

Regional Air Plan for Southland – proposed rules

Frequently Asked Questions

Background Information

- [Regional Air Plan for Southland](#)
- [Air Pollution](#)
- [Monitoring Air Pollution](#)
- [Taking Action](#)

Proposed Rules

- [Burners](#)
- [Boilers](#)
- [Changing Heating Systems](#)
- [Fuel for Burning](#)
- [Outdoor Burning](#)

Definitions

Background Information

Regional Air Plan for Southland

What is the Air Plan?

The Regional Air Plan for Southland sets out how air quality will be managed in Southland. Environment Southland has a legal requirement to adopt an Air Plan to manage the discharge of contaminants (pollution) into the air.

Why is the Air Plan being reviewed?

The Regional Air Quality Plan for Southland was adopted in 1999. Southland has changed a lot over the past 15 years. Some existing problems have become more significant and new issues have arisen.

Since 1999, the Government has also introduced the Resource Management (National Environmental Standards for Air Quality) Regulations or the NES.

The current Air Plan is now out of date and needs to be revised to reflect the new national legislation and include provisions to address air quality issues.

What are the Resource Management (National Environmental Standards for Air Quality) Regulations?

The Resource Management (National Environmental Standards for Air Quality) Regulations, or the NES, are regulations made under the Resource Management Act 1991 (RMA). They determine minimum requirements for outdoor air quality.



**environment
SOUTHLAND**

Te Taiao Tonga

The NES aims for a guaranteed minimum level of health protection for all New Zealanders.

Who is responsible for ensuring compliance with the NES?

The Government has made regional councils responsible for ensuring the requirements of the NES are met.

How do regional councils ensure compliance with the NES?

The NES requires regional councils to identify areas where air quality is known to be poor. These areas are called as airsheds. There are two airsheds in Southland, one covering Invercargill and the other centred on Gore. Maps of the airsheds and their boundaries can be found at www.BreatheEasySouthland.co.nz.

Once airsheds have been identified, regional councils need to take steps to improve their air quality so they meet NES standards. Regional councils can put rules in place to restrict discharges to the air and/or encourage residents to burn more cleanly. All rules must be included in the Air Plan and consulted on with the community.

Air Pollution

What is PM₁₀?

Fine particulate matter (PM) that is less than 10 microns (0.01 mm or one hundredth of a millimetre) in diameter. It makes up a large component of smoke.

What standard in the NES does air quality in Southland exceed?

Air quality in the Invercargill and Gore airsheds exceeds the NES ambient air quality standard for PM₁₀.

What is the NES standard for PM₁₀?

The NES allows for up to 50 micrograms of PM₁₀ per cubic metre of ambient air measured as a 24-hour average.

Where does PM₁₀ come from?

PM₁₀ is formed through combustion of fuels (burning), atmospheric reactions (weather/chemical) and mechanical processes including crushing, grinding and abrasion.

The main sources of PM₁₀ in Southland's urban areas are:

- burning fuels such as wood and coal for home heating (causing over 90% of human generated PM₁₀ emissions in Invercargill and Gore)
- outdoor burning (causing <1% of human generated PM₁₀ emissions for Invercargill and 1% for Gore)
- vehicle exhaust emissions (causing 2% of human generated PM₁₀ emissions for Invercargill and 1% for Gore)
- industrial discharges (causing 6% of human generated PM₁₀ emissions for Invercargill and 1% for Gore)¹.

¹ Wilton, Emily (2011), *Emission Inventory for Invercargill and Gore – 2011*, prepared for Environment Southland, Invercargill.

Why is PM₁₀ a problem?

Breathing particulate matter is harmful to human health. Larger particles can deposit in the upper airways, while smaller particles can penetrate deeper in the lungs.

Health effects include irritation to eyes, nose and throat, increased risk of colds and influenza, asthma attacks, deterioration in chronic heart and lung conditions.

Monitoring Air Pollution

Where does Environment Southland monitor air quality?

Environment Southland monitors air quality at:

- Invercargill* - Pomona Street and Glengarry Crescent
- Gore* - Main Street
- Winton - Essex Street.

* These sites have been chosen because the NES requires PM₁₀ to be monitored at the site within the airshed that experiences the highest concentrations or greatest frequency of concentrations of more than 50µg/m³ of PM₁₀.

How is air quality monitored?

Two types of equipment are used to collect data. Both draw a known volume of air through a filter, which captures particles that enter through a PM₁₀-sized inlet.

Airsheds have an automated system that monitors continuously every hour. Outside the airsheds we use a manually operated system that operates for a period of 24 hours at a time. It works one day in two during winter and one day in six outside this period.

Values are reported as a mass/flow unit - micrograms per cubic metre (µg/m³) averaged over 24 hours (midnight to midnight).

How do I find the air quality monitoring results?

Air quality monitoring results are published each week during the winter for Invercargill, Gore, and Winton in The Invercargill Eye and The Ensign. You can also find the results on our Facebook page during winter or at www.BreatheEasySouthland.co.nz.

How often does air quality in the Invercargill and Gore airsheds exceed the NES standard for PM₁₀?

During the 2013 winter (1 May – 31 August) there were a total of 12 confirmed exceedances reported in Invercargill and 3 reported in Gore.

One further exceedance was recorded in Invercargill during September, taking the total number of exceedances to 13 at the end of September 2013. This compares with the 2012 winter when there were 23 exceedances in Invercargill and 6 in Gore.

Are there any other areas in Southland that exceed or are likely to exceed the NES for PM₁₀?

There are no other areas in Southland where air quality exceeds the NES. However, Environment Southland is currently monitoring air quality in Winton. Both Winton and Maitaia have shown to be close to exceeding the standard in previous monitoring programmes. Many other towns have not yet been monitored.

For up-to-date information on PM₁₀ levels in Invercargill, Gore and Winton please visit: www.BreatheEasySouthland.co.nz.

Taking Action

If Invercargill and Gore are currently exceeding the PM₁₀ standard what needs to happen?

There are targets for PM₁₀ levels set for 2016 and 2020 that the region must comply with to meet the NES.

The NES requires that airsheds with more than 10 exceedances per year (e.g. Invercargill) exceed the standard no more than three times per year by 2016 and once per year by 2020. Concentrations of PM₁₀ need to be reduced by approximately 47% to meet the NES target of 50 µg/m³ (24 hour average) at the Pomona Street monitoring site in Invercargill.

Airsheds with less than 10 exceedances per year (e.g. Gore) must not exceed the standard more than once per year by 2016. Concentrations of PM₁₀ need to be reduced by approximately 38% to meet the NES target of 50 µg/m³ (24 hour average) at the Main Street monitoring site in Gore.

What will happen if Invercargill and Gore do not meet the targets for PM₁₀ set by the NES?

If the Council fails to show reasonable progress towards implementing the standards the Minister for the Environment may investigate the performance of the Council and make recommendations based on that investigation.

If the Minister thinks there are grounds for intervention he or she may appoint commissioners to perform the Council's functions, powers, or duties, in place of the Council.

The Minister may direct the Council to prepare a plan change, or variation or direct a plan review to address air quality issues. The Minister may also require the Council to supply information and can also request that the Ministry for the Environment offer to assist or provide advice to the Council.

Intervention by the Minister would mean that there were serious breaches or concerns about the actions or inactions of the Council. The Minister would not intervene lightly and would only do so if all other reasonable options had been exhausted.

Proposed Rules

Burners

Can I still use my existing open fireplace?

Yes – until 1 September 2015. After this date the use of open fireplaces is prohibited.

Do I have to get rid of my open fireplace or can I keep it?

You can keep it but you won't be able to use it from 1 September 2015.

I've got a wood burner but how do I know if it's NES approved?

See the Ministry of Environment website for a list of NES approved burners.

<http://www.mfe.govt.nz/laws/standards/woodburners/authorised-woodburners.html>

What is a NES approved burner?

These are home burners that meet the emission and thermal efficiency limits in the National Environmental Standards for Air Quality (NES). See the Ministry for the Environment website for a list of approved burners:

<http://www.mfe.govt.nz/laws/standards/woodburners/authorised-woodburners.html>

Can I still use my multi-fuel burner?

Yes, for now – non-approved multi-fuel burners are being phased out over time. (There are no approved multi-fuel burners at this time). If your multi-fuel burner was installed before January 2001, you have until 1 January 2016 to replace it with an approved burner or alternative heat source. Newer multi-fuel burners will be phased out from January 2021 onwards.

I've got a coal range – can I still use it?

Yes, for now – non-approved multi-fuel burners (including coal ranges) are being phased out over time. If your coal range was installed before January 2001, you have until 1 January 2016 to replace it with an approved burner or alternative heat source. Newer coal ranges will be phased out from January 2021 onwards.

I've got a wood-burning stove for cooking – can I still use it?

Yes – these are not being banned or phased out. Refer to the Proposed Air Plan for the definition of 'wood fire cooking stove' to make sure yours meets the criteria.

Can I still use my diesel burner?

Yes

Can I still use my pellet fire?

Yes

I don't live in Invercargill or Gore – will I still be able to use my multi-fuel burner?

Yes – multi-fuel burners can still be used outside of the Invercargill and Gore airsheds.

Boilers

Can I still use my coal-fired boiler?

Yes, for now – coal-fired boilers are being phased out over time. If your coal-fired boiler emits more than 3 g/kg or less when tested to a method equivalent to AS/NZS 4013:1999 and was installed before January 2001, you have until 1 January 2016 to replace it with an approved boiler or alternative heat source. Newer coal-fired boilers that don't meet the standard above will be phased out from January 2021 onwards.

Can I still use my wood-fired boiler?

Yes, for now - but non-compliant wood fired boilers are being phased out. If your wood-fired boiler emits more than 3 g/kg or less when tested to a method equivalent to AS/NZS 4013:1999 and was installed before January 2001, you have until 1 January 2016 to replace it with an approved boiler or alternative heat source. Newer wood-fired

boilers that don't meet the standard above will be phased out from January 2021 onwards.

Can I still use my pellet-fired boiler?

Yes

Changing heating systems

I can't afford to replace my existing fireplace – what should I do?

Have your say through the public submission process about what assistance you need to make the change to cleaner heating. Submissions can be made before 5pm, 3 November 2014. Environment Southland is currently working with other organisations and councils to find ways to help you make changes to the way you heat your home. We'll keep you updated online at: www.BreatheEasySouthland.co.nz

Where can I find out more information about heating options?

See the useful links section on the BreatheEasySouthland website:

<http://www.es.govt.nz/breathe-easy/links/>

Fuel for burning

Can I still burn coal?

Yes – you can still burn all types of coal until the 1 January 2015. From this date you can only burn low-sulphur coal. Ask your local coal merchant for advice about the right coal to buy.

What is low-sulphur coal?

Coal that has a sulphur content of less than 0.5% by weight. Ask your local coal merchant for advice about the right coal to buy.

Where do I buy low-sulphur coal?

Your local coal merchant will be able to supply you with appropriate coal.

What wood can I burn?

From 1 January 2015 you will only be able to burn dry wood (with a moisture content of less than 25% dry weight). Wood is considered 'dry' when it is has been drying for at least 9-12 months and has been stored and stacked correctly.

You cannot burn wood that has been chemically treated or coated with paint or varnish.

What can't I burn for home heating?

You can't burn the following: chemically treated timber (such as fence posts and some building materials); painted and varnished timber; household rubbish and plastics; waste oil. See a more detailed list at www.BreatheEasySouthland.co.nz.

Outdoor burning

Can I still burn outdoors?

From 1 May 2015, residents in the Invercargill or Gore airsheds will not be able to burn outdoors during winter (from 1 May to 31 August). Leisure activities such as barbeques, braziers, hangi, and fireworks are exempt from this rule.

If you live outside the airsheds there are no restrictions on when you can burn outdoors.

What can I burn outside?

You can burn vegetation, paper, cardboard, untreated wood.

What can't I burn outside?

You can't burn the following: chemically treated timber (such as fence posts); painted and varnished timber; household rubbish and plastics; waste oil. See a more detailed list at www.BreatheEasySouthland.co.nz.

Definitions

Airshed

Airsheds are areas that regularly exceed acceptable levels for air quality. Southland has two airsheds, encompassing Invercargill and Gore.

Maps showing airshed boundaries can be found on www.BreatheEasySouthland.co.nz.

Enclosed Burner

A small-scale solid fuel burner that's enclosed by a door. For example, free standing or built-in woodburners, multi-fuel burners, pellet burners, potbelly stoves and coal ranges.

Multi-fuel Burner

Any small-scale burner that is designed to burn wood and/or coal.

Open Fire

A fireplace that's not enclosed and doesn't have a way of controlling the rate of air supply to the fire.

Outdoor Burning

Burning in the open air, not in a purpose-built fireplace. Outdoor burning includes open fires, bonfires, burning in drums and backyard rubbish incinerators. (It doesn't include: hangi, barbeques, fireworks, candles, lamps outdoor patio gas heaters or smokers.)

Outdoor Open Fire

A fireplace located outdoors that doesn't have a way of controlling the rate of air supply to the fire.

Pellet Burner

Small-scale solid fuel burner that burns pellets (which are delivered to the fire at a controlled rate).

PM₁₀

Fine particulate matter (PM) that is less than 10 microns (0.01 mm or one hundredth of a millimetre) in diameter. It makes up a large component of smoke.

Smoke

Any airborne product of burning that is visible to the naked eye.

Solid Fuel

Includes wood (not chemically treated, containing chemicals or coated with paint or varnish), coal and its derivatives, and manufactured fuel pellets.

Vegetative Matter (vegetation)

Plant material such as tree branches, roots, leaves, grass cuttings, seed pods, stalks and stubble (stems), prunings, and wood.

Waste Oil

Oil that has been already been used and has become contaminated (no longer pure oil). Contaminants may include heavy metals, combustion by-products, fuel and used additives.

Wood Burner

A small-scale solid fuel burner that burns wood only (doesn't include open fire places, multi-fuel burners or wood-fired cooking stoves).

Wood fired cooking stove

Means a wood fuelled cooking appliance containing an oven of not less than 20 L capacity and a hot. A 'wood fired cooker' does not include a pot belly, chip heater or a wood burner.

Wood Pellets

Pellets made from wood, wood shavings or sawdust that are used as fuel for burning.