

What we do

About Weir

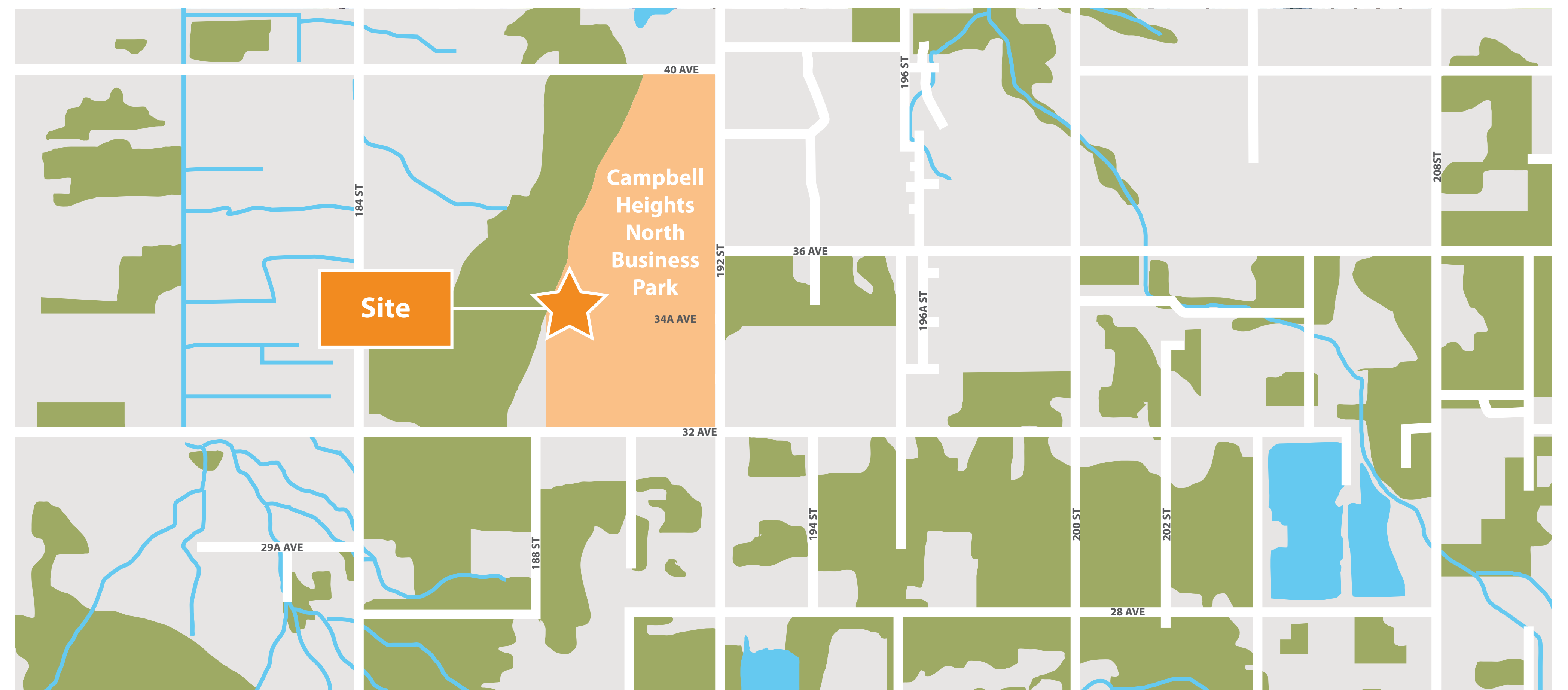
Weir Canada has been operating in Metro Vancouver since 2013 when we acquired the long established R. Wales Company. We are a leading provider of products and services for a variety of Canadian markets including power, minerals, oil and gas, and industrial. We manufacture products like rubber lined steel pipes that help our customers improve operational efficiency, increase the lifespan and durability of their equipment, and reduce industrial waste.

About our facility

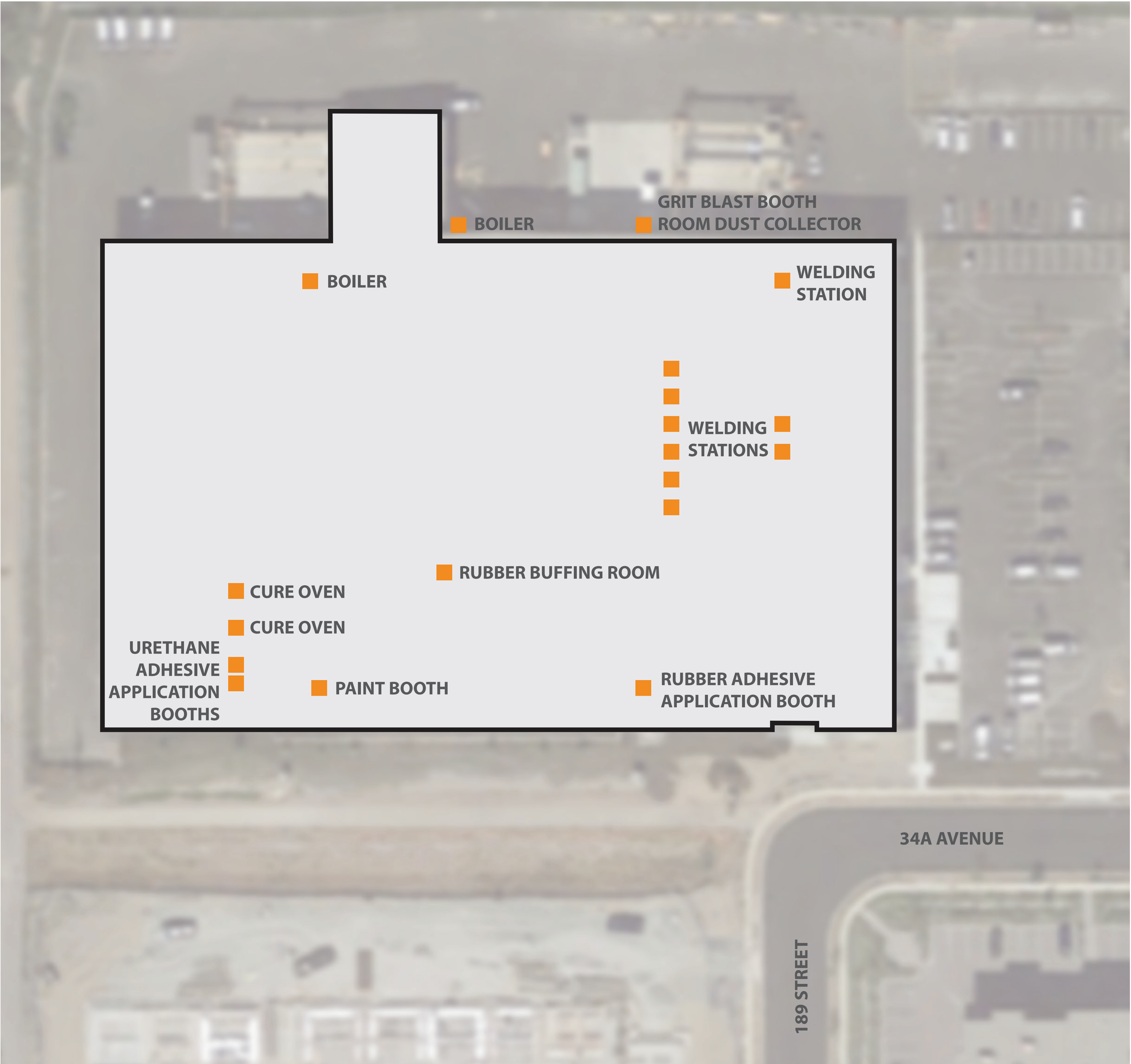
- New, state-of-the-art facility in the Campbell Heights North Business Park in Surrey, B.C.
- Consolidates two facilities previously located in Richmond and Delta
- We have 125 employees, many of whom live in Surrey

Why what we do is important

- More efficient movement of material in pipes and machinery
- Increased lifespan and durability of products to help reduce industrial waste
- Ultimately reduces costs for our customers
- Our facility will be cleaner and better for the Metro Vancouver environment



Our facility



About our permit application

How does modelling work?

Air quality dispersion modelling predicts ambient concentrations for a specific facility based on:

- 1) The conditions of the facility including:
 - Raw materials used
 - Product throughput
 - Operating conditions
- 2) Background conditions, for example terrain, wind direction and weather conditions, of the area in which the facility operates

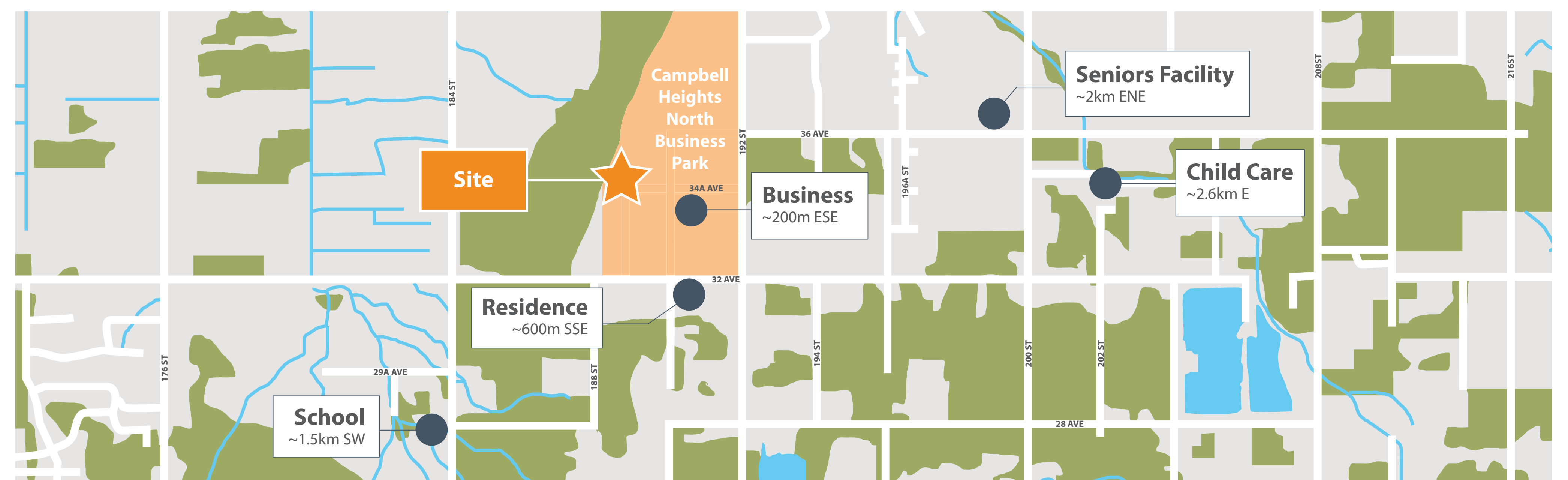
These two modelling inputs are then used to predict potential impacts on local air quality.

Metro Vancouver reviewed and approved Weir's air dispersion modelling plan prior to our commencing the assessment.

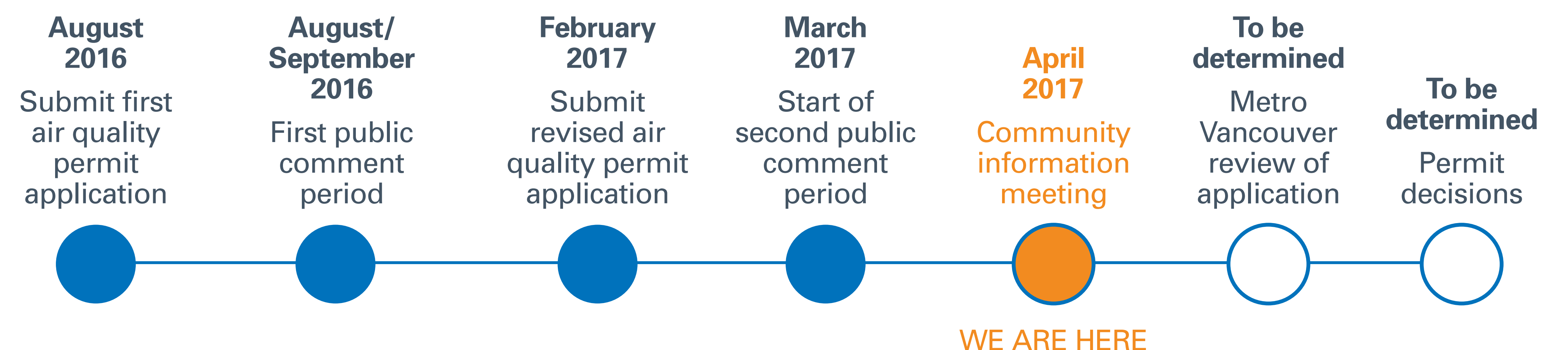


Dispersion modelling considers a number of factors including:

- Meteorology and land use
- Terrain
- Receptors
- Building downwash (emissions being forced to ground level)
- Background ambient concentrations



Sensitive receptor points were included in this assessment and preliminary air quality predictions have shown no appreciable increases from background levels. Sensitive receptors are areas of particular interest; for example, schools, hospitals, daycares, residences and seniors facilities.



About our permit application

Preliminary modelling results show concentrations in the surrounding area will fall within Metro Vancouver objectives.

Substance	Metro Vancouver Objective (µg/m3)	Averaging Period	Maximum predicted concentration at Modelled Sensitive Receptors* (facility emissions only) (µg/m3)	Maximum Percentage of Limit at Modelled Sensitive Receptors* (facility emissions only)	Maximum predicted concentration at Modelled Sensitive Receptors* (facility emissions and background) (µg/m3)	Maximum Percentage of Limit at Modelled Sensitive Receptors* (facility emissions and background)
Nitrogen oxides (NOx)	200 40	1 hour Annual	12.1 0.13	6.1% 0.33%	62.3 18.1	31% 46%
Sulphur dioxide (SOx)	196 125 30	1 hour 24 hours Annual	0.21 0.03 0.002	0.11% 0.03% 0.01%	5.19 2.13 0.63	2.7% 1.7% 2.1%
Volatile organic compounds (VOCs)	300 (EU)	8 hours	10.9	3.62%	226	75.3%
Total suspended particulate	120 60	24 hours Annual	0.05 0.03	0.04% 0.06%	25.4 11.2	21.2% 18.6%
Inhalable particulate matter (PM10)	50 20	24 hours Annual	0.05 0.03	0.09% 0.17%	25.4 11.2	50.8% 55.8%
Fine particulate matter (PM2.5)	25 8	24 hours Annual	0.05 0.01	0.18% 0.17%	16 6.31	64.2% 78.9%
Carbon monoxide (CO)	30,000 10,000	1 hour 8 hours	8.76 2.85	0.03% 0.03%	8.76 2.85	0.03% 0.03%

*Preliminary model results show the Business 200m ESE of the facility will experience the highest concentrations of any of the modelled Sensitive Receptors.

KEY IMPROVEMENTS THAT LED TO CHANGES IN PREDICTED EMISSIONS

- **Reducing** our hours of operation and selecting refined process emissions factors for the analysis, which better reflect our current and future activity levels.
- **Improving** how emissions will be captured and treated including investing in additional filters, to reduce the amount of emissions released into the air.
- **Eliminating** earlier plans to install a burn-off oven. We are now exploring cryogenic technology for removing coatings from various parts.

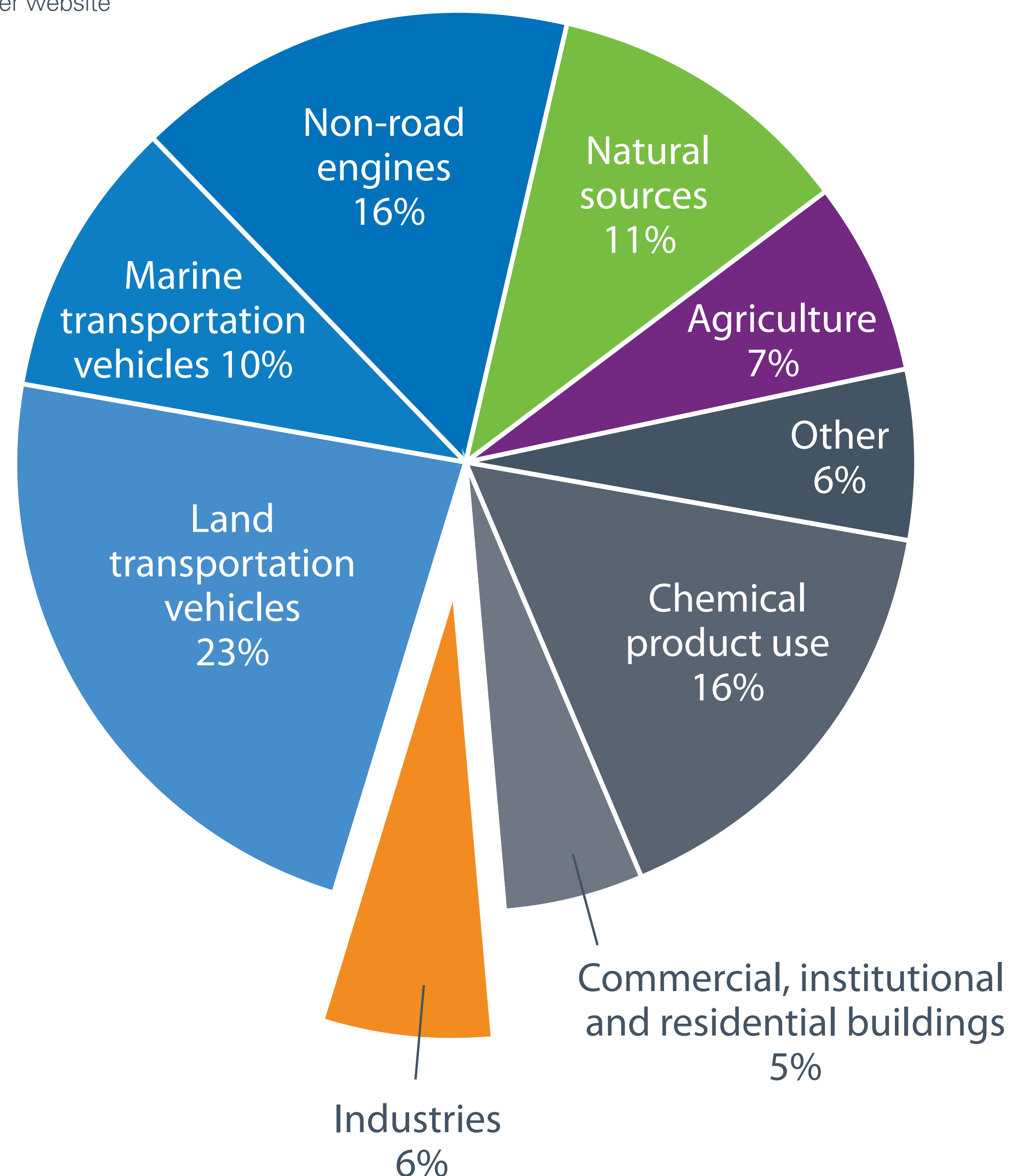


Air quality and human health in Metro Vancouver

Metro Vancouver objectives are health-based guidelines that are consistent in most jurisdictions in North America. Metro Vancouver and their partners have made significant progress in reducing air emissions in our region to protect our health and environment.

Where do smog-forming air emissions come from in Metro Vancouver?

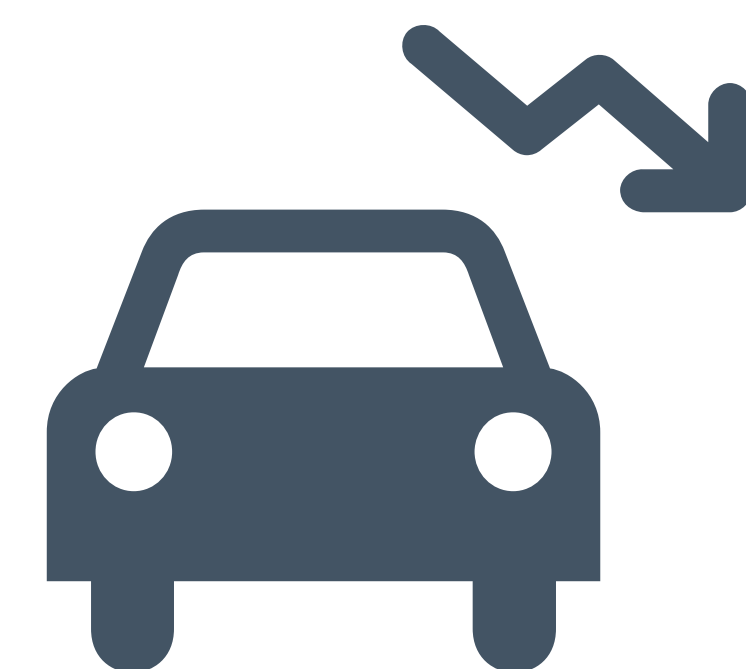
Source: Metro Vancouver website



WOOD SMOKE ACCOUNTS FOR **MORE THAN 25%** OF PARTICULATE MATTER IN OUR AIRSHED AND CONTAINS TOXIC AIR POLLUTANTS



OVER THE PAST FEW YEARS, HEALTH RISKS FROM AIR QUALITY WERE **"LOW"** MORE THAN 99% OF THE TIME



OVER THE PAST 10 YEARS EMISSIONS OF **DIESEL PARTICULATE MATTER** HAVE GONE DOWN 60%

Source: *Caring for the Air*, Metro Vancouver 2015

Thank you

Our commitment

We want to be a good neighbour. We are committed to operating in compliance with the permit requirements set forth by Metro Vancouver. We will continue to explore new technologies and ways to reduce our emissions further where possible.

Metro Vancouver is now accepting public comments regarding our permit request.

Email your comments:

WeirCanadaComments@metrovancover.org

For more information:

<http://www.metrovancover.org/services/Permits-regulations-enforcement/air-quality/Pages/default.aspx>

Contact us:

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