

Maximum PM₁₀ levels (24 hours consecutively) in airsheds

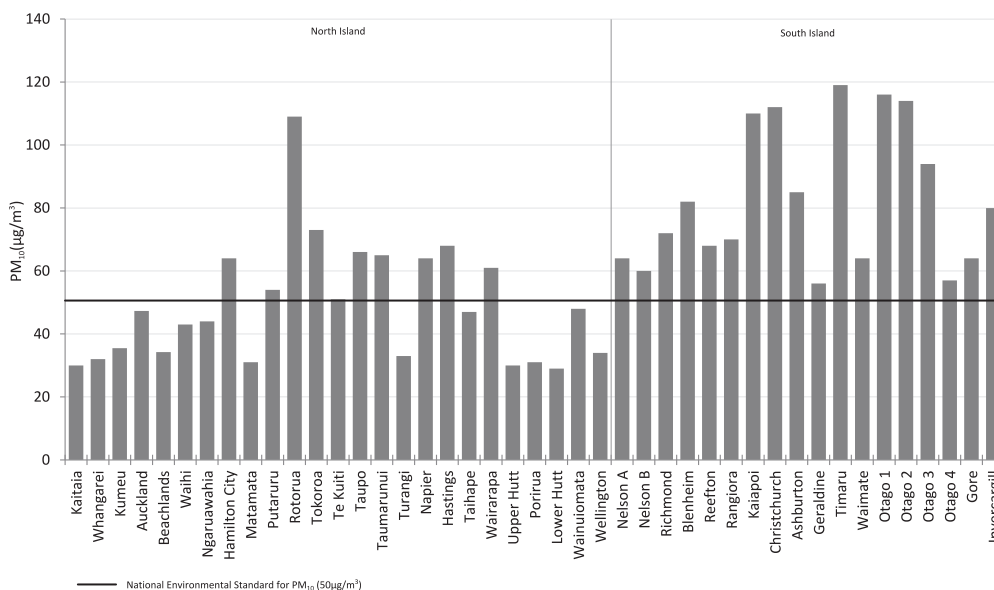
An exceedance of the National Environmental Standard (NES) occurs when daily monitoring of PM₁₀ concentrations are over 50µg/m³ in an airshed (RM 2004). This threshold is in place because PM₁₀ does not have a 'safe' level at which there are no adverse health impacts (MfE 2013a).

Of the 43 monitored airsheds in 2011, 28 of them exceeded the NES for PM₁₀ (figure 1), the same amount as in 2010 (CPHR 2011). All of the monitored airsheds in the South Island exceeded the NES for PM₁₀ during the year, whereas 10 of the 25 airsheds in the North Island exceeded the NES. Six airsheds had readings of over 100µg/m³ (double the NES) in 2011, five of which were in the South Island. Timaru had the highest recordings in 2011 (119µg/m³) and in 2010 (148µg/m³) (CPHR 2011).

HIGHLIGHTS:

- All of the monitored airsheds in the South Island exceeded the National Environmental Standard for PM₁₀
- Six airsheds had levels that exceeded 100µg/m³, double the National Environmental Standard for PM₁₀
- Timaru had the highest recording of average PM₁₀ over a 24-hour period in 2010 and 2011

FIGURE 1: Maximum 24-hour average of PM₁₀ (µg/m³) by airshed 2011



Source: MfE 2013b

References

CPHR. 2011. Particulate Matter (PM₁₀) – Highest 24-Hour PM₁₀ Concentration. Environmental Health Indicator Factsheets. Centre for Public Health Research - Massey University. <http://www.ehinz.ac.nz/assets/Factsheets/2010%20data/2011%20release/Factsheet-26-PARTICULATE-MATTER-PM10-max-24-hour-conc.pdf>

MfE. 2013a. Air Quality (particulate matter—PM₁₀). Ministry for the Environment. Available: <http://www.mfe.govt.nz/environmental-reporting/air/air-quality-indicator/report-card-2012.html> [Accessed 18th November 2013].

MfE 2013b. '2011 PM₁₀ highest 24-hour average by airshed'. Ministry for the Environment. Personal Communication J. Fyfe.

RM 2004. Resource Management (National Environmental Standards for Air Quality) Regulations 2004. Accessed: http://legislation.govt.nz/regulation/public/2004/0309/latest/DLM286835.html?search=sw_096be8ed8072b5a8_24_25_se&p=1

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