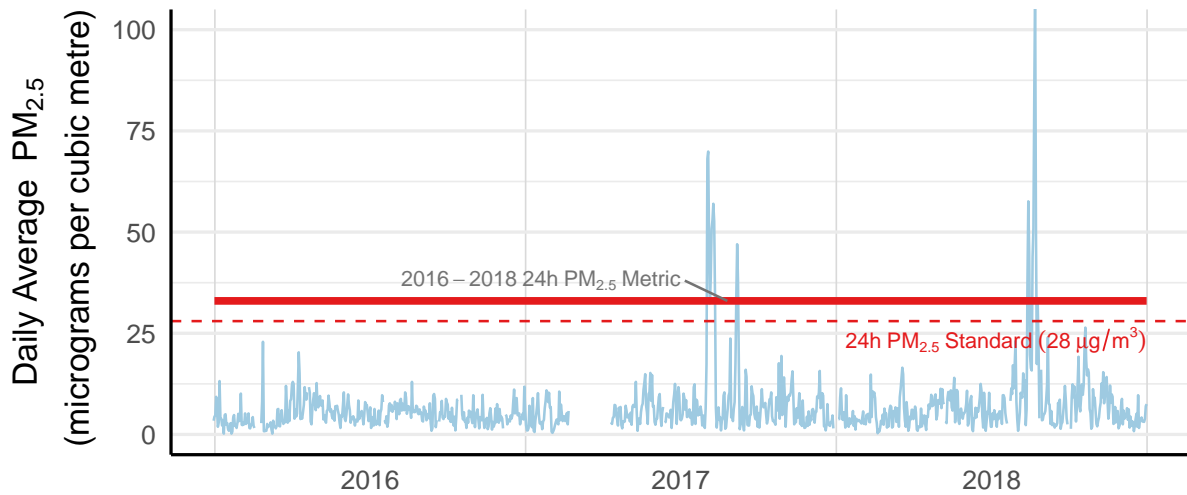
**PM<sub>2.5</sub> Annual Metric: 6.5 µg/m<sup>3</sup> (3 year average)**



**Mission monitoring station**

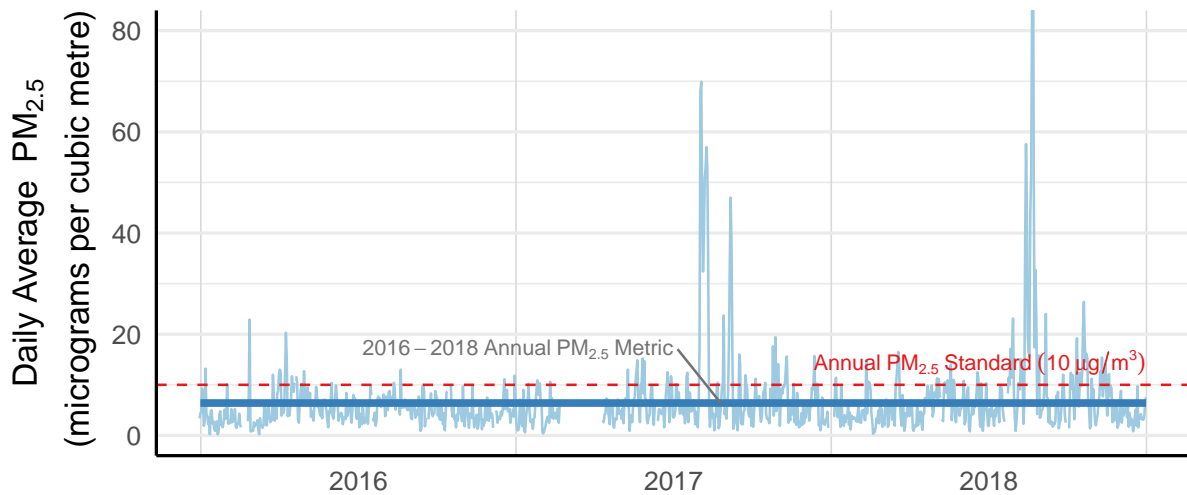
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 33 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

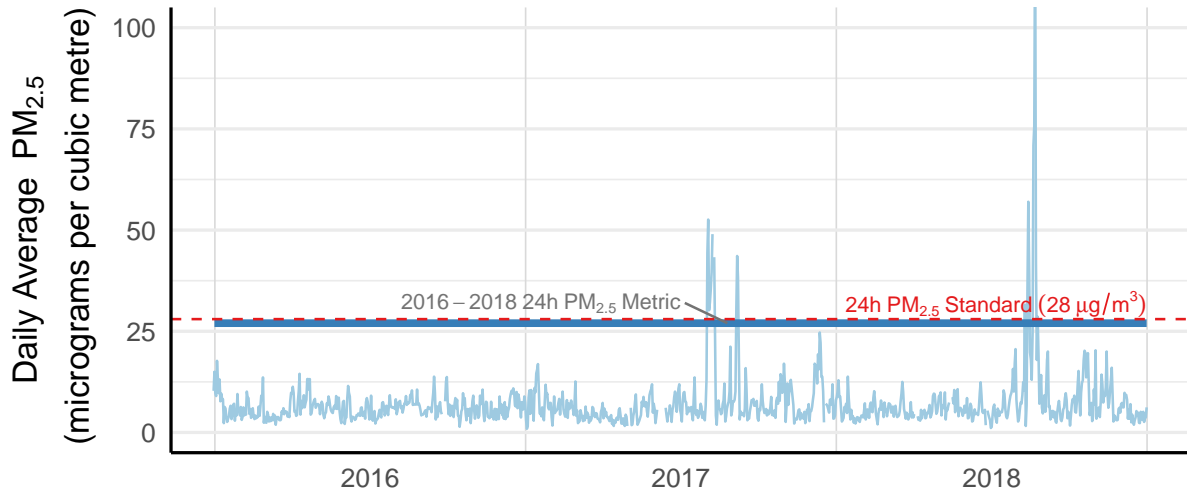
**PM<sub>2.5</sub> Annual Metric: 6.4 µg/m<sup>3</sup> (2 year average)**



**New Westminster monitoring station**

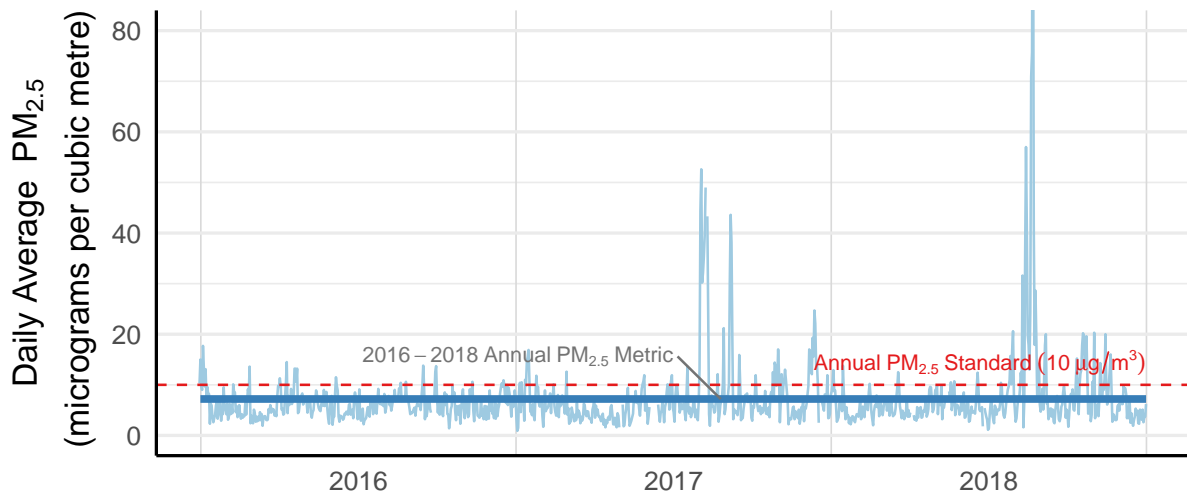
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 27 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

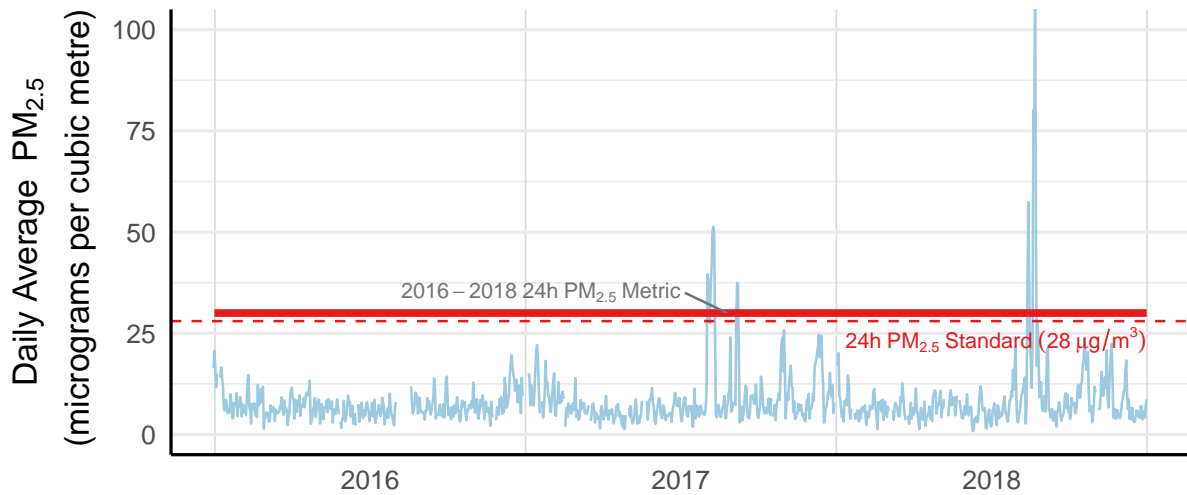
**PM<sub>2.5</sub> Annual Metric: 7.2 µg/m<sup>3</sup> (3 year average)**



**Vancouver-Clark Dr. monitoring station**

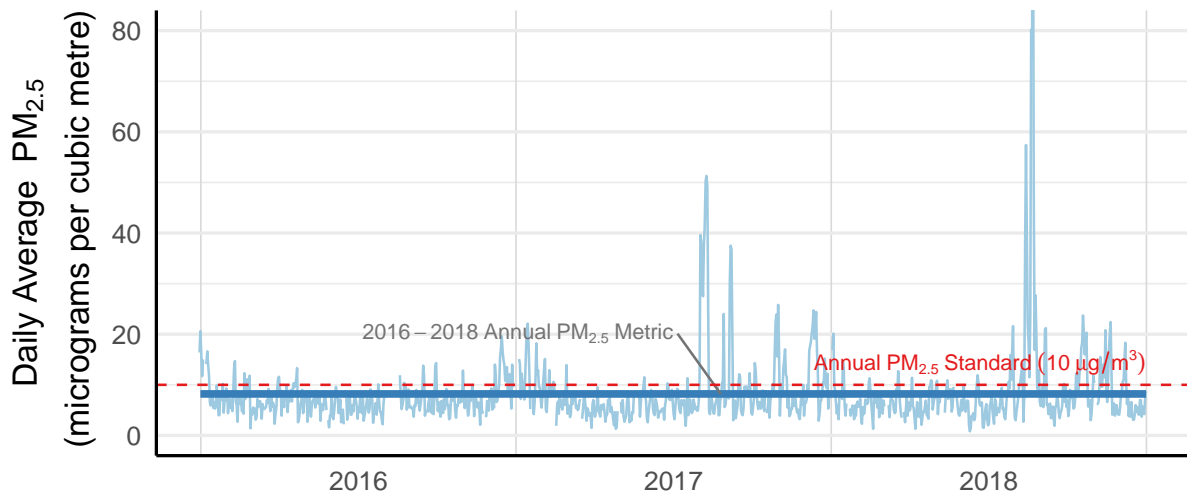
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 30 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 8.2 µg/m<sup>3</sup> (3 year average)**

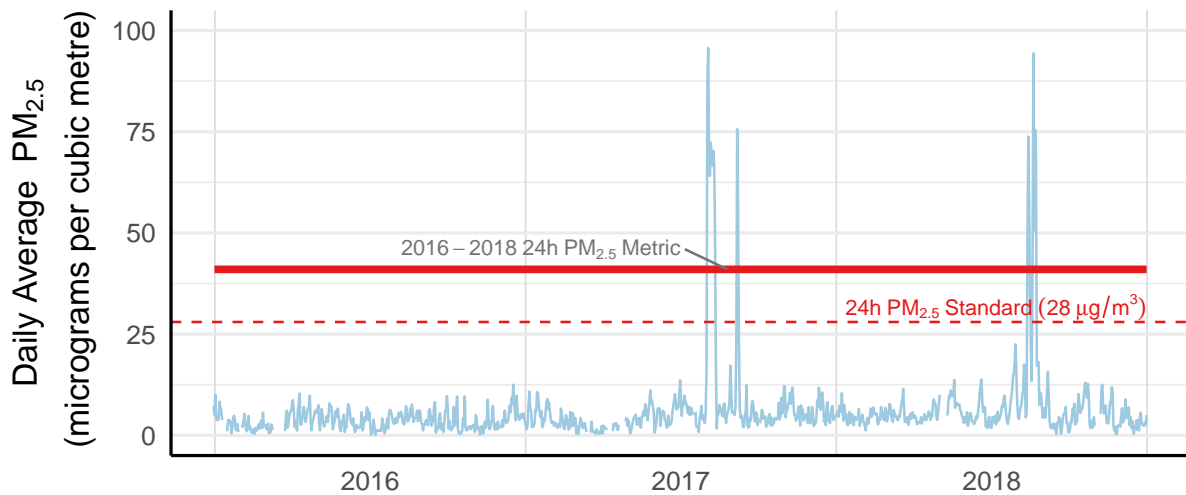


## Georgia Strait Air Zone

### Squamish monitoring station

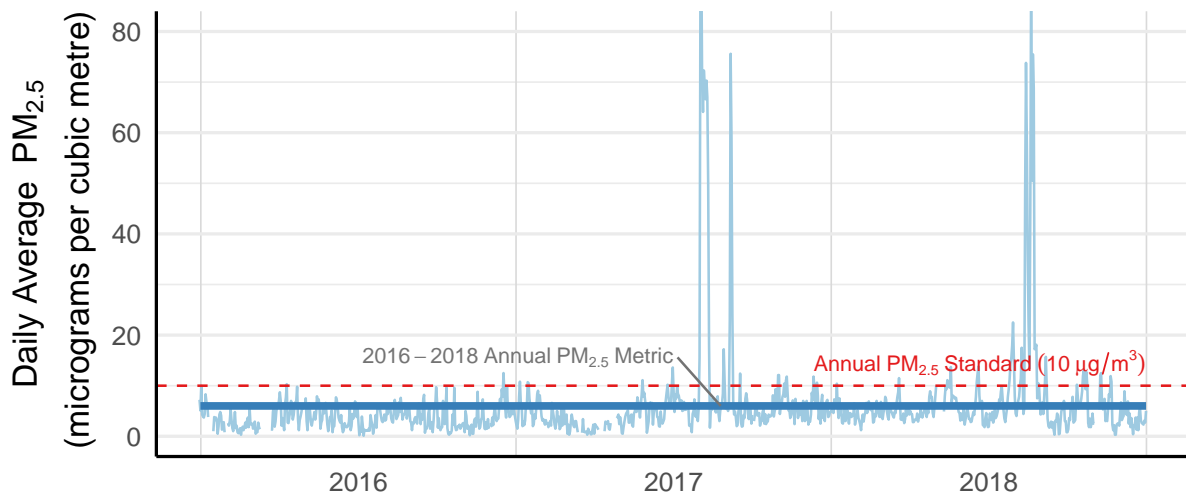
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 41 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 6 µg/m<sup>3</sup> (3 year average)**

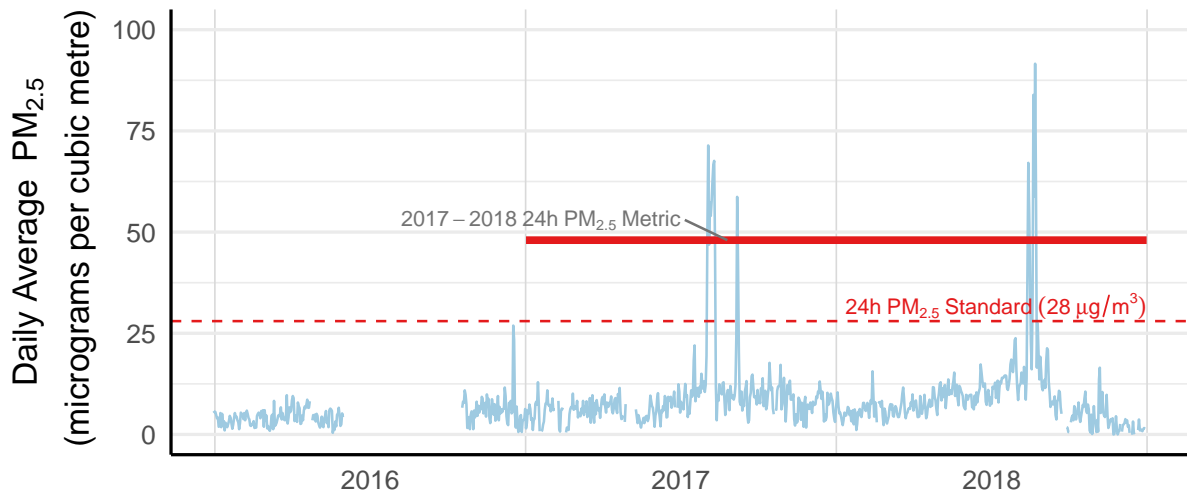




**Langdale monitoring station**

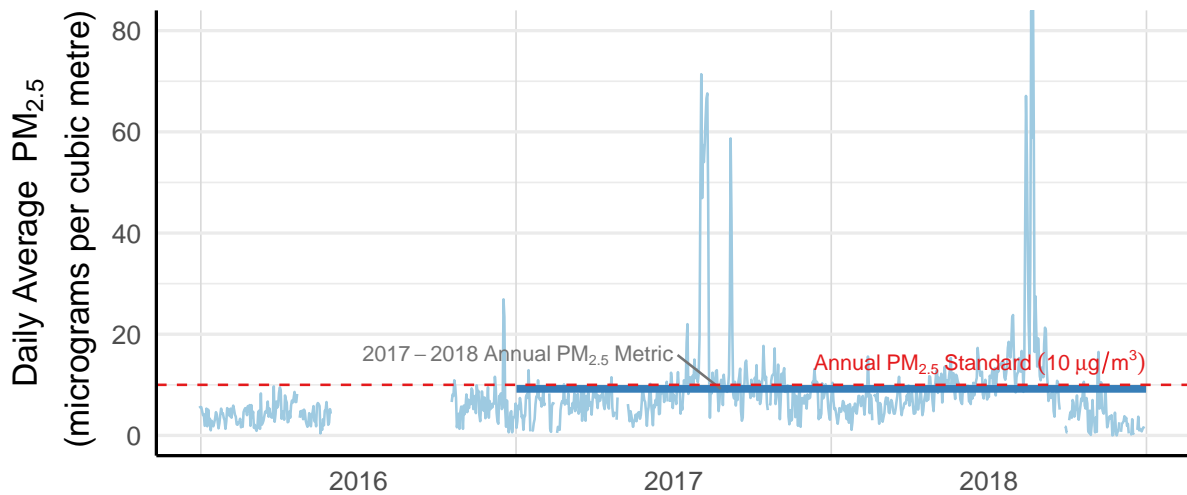
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 48 µg/m<sup>3</sup> (2 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

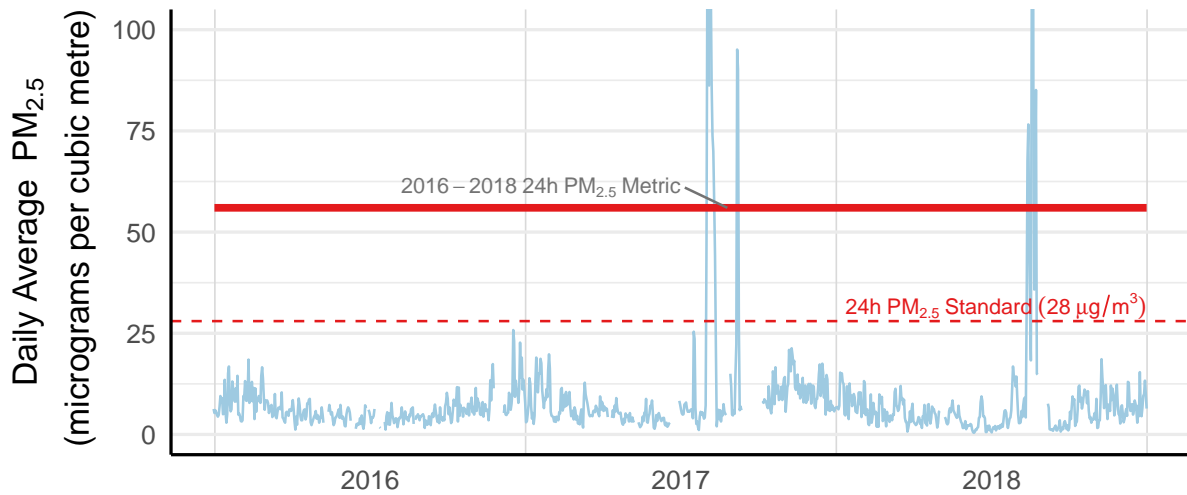
**PM<sub>2.5</sub> Annual Metric: 9.2 µg/m<sup>3</sup> (2 year average)**



**Whistler monitoring station**

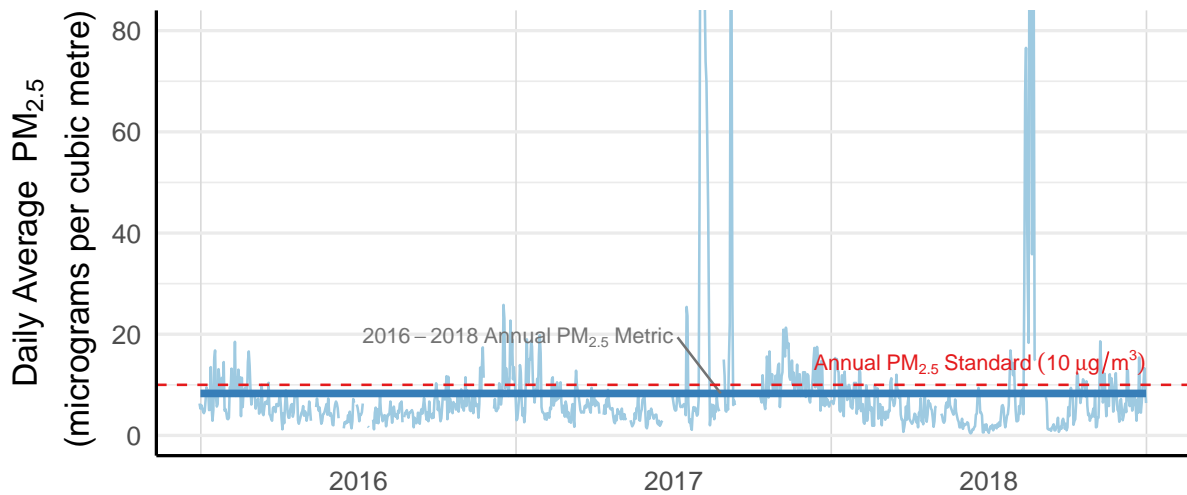
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 56 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

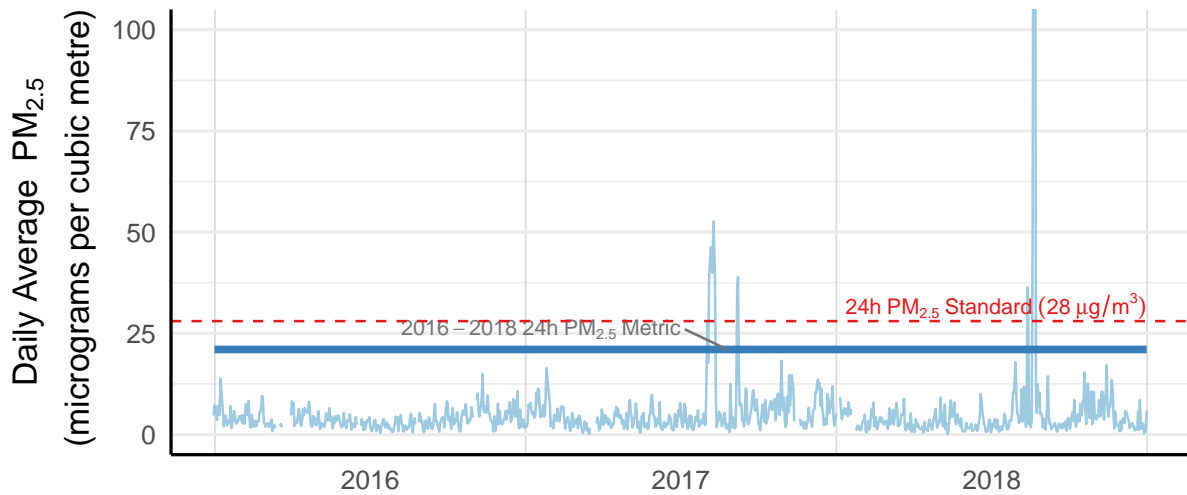
**PM<sub>2.5</sub> Annual Metric: 8.3 µg/m<sup>3</sup> (3 year average)**



**Nanaimo monitoring station**

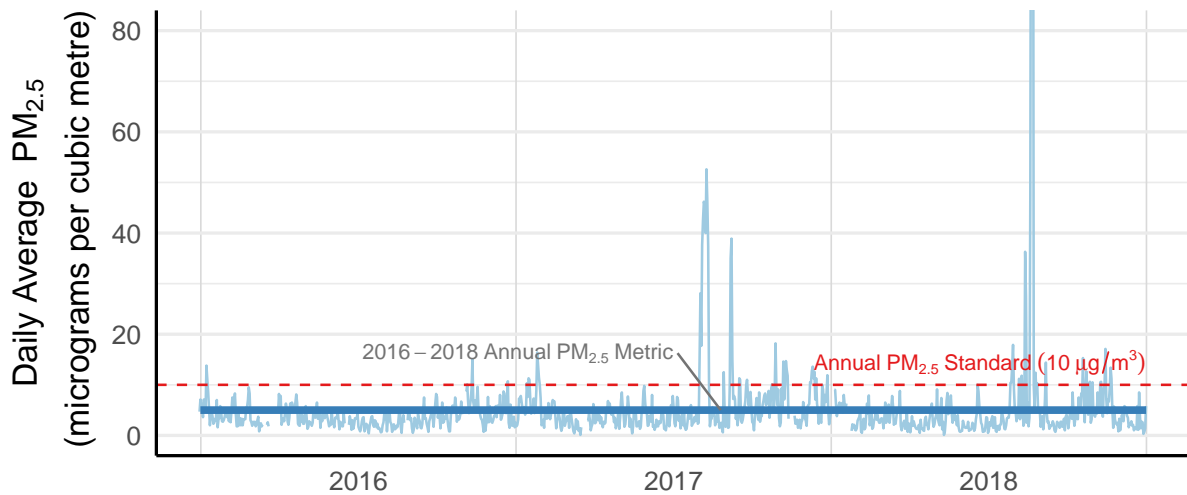
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 21 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

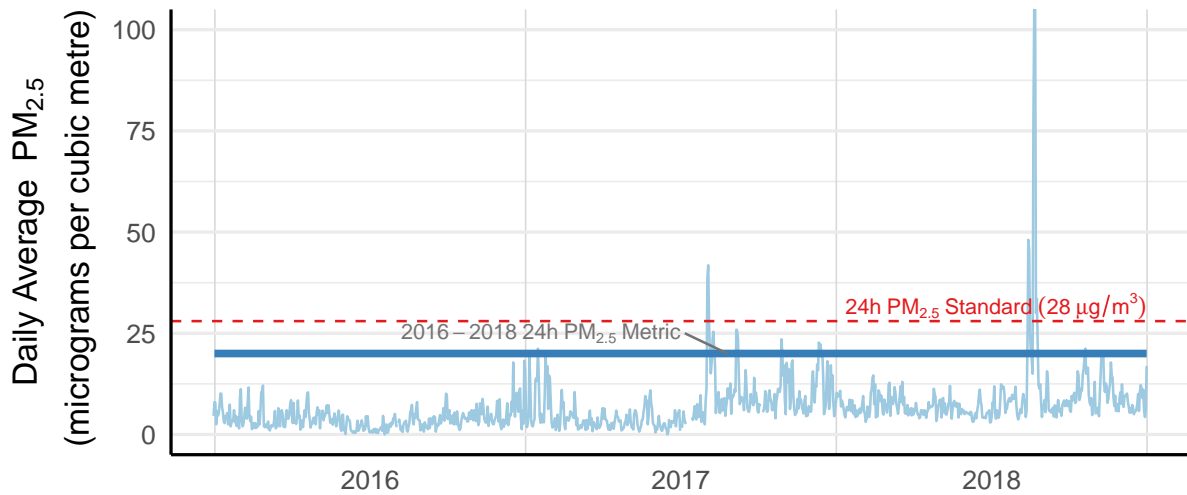
**PM<sub>2.5</sub> Annual Metric: 5 µg/m<sup>3</sup> (3 year average)**



**Victoria-Topaz monitoring station**

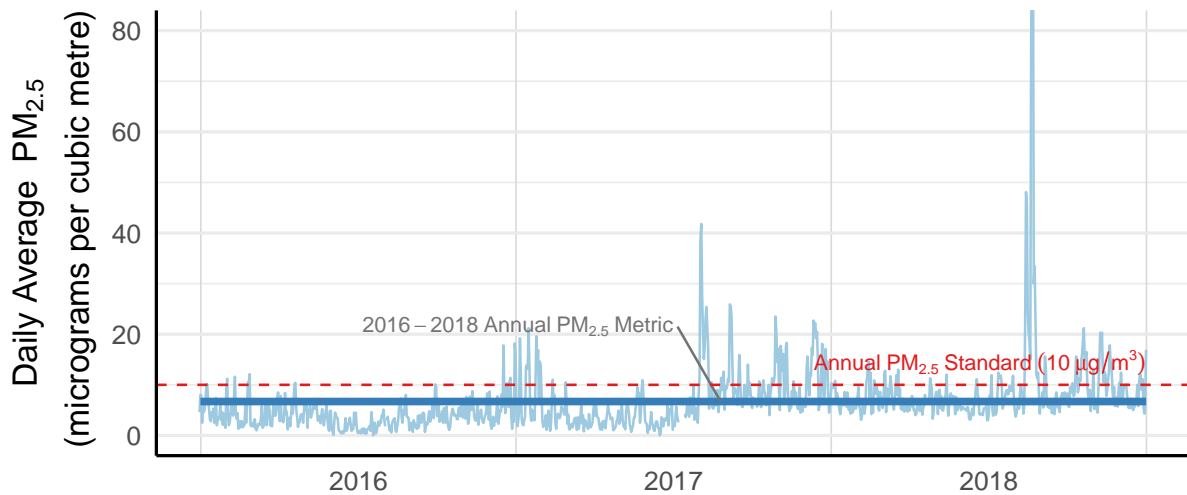
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 20 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

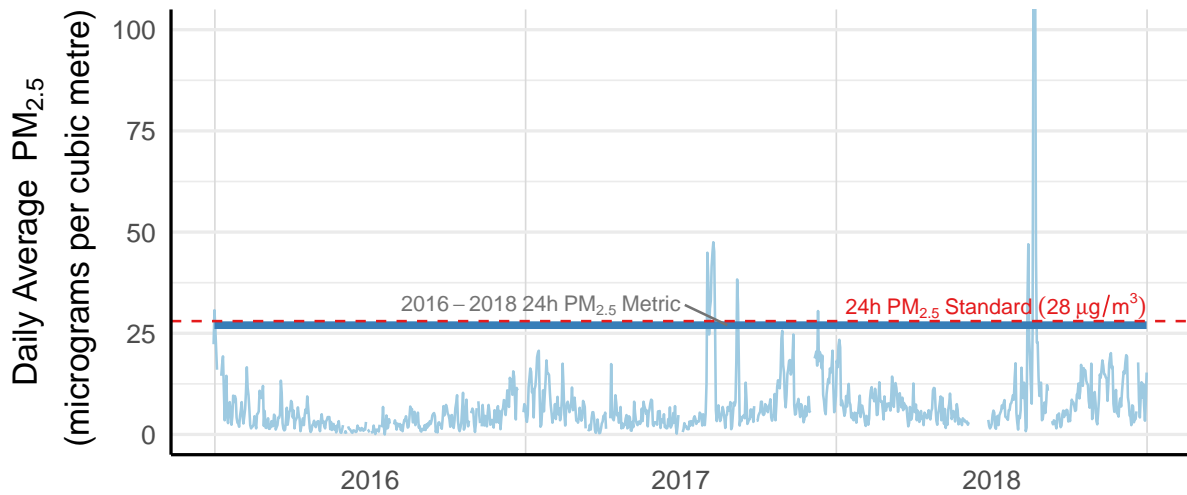
**PM<sub>2.5</sub> Annual Metric: 6.7 µg/m<sup>3</sup> (3 year average)**



**Duncan-Deykin Ave monitoring station**

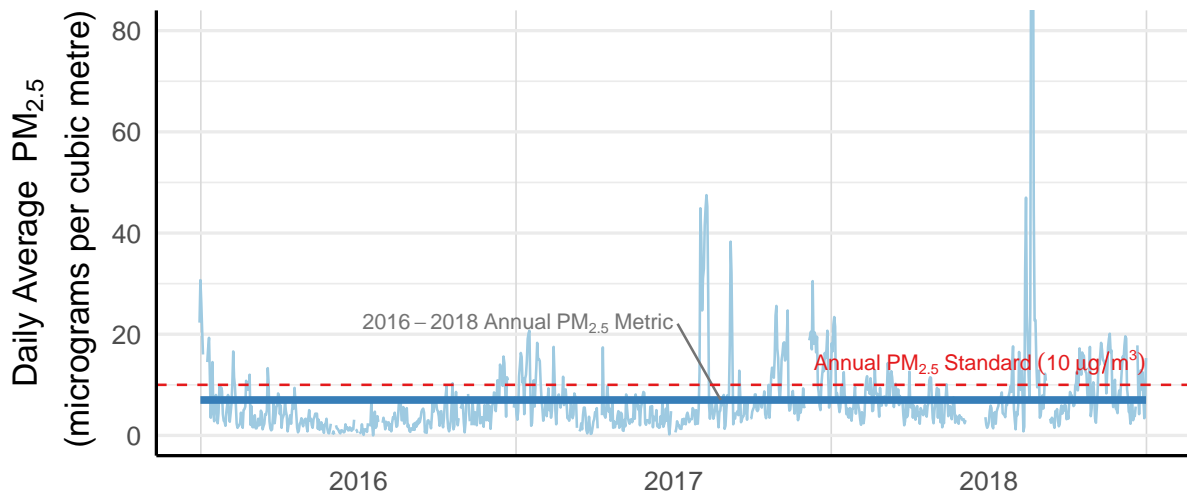
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 27 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

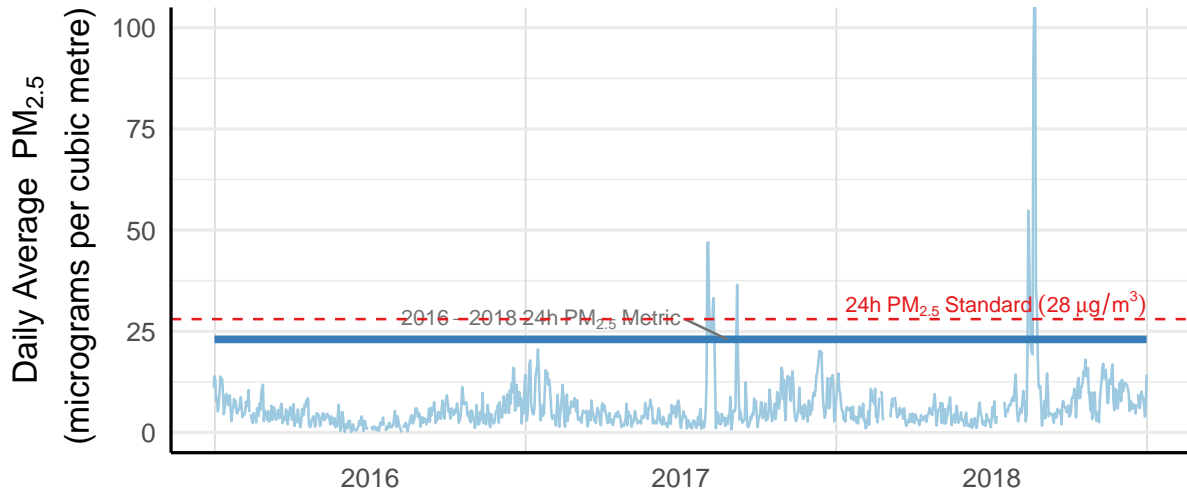
**PM<sub>2.5</sub> Annual Metric: 7 µg/m<sup>3</sup> (3 year average)**



**Colwood monitoring station**

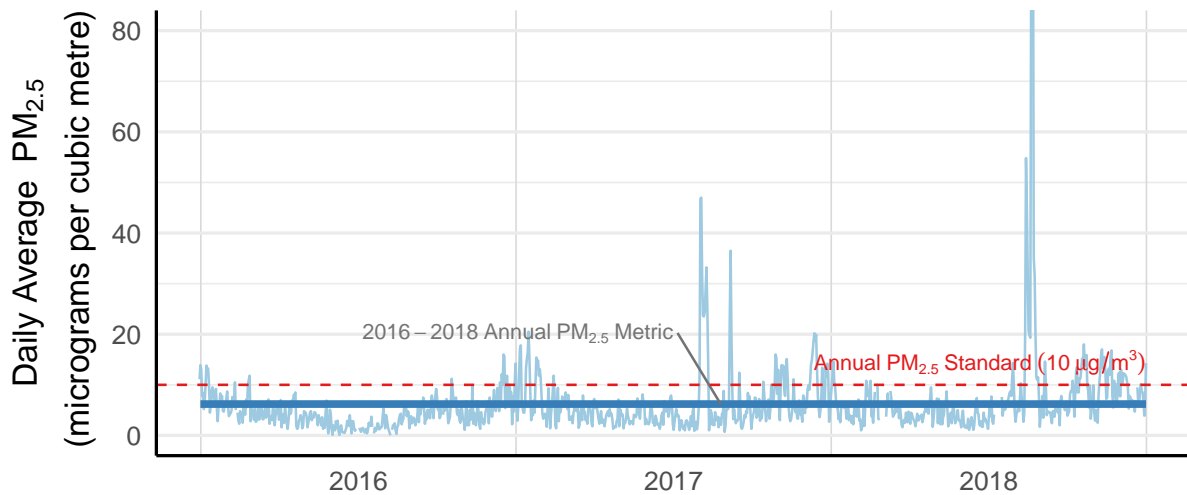
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 23 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

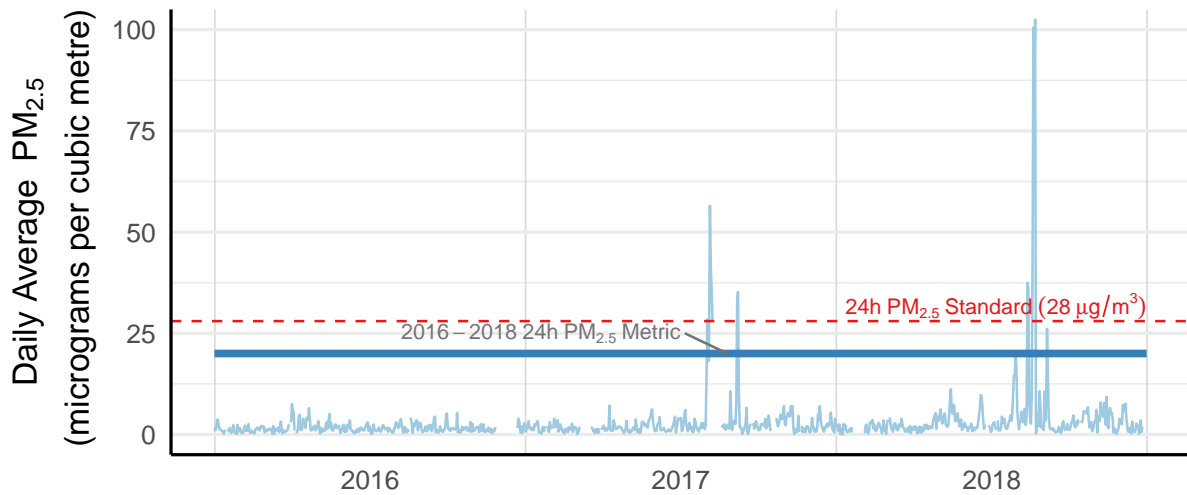
**PM<sub>2.5</sub> Annual Metric: 6.2 µg/m<sup>3</sup> (3 year average)**



**Powell River-J. Thomson monitoring station**

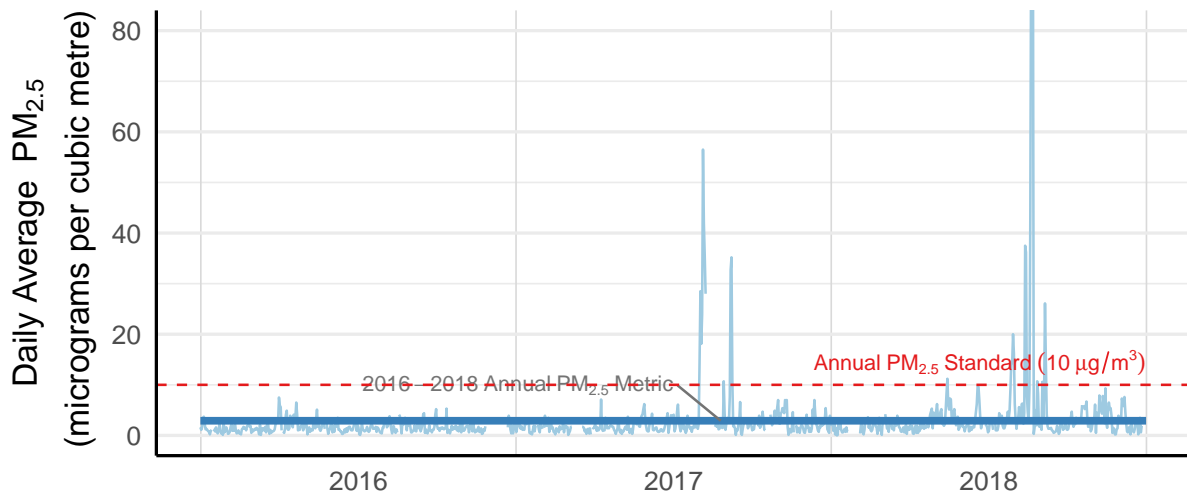
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 20 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

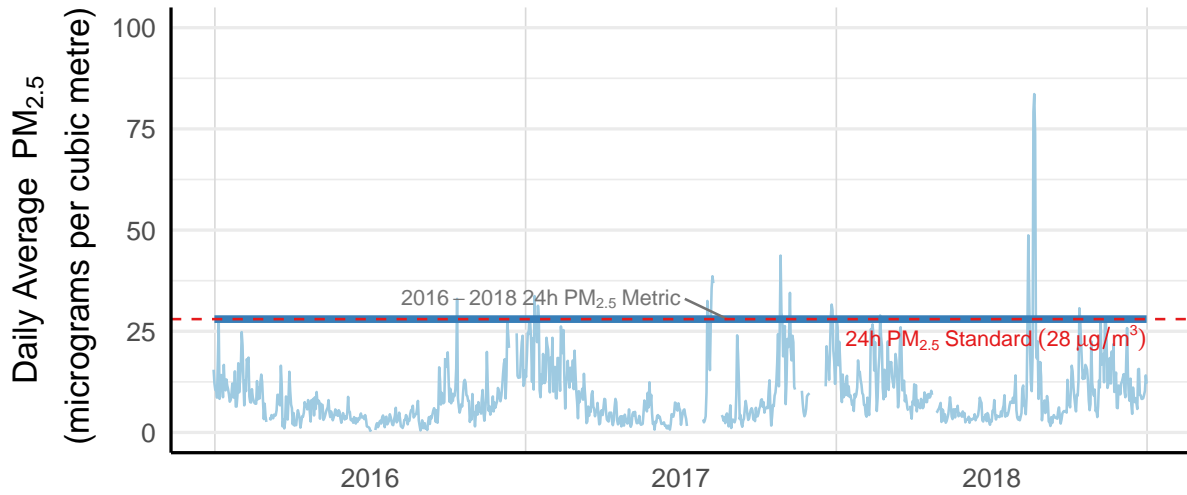
**PM<sub>2.5</sub> Annual Metric: 2.9 µg/m<sup>3</sup> (3 year average)**



Port Alberni monitoring station

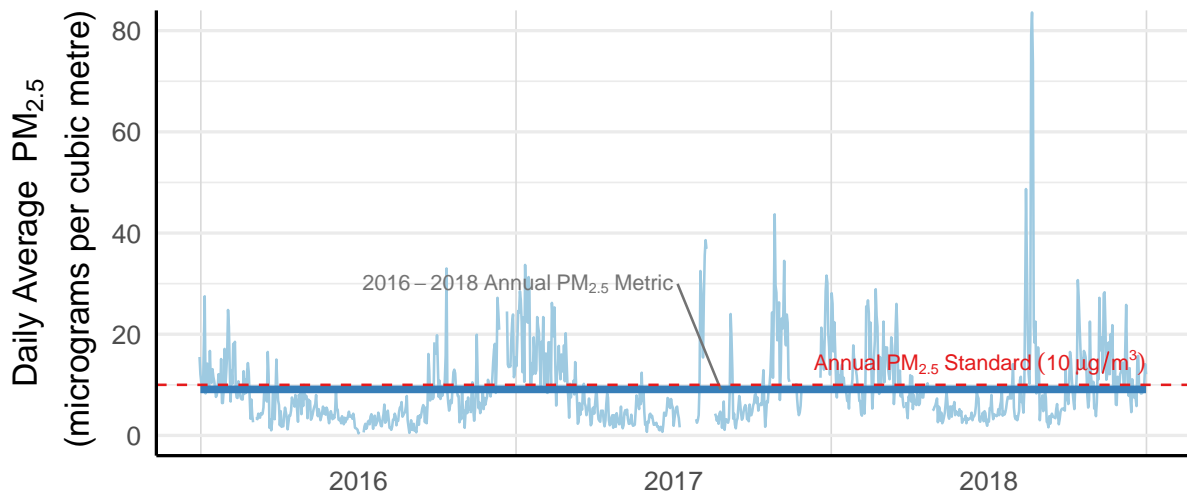
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 28 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 9.1 µg/m<sup>3</sup> (3 year average)**

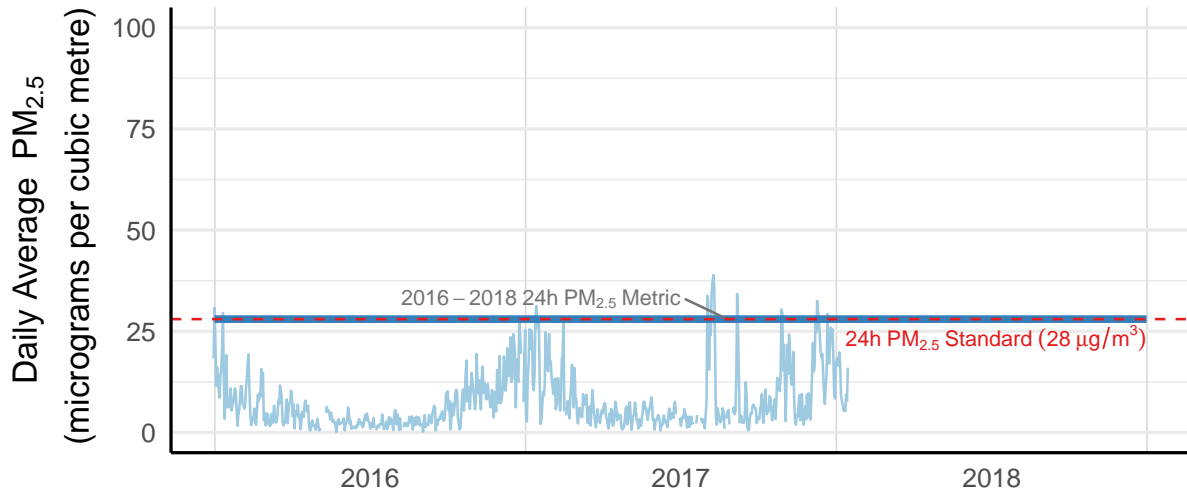




**Duncan-Cairnsmore monitoring station**

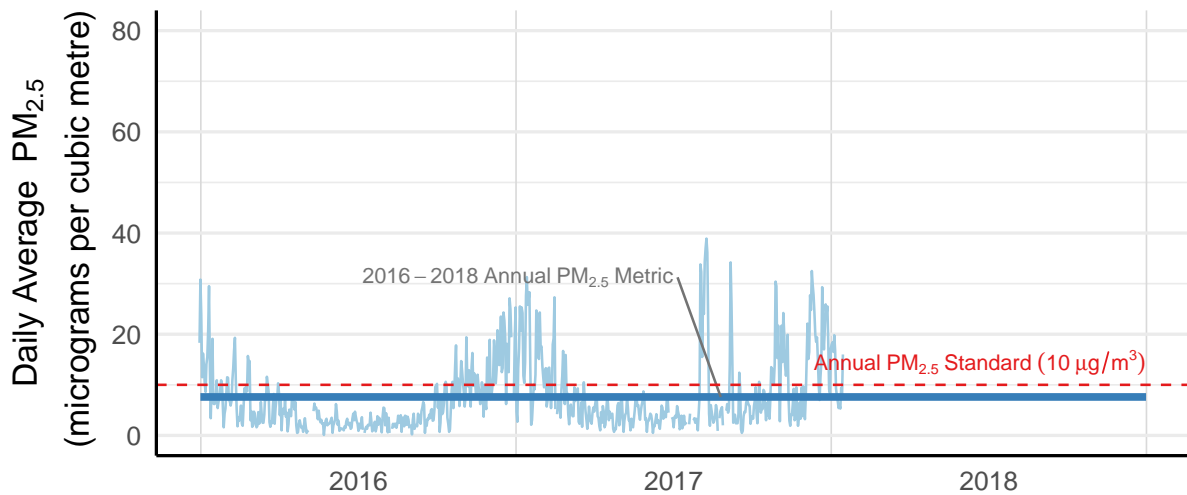
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 28 µg/m<sup>3</sup> (2 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

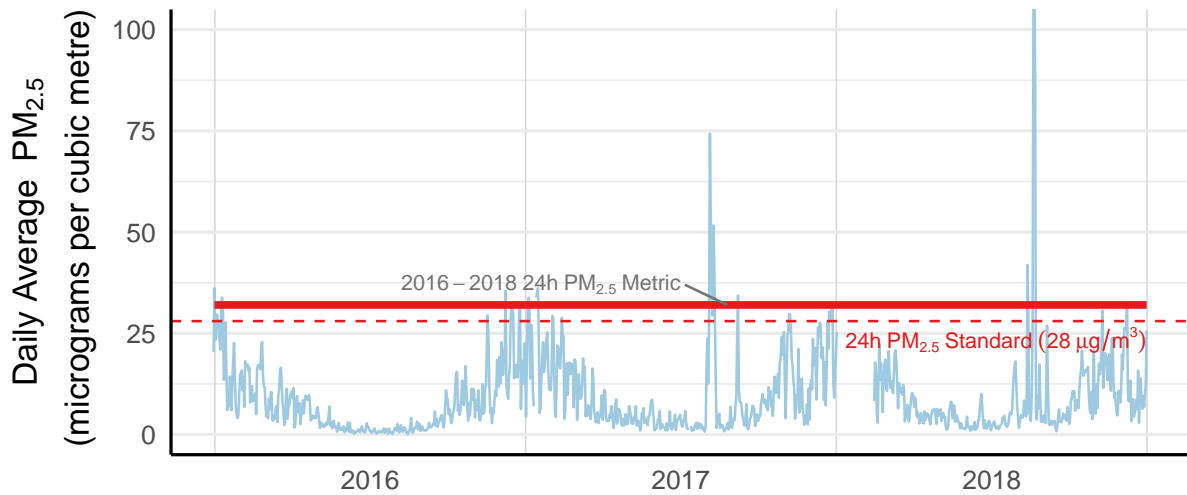
**PM<sub>2.5</sub> Annual Metric: 7.6 µg/m<sup>3</sup> (2 year average)**



**Courtenay monitoring station**

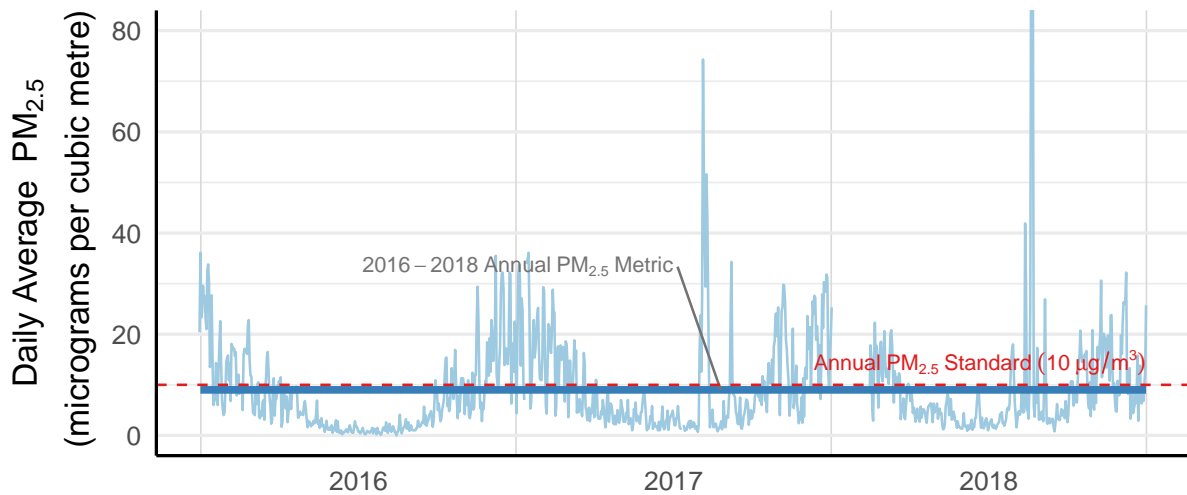
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 32 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

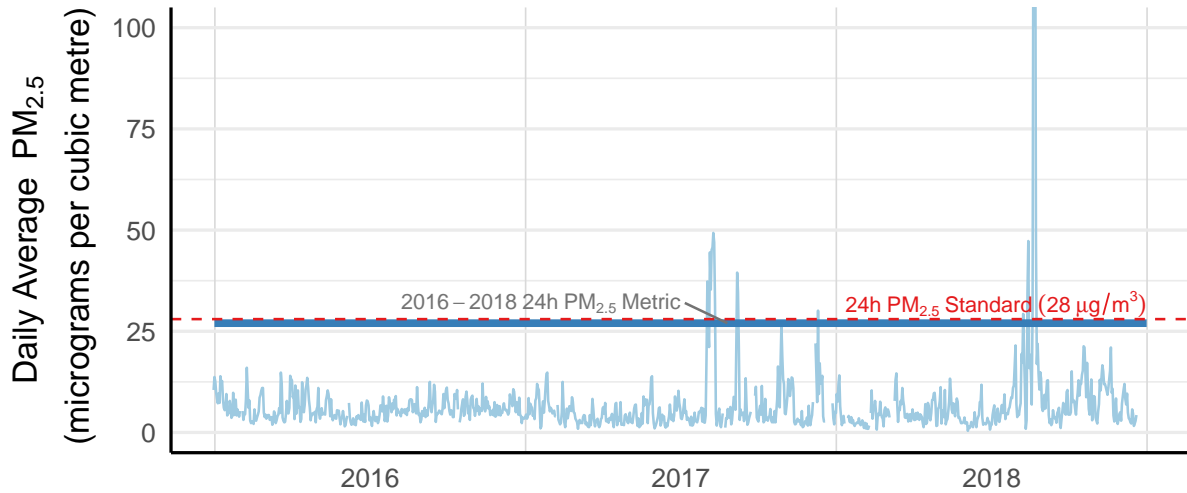
**PM<sub>2.5</sub> Annual Metric: 9 µg/m<sup>3</sup> (2 year average)**



**Crofton-Georgia Hts monitoring station**

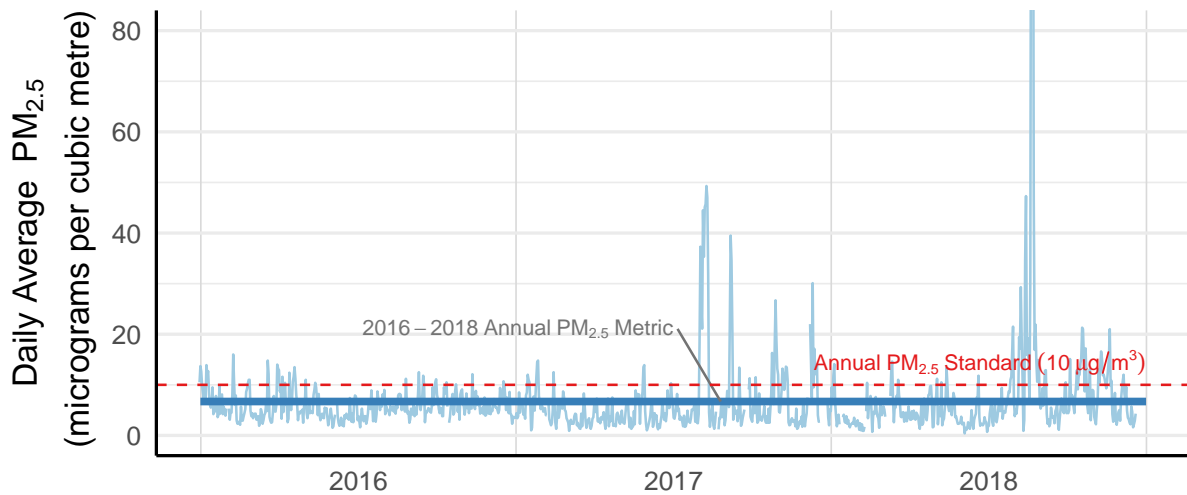
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 27 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 6.7 µg/m<sup>3</sup> (3 year average)**

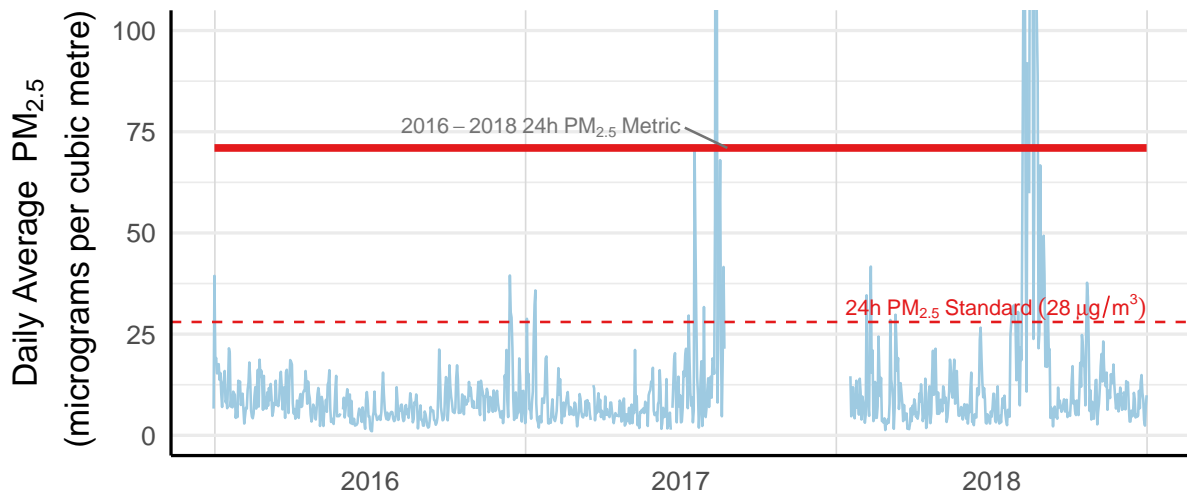


**Central Interior Air Zone**

**Prince George monitoring station**

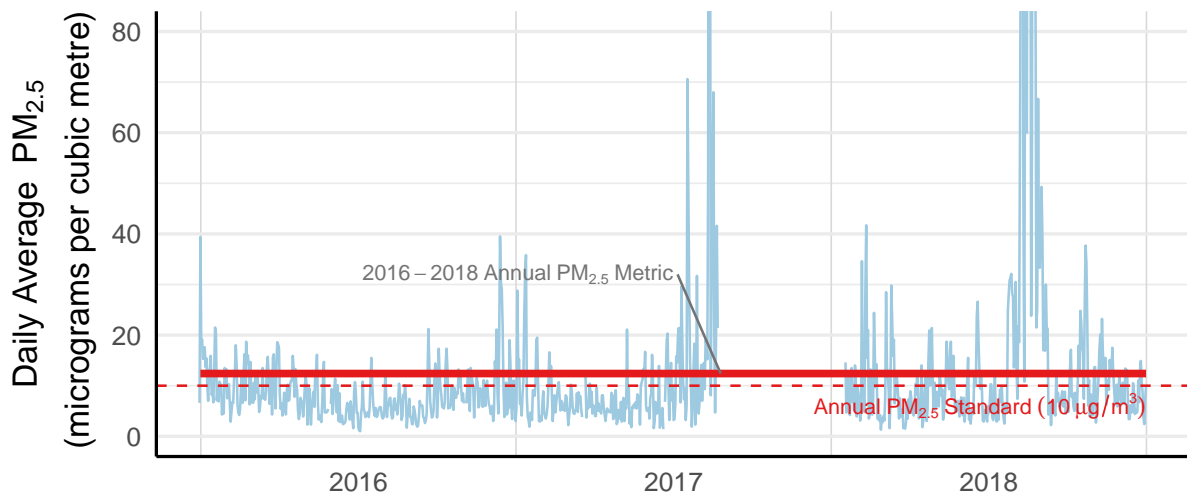
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 71 µg/m<sup>3</sup> (2 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

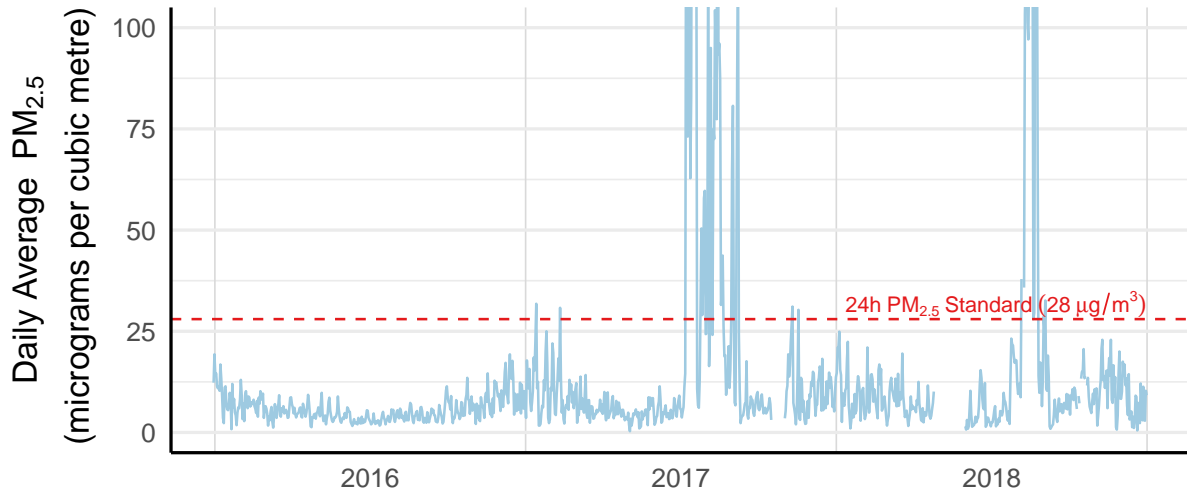
**PM<sub>2.5</sub> Annual Metric: 12.4 µg/m<sup>3</sup> (2 year average)**



**Williams Lake monitoring station**

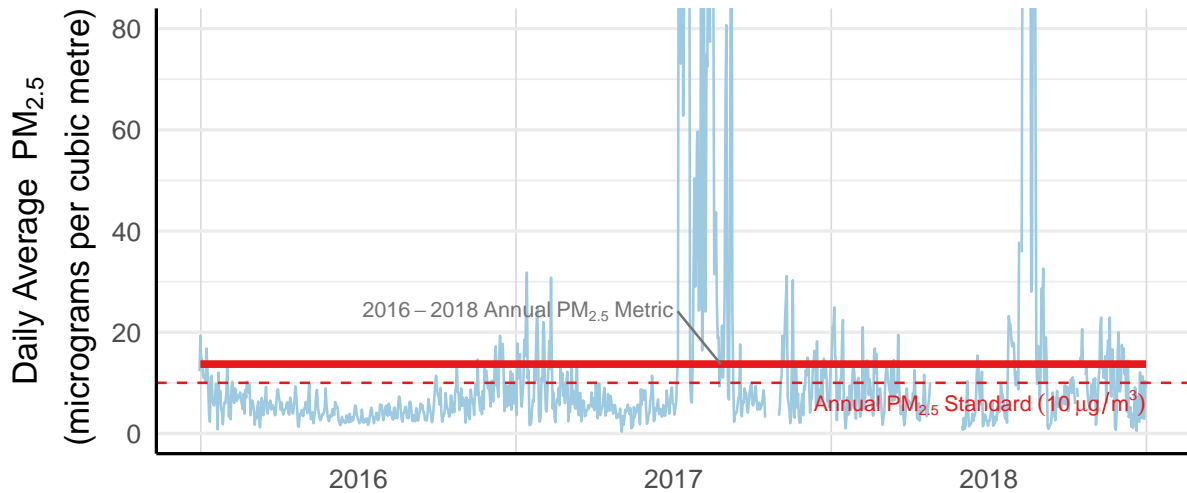
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 111 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

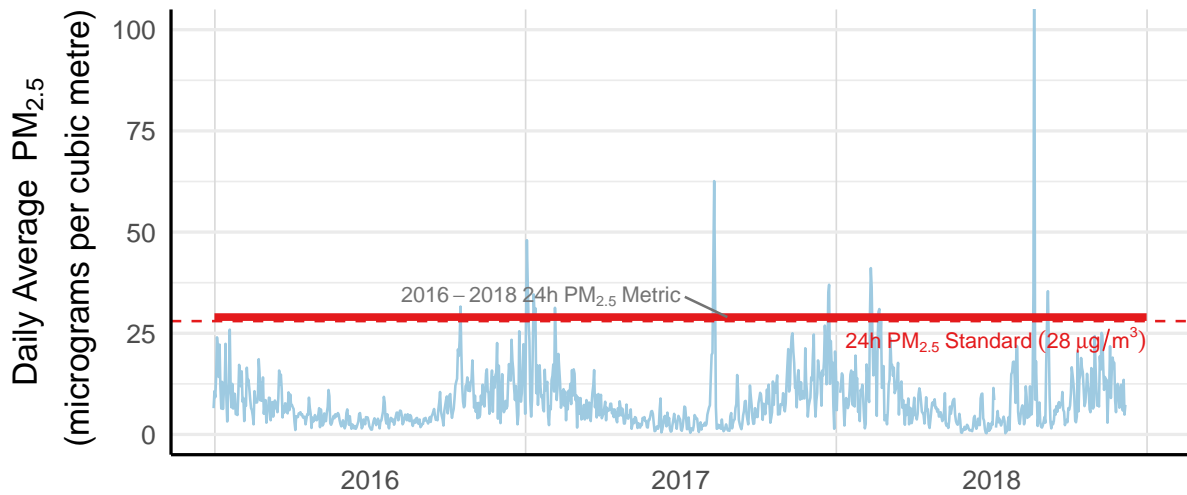
**PM<sub>2.5</sub> Annual Metric: 13.7 µg/m<sup>3</sup> (3 year average)**



**Smithers monitoring station**

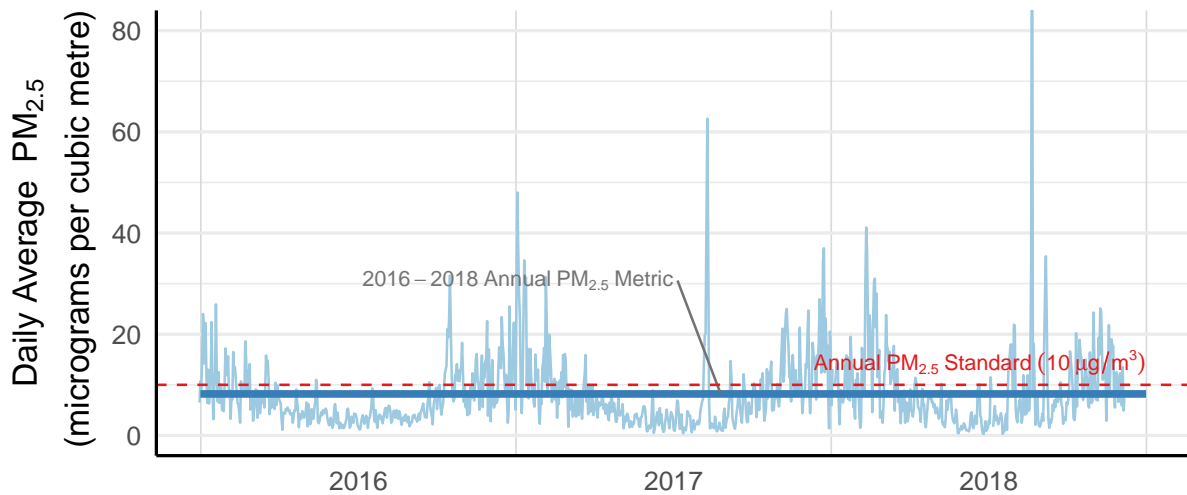
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 29 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

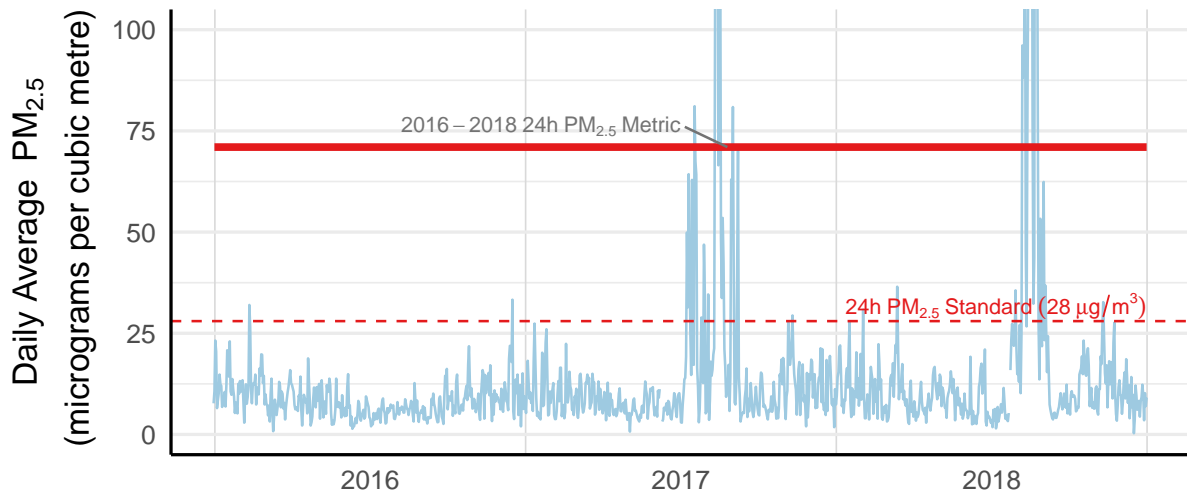
**PM<sub>2.5</sub> Annual Metric: 8.2 µg/m<sup>3</sup> (3 year average)**



**Quesnel monitoring station**

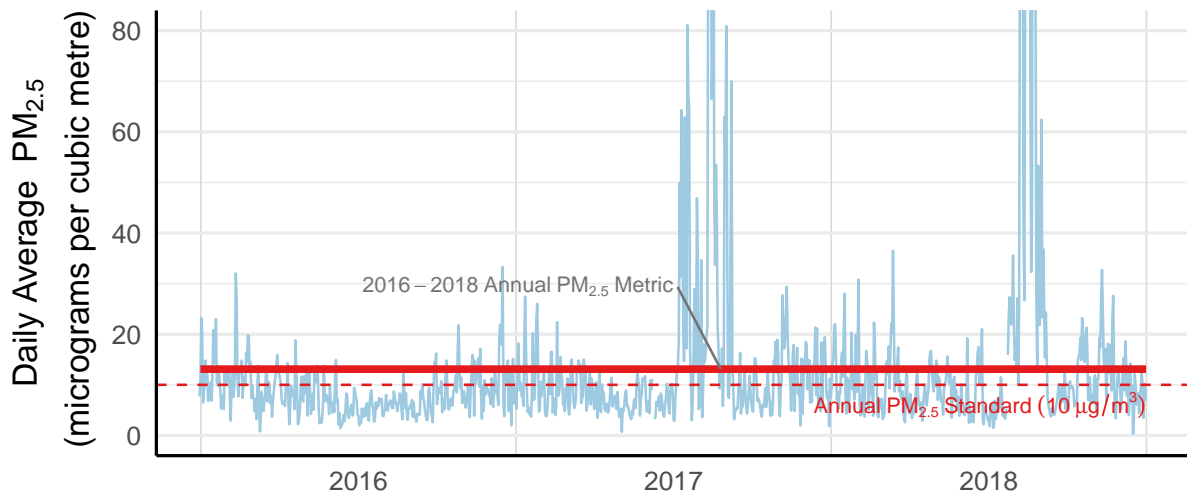
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 71 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

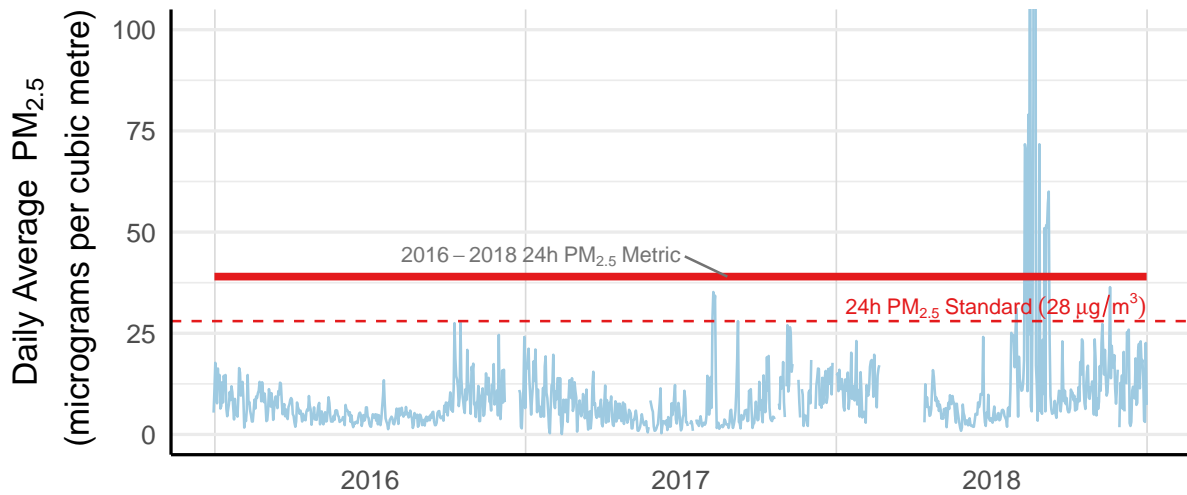
**PM<sub>2.5</sub> Annual Metric: 13.1 µg/m<sup>3</sup> (3 year average)**



**Burns Lake monitoring station**

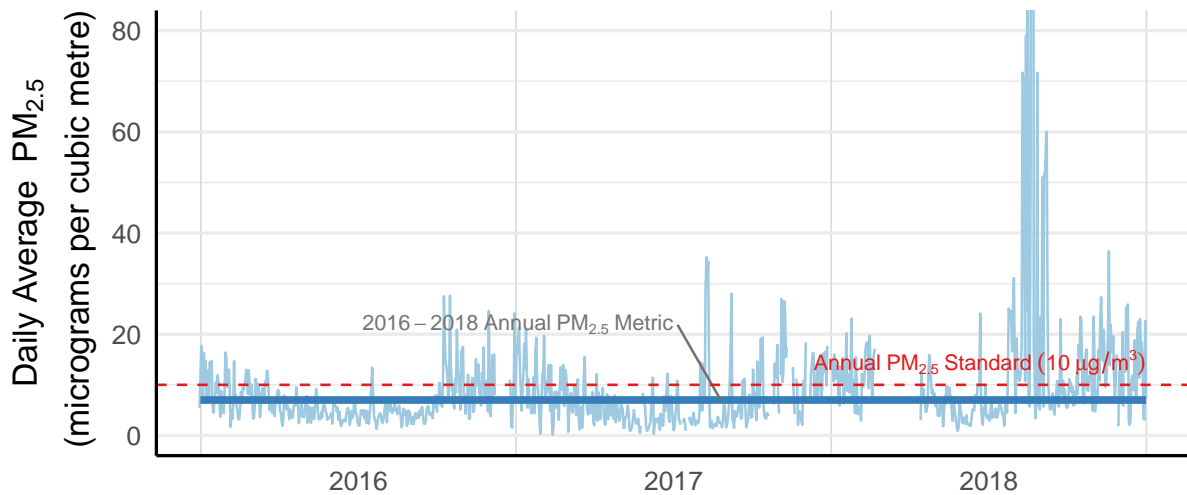
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 39 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 7 µg/m<sup>3</sup> (2 year average)**

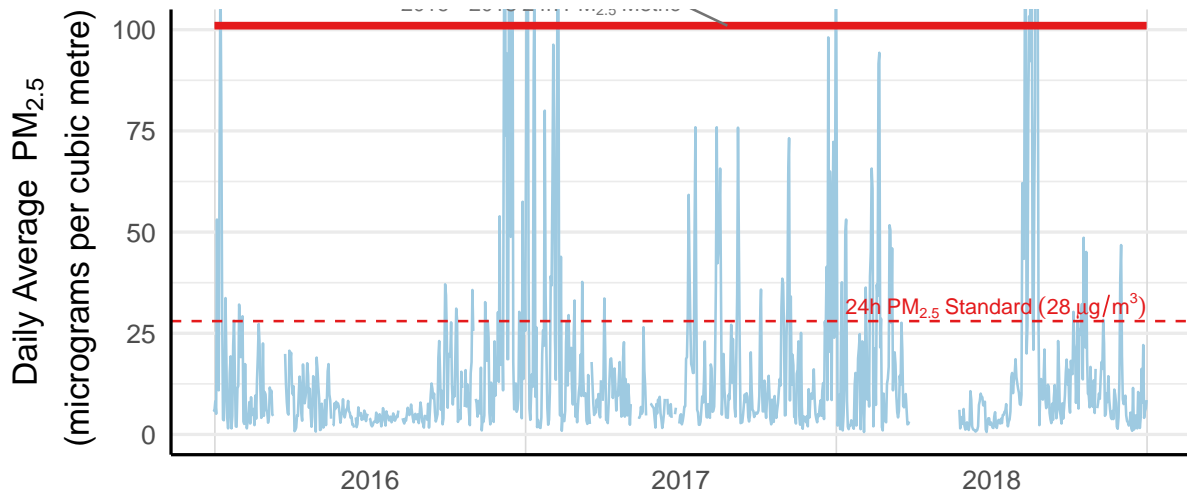




**Valemount monitoring station**

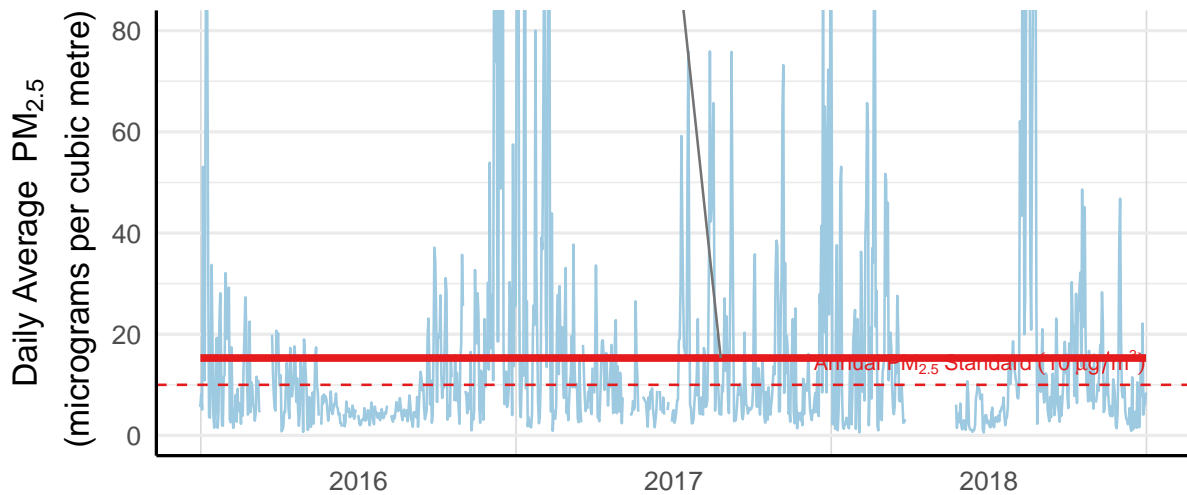
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 101 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

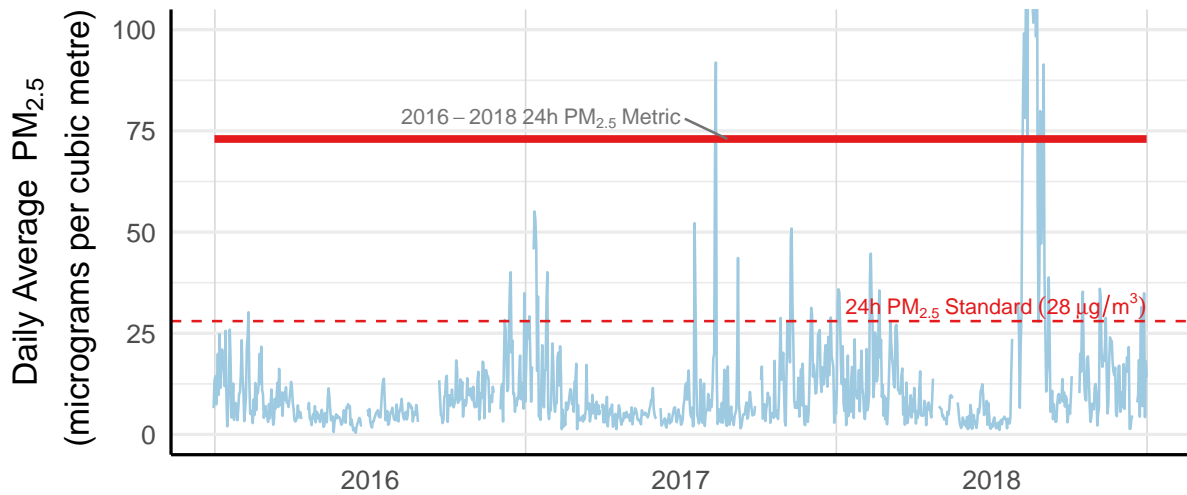
**PM<sub>2.5</sub> Annual Metric: 15.3 µg/m<sup>3</sup> (2 year average)**



Vanderhoof monitoring station

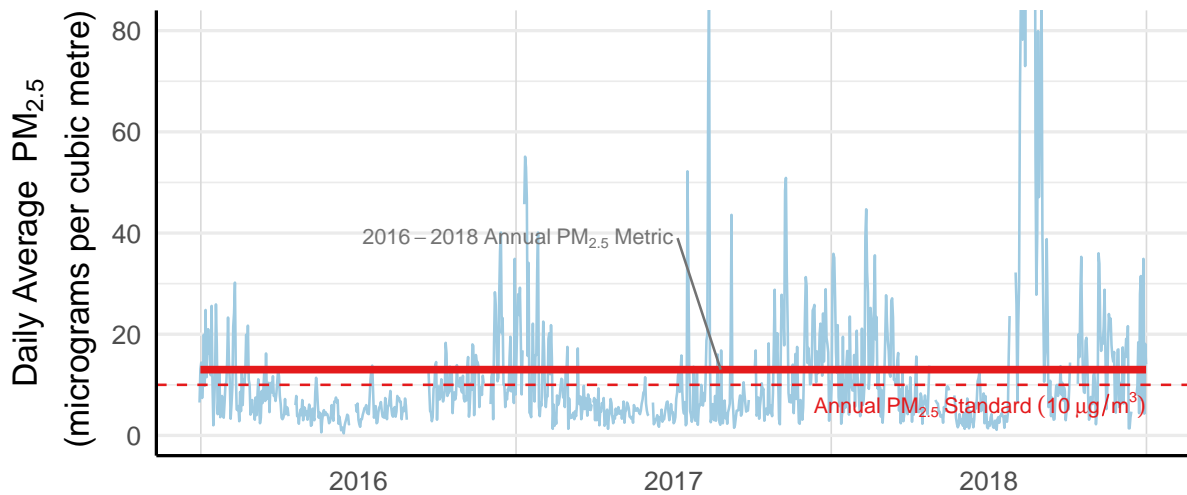
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 73 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

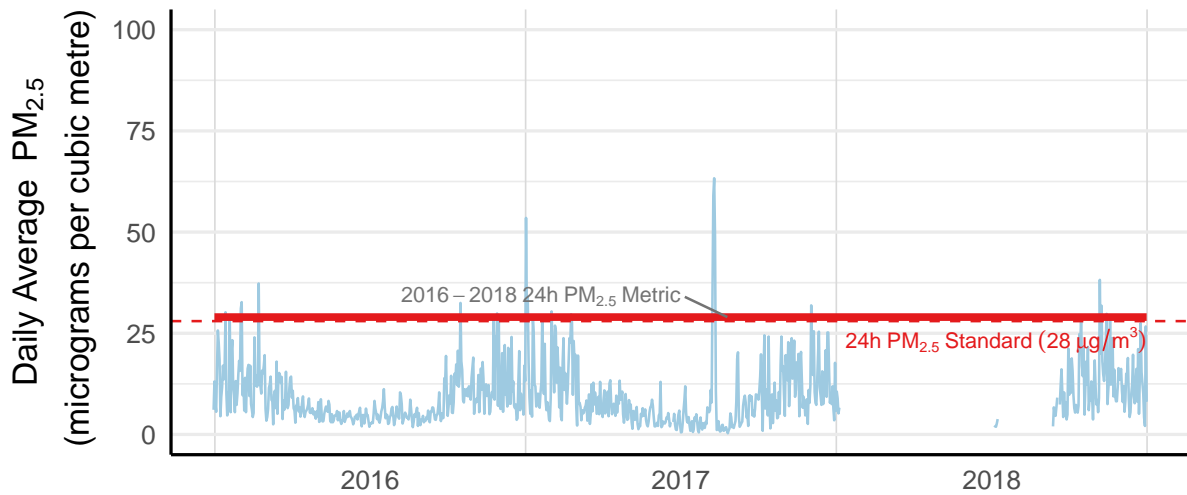
**PM<sub>2.5</sub> Annual Metric: 13 µg/m<sup>3</sup> (3 year average)**



**Houston monitoring station**

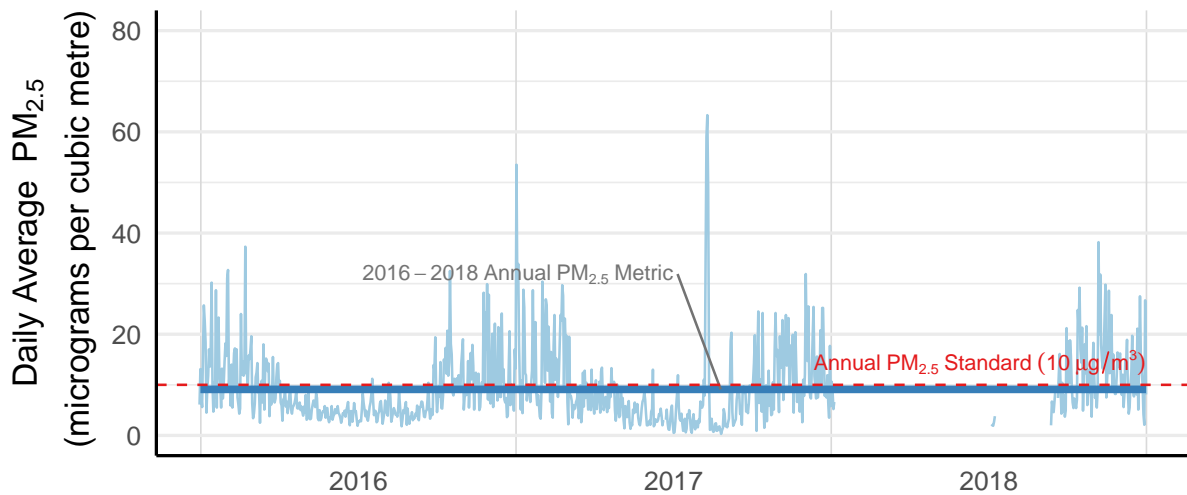
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 29 µg/m<sup>3</sup> (2 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 9.1 µg/m<sup>3</sup> (2 year average)**

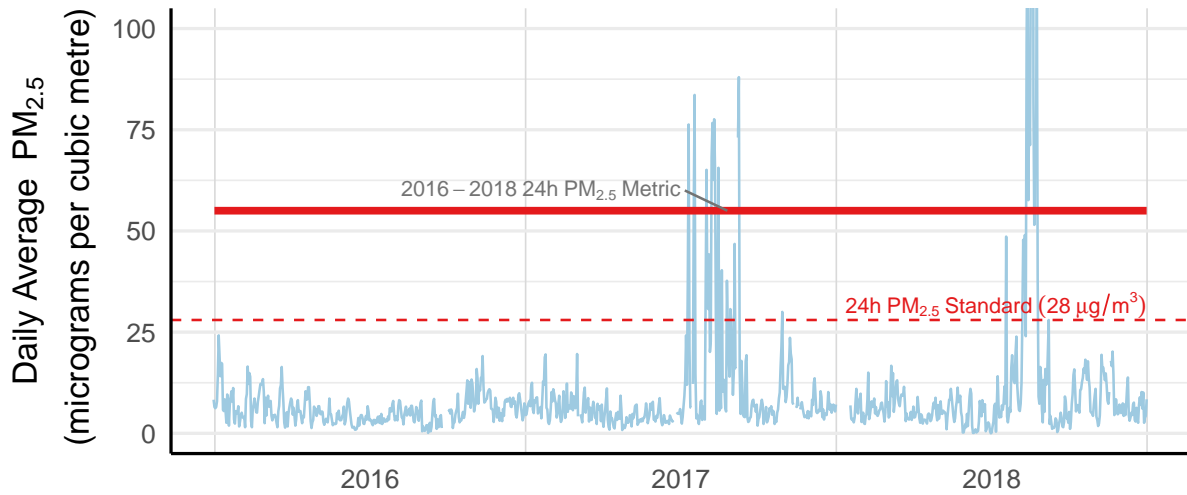


**Southern Interior Air Zone**

**Kelowna monitoring station**

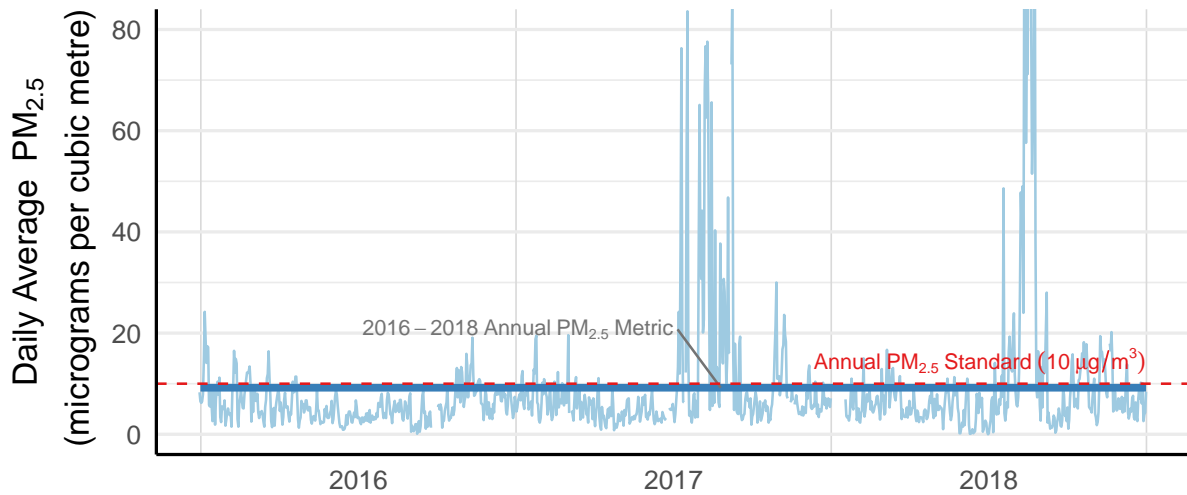
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 55 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

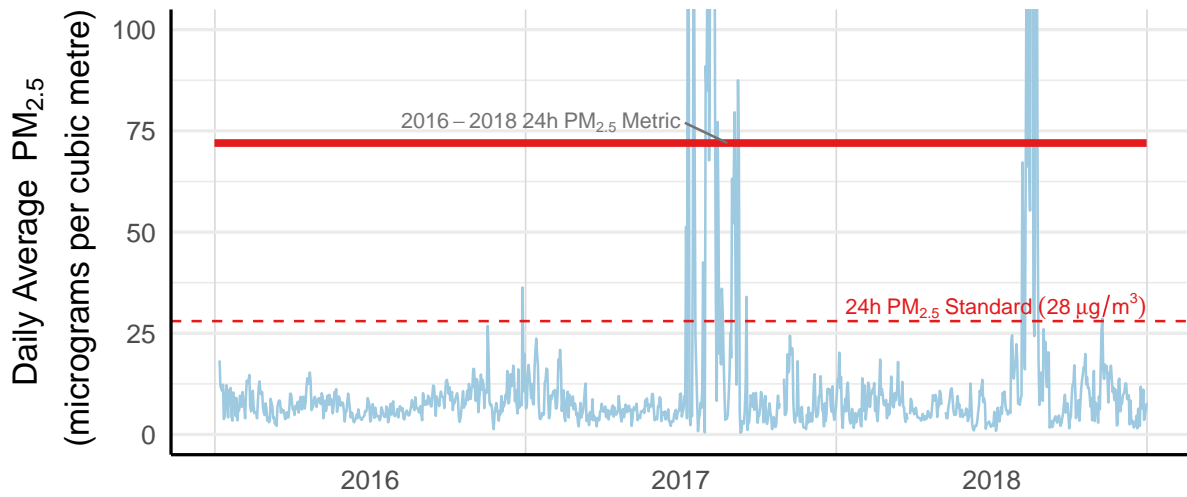
**PM<sub>2.5</sub> Annual Metric: 9.2 µg/m<sup>3</sup> (3 year average)**



**Kamloops-Fed. Bldg monitoring station**

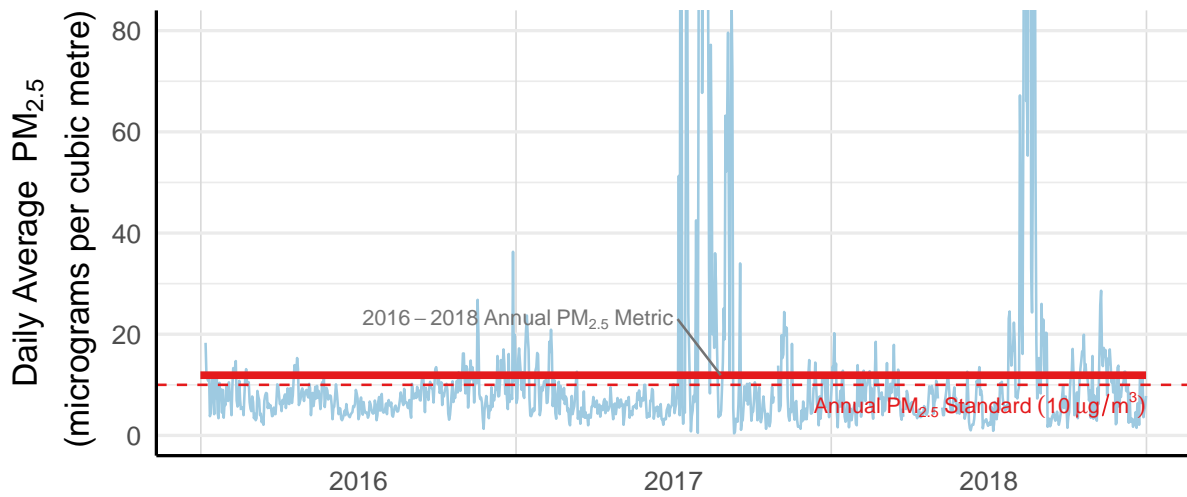
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 72 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

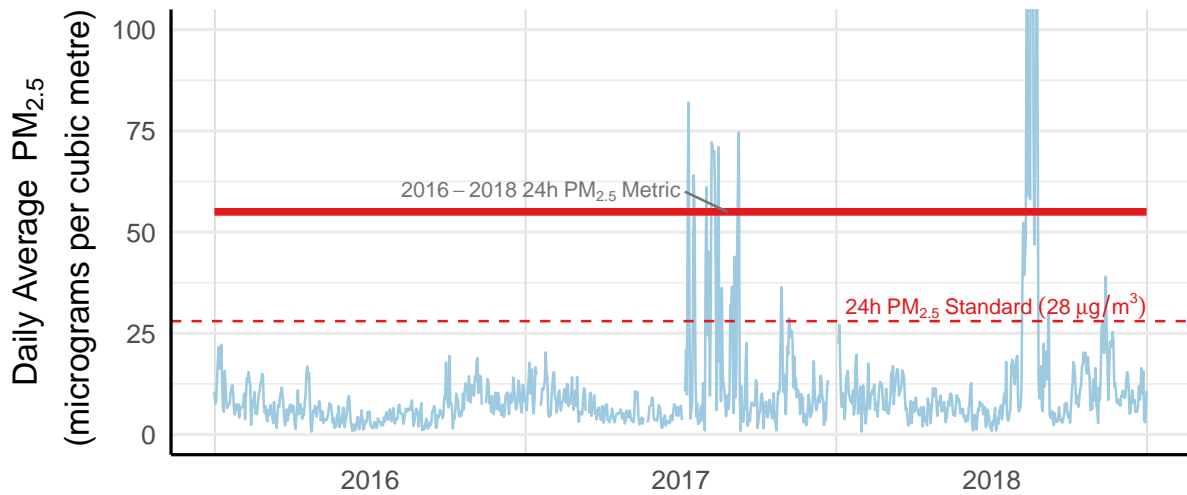
**PM<sub>2.5</sub> Annual Metric: 11.9 µg/m<sup>3</sup> (3 year average)**



**Vernon monitoring station**

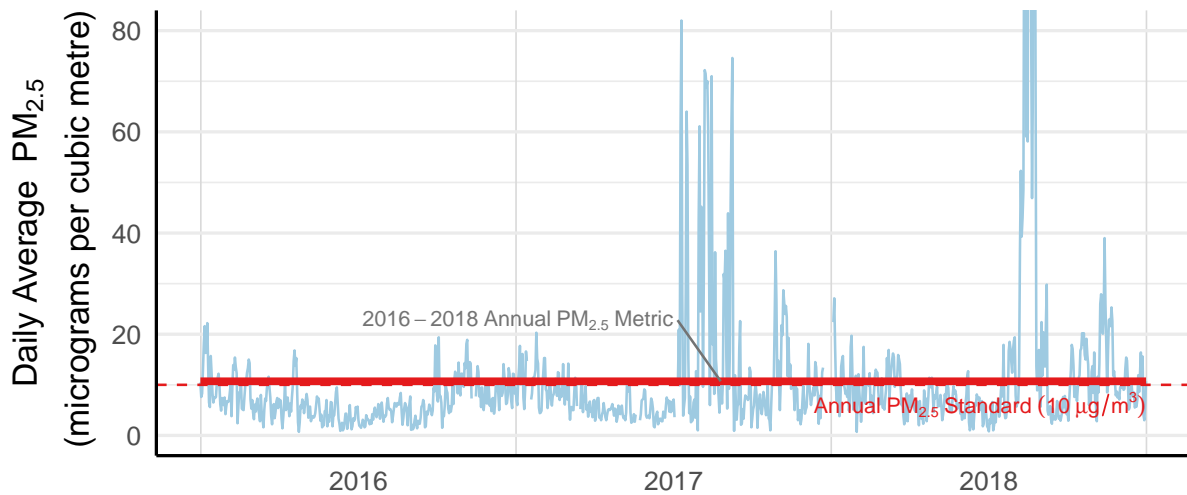
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 55 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

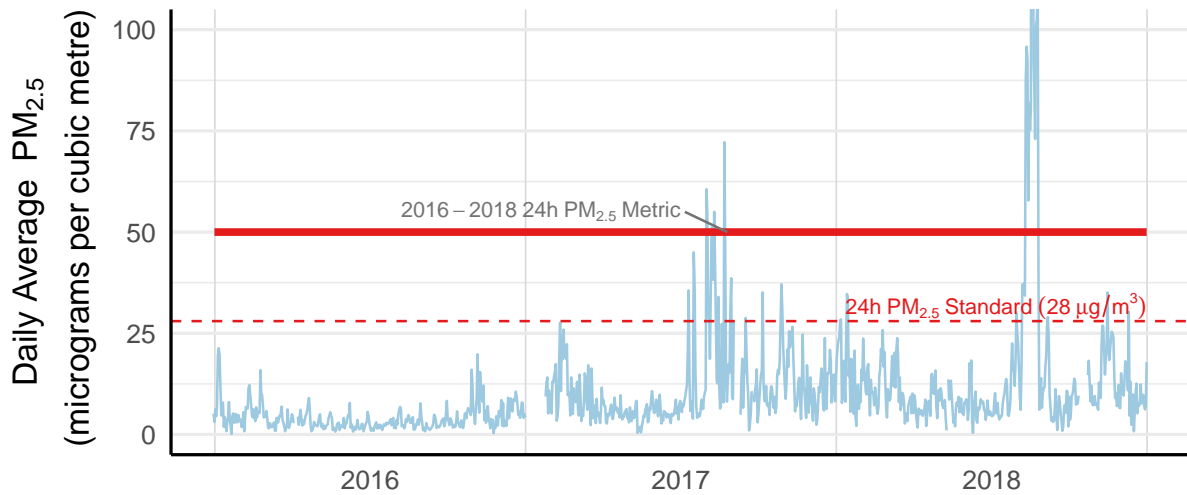
**PM<sub>2.5</sub> Annual Metric: 10.7 µg/m<sup>3</sup> (3 year average)**



**Grand Forks monitoring station**

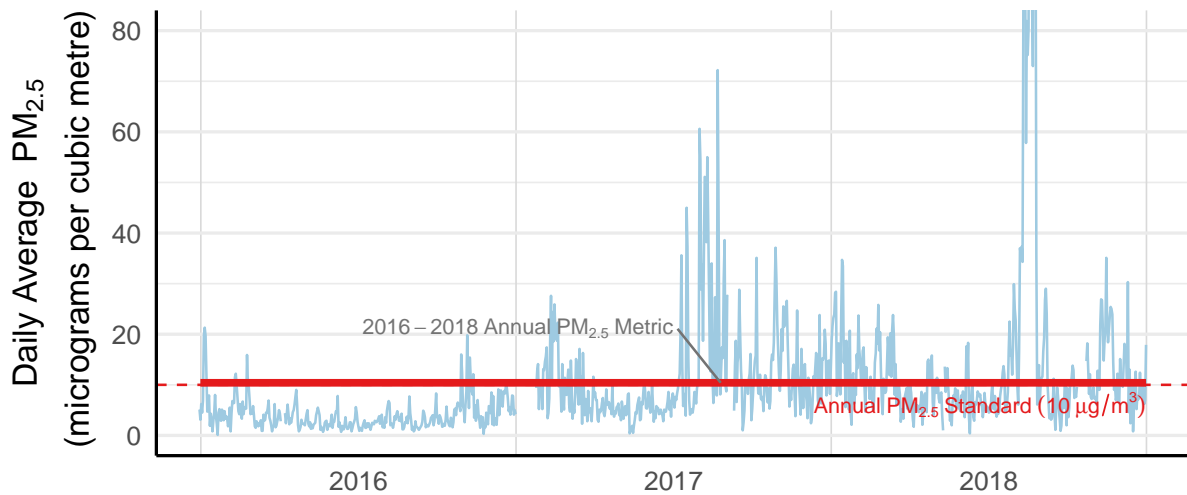
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 50 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

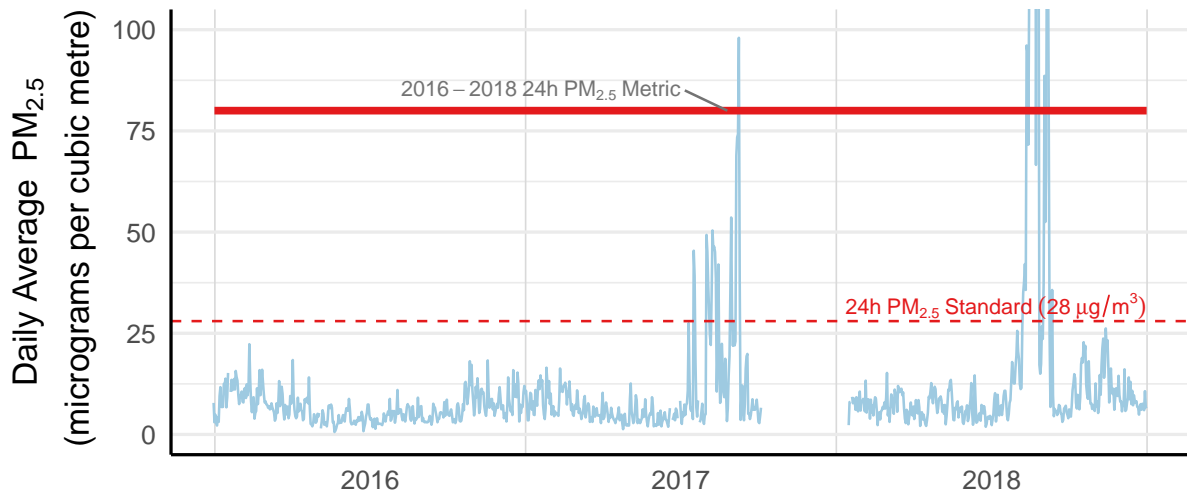
**PM<sub>2.5</sub> Annual Metric: 10.4 µg/m<sup>3</sup> (3 year average)**



**Castlegar monitoring station**

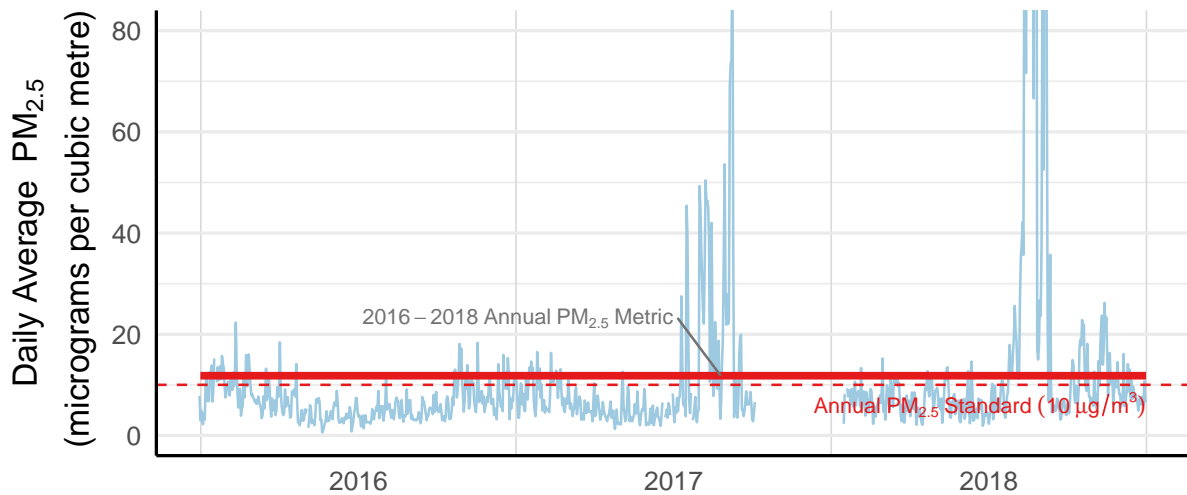
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 80 µg/m<sup>3</sup> (2 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> Annual Metric: 11.8 µg/m<sup>3</sup> (2 year average)**

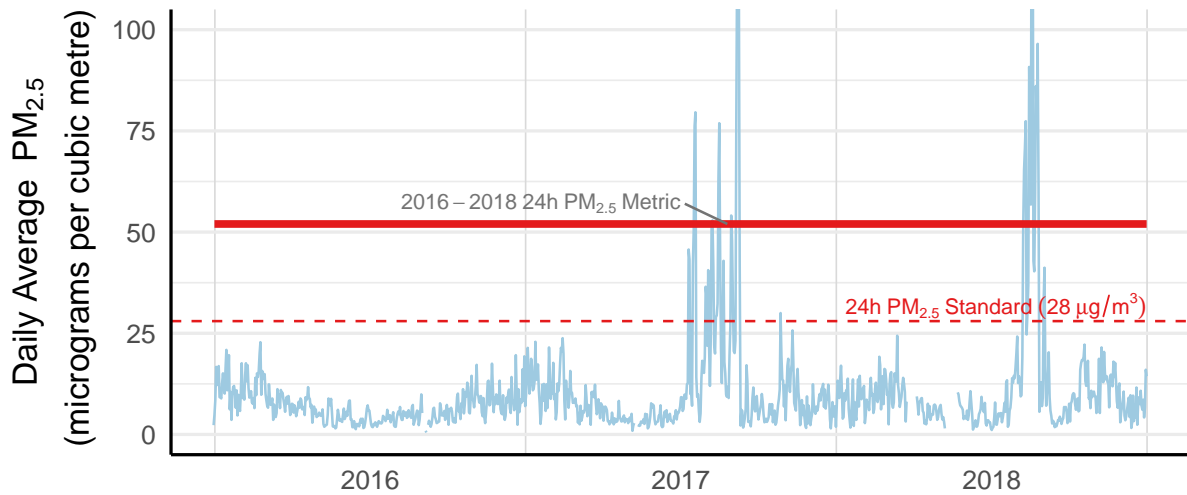




**Golden monitoring station**

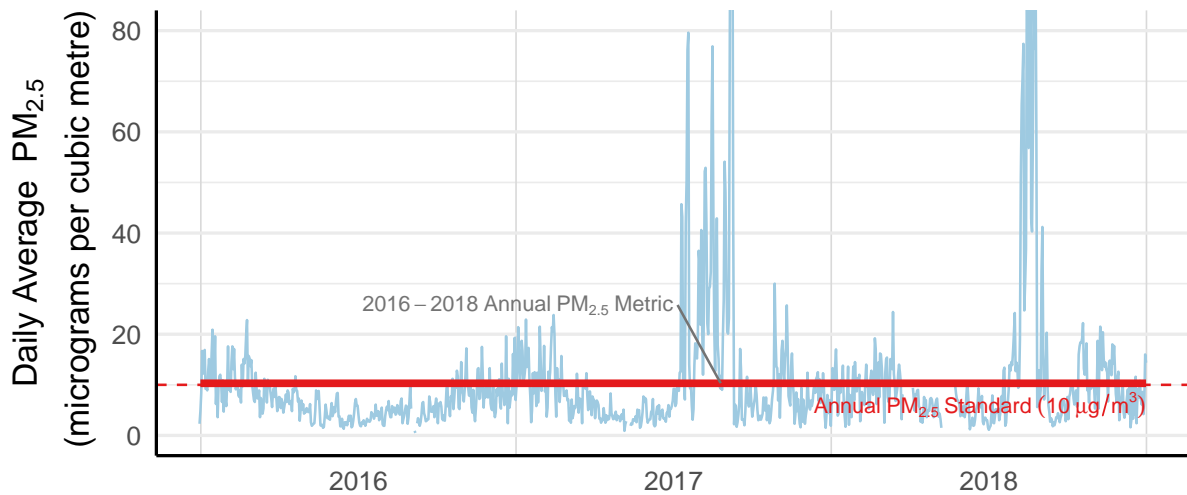
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 52 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

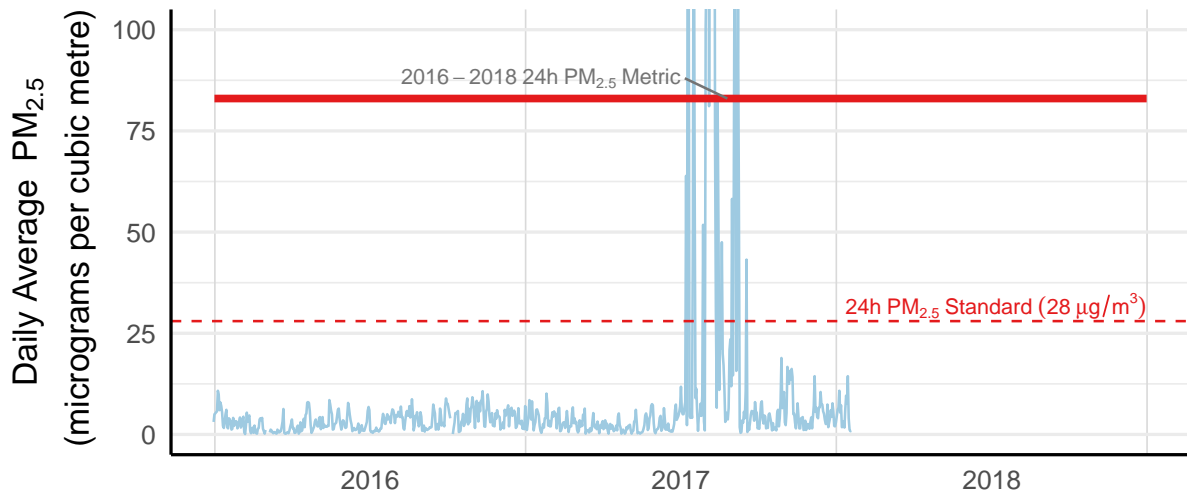
**PM<sub>2.5</sub> Annual Metric: 10.3 µg/m<sup>3</sup> (3 year average)**



**Kamloops-Aberdeen monitoring station**

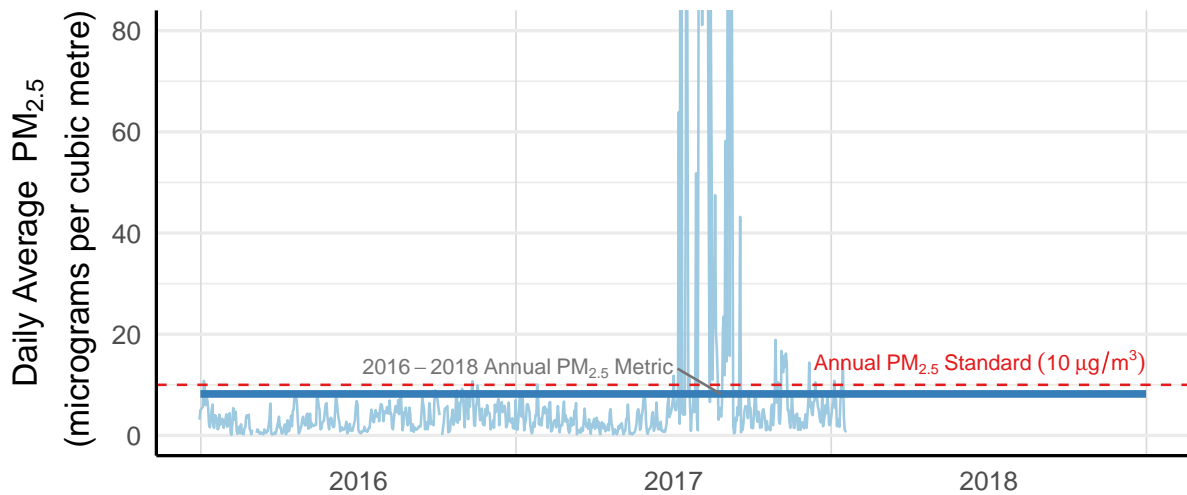
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 83 µg/m<sup>3</sup> (2 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

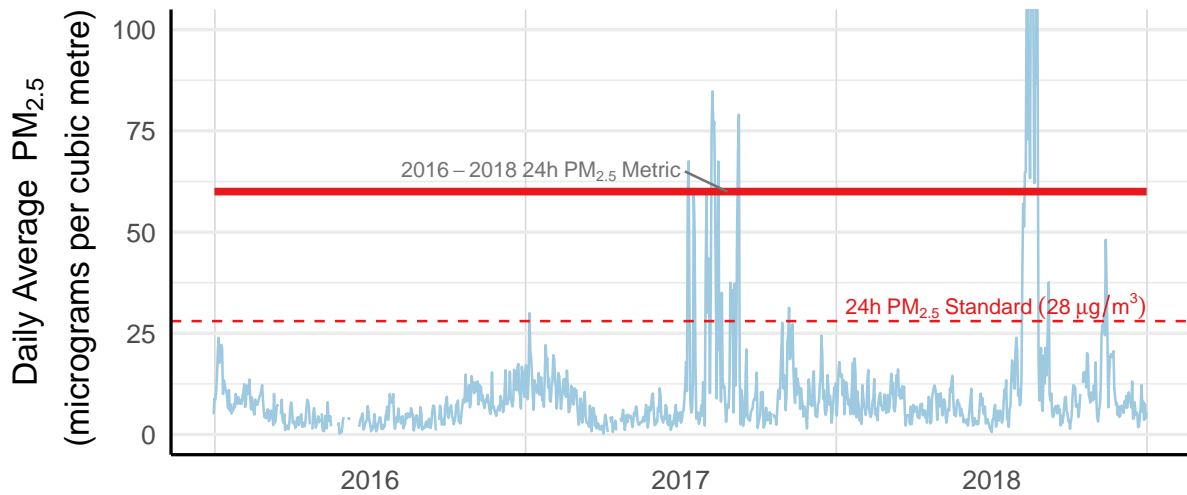
**PM<sub>2.5</sub> Annual Metric: 8.2 µg/m<sup>3</sup> (2 year average)**



**Lavington monitoring station**

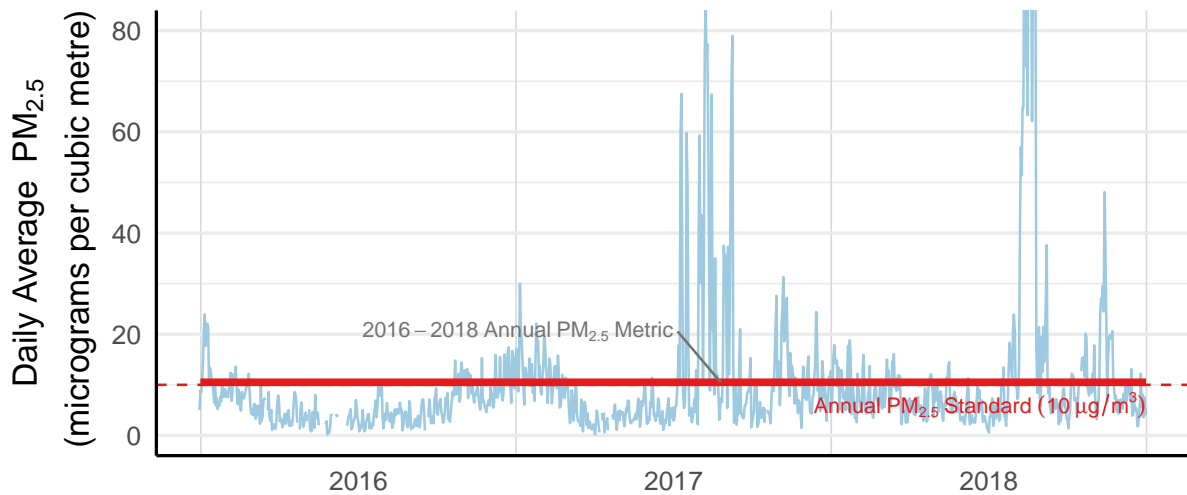
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 60 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Not Achieved**

**PM<sub>2.5</sub> Annual Metric: 10.5 µg/m<sup>3</sup> (3 year average)**

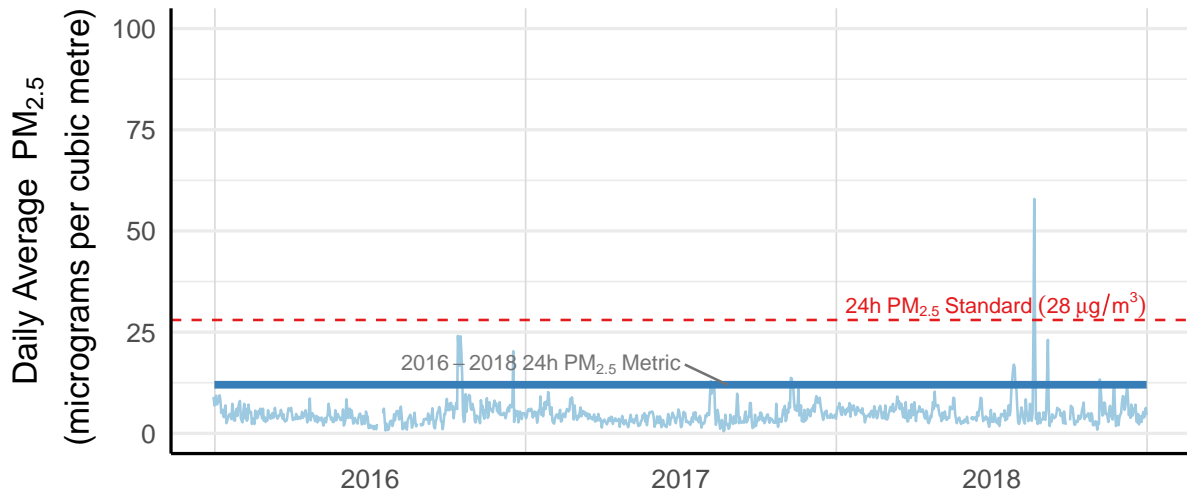


**Coastal Air Zone**

**Kitimat-Riverlodge monitoring station**

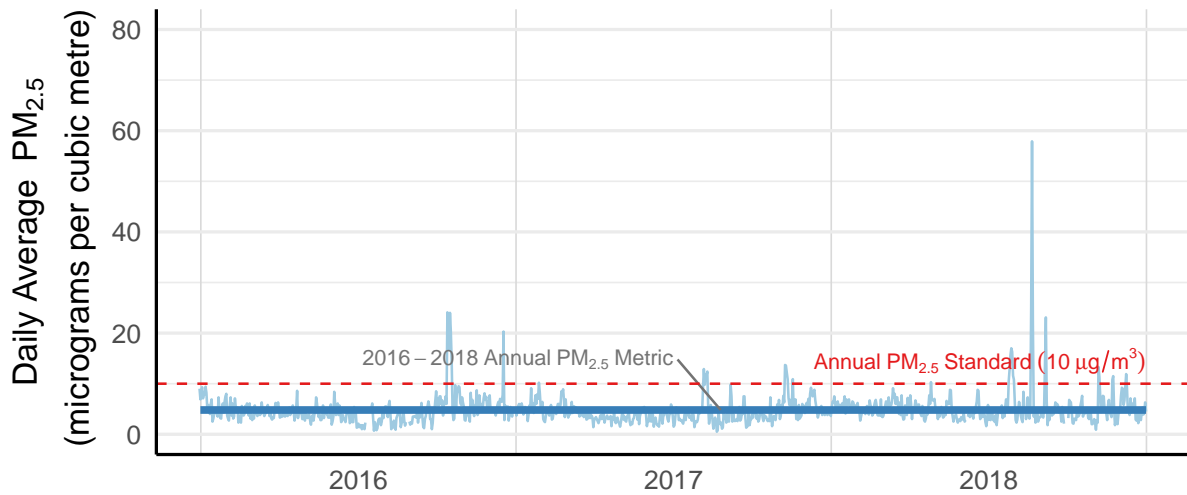
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 12 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

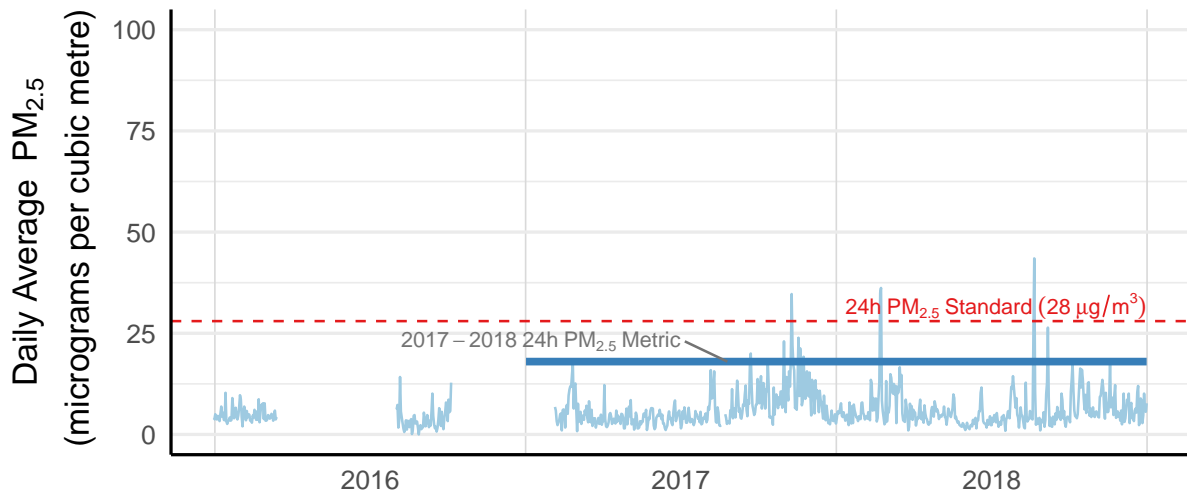
**PM<sub>2.5</sub> Annual Metric: 4.8 µg/m<sup>3</sup> (3 year average)**



**Terrace-Skeena monitoring station**

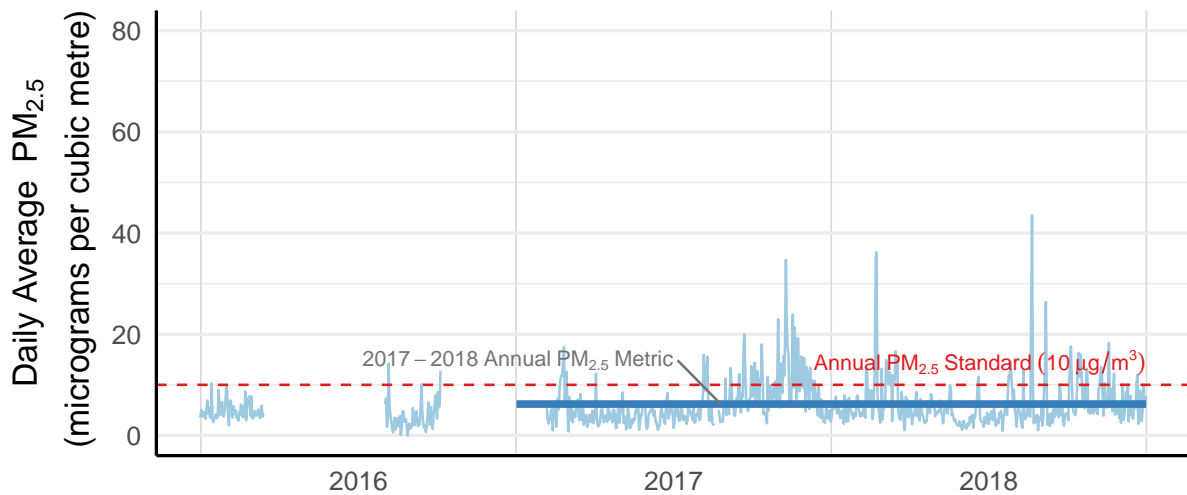
**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 18 µg/m<sup>3</sup> (2 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 6.2 µg/m<sup>3</sup> (2 year average)**

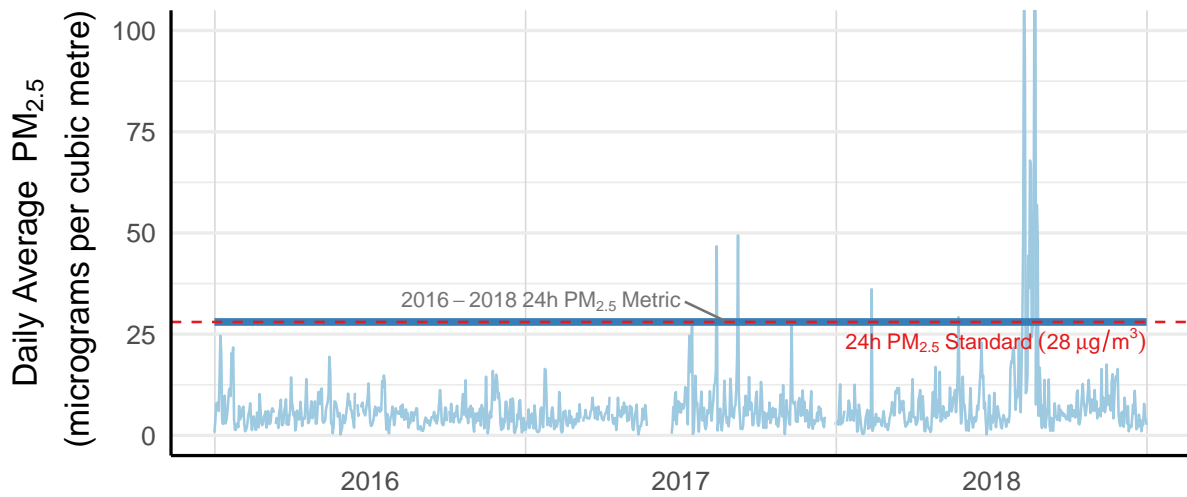


**Northeast Air Zone**

**Fort St. John monitoring station**

**PM<sub>2.5</sub> 24-hour Air Quality Standard: Achieved**

**PM<sub>2.5</sub> 24-hour Metric: 28 µg/m<sup>3</sup> (3 year average)**



**PM<sub>2.5</sub> Annual Air Quality Standard: Achieved**

**PM<sub>2.5</sub> Annual Metric: 6.8 µg/m<sup>3</sup> (3 year average)**

