



State of the Environment Report Card 2016

How does our air stack up?

How we measure air quality?

PM₁₀ is the concentrations of fine smoke particulates. The National Environmental Standard for PM₁₀ is 50 µg/m³ expressed as a 24 hour mean. The guideline annual average PM₁₀ is 20 µg/m³. However, there is no evidence of a safe level of exposure or a threshold below which no adverse health effects occur.

The National Environmental Standard (NES) for PM₁₀ was exceeded seven times in Hastings in 2016. It was not exceeded in the Napier and Awatoto airsheds.

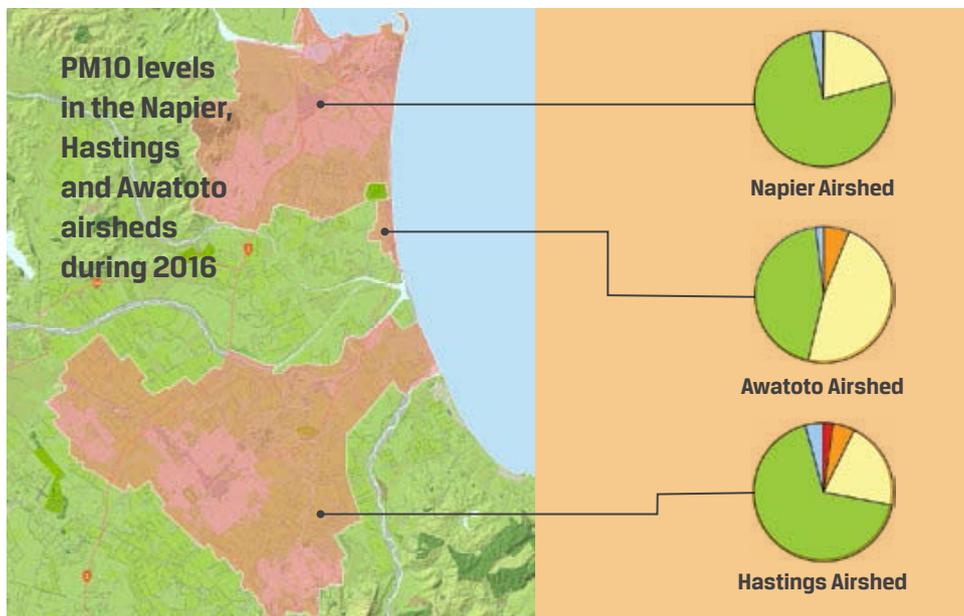
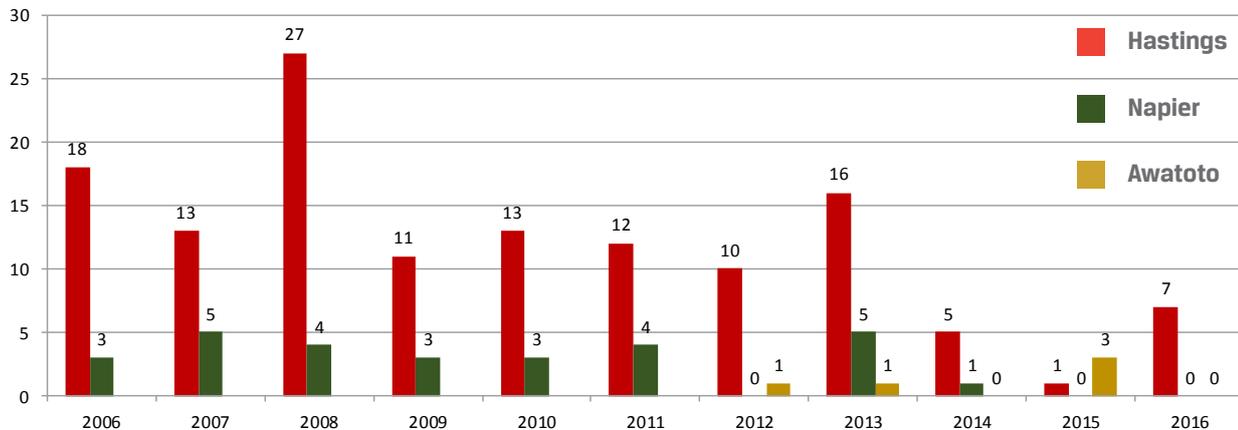
- The number of exceedances in Hastings was greater than the previous two years but the trend in PM₁₀ over the past 10 years is still downward.
- Strong winds help to clear pollution and in winter 2016 the wind was lighter than the previous two years.
- The maximum 24 hour average concentration in Hastings was 71 µg/m³, 34 µg/m³ in Napier and 47 µg/m³ in Awatoto.
- Annual average PM₁₀ in the Hastings, Napier and Awatoto airsheds for 2016 was 15, 13 and 18 µg/m³ respectively.

QUICK FACTS

On average we breath **10** litres of air a minute

On a typical winter's day approx **1.5** tonnes of PM₁₀ is emitted into the air from human sources in Napier and Hastings.

The annual number of exceedances of the NES for PM₁₀ from 2006 to 2016



Monitoring sites

HBRC monitors PM₁₀ at 3 sites in Napier, Hastings and Awatoto. Marewa Park in Napier, St John's College in Hastings and Waitangi Road, Awatoto.

- **NES Exceedance** >50 µg/m³
- **Alert** 33.3 - 50 µg/m³
- **Acceptable** 16.6 - 33.3 µg/m³
- **Good** 5 - 16.6 µg/m³
- **Excellent** <5 µg/m³

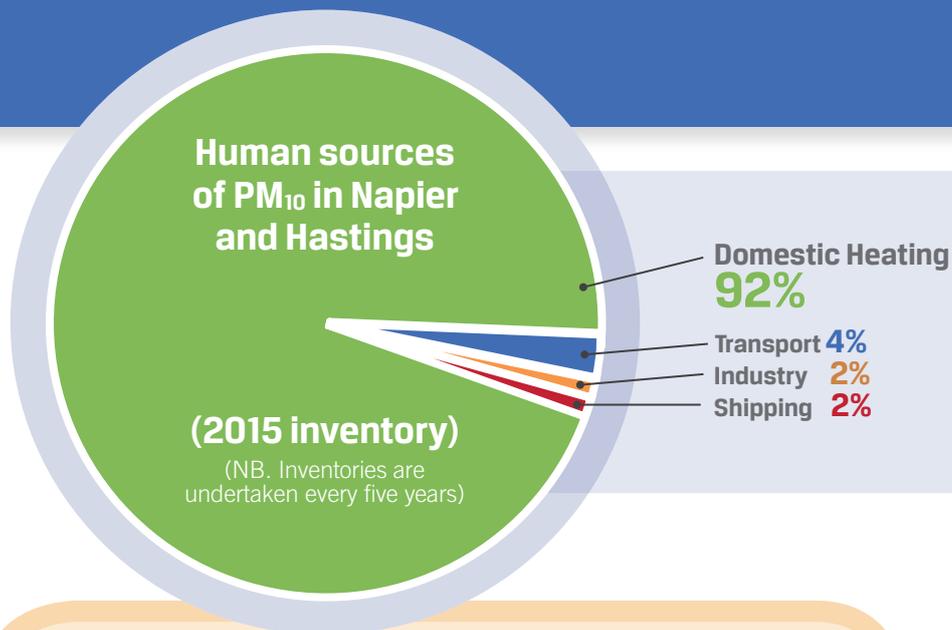


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QUICK FACTS

Health effects attributed to air pollution include lung cancer and other lung and heart diseases.

Burning treated and painted timber can release toxins, e.g. arsenic and lead, into ambient air and into your home.



Air quality rules

We want clean, healthy air in Hawke's Bay.

Smoke, fumes, odours and other products of combustion have a major impact on air quality. Apart from natural forest fires and geothermal activities, combustion/burning is the result of people's activities. Burning has a major impact on human health and activity. It smells and can aggravate or cause lung conditions and cause sore eyes.

HBRC has consulted with the community and set rules through the Regional Resource Management Plan to limit the effects of smoke from industrial, agricultural and home based activities. Local city and district councils also have their own rules about burning and should be contacted to check whether you are able to light a fire.

HBRC has run a campaign to encourage orchardists and farmers to manage fires, so that dry material only is included and that no accelerants are used (ie no tyres or waste oil, which produce damaging toxic fumes).



Find out more The purpose of HBRC's State of the Environment report is to:

- Report on issues that affect our shared environment
- Help councils and communities set priorities for environment management
- Monitor the effectiveness of how we manage the environment
- Provide information people can use in their decision-making

This report card is part of a series prepared by Hawke's Bay Regional Council. It outlines the high-level results from HBRC's monitoring programme.

For more details, including full technical reports and up to the minute monitoring results visit: www.lawa.org.nz

