Science Snapshot report **Air Quality Monitoring** 2016



- The Ministry for the Environment (MfE) is reviewing National Environmental Standards for air quality. A discussion document is expected around the middle of 2016.
- MfE is also updating the good practice guides for assessing and managing dust and odour and assessing discharges to air from industry. Council staff have been involved in providing comments of draft versions of these guides.
- Particulate matter monitoring is still the primary focus of Bay of Plenty Regional Council's monitoring programme, although recent SO₂ data recorded in the Mt Maunganui area has resulted in the installation of several investigation sites
- The LAWA website (www.lawa.org.nz) features air quality data from regional councils around the country. This site should be live towards the end of June 2016.

Particulate matter (PM₁₀)

A summary of PM₁₀ data in relation to the NES-AQ and state indicators are presented right.



Key Points Air quality monitoring at Otumoetai,

Tauranga (PM₁₀), Edmund Road Rotorua (PM₁₀ and PM_{2.5}), Whakatāne (PM₁₀), Totara Street, Mt Maunganui (SO₂, TSP), Taiaho Place (SO₂, HF, H₂S, TSP), Tauranga Harbour Bridge Marina (SO₂) and meteorological data at all sites.



A dust monitor was installed at Totara Street in August 2015 to complement the nuisance dust project.



New sites was installed at Taiaho Place in September 2015 and Tauranga Bridge Marina in April 2016 to focus on industrial emissions.

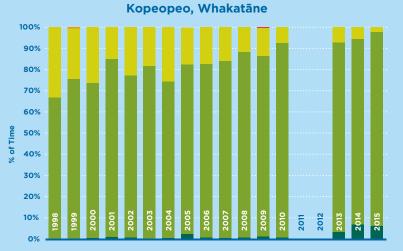


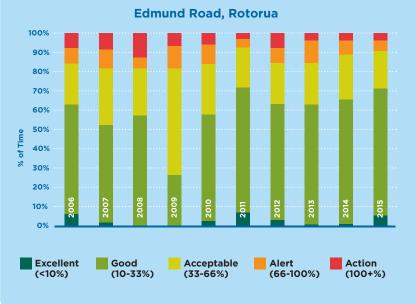
An operational PM₂₅ monitor at Edmund Road shows for a period covering the 2015/16 summer the ratio of PM_{25} to PM₁₀ was approximately 60 percent.

Otumoetai Road. Tauranga 100% 90% 80% 70% 60% 50% of 40% 30% 20% 10% 2012 0%

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Key Points

The number of exceedances of the PM₁₀ standard has been reducing at the Edmund Road site. To date (mid-June) no exceedances have been recorded so far this year.



Warm weather patterns for March, April, May and June are one of the natural factors affecting the number of exceedances (see www.niwa.co.nz/climate/ summaries).

Otumoetai and Whakatāne data records continue to show acceptable and good levels of PM10 air quality.

Left: Filters from the monitoring instrument in Edmund Road, Rotorua. A new filter (left) and a filter that has been collecting PM₁₀ material during a one-month period in winter (right).

Pollen

Pine pollen becomes obvious in the Bay of Plenty from July to October. Our monitoring equipment is designed to measure particles less than 10 microns. Pine pollen is larger than this, but its presence does cause air guality issues for some people.

Wind-pollinated plants are most likely to cause hayfever symptoms. These plants produce high numbers of light and buoyant pollen grains that are easily distributed through the air. Pretty, brightly coloured flowering plants and trees are unlikely to cause hayfever symptoms.

These plants attract bees and other insects to transfer their pollens from flower to flower, and produce far fewer pollen grains that don't generally become airborne. This is fortunate for people who like flowering plants.

For more information see www.allergy.org.nz/site/ allergynz/ files/Annual%20Pollen% 20Calendar.pdf



Above: Pine pollen collected from the bonnet of a vehicle in Whakatāne.

For more information on air quality monitoring undertaken by Bay of Plenty Regional Council, contact the science team on 0800 884 880.

