

Air quality

Having clear, clean air is essential for the health of our people and environment.

Northland's air quality is comparatively good but in a few localised areas it approaches the limits of national environmental standards from time to time.

Our role is to monitor air quality and work with communities to keep our air clean and healthy.

Pressures on air quality

Air quality is influenced by several natural and human-made factors, including solid fuel burning for home heating, transport emissions, dust, industrial activities, pollen and backyard burning.

Northland generally has a high standard of air quality thanks to local weather patterns, a relatively dispersed population, low vehicle density and sparse heavy industry.

However, human-made pressures – such as agricultural spraying, burning and smoke nuisance, home heating and industrial emissions – need to be effectively managed to reduce air quality-related health and environmental effects.

Northland's weather means our air quality tends to be better in summer than in winter. Pollutants tend to disperse in warm, windy conditions, but they linger in cool, calm conditions.



At a glance

- Burning and smoke nuisance are the most common air quality complaints to the Northland Regional Council Environmental Hotline.
- Urban Whāngārei – Northland's most densely populated area – is the most likely place to exceed national air quality standards during winter.
- The only time national air quality standards weren't met in Whāngārei was in September 2009 when dust from an Australian storm blew over the Tasman.
- In 2011 there were 332 resource consents for discharge of contaminants to air in Northland.

State of our air quality

Northland's air quality is generally very good by national standards.

Urban Whāngārei – our most densely populated area – is the most likely location for poorer air quality in winter months and is continuously monitored for key indicators like carbon monoxide, sulphur dioxide and PM10.



Particulate matter (PM10) is the collective term for very small particles – like dust, fumes or smoke – less than 10 microns in size, roughly a fifth of the diameter of a human hair. Small enough to be inhaled, PM10 can aggravate respiratory conditions in higher concentrations. PM10 concentrations recorded in central Whāngārei exceeded national environmental Standards just once in the period from 2007 to 2011, due to a huge Australian dust storm in September 2009.

On a typical winter's day, around three-quarters of Whāngārei's PM10 emissions come from solid fuel burning for household heating.

Carbon monoxide levels in urban Whāngārei – which we began monitoring from July 2010 – have consistently been within national standards, with 92% of results falling into the 'excellent' category.

Sulphur dioxide monitoring results in Whāngārei and at Marsden Point were also 'excellent' 99% of the time. The main sources of sulphur dioxide in Northland are combustion of fossil fuels and industrial activity.

What is the Northland Regional Council doing?

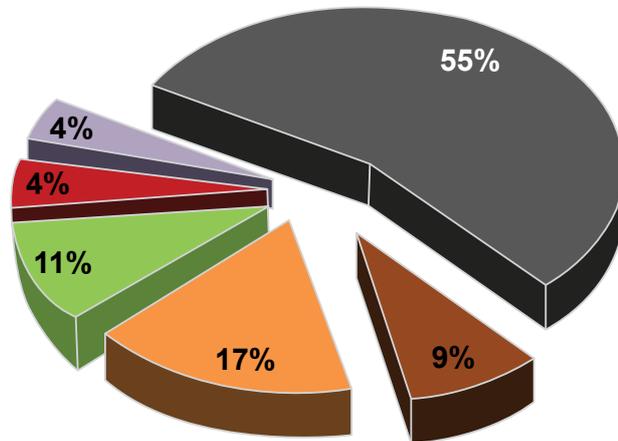
Air quality limits are set through national environmental standards, and our Regional Air Quality Plan indicates how we achieve them and protect our precious air. The plan contains rules around activities that cause pollution.

We also have an air quality strategy and a continuous monitoring station for the Marsden Point area.

There are 332 resource consents for discharge of contaminants to air in Northland. We monitor the major consents to make sure there are no significant negative effects.

Our 24/7 Environmental Hotline responds to and investigates complaints about air quality issues. Burning and smoke nuisance are the most common incidents reported.

Types of air quality incidents reported to Environmental Hotline



- Burning & smoke nuisance
- Dust nuisance
- Odour
- Spray drift
- Industrial emission
- Other

What you can do

- Use dry, untreated wood in your household woodburner.
- Consider replacing your old woodburner with a new, efficient, low-emission one.
- Don't burn treated wood, rubbish or plastics inside or out – these can give off toxic substances.
- Keep your car well-tuned and maintained.

