

Air Quality Snapshot Report 2024

OVERVIEW

Clean air is vital for our wellbeing and the health of our environment. This snapshot report provides an overview of the air quality in Northland and the efforts of Northland Regional Council (NRC) to ensure clean and safe air for the region's residents.

KEY FINDINGS

Air Quality in Northland Annually Causes Around Around Around Around 134 274 98 460 Cardiovascular Asthma (0-18 years) Premature deaths Million social costs hospitalisation hospitalisation https://environment.govt.nz/publications/health-and-air-pollution-in-new-zealand-2016-findings-and-implications/ **Did You Know Burning &** Annually around Northland has **Smoke** 447 370 Clean **Nuisance Current resource** air quality most common air consents for Air complaints are quality complaints discharge to air investigated by to Northland being monitored by compared to many council's compliance **Regional Council** the council other Regions in NZ team Environmental Hotline

PRESSURES ON NORTHLAND'S AIR QUALITY

1. Home Heating:

Emissions from wood burners can contribute to air pollution, particularly exceeding the standards for air quality.

Tips for reducing air pollution from home heating include using low emission burners, regular chimney cleaning, and avoid burning materials like rubbish, rubber, plastic, driftwood, and treated or painted timber.



2. Open Burning:

Burning rubbish in backyard areas is no longer acceptable in urban areas due to its harmful effects on human health and the environment.

Tips for reducing open burning include composting garden vegetation and maximising recycling efforts.



3. Vehicle Emissions:

Vehicles release harmful pollutants into the air, including carbon monoxide, particulate matter, nitrogen oxides, sulphur compounds, and benzene.

Tips for reducing vehicle emissions include regular vehicle maintenance, considering alternative travel methods like public transportation or biking, and opting for low emission vehicles such as hybrids or electric vehicles.



4. Industrial Activities:

Different industries release air pollutants, including particulate matter, gaseous pollutants, and heavy metals.

Tips for minimising industrial air pollution include complying with resource consent conditions, implementing best practices to reduce environmental impact, and ensuring regular tuning and servicing of boilers and equipment.



5. Road Dust:

Unsealed roads contribute to dust pollution, which can have negative impacts on human health and the environment.

Tips for reducing road dust stay within speed limits, use water to suppress dust, avoiding the application of waste oil on roads, and request dust suppressant application from the council.

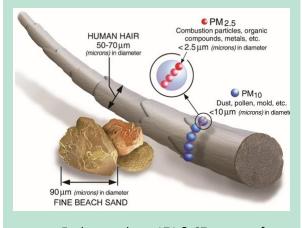


AIR QUALITY MONITORING AND COMPLIANCE

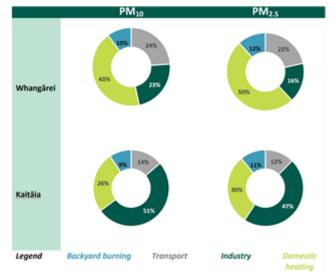
- NRC conducts regular air quality monitoring to ensure compliance with relevant standards.
- Key pollutants monitored include PM₁₀ and PM_{2.5} and meteorology in Whangārei and PM₁₀ at Kaitāia and Dargaville.
- PM₁₀ was monitored at Marsden Point between 2013 and 2023.
- NRC's 24/7 Environmental Hotline promptly responds to and investigates air quality complaints.
- NRC monitors current resource consents for discharge to air to ensure compliance with respective consent conditions.

PM₁₀ and PM_{2.5}

 Particulate matter with an aerodynamic diameter of less than 10 microns is referred as PM₁₀. PM_{2.5} is a subset of PM₁₀ and refers to particulate matter smaller than 2.5 microns. Figure below.



 Each year about 171 & 67 tonnes of PM₁₀ are emitted from Whangārei and Kaitāia airsheds respectively from activities such as domestic heating, transport, industrial emission, and backyard burning.



CONCLUSION

NRC is committed to maintaining and improving air quality in Northland. By addressing the pressures on air quality, including home heating, burning, vehicle emissions, industrial activities, and road dust, NRC aims to create a cleaner and healthier environment for the community. Continued monitoring, incident investigation, compliance monitoring, and the implementation of regulations are essential in safeguarding public health and the environment.

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