



DRAFT REGIONAL POLICY STATEMENT

May 2016

Chapter 12

Air

Kounga hau

I.12 Significant Resource Management Issues: Air

Issue 12.1 There is a need to safeguard Whakatū Nelson’s ambient air quality in order to maintain the community’s health and well-being.

Safeguarding the life-supporting capacity of air is a core aim of sustainable resource management. Related to this, Whakatū Nelson’s ambient air quality and the community’s collective health and well-being are directly linked.

Historically, Whakatū Nelson’s ambient air quality has been adversely affected by domestic home heating sources. Since 2001, however, the City’s ambient air quality has improved significantly. Owing to the phase out of open fires and older, polluting wood burners, Nelson’s four urban airsheds experienced 60-70% reductions in domestic heating-related emissions over the period from 2001 to 2015.

Improvements have also been observed in relation to the City’s statutory obligations¹ under the National Environmental Standard for Air Quality (NESAQ). In 2001, monitoring data from Nelson South recorded 81 exceedances of the NESAQ 50µg/m³ short-term exposure limit, with maximum concentrations observed at around 165µg/m³. By 2015, annual exceedances had almost completely ceased and maximum recorded concentrations were below 60µg/m³. However monitoring results also suggest that further reductions from domestic heating are required to ensure that maximum short term and long term exposure levels are not breached.

Limitations on the use of wood-burning appliances have also given rise to concerns about the consequences of air quality rules on people’s ability to heat cold, damp homes and consequent health impacts. There have been significant increases in electricity prices in the last decade that have potentially compounded this issue, particularly in relation to older housing stock and rental properties where improvements to the Building Act 2004 insulation standards are less relevant and the limitations of the Residents Tenancies Act 1986 have most impact. Moreover, some residents prefer wood burning to other domestic heat sources for cultural, economic, aesthetic, and other reasons. There is accordingly a need to strike a balance between improving outdoor air quality and ensuring that homes are able to be kept warm and dry enough to meet human health needs.

¹ The NES threshold for ambient PM₁₀ is 50 µg/m³ averaged over a given 24-hour period, and 20 µg/m³ annual average.

The Nelson Air Emissions Inventory 2014 indicates that the source of air pollution varies in different parts of Nelson, although domestic home heating is still the cause of more than 90% of emissions everywhere within the urban area except Tahunanui. The inventory indicates:

- In Airshed A (Nelson South) 91% of the emissions are from domestic home heating, 5% from industry and 4% from transport
- In Airshed B1 (Tahunanui) 54% of emissions are from domestic home heating, 41% from industry and 5% from transport (motor vehicles and airport emissions)
- In Airshed B2 (Stoke) 93% of emissions are from domestic home heating, 4% from transport and 3% from industry
- In Airshed C (Central and North Nelson) 93% of emissions are from domestic home heating, 5% from transport and 2% from industry

Discharges from rural, industrial and transport sectors also affect air quality.

Air pollutants including nitrogen oxides (NO_x), sulphur dioxide (SO₂), carbon monoxide (CO), volatile organic compounds (VOC), carbon dioxide (CO₂), benzene and hazardous air pollutants can cause health effects, depending on concentrations and exposure.

Vehicle emissions are ultimately regulated by Central Government; however the Nelson Plan plays a role in managing the impacts of vehicle emissions on air quality, including through its promotion of a compact urban form and associated reductions in reliance upon private vehicle usage.

In addition to health considerations, meeting the NESAQ standards is important to the economic wellbeing of the community. For example, breaches of the standards may jeopardise the ability of industries to be able to gain consent to operate, where this involves air discharges.

The Government has signalled a review of the National Environmental Standard by October 2016. It is anticipated that the revised NESAQ will be amended to focus more on long term exposure to smaller PM2.5 particles than on short term exposure to PM10 particles. This approach is recommended by the Parliamentary Commissioner for the Environment and by the World Health Organisation.

The impact of a change to the NESAQ for Nelson's air quality provisions is not yet known, and a variation to the air quality provisions may be required.

Issue 12.2 Localised adverse effects from discharges to air need to be appropriately managed.

The management of localised adverse effects on amenity values, human health, property and the environment is necessary. Adverse effects can occur from smoke, odour, dust, agrichemicals, combustion activities or the discharge of other contaminants. The potential for (and magnitude of) these effects can be elevated where neighbouring land uses are incompatible.

Issue 12.3 Tangata whenua Iwi's role as kaitiaki, and recognition of customary practices, need greater acknowledgement in resource management decision making.

The approach to air quality management needs to account for iwi/tangata whenua Iwi values and traditions, including:

- (a) Acknowledgement of air as a taonga
- (b) Enabling tangata whenua to exercise kaitiakitanga
- (c) Recognising the ongoing use of customary practice such as hangi and ahi kaa

Air quality is an issue that is of significance to Iwi and is highlighted in Iwi Management Plans and the Aoturoa framework described in the Iwi tangata whenua section of the Plan.

R.12 Resource Management Responses: Air

Objectives

Objective 12.1 Maintain and enhance Whakatū Nelson's air quality in a way that provides for people's health and well-being.

Policies

Policy 12.1 Manage Whakatū Nelson's ambient air quality to ensure the National Environmental Standards for Air Quality are met in a way that:

- a) does not unduly limit the ability of people to heat their home**
- b) enables discharges of contaminants where they do not result in significant adverse effects on human health, local amenity or other natural or physical resources**

- c) maximises opportunities to enhance air quality through improved technology and practices.**

Explanation

The Council is required to meet a minimum standard for air quality under the NESAQ. This, in turn, requires that a variety of management measures must be applied across domestic, rural, industrial and transport sectors.

Improvements in the City's air quality have been significant in recent decades, owing to substantial reductions in emissions from domestic heating sources. It is important to achieve further reductions in emissions from domestic sources while also ensuring that management measures do not result in adverse health outcomes borne out of people's inability to warm their homes.

New generation solid fuel burners (ultra-low emission burners) are now commercially available and are considerably cleaner than their predecessors. These new burners, combined with further technological advancements and improvements in domestic wood-burning behaviour, are anticipated to play important roles in the future.

It is also important to provide for other activities, such as industrial and rural activities, that involve the discharge of contaminants to air. However, the discharges must be managed to avoid nuisance effects such as dust and odour, or other significant effects on the local environment or people's health and safety.

Policy 12.2 Minimise the potential for incompatible activities to establish near one another by discouraging:

- **new activities that emit dust, smoke, odour, agrichemicals or the discharge of contaminants locating near sensitive activities**
- **new sensitive activities from locating near activities that emit dust, smoke or odour, agrichemicals or the discharge of contaminants**

Explanation

In areas which are sensitive to nuisance effects such as dust and odour, activities which entail those nuisance effects should be avoided unless they can mitigate the effects on amenity, health and well-being to a sufficient degree.

Likewise, established activities that emit contaminants to air may be subject to reverse sensitivity effects if new sensitive activities are allowed to be established nearby. This outcome should generally be avoided.

Policy 12.3 Enable customary practices and tikanga of tangata whenua Iwi in a manner that protects the mauri of air.

Explanation

Air is a taonga for Maori, and the safe-guarding of air’s life supporting quality is an important function of kaitiakitanga.

Provision of kai and manaakitanga are similarly important to tangata whenua, and these and other customary practices must take into account their potential to affect the mauri of Whakatū Nelson’s overall air quality.

Methods

Regulatory methods	Who	Policy link
Nelson Plan		
Include minimum requirements for new domestic solid fuel burning appliances for home heating, including minimum efficiency and emission standards.	Council	Policy 12.1
Manage allocation of domestic solid fuel burning appliances for home heating by airshed.	Council	Policy 12.1
Use buffer areas and associated rules to manage incompatible activities.	Council	Policy 12.2
Include subdivision methods to maximise solar gain for new buildings.	Council	Policy 12.1
Include measures to manage dust, odour, smoke and other effects from discharges to air, including point source discharges.	Council	Policy 12.2
Include controls providing for the ongoing use of tangata whenua iwi customary practices such as hangi and ahi kaa.	Council	Policy 12.3
Include measures to enable small scale and or ‘clean’ industrial practices, and other management measures for larger facilities.	Council	Policy 12.1
Other Statutory Policies, Standards and Plans		
National Environmental Standards for Air Quality and associated Ministry for the Environment guidelines	Council, MfE	Policy 12.1
Region-wide aims for reducing vehicle emissions through the Regional Land Transport Plan.	Council, Tasman District Council, New Zealand Transport Agency	Policy 12.1

Non-regulatory methods	Who	Policy link
Monitoring and information		
Conduct and report on regular airshed monitoring and biennial emission inventories, and make information available to the public.	Council, Tasman District Council, New Zealand Transport Agency	Policy 12.1
Administer domestic wood-burner allocation and certification programmes, including biennial review procedures and associated monitoring. Maintain an inventory of appliances that have been certified and allocated, and update the public on any changes to allocation limits.	Council	Policy 12.1
Collaborate with the District Health Board to improve understanding of health impacts from air quality, and to monitor trends in observed health outcomes.	Council, District Health Board,	Policy 12.1
Advocacy and education		
Encourage information sharing between the public, Council and other agencies and sectors regarding air quality and the management of discharges to air.	Council, Public, New Zealand Transport Agency, Ministry for the Environment, Tasman District Council, District Health Board, Industrial sector	Policy 12.1
Promote use of housing insulation, non or low emitting efficient domestic heating options, and appropriate renewable energy generation systems.	Council	Policy 12.1
Implement an enhanced behaviour change programme to improve domestic wood-burning practices, including through: <ul style="list-style-type: none"> • expansion of Council's education programmes such as the 'Good Wood Scheme' • increased and targeted identification of excessive or serial smoky burners • targeted engagement and follow up visits to improve burning practices • increased media campaigns and direct public engagement at public events • increased monitoring and enforcement where required 	Council	Policy 12.1
Provide advice and technical information to industrial and rural sectors for the management of dust, odour and other nuisance effects.	Council	Policy 12.2
Promotion of composting, recycling and waste reduction.	Council	Policy 12.1
Funding and assistance		
Provide financial assistance to support installation of insulation.	Council	Policy 12.1
Provide free home assessments and advice on energy, water, and material efficiency and encourage better resource use.	Council	Policy 12.1

Anticipated environmental results

Anticipated Environmental Result	Link to policy	Indicator	Data Source
Nelson's ambient air quality will improve such that contaminant levels in all airsheds meet the National Environmental Standards throughout the life of the Nelson Plan.	Policy 12.1	PM ₁₀ levels Carbon monoxide Nitrogen dioxide Ozone Sulphur dioxide	The Council's state of environment air quality monitoring programme
Nelson's homes are healthier and warmer overall.	Policy 12.1	Number of homes insulated through the Warmer Healthier Homes Nelson-Tasman programme. Adequate heating available for cold homes.	District Health Board records Feedback from community Council surveys Eco Design Adviser
New development is designed to maximise energy efficiency.	Policy 12.1	Design of new buildings. Availability of advice on designing for solar gain.	Consent data Eco Design Adviser
Tangata whenua can exercise manaakitanga.	Policy 12.3	Feedback from Iwi	Consent data Plan change data

Principal reasons

Council provides a key role in managing Nelson's air resource to enable communities to provide for their social, economic and cultural wellbeing and their health and safety while safeguarding the life supporting capacity of air.

The National Environmental Standard for Air Quality sets separate but interlinked standards that: ban activities that discharge significant quantities of dioxins and other toxics into the air; establish ambient (outdoor) air quality levels; provide a design standard for new wood burners installed in urban areas; and require large landfills to collect greenhouse gas emissions. Council needs to meet these standards as a minimum. The way that Council achieves these standards will have a significant impact on the health and wellbeing of the community.

While domestic fires are the main source of air pollution in Nelson, it should be recognised that cold damp houses can also significantly impact on people's health. While Nelson's air quality has improved significantly over the last decade there are still a large number of people living in unhealthy homes. Restrictions on heating options and costs of heating are potentially compounding this issue. The Plan aims to strike a balance

between achieving minimum air quality standards while not unduly limiting the ability for people to heat their homes. This is achieved via a number of methods including controls on the number of, and type of, woodburners across different airsheds, supporting a behaviour change and insulation programme, and implementing an ongoing monitoring and modelling programme to keep up to date with new technology and understand future opportunities for airshed capacity.

There is also a need to manage incompatible activities by ensuring amenity values are maintained. The Plan seeks to discourage activities that have noxious discharges from locating next to sensitive activities and sensitive activities from locating next to noxious dischargers.

Tangata whenua Iwi's role as kaitiaki and recognition of customary practices are also necessary in managing the air resource. Council has decided to take a partnership approach with Iwi in developing the Nelson Plan. Reference to air quality is made in Iwi Management Plans refer to air quality and there is a need for Iwi Management Plans to be taken into account.

The Iwi Chapter of the Plan highlights that natural and physical resources should be managed in away that provides for tikanga Maori and the spiritual and cultural values of Whakatū's tangata whenua Iwi. Iwi have indicated that recognition of ahi kaa and provision for cultural activities such as hangi will contribute to achieving this objective.