LET'S GET ARTICULATE ABOUT PARTICULATE... MATTER!

WHAT IS PARTICULATE MATTER?

Particulate matter (PM) is made up of tiny solid or liquid particles that float in the air.

Particulate matter can be emitted directly (see sidebar) and it can be formed indirectly when nitrogen oxides or sulphur oxides react with ammonia in the atmosphere.

sulphur ammonia oxides or + oxides

PM₁₀ is particulate matter less than 10 microns in diameter (about one-fifth the thickness of a human hair). Examples are dust, pollen and cigarette smoke.

 ${\rm PM}_{2.5}$ is even smaller – less than 2.5 microns in diameter (less than 1/30th the thickness of a human hair). ${\rm PM}_{2.5}$ is so small that it can penetrate deep into our lungs and even into our bloodstream.



PM₁₀ is 10 microns in diameter and includes dust and pollen particles. PM₂₅ is 2.5 microns in diameter and includes particles from fuel burning. one sheet of paper for thick PM₂₅ PM₂₅ PM₂₅

WHERE DOES PARTICULATE MATTER COME FROM?

Many activities directly emit PM_{2.5}. Excluding road dust, the biggest emitters of PM_{2.5} in Metro Vancouver are:

PARTICULATE MATTER AND...

YOUR HEALTH

Particulate matter can damage your health by:

- Aggravating existing lung and heart diseases
- Increasing the risk of cancer
- Reducing life expectancy

THE ENVIRONMENT

Particulate matter can affect our environment and our economy by:

- Damaging vegetation and crops
- Acidifying soil and surface water
- Creating a haze in the air that impacts tourism

Check out Health Canada's website to learn more

32% 15% 15% 15% 8%

WHAT IS METRO VANCOUVER DOING ABOUT PARTICULATE MATTER?

The World Health Organization has classified both particulate matter and diesel engine exhaust as carcinogenic to humans. To reduce health effects in our densely populated region, Metro Vancouver has introduced a regulation that will reduce diesel particulate matter emissions from non-road equipment. Check out our Integrated Air Quality and Greenhouse Gas Management Plan to learn about other actions that will address particulate matter.



Watch this video to learn more.

HOW CAN YOU HELP?

Visit Metro Vancouver's air quality and climate change webpages at www.metrovancouver.org/air for tips!

For more air quality and climate change information, visit:

Caring for the Air | BC Air Quality | Northwest Clean Air Agency | US Environmental Protection Agency | World Health Organization



Click here for more information about emissions in our region.

