



PORT of  
**vancouver**

Vancouver Fraser  
Port Authority

# Strathcona Area Air Quality Study: Overview

June 16, 2022

Presentation to the South Shore Community Liaison  
Committee

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# Overview

- Background
- Terms of reference
- Stakeholder engagement
- Monitoring technologies
- Monitoring site selection
- Sharing results

# Background

- The Strathcona Area Air Quality Study (SAAQS) is a two year study to measure and assess air quality in Strathcona and identify opportunities for improvement
- The SAAQS is in follow up to the Strathcona Residents Association air quality survey and report in 2021
- The study is guided by a steering committee co-chaired by the Strathcona Residents Association and the Vancouver Fraser Port Authority
- Vancouver Fraser Port Authority is funding the study

## Timeline

- **April 2020**  
Strathcona Residents Association receives Centerm Community Fund Grant
- **November 2020**  
Strathcona Residents Association air quality working group meets with air quality experts
- **February – March 2021**  
Strathcona Residents Association conducts community survey
- **Fall 2021**  
Port authority approves funding for comprehensive air quality study, guided by steering committee
- **Spring 2022 – Spring 2024**  
Air quality study data collection and information sharing
- **Summer – Fall 2024**  
Final report

*\*Timelines are subject to change.*

# Terms of Reference


- **Objective:** Improve understanding of air quality in the Strathcona area including:
  - Engage community to increase awareness and knowledge on local air quality
  - Identify sensitive receptors within the community
  - Identify and characterize sources of air pollution, in particular those related to port activities such as container trucks, locomotives, cargo-handling equipment, and vessels
  - Assess impact on Strathcona area air quality resulting from port activities and expansion of terminal operations
  - Identify air quality concerns and opportunities for mitigation
- Steering committee membership:
  - Strathcona Resident Association's air quality working group
  - Vancouver Fraser Port Authority and its consultant(s)
  - University of British Columbia
  - Metro Vancouver
  - Vancouver Coastal Health
  - City of Vancouver
  - Environment and Climate Change Canada

## Overall study consultant support:

- WSP (Technical)
- Lucent Quay (Engagement)

# Stakeholder engagement

- Project website: <https://portvancouver.civilspace.io/en/projects/strathcona-air-study>
- Communication materials e.g Host Information Sheet, Fact Sheet, FAQ, Key Messages
- Engagement plan = High Touch + High Tech
  - Community mail-out
  - Workshops
  - Webinars
  - Community events
    - e.g. Celebrate Strathcona June 11
  - E-newsletter
  - Engagement survey
  - Elementary school programming



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**STRATHCONA**

**Strathcona Area Air Quality Study**

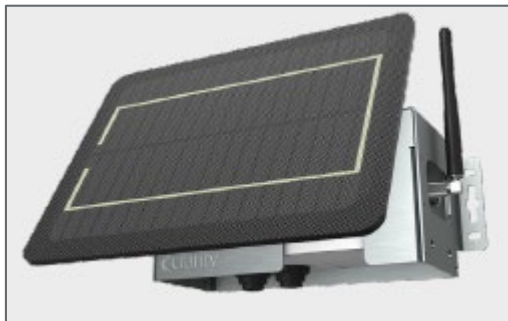
**STRATHCONA AREA AIR QUALITY STUDY**  
Frequently Asked Questions

**GENERAL**

- 1. What is the Strathcona Area Air Quality Study?**  
The study will measure and assess air quality levels in the Strathcona area, to identify potential opportunities for improvement.
- 2. What kind of outcomes might we expect from the study?**  
Our focus for this study is to understand air quality, identifying concerns and potential opportunities for improvement.  
In the meantime, we welcome questions and suggestions through the port authority's information line at [Community.Feedback@portvancouver.com](mailto:Community.Feedback@portvancouver.com)
- 3. What geographic area will the study focus on?**  
The study focuses on the Strathcona area, with particular emphasis on areas near port-related road, rail, cargo handling and marine activity. As a first step in the study, we worked with the community and technical experts to identify appropriate locations where air quality will be monitored.

# Monitoring Technologies

Pollutant	Monitoring technology
Particulate matter	Purple Air Clarity Node-S
Nitrogen dioxide	Clarity Node-S
Sulphur oxides	Passive sampling / lab analysis
Diesel particulate matter (black carbon)	MicroAeth MA 350 black carbon monitor
Ultrafine particulate matter	To be confirmed e.g. TSI Handheld





# Monitoring Site Selection

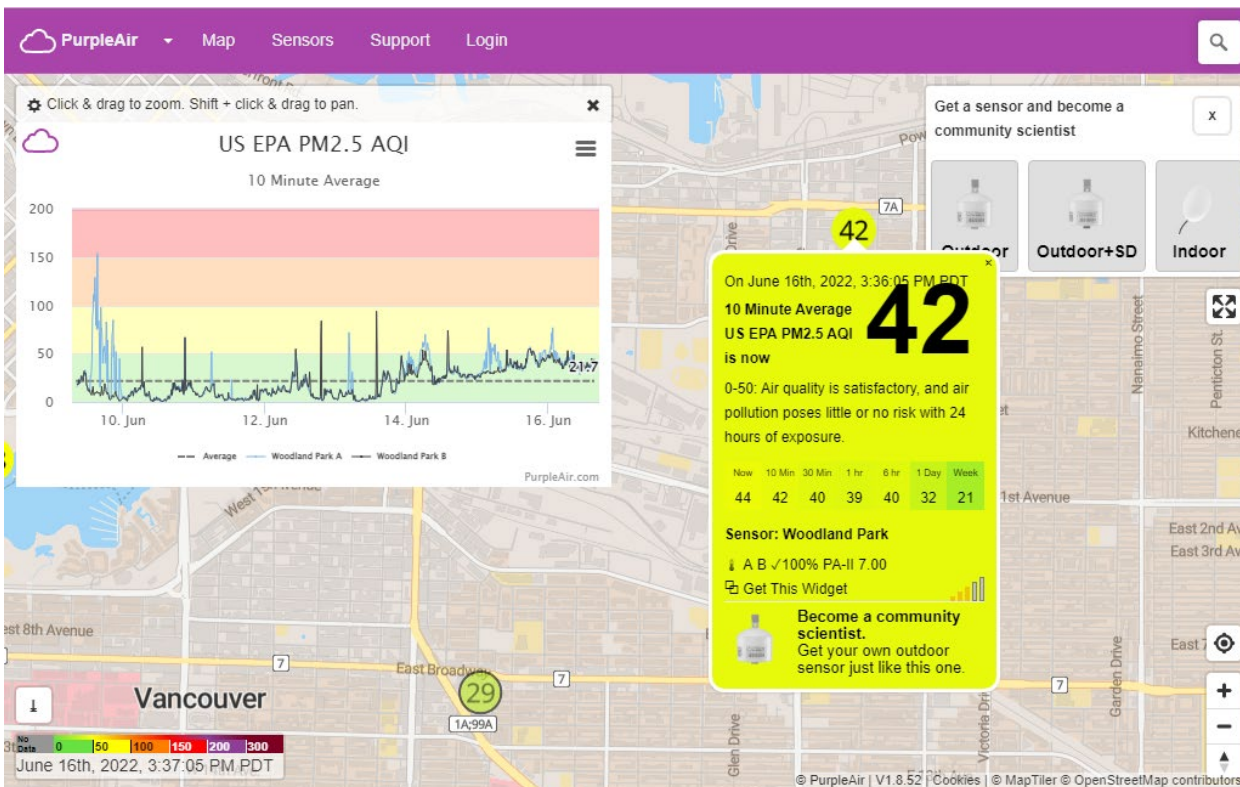
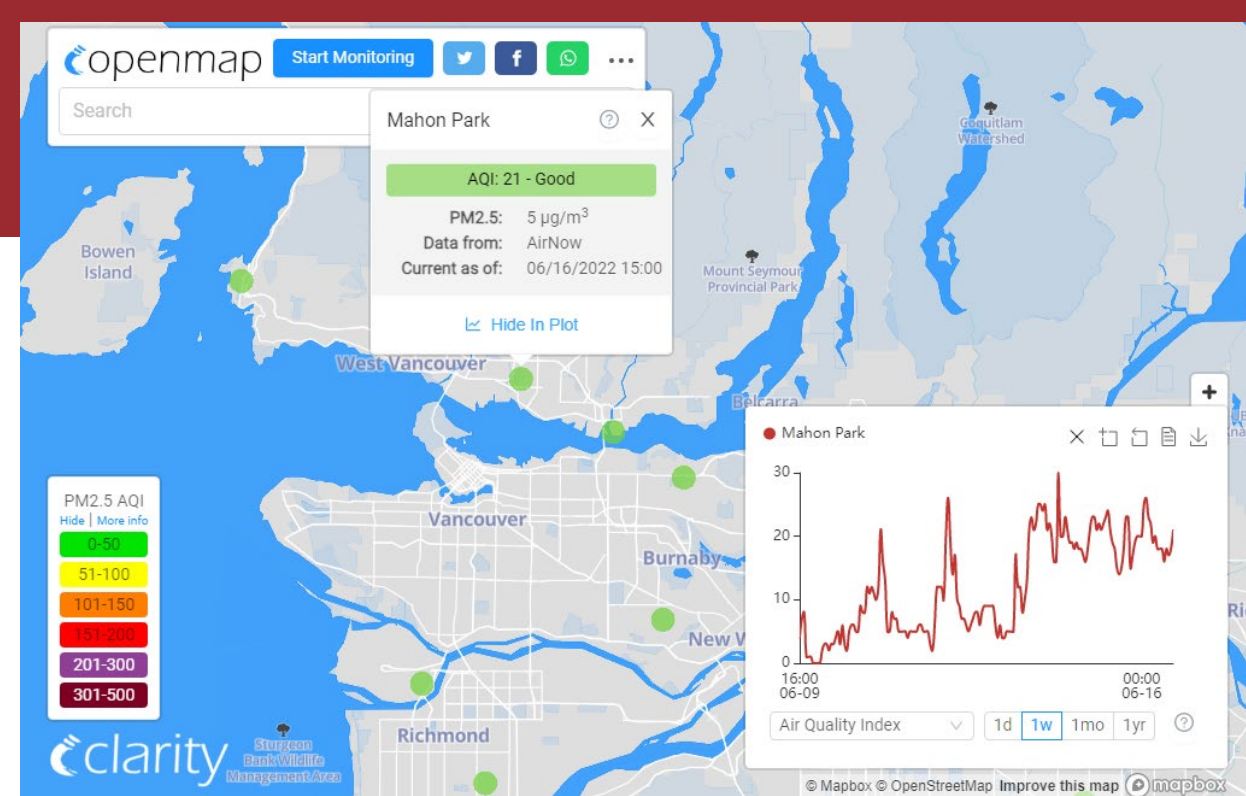


- Strathcona Committee Boundary
- Rail Route
- Port Truck Route
- Priority Monitoring Locations
- Alternate Monitoring Locations



# Sharing results

- Real-time online
  - Raw data



- Reporting (quarterly, annual):
  - Data completeness & quality control
  - Comparison to reference monitoring data and ambient objectives
  - Correlation with meteorology (e.g. wind direction)
  - Variation over time and throughout neighbourhood
  - Comparison with activity data e.g. truck and rail traffic, construction
  - Address study objective





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