IN THE MATTER of the Resource Management Act 1991

AND IN THE MATTER of

PLAN CHANGE 13 (AIR QUALITY)
TO THE OPERATIVE BAY OF PLENTY
REGIONAL NATURAL RESOURCES PLAN

REPORT AND RECOMMENDATIONS OF THE HEARING COMMITTEE

Hearing Commissioners:

- Andrew von Dadelszen, Councillor and Hearing Committee Member (Chair)
- John Iseli, Independent Hearing Commissioner (Air Quality Technical Expert)
- Matemoana McDonald, Councillor and Hearing Committee Member

Date: 4th February 2019

TABLE OF CONTENTS

TABLES

APPENDICES

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

(1) This report and recommendations relate to Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan (PC13).

(2) **Area covered:** the entire catchment of the Bay of Plenty Regional Council

(3) **What the proposed change does:** Proposed Change 13 introduces new issues, objectives, policies and methods specific to Air Quality. This plan change relates specifically to air quantity provisions in the natural resources plan. It is part of a programme of changes needed for the National Policy Statement: Air Quality Management 2014 (NPSFM).

(4) 80 submissions and 30 further submissions were received between 27th February 2017 and 31st July 2017. In total there were 37 submitters who appeared in person before the Hearings Panel.

1.2 Background

(5) For Under the Resource Management Act 1991 (RMA), regional councils are responsible for the management of natural and physical resources such as land, air, and water and may develop regional plans to assist with resource management.

(6) The Regional Air Plan (the current plan) was prepared to help manage air quality and it was made operative in 2003. Since its development, the National Environmental Standards for Air Quality 2004 (NESAQ) have been released and amended in 2011, and the next generation Bay of Plenty Regional Policy Statement (RPS) was made operative in 2014.

(7) Any regional plan needs to be reviewed every ten years to assess whether it is still managing the resource in the best possible way. The review of the current plan in 2013 found that the plan had addressed some air quality issues, but was now out of date. The recommendation was to replace the current plan with a new plan as soon as practicable.

(8) The primary reasons for developing a new plan are detailed further in this report, but can be briefly summarised here:

i. **Address the air quality issues in the Regional Policy Statement.** These issues are the impacts of odours, particulates, and chemicals on amenity and well-being, and effects of fine particulate matter on human health.

ii. **Meet the ambient air quality standards of the National Environmental Standards for Air Quality (NESAQ).** The Rotorua Airshed is exceeding the PM_{10} limit of the NESAQ and is at risk of breaching the standard in 2020. The provisions in the current plan are not sufficient to achieve the required reduction in emissions.

iii. **Resolve deficiencies identified during the plan review.** Some activities are causing adverse effects as currently managed by the plan. About 1,000 complaints per year regarding air issues, many about permitted activities.

(9) As outlined further below, the Regional Council is currently amalgamating six regional plans, including the air plan, into one consolidated plan. The Regional Water and Land Plan was reformatted to ease the consolidation process, and was renamed the Regional Natural Resources Plan (RNRP) and reissued in November 2017. The new air plan will be incorporated into the operative RNRP as Plan Change 13 (Air Quality). It is referred to in this document as

"the Plan Change" or "this Plan Change", and provisions need to be amended to assist with compliance and enforcement, in order to improve air quality.

(10) The provisions relating to Air Quality apply to the whole Bay of Plenty region, including the coastal marine area. As such this plan is both a regional plan and regional coastal plan, and the Minister of Conservation is the final approval authority for the parts of the plan that relate to the coastal marine area.

(11) Air is essential to life. While there is no danger of the volume of air running out, good quality air unpolluted by contaminants is under pressure in many areas of the world.

(12) The Bay of Plenty in general, has good air quality. However, there are areas of the region where air quality is not as good as it could be, and this is affecting health and well-being.

(13) The Regional Council is responsible for sustainably managing the air in the region, in particular the discharge of contaminants to air. This involves managing activities that discharge to air to ensure businesses and communities in the region continue to thrive and grow economically, while ensuring the contaminants being discharged do not affect human health and well-being.

(14) In the past the focus has been on managing point source discharges to air, such as large-scale industrial processes like pulp and paper mills. These large discharges are, for the most part, managed through resource consent conditions. The conditions often require monitoring, equipment installed to reduce discharges, and many other requirements to manage the effect of the discharges on the environment.

(15) With large point-source discharges under better control, most of the air quality issues the region faces today are from diffuse sources such as home heating fires, open burning, and agrichemical spraying. The current plan requires updating to improve management of these sources.

(16) The current plan needs updating to manage these sources better, and this has driven the need to update the provisions through this Plan Change.

1.3 Air Quality Issues in the region

OPEN BURNING

(17) Open Burning – Open burning in urban and rural areas is permitted under the current air plan, provided good management practice is used, there are no harmful concentrations of gases beyond the property boundary, and no objectionable or offensive discharges.

(18) In 2015, the Council received 525 complaints about outdoor smoke. Three quarters of those complaints were about open burning, and were from people living in residential areas. These complaints tended to be about burning household or garden waste.

(19) The level of complaints suggests that open burning in residential areas is no longer acceptable and cannot be controlled. Smoke and other emissions can have adverse effects on health, and people living in residential areas generally have other accessible options for disposing of household rubbish and garden waste.

ROTORUA DOMESTC BURNERS

(20) In 2005 and the Regional Council carried out monitoring and research in the Rotorua airshed, including an emissions inventory, a home heating survey and airshed modelling. The inventory showed that although industry contributes to poor air quality, the main source of fine

particulates in the Rotorua airshed in winter is domestic burners. The home heating survey confirmed that the older burners (not designed to the same standard as modern domestic burners) are a feature of the airshed. The findings of that research remain relevant in 2018.

(21) The 2007 modelling showed that annual PM_{10} emissions from domestic sources would have to reduce by 60 tonnes to meet the NESAQ. To do that, 7,650 (89% of a total 8,550) domestic burners would need to be converted to cleaner heating, and backyard burning would have to cease.

(22) In 2010, the Rotorua Lakes Council introduced the Rotorua Air Quality Control Bylaw (the Bylaw). The Bylaw restricts new burner installations to certain types and models, phases out indoor open fires and requires old burners to be removed when a property is sold.

(23) The Regional Council has introduced incentives such as the Hot Swap loans and grants, resulting in the conversion of around 4,500 burners to cleaner heating. The annual number of conversions (via the incentive schemes) has declined to about 250 per year.

(24) As a result of actions to date the number of exceedances of the NESAQ has fallen to around 10 per year in the last 10 years. The height of the individual exceedances has reduced from highs of around 120µg/m^3 to around 80µg/m^3.

(25) The Bylaw was reviewed and updated in 2017. A key reason for the review was to address the continuing breaches of the NESAQ. The 2010 bylaw allowed new burners into the catchment provided they met the NESAQ standard. The update tightened the standard from 1.5 g/kg to 0.6 g/kg. The prohibition on indoor open fire use and the point-of-sale removal of noncomplying wood burners remained in place.

(26) With four years to the NESAQ 2020 deadline and at least 3,150 burners still to convert (from original calculations) current actions are not expected to achieve the NESAQ targets.

AGRICHEMICAL SPRAYING

(27) Agriculture and horticulture are important economic sectors in the Bay of Plenty economy. On many properties, application of herbicides and insecticides is part of producing goods for market.

(28) The Regional Council receives about 100-120 complaints annually about agrichemicals, most of those in spring, and many related to perceived poor practices by property owners or people applying agrichemicals. These practices include lack of notification or inadequate notification when spraying occurs.

(29) People contacting the Council expressed health concerns for themselves and their families, with particular concerns for individuals with existing health issues, or times when people may be particularly sensitive (e.g. in pregnancy), or for children. People also reported symptoms such as headaches which they considered were as a result of contact with the agrichemicals.

(30) The complaints data showed that a growing number of people want more information. People were concerned that they didn't know what chemicals were being sprayed and they didn't know what precautions they should take with themselves, their families and their animals.

(31) In some cases, the activities of a property owner affected the economic activities of another, such as spray drifting onto an organic property and potentially compromising organic certification.

FUEL BURNING EQUIPMENT (BOILERS)

(32) There are a range of different terms used to describe fuel burning equipment, including "combustion sources" (in the current plan), "heat plants" (Energy Efficiency and Conservation Authority or EECA), and "boilers". This report uses the term "boilers".

(33) Boilers combust fuel within an enclosed chamber, transferring from the combusted material directly for the production of useful heat or power.

(34) The EECA database records 194 boilers in the Bay of Plenty. Full detail is not available on all of these (for example, size, fuel type, sector, age). The following paragraphs are based on the boilers recorded in the EECA database.

(35) Most boilers in the region are used in the public sector, followed by commercial, industrial and the agricultural sector. Under the current plan, 115 (59%) of the boilers in the database are within the limits for size and fuel type to be a permitted activity.

(36) Boilers are mostly used in the public sector (36, 43%). This includes schools and hospitals. These are fuelled by electricity (26%), natural gas (26%) and wood (21%). Under the current plan half (34) of these boilers are permitted. The activity status of the remaining 38 is not clear because of insufficient information.

(37) About one-third (52, 30%) of boilers are used in the commercial sector – almost exclusively accommodation. All boilers used by the commercial sector are fuelled by geothermal energy. Under the current plan all boilers in the commercial sector have permitted activity status.

(38) One-fifth (36, 21%) of boilers are used in the industrial sector, which includes wood processing (14), Pulp and paper (7), dairy processing (6), meat processing (5) and other manufacturing (5). These are fuelled by natural gas (42%), wood (33%), and coal (17%). The remaining boilers are fuelled by diesel and black liquor or green sawdust. Under the current plan half of the boilers have permitted status; the remainder have discretionary status.

(39) Nineteen (6%) boilers are used in the agricultural sector –specifically horticulture. These are fuelled by geothermal (47%), coal (32%) natural gas (21%). Under the current rules half of these are permitted. The activity status of the remainder is not clear because of insufficient information.

(40) The fuel type for boilers has changed over time. In the older plants coal is the dominant fuel, followed by natural gas and wood. In plants installed in the 10 years 1990 - 2000 natural gas is the dominant fuel, followed by wood. For those plants installed since 2000 natural gas remains the dominant fuel, followed by electricity, then wood. Two plants installed in 2007 in Whakatane (horticulture sector) are fuelled by coal. One plant installed in 2003 in Kawerau (education sector) is solar powered.

(41) The Rotorua district has 78 boilers (2014 data). More than half of these are used in the commercial sector, mostly in accommodation. About quarter are accounted for in the public sector, such as schools and hospitals. A small number are used in industry (wood processing, meat processing). Geothermal energy is an important energy source for boilers in the Rotorua District, although other fuel sources such as wood, coal and sawdust are also used.

METHYL BROMIDE AND FUMIGATION

(42) Methyl bromide is a broad-spectrum pesticide used as a fumigant to control pest insects, nematodes, weeds, pathogens and rodents. It is also used for storage of durable commodities such as grains and timber, and perishable commodities such as fresh vegetables, flowers, and disinfestations of structures (e.g. buildings, ships and aircraft).

(43) Methyl bromide is odourless and colourless which makes it difficult to measure and monitor and can make it particularly hazardous.

(44) Methyl bromide is an ozone-depleting substance and was widely used as a soil fumigant in developed countries prior to the phase-out under the Montreal Protocol. New Zealand is a signatory to the Montreal Protocol and phased out non-quarantine use of methyl bromide in 2007.

(45) Methyl bromide use is regulated in New Zealand by the Ozone Layer Protection Act 1996 (OLPA) and the Ozone Layer Protection Regulations 1996 (OLPR). These regulations give effect to New Zealand's obligations under the Convention and the Protocol to phase out ozone depleting substances except for critical uses. Methyl bromide for the purpose of quarantine and pre-shipment is exempt from the phase-out programme, subject to certain provisions including use in pre-shipment and quarantine application (see s32 evaluation report).

(46) In New Zealand, fumigation by methyl bromide is used as a biosecurity measure. About 90% of methyl bromide is used for export goods, including logs and timber products, kiwifruit, dried food product and general goods. Imports fumigated include vehicles, vehicle parts and tyres.

(47) At the Port of Tauranga methyl bromide is used to fumigate containers, ship's holds, and log shipments. The latter are generally fumigated via a tent or tarpaulin on the Port. After treatment the residue is released into the air (apart from the greater than 20% recaptured, rising to 60% in April 2018).

(48) In 2010, the Environmental Risk Management Authority, now the Environmental Protection Authority (EPA) reassessed the use of methyl bromide due to concerns with a possible link to motor neurone disease. The EPA approved the continued use of methyl bromide despite community concern because it considered there is no practical alternative. EPA has put in place controls covering importing, transporting, storing, using and disposing of methyl bromide.

(49) A 10-year limit was set for recapture as "appropriate and necessary" for New Zealand to meet its obligations under the Montreal Protocol. From October 2020 all methyl bromide fumigations must use recapture technology.

MOUNT MAUNGANUI INDUSTRIAL AREA

(50) The Mount Maunganui industrial area encompasses the Port of Tauranga, Mount Maunganui and Sulphur Point areas. Any assessment of air in the geographic area would include methyl bromide, fumigation, and emissions from boilers, but because these have been discussed under other topics, the main air emissions discussed here are dust and particulates, sulphur dioxide and hydrogen sulphide.

(51) Regional Council regularly monitors dust levels in Mount Maunganui. In 2016 the Council carried out a dust audit focused on the Port and associated operations. The audit concluded that the levels of dust in this area most likely exceed the ambient standard for PM_{10}. The 2016 audit showed that the Mount Maunganui and Sulphur Point areas experience elevated levels of dust under certain meteorological conditions. The main sources and activities were bulk cargo handling, log handling, unsealed yards, vehicles and cargo handling equipment. Under Regulation 15 of the NESAQ, the Council is required to monitor any contaminant where it is likely to breach.

(52) Shipping emissions are one of the sources of contaminants discharged to air from port activity. The Resource Management (Marine Pollution) Regulations 1998 manages discharges from shipping emissions and states that no rules may be included in a regional plan to manage

discharges that are part of normal operations of ships. This means that the Regional Council cannot manage shipping emissions using the Plan Change.

(53) Sulphur dioxide (SO_2) is produced mainly from the combustion of fossil fuels that contain sulphur, such as coal and oil (for example, coal burnt for heating, diesel-powered vehicles). SO_2 is also produced from some industrial processes, such as fertiliser manufacturing, aluminium smelting and steel making. Industrial sources include traffic, shipping, and train activity.

(54) Although the Mount Maunganui airshed is largely industrial, there is residential housing in close proximity including a community of five papakainga, privately owned family homes, the Whareroa Marae, and a kohanga reo early childhood centre in the marae grounds.

(55) The Regional Council receives odour complaints from residents and workers in the Mount Maunganui industrial area. Concerns have been raised about the health effects on young children and the elderly in the housing units surrounding the Whareroa Marae. Complainants describe symptoms consistent with exposure to SO2 including irritation to eyes, nose and throat. To collect more information about adverse air quality the Council installed an air quality monitoring trailer at the marae site in September 2015.

(56) Hourly levels of SO_2 measured at Whareroa Marae between 26 September 2015 and 31 October 2017 showed two breaches of the upper limit of the NES (570 $\mu g/m^3$): 27 February 2016 (628 $\mu g/m^3$); and 5 March 2016 (751 $\mu g/m^3$). There have been eight exceedances of the lower limit (350 $\mu g/m^3$).

(57) The NESAQ set the ambient limit for SO_2 at 120 micrograms per cubic metre, in line with the World Health Organisation (WHO) guideline. Since then the WHO has revised the guideline to 20 micrograms per cubic metre. NESAQ concentration limits are 350 micrograms per cubic meter (expressed as a 1hour mean), with nine allowable exceedances in a 12-month period, and an absolute limit of 570 micrograms per cubic metre (expressed as a 1-hour mean).

(58) Hydrogen sulphide (H_2S) threshold set in the Ambient Air Quality Guidelines (AAQGs) is 7$\mu g/m^3$ (1 hour mean). The odour can be offensive and can generate complaints to the Council. The issue of resource consent conditions and compliance with the AAQGs is a consenting and compliance matter. Provided the air plan continues to require consents for anthropogenic activities that discharge H_2S, no change is necessary.

(59) Other contaminants are discharged from industries and processes including carbon monoxide, oxides of nitrogen, and volatile organic compounds.

(60) Natural sources of contaminants are not addressed by the Plan Change.

(61) If an ambient standard is breached, regulations of the NESAQ take effect. For example, if the monitoring network in the Port/Mount Maunganui area records an exceedance of the PM_{10} standard, Regulation 17 requires the Regional Council to decline resource consent applications for new or increased discharges of PM_{10} unless the applicant can offset the increase elsewhere in the airshed.

(62) Due to the exceedances of SO_2 recorded in the Mount Maunganui area, Regulation 21 (NESAQ) applies. Under Regulation 21 the Regional Council must decline a consent application to discharge SO_2 into air if the discharge is likely to cause the concentration to breach the ambient standard.

1.4 Plan Change Overview

(63) The Regional Council is amalgamating six regional plans, including the air plan, into one consolidated plan. The Regional Water and Land Plan was reformatted to ease the consolidation process. It was renamed the Regional Natural Resources Plan (RNRP) and reissued in October 2017.

(64) A new "Air Quality" chapter has been included in the RNRP. This chapter is currently empty as air provisions are still covered by the current plan. Once this Plan Change becomes operative, it will be included in the RNRP as the Air Quality chapter and the current plan will be withdrawn.

(65) The Plan Change focuses on discharges of contaminants to air and contains:
- 3 objectives
- 10 policies
- 21 rules

1.5 Development of Proposed Change 13

(66) At the Regional Direction and Delivery Committee meeting on 31st March 2016 approval was sought for Proposed Change 13 to be publicly notified. At that meeting the Committee sought a workshop to consider matters more fully. A Committee workshop was held on 8 September 2016 and direction was provided on a revised version of Proposed Change 13, taking account of all feedback and discussions up to that point in time. On 30th November 2017 the Regional Direction and Delivery Committee met, and approved to publicly notify Proposed Plan Change 13.

1.6 The Hearing Process

(67) On 27h February 2018 the Bay of Plenty Regional Council ("Council") acting under section 60 of the Resource Management Act 1991 ("RMA") and clause 5 of Schedule 1 to that Act, publicly notified Proposed Change 13 (Air Quality) to the Operative Bay of Plenty Regional Natural Resources Plan (PC13).

(68) The Council received a total of 80 submissions. The period for further submissions opened on 17th July 2018 and closed on 31st July 2018 with 30 further submissions received.

(69) Acting under Section 34A (1) of the RMA the Council appointed us, the undersigned, as Hearing Committee members to hear and make decisions on submissions on PC13; and delegated to us all the functions, powers and duties of the Council to hear and consider submissions on PC13, including requiring and receiving reports under section 42A of the RMA.

(70) We, the Hearing Committee, conducted public hearings of the reports made under section 42A of the RMA, and of the evidence and submissions of the submitters who wished to be heard. Hearings were conducted on the 15th, 16th and 17th of October 2018 at Tauranga; and on 25th and 26th October in Rotorua. The parties who appeared at the hearing in support of their submissions are listed in chronological order of appearance in Table 3 (Page 28 of this report). All submitters were given the opportunity of attending hearings and addressing their submission and any expert evidence they had provided in advance. Questions of clarification only were directed to witnesses by members of the panel. No cross-examination was allowed. Verbal and written submissions were received from a number of submitters.

(71) The hearing of submitters concluded at 11:41am on 26th October 2018, and the hearing was then adjourned.

(72) The hearing was formally closed at end of the deliberations meeting on Thursday 8th November 2018.

1.7 Conflicts of Interest

(73) Councillors Andrew von Dadelszen and Matemoana McDonald raised a perceived potential conflict of interest, relating to their being elected members of Bay of Plenty Regional Council. This Regional Council has a 100% council-owned company Quayside Holdings Ltd, which in turn owns 54.14% of Port of Tauranga Limited. Port of Tauranga Limited is submitter [#67] PC13. Bay of Plenty Regional Council is also a submitter [#74] to this Plan Change. It was determined that Cr von Dadelszen and Cr McDonald have no conflict of interest regarding either Port of Tauranga Limited or Bay of Plenty Regional Council submission points.

1.8 Deliberations

(74) Deliberations commenced on the 7th and 8th of November, and were then adjourned pending the provision of additional information requested from staff. On 17th December 2018 the hearing reconvened via conference call for the purposes of receiving a supplementary staff report,[1] and the deliberations continued.

(75) Most of the submissions were generally supportive of PC13, although some submitters sought amendments. Constructive improvements were suggested by submitters and their counsel, expert witnesses and other witnesses. The Hearing Committee also considered the section 42A reports prepared by officers of the Council. We acknowledge the suggested amendments, even those we do not adopt, and the related evidence, have substantially helped us in coming to our recommendations.

(76) During the course of the hearing we issued several directions requesting clarification of and caucusing on certain matters. This resulted in a number of further reports and memoranda.

(77) The Hearing Committee met again, via conference call, on XXX December 2018 to conclude our deliberations.

2.0 LEGAL ISSUES

(78) In this Report we state our understanding of the general legal context within which the Council must give its decisions on the submissions to PC13.

3.0 STATUTORY FRAMEWORK

(79) The RMA creates a hierarchy of planning instruments including national, regional and local documents. It directs the manner in which the provisions within these instruments must be considered in preparation of this proposed plan change.

[1] Proposed Plan Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan, Proposed Plan Change 13 – Section 32AA Report, Karen Parcell, 11th December 2018

3.1 Resource Management Act 1991

(80) Plan Change 13 to the Regional Natural Resources Plan was prepared under the Resource Management Act (referred to as the Act or RMA), pursuant to Part 5 (Standards, Policy Statements and Plans) and Schedule 1. Under section 63 the purpose of the preparation, implementation, and administration of regional plans is to assist a regional council to carry out its functions in order to achieve the purpose of the Act. The Act provides at section 65 directions around the preparation and change of regional plans, including the requirement to amend a regional plan to give effect to the Regional Policy Statement (RPS) once it is reviewed and made operative. This is to be done in the timeframe specified in the RPS, or as soon as reasonably practicable if no time is specified.

(81) Section 66 of the Act sets out the matters to be considered by the Regional Council, and which it must prepare and change a regional plan in accordance with. This includes (under section 67(3) and (4)) that a change to a Regional Plan must give effect to any national policy statement, and any Regional Policy Statement; and not be inconsistent with any other regional plan for the region. It shall consider the extent to which consistency is required with the regional policy statements or plans of adjacent councils. Council shall "take into account" relevant planning documents recognised by an iwi authority.

(82) These statutory directions are addressed below, and in the section 32 report.

(83) The purpose of the Act under section 5 is to promote the sustainable management of natural and physical resources, with sustainable management meaning:

> *…managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while:*
>
> (a) *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
> (b) *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
> (c) *avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

(84) In achieving this purpose section 6 of the Act lists aspects of national importance that shall be recognised and provided for. The following are directly relevant to Plan Change 13:

> (e) *the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.*

(85) Section 7 of the Act references other matters that the Council shall have particular regard to when exercising functions and powers under the Act. Of direct relevance to Plan Change 13 are the following:

> (c) *the maintenance and enhancement of amenity values:*
> (d) *intrinsic values of ecosystems:*
> (f) *maintenance and enhancement of the quality of the environment:*

(86) Section 8 of the Act requires the principles of the Treaty of Waitangi to be "taken into account" with the management, use, development and protection of natural and physical resources.

(87) Section 15, 15A and 15B of the Act restrict discharge of contaminants into the environment:

- *Discharges of contaminants into air from industrial or trade premises are not authorised by the RMA unless the discharge is expressly allowed by a national environmental standard or other regulation, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.*

- *Discharges of contaminants into the air from a place or any other source, whether movable or not, cannot contravene a national environmental standard unless the discharge is expressly allowed by other regulations, a resource consent, or under s20A.*

- *Discharges of contaminants into the air from a place or any other source, whether movable or not, cannot contravene a regional rule unless the discharge is expressly allowed by a national environmental standard or other regulations, a resource consent, or under s20A.*

- Section 15A restricts dumping and incineration of waste or other matter in the coastal marine area.

- Section 15B restricts the discharge of harmful substances from ships or offshore installations.

ASSESSMENT AGAINST SECTION 6 AND 7 OF THE ACT

(88) Overall, the plan change seeks to manage the discharges of contaminants to air to ensure maintenance and enhancement of the quality of the environment (which includes people and communities). Management is carried out by controlling discharges of particulates, odour, chemicals, and gases with the first priority to protect human health. The provisions of the plan also protect air quality in general, including maintenance and enhancement of amenity values, and the intrinsic values of ecosystems.

(89) The plan change protects the mauri of air. Tāngata whenua consider the mauri of air to be a taonga.

ASSESSMENT AGAINST SECTION 8 OF THE ACT

(90) Consultation with tāngata whenua and consideration of Iwi Management Plans (IMPs) is discussed in further detail in Part 4.

(91) IMPs provide a mechanism for tāngata whenua interests to be considered in the Regional Council processes. There are specific legislative requirements which place a duty on Regional Council staff to take IMPs into account.

(92) In preparing Plan Change 13, IMPs were reviewed to identify and understand the expectations of iwi and hapu with regard to natural resource management, and in particular air quality, and to inform engagement with iwi and hapu about the Plan Change.

(93) Of the 38 IMPs lodged with the Regional Council, 22 contained provisions directly relevant to the Plan Change. Key issues included horticultural and agrichemical sprays, industrial discharges, domestic fires, burning of waste, odour and dust, and the use of the fumigant methyl bromide.

(94) The relevant information from the IMPs is provided in the s32 evaluation report (see subsection 4.2).

(95) Direct engagement with Maori, taking into account the principles of active protection, mutual benefit, equity and equal treatment, included 10 hui across the region from July 2016 to October 2017, where presentations were made and the draft air plan was discussed. The key issues for Maori constituencies were identified, along with the desired responses and remedies to the draft plan change.

3.2 The National Policy Statements and National Environmental Standards

(96) Regional plans must give effect to national policy statements (NPS), including the New Zealand Coastal Policy Statement, and ensure that national environmental standards (NES) and regulations are met. Plans must also comply with any other national regulation made under the RMA.

(97) The following national planning instruments have been consulted and objectives, policies and rules have been included in the Plan Change to give effect to national policies, and achieve national environmental standards:

- NES for Air Quality 2004 (NESAQ)
- NES for Sources of Drinking Water 2007 (NES-SDW)
- NES for Electricity Transmission Activities 2009 (NES-ETA)
- NES for Plantation Forestry 2017 (NES-PF)
- NES for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES for Contaminated Soil)
- NPS on Electricity Transmission (2008) NPS-ET
- New Zealand Coastal Policy Statement 2010 (NZCPS)
- NPS on Urban Development Capacity 2016 (NPS-UDC)
- Resource Management (Marine Pollution) Regulations 1998

(98) National Environmental Standards (NES) are regulations issued under Section 43 of the RMA, to provide a nationally consistent approach to decision-making processes. They may be prescribed technical standards, methods or other requirements for environmental matters. Each council must enforce the same standard and, in some circumstances, can impose stricter standards.

(99) The National Environmental Standards for Air Quality (Air Quality NES) are regulations made under the Resource Management Act 1991 which aim to set a guaranteed minimum level of health protection for all New Zealanders.

(100) The Air Quality NES came into effect on 8 October 2004. They are made up of 14 separate but interlinked standards. These include:

- seven standards banning activities that discharge significant quantities of dioxins and other toxics into the air
- five standards for ambient (outdoor) air quality
- a design standard for new wood burners installed in urban areas
- a requirement for landfills over 1 million tonnes of refuse to collect greenhouse gas emissions.

(101) Requirements for councils - Regional councils and unitary authorities are responsible for managing air quality under the Resource Management Act. They are required to identify areas where air quality is likely, or known, to exceed the standards. These areas are known as airsheds.

3.3 Bay of Plenty Regional Policy Statement (Operative 2014)

(102) The second-generation Regional Policy Statement (RPS) became operative on 1 October 2014.

(103) Under the RMA (s67(3)), a regional plan must give effect to the Operative Regional Policy Statement (RPS). Topic areas within the RPS of particular relevance are:

- Air quality
- Coastal environment
- Integrated resource management

- Iwi resource management

(104) The RPS provides a framework for sustainably managing the region's natural and physical resources. It highlights regionally significant issues with our land, air, fresh and coastal water, infrastructure and biodiversity, including issues of significance to iwi. It sets out what needs to be achieved (objectives) and how it will be achieved (policies and methods).

(105) It does not contain rules. Instead, it explains how regional, city and district councils, need to manage these resources. It is a directive policy document in relation to regional and district plans and the consideration of resource consents. It must be given effect by the region's city and district councils when developing their district plans.

(106) Objective 1 requires the adverse effects of odours, chemical emissions and particulates are avoided, remedied or mitigated so as to protect people and the environment.

(107) In the RPS, Method 2 requires regional plans to give effect to Policy AQ 2A; Method 3 requires resource consents, notices of requirement, and changes, variances, reviews and replacement of plans to give effect to Policy AQ 1A. In the air quality chapter of the RPS, implementation of Method 3 (to achieve Policy AQ 1A) is specifically assigned to city and district councils.

(108) Provisions in the Plan Change have been designed to give effect to the relevant provisions of the RPS. Details of this assessment are provided in Appendix 5 of the Section 32 report.

3.4 Operative Regional Plan provisions

(109) The Bay of Plenty Regional Air Plan (the current air plan) became operative in 2003 and was reviewed in 2013. The review recommended that the current air plan be replaced with a new plan. The Council is in the process of amalgamating six of its plans into one Regional Natural Resources Plan and for that reason this matter has been promulgated as a plan change (Plan Change 13) to the Operative Regional Natural Resources Plan. When Plan Change 13 is operative, the current air plan will be removed.

(110) The Proposed Regional Coastal Environment Plan (the Coastal Plan) is currently in its final appeals process and will be operative in the near future. Once operative, the Coastal Plan will supersede the current Operative Regional Coastal Environment Plan. For this reason, the Operative Regional Coastal Environment Plan has not been considered.

(111) The Coastal Plan clearly states that it does not manage discharges of contaminants to air in the coastal marine area as these are addressed in the Regional Air Plan. The Coastal Plan contains provisions regarding integrated management, iwi resource management, and the port zone that have been considered alongside this Plan Change. There are no inconsistencies.

(112) Plan Change 13 provisions have been aligned with the current provisions of the Regional Natural Resources Plan with the addition of new clauses in AQ R3 and advice notes where appropriate.

3.5 Other Relevant Statutory Instruments

OZONE LAYER PROTECTION ACT 1996, OZONE LAYER PROTECTION REGULATIONS 1996

(113) The Vienna Convention for the Protection of the Ozone Layer (the Convention) followed by the Montreal Protocol on Substances that Deplete the Ozone Layer (the Protocol) required use of

methyl bromide to be phased out by January 2015. New Zealand ratified the Protocol in 1987, except for quarantine and pre-shipment application.

(114) This is regulated in New Zealand by the Ozone Layer Protection Act 1996 (OLPA) and the Ozone Layer Protection Regulations 1996 (OLPR). These regulations give effect to New Zealand's obligations under the Convention and the Protocol to phase out ozone depleting substances by January 2005 except for critical uses. Under these regulations the importation of methyl bromide is prohibited except for quarantine and pre-shipment purposes.

HAZARDOUS SUBSTANCES AND NEW ORGANISMS ACT 1996

(115) The risks of hazardous substances are managed under the Hazardous Substances and New Organisms Act 1996 (HSNO) to safeguard people and the environment. The HSNO is administered by the Environmental Protection Authority (EPA).

(116) The Resource Legislation Amendment Act 2017 removed the control of hazardous substances as an explicit function of councils. This means councils no longer have an explicit obligation to regulate hazardous substances in RMA plans, or policy statements. Consequential changes have also been made to the HSNO Act and the Health and Safety at Work Act (2015) in light of this change.

(117) The intent of this change is to remove the perception that councils must always place controls on hazardous substances under the RMA and to ensure councils only place additional controls on hazardous substances if they are necessary to control effects under the RMA that are not covered by other Acts.

(118) In most cases the HSNO Act will be adequate to avoid, remedy or mitigate adverse environmental effects (including potential effects) of hazardous substances. However, councils still have a broad function of achieving integrated management, and must still control discharges of contaminants into or onto land, air or water (s30(f)).

(119) The discharge of agrichemicals to air may occur as spray drift which may cause adverse effects. Spray drift is not controlled by other regulations which focus on different aspects of hazardous substances. This regulatory gap is filled by provisions in regional plans to avoid, remedy or mitigate adverse effects of spray drift. Regional plans do not need to regulate the storage, transport, disposal or overall use of these substances as these are all required by the HSNO Act.

3.6 Local Government Act 2002

(120) Schedule 1 of the Resource Management Act provides the process required to be completed with the preparation, change and review of any policy statement or plan. Clause 3 of Schedule 1 identifies the consultation required during the preparation of a plan or policy and requires this to be completed in accordance with s82 of the Local Government Act (LGA).

(121) Section 82 of the LGS ensures that all parties who will or may be affected by, or have an interest in the matter are provided with reasonable access to information, and the opportunity to present their views to the local authority. Specific mention is provided for consultation with Maori in ss82(2). The local authority must "give consideration to" the views and preferences of any persons affected by or with an interest in the matter.

(122) Plan Change 13 was developed with consultation with the community. From April to June 2016 the Draft Plan was available for consultation. During this consultation period three workshops

were held – one in each of the three main centres (Tauranga, Rotorua and Whakatane), along with an open day and evening. Printed fact sheets and rules information were provided.

(123) Presentations and discussions were held with interested parties on their request. The discussion document and supporting technical information was made available to the community on the Council website.

(124) Specific iwi and hapu consultation took the form of community meetings, with 10 meetings /presentations/discussions held across the region from July 2016 to October 2017.

(125) All submissions received on Plan Change 13 were collected and considered, and revisions made to address concerns raised by the community where appropriate, whilst acknowledging the need to uphold the requirements under the RMA and the RPS.

(126) Further detail on the consultation for Plan Change 13 is provided in the s32 report.

3.7 Statutory Acknowledgements

(127) Deeds of Settlement and Settlement Legislation achieved with each iwi, regional councils are required to include statutory acknowledgments in relevant regional plans and policy statements, and to have regard to them in resource consent decision making.

(128) A number of co-governance/co-management arrangements have been established as a result of treaty settlement processes.

(129) The Integrated Planning Protocol between Tuhoe Te Uru Taumatua, Bay of Plenty Regional Council, Hawke's Bay Regional Council, Wairoa District Council and Whakatane District Council is to provide an integrated and consistent framework for all Council planning processes within the Ngai Tūhoe rohe. It seeks to promote effective engagement and prevent misunderstandings around roles and statutory obligations. The protocol includes principles and expected levels of engagement.

(130) This Protocol is of particular relevance to this Plan Change as it requires Regional Council to carry out early communications and share a Draft Plan Change with Tuhoe Te Uru Taumatua for comment.

(131) The Draft Plan Change was provided to Tuhoe Te Uru Taumatua in December 2016. During discussions at this meeting it became clear that Tuhoe have few if any air quality concerns. Tuhoe Te Uru Taumatua will be kept informed of developments in the Plan Change.

3.8 Section 32 Requirements

(132) Section 32 of the RMA prescribes the requirements for preparing and publishing evaluation reports. An evaluation report is to examine whether the provisions of PC3 are the most appropriate way to achieve the relevant objectives of the RPS by:

(a) identifying other reasonably practicable options;

(b) assessing the efficiency and effectiveness of the provisions in doing so; and

(c) summarising the reasons for deciding on the provisions (s.32(1)(b)).

(133) The report is to contain the level of detail that corresponds to the scale and significance of the environmental, economic, social and cultural effects anticipated from implementation of the proposal (s.32(1)(c)).

(134) In assessing the efficiency and effectiveness of provisions, the assessment has to identify and assess the anticipated benefits and costs of the environmental, economic, social and cultural effects, including opportunities for economic growth and employment anticipated to be provided or reduced.

(135) The assessment, if practicable, should quantify the benefits and costs; and if there is uncertain or insufficient information about the subject matter of the provisions, has to assess the risk of acting or not acting. (s.32(2)(a)).

(136) Section 32 requires a value judgement as to what, on balance, is the most appropriate when measured against the relevant objectives. The High Court[2] rejected the submission that in order to be the "most appropriate", an RPS change must be the superior method; the Court found that "appropriate" meant suitable, and there was no need to place any gloss on that word by incorporating that it be superior. Further, the Court did not agree that s.32 mandated that each individual objective had to be "the most appropriate" way to achieve the RMA's purpose. Each objective is required to be examined in the process of evaluation. Objectives could not be looked at in isolation because the extent of each objective's relationship in achieving the purpose of the Act may depend on inter-relationships.

(137) **Under s.32AA**, a further evaluation is required for any changes proposed since the original evaluation report was completed. That further evaluation does not need to be published as a separate report if it is referred to in the decision-making record in sufficient detail to demonstrate that it was undertaken in compliance with that section (s.32AA(1)(d)(ii)).

(138) We have considered all of the statutory reports to the extent that we are required to do so by the statutory directions.

3.9 Statutory Summary

(139) Table 1 (below) provides a summary of the statutory documents that are required to be met as part of a plan change and considered as part of any recommendations made in response to submissions.

Table 1 Summary of Statutory Documents

Statutory Document	Requirement
Resource Management Act 1991	
	The purpose of section 5 is upheld.
	Matters of national importance are recognised and provided for.
	The matters listed in section 7 shall be given particular regard to.
	The principles of the Treaty of Waitangi shall be taken into account.
	The content of a regional plan shall adhere to those specified within Section 67 of the Act.

[2] See *Rational Transport Society Inc v New Zealand Transport Agency*, HC Wellington CIV-2011-485-2259, 15 December 2011.

Statutory Document	Requirement
	The process and timeframes within Schedule 1 are adhered to.
Local Government Act 2002	Consultation is completed in accordance with section 82 during development of the plan.
National Policy Statements and National Environmental Standards	A regional policy and plan must uphold the intent and direction of the NPS. Alignment must be achieved with the objectives and policies of the NPS and NES.
Resource Management (Marine Pollution) Regulations 1998	No regional rule may apply to discharges from ships.

Bay of Plenty Regional Policy Statement (Operative 2014)	
Objective 1	Requires the adverse effects of odours, chemical emissions and particulates are avoided, remedied or mitigated so as to protect people and the environment.
Policy AQ 1A	Discourage reverse sensitivity associated with odours, chemicals and particulates.
Policy AQ 2A	Manage adverse effects from the discharge of odours, chemicals and particulates.
Policy AQ 3A	Manage adverse effects of fine particulate contamination.
Operative Regional Natural Resources Plan	Provisions must be consistent with the operative provisions of this plan
Ozone Layer Protection Act 1996; Ozone Layer Protection Regulations 1996	Regional Council has no role under these regulations.
Hazardous Substances and New Organisms Act 1996	Regional Councils no longer required to control use, storage, transport and disposal of hazardous substances

4.0 IWI MANAGEMENT PLANS

(140) Under section 61(2A) (a) of the RMA, when a regional council is preparing a plan change it must take into account any relevant planning documents recognised by an iwi authority. These plans describe resource management issues of importance to them as kaitiaki within their area of interest. The plans may also contain information relating to specific cultural values, historical accounts, descriptions of areas of interest (hapu/iwi boundaries or rohe) and consultation and engagement protocols for resource consents and/or plan changes. Council must take into account any relevant planning document recognised by an iwi authority when preparing its plan change (s.66(2A) (a) RMA).

(141) IMPs provide a mechanism for tāngata whenua interests to be considered in Council processes. There are specific legislative requirements which place a duty on Council staff to take these plans into account. In practice, Councils must balance a number of competing interests including IMPs.

(142) In preparing this Plan Change, IMPs were reviewed to:

- identify and understand the expectations of iwi and hapu with regards to natural resource management, in particular, air quality
- inform engagement with Iwi and hapu about the Plan Change.

(143) Of the 38 IMPs lodged with the Regional Council, 22 contained provisions directly relevant to this Plan Change.

(144) Key issues include:

- Horticultural and agrichemical sprays
- Industrial discharges
- Domestic fires
- Burning of waste
- Odour and dust
- Methyl bromide

(145) Table 2 (below) summarises the key air quality issues and policies and how they are addressed by the provisions in the Plan Change.

(146) In addition to the actions taken as detailed in the table, the Plan Change also requires air discharges to be managed according to the effects on cultural values (AQ O3). Air discharges must be managed to minimise the discharge of contaminants beyond the boundary where it may cause adverse effects on cultural values (AQ P3) and plan users must have particular regard to the effect of a discharge on cultural values and any effects on air quality values identified in an IMP (AQ P4).

Table 2 Summary of assessment of Iwi Management Plans

Iwi Management Plan	Issues and Policies	Response and remedy
Mauao		
Matakana and Rangiwaea Islands Hapu Management Plan (2012, updated 2017) Te Whanau a Tauwhao, Te Ngare, Ngai Tamawhariua, Ngati Tauaiti, Ngai Tuwhiwhia	***Issue*** ▪ Commercial use of herbicides and insecticides.	Agrichemical spray drift is identified as a key issue for air quality in the region. Provisions in the Plan Change require spray drift to be avoided in the first instance, and remedied or mitigated otherwise. The notification requirement for agrichemical spray has been increased in the Plan Change and additional consideration of sensitive activities is required.
Motiti Island Native Resource Management Plan (2011 revised 2012) Ngati Te Hapu & Korowai Kahui o Te Patuwai Tribal Council	***Issues*** ▪ Indigenous flora and fauna, have been significantly compromised by contamination from discharges to air, land and water. ▪ Management systems have resulted in inadequate performance standards and monitoring regimes being applied to resource users and waste generators. ▪ Discharge related to toxic sprays has adverse effects. ▪ Discharges related to the burning of wastes have adverse effects. ▪ Health impact of toxic (horticultural) sprays ***Provisions*** ▪ Requiring that all proposals for arthworks or the disturbance of landforms assess the impact of dust and other air-borne contaminates on health, mahi kai, indigenous flora and fauna and waahi tapu and taonga. ▪ Require that all applications for air discharge consents assess the impact of the discharge on health, mahi kai, indigenous flora and fauna.	Agrichemical spray drift is identified as a key issue for air quality in the region. Provisions in the Plan Change require spray drift to be avoided in the first instance, and remedied or mitigated otherwise. The notification requirement for agrichemical spray has been increased in the Plan Change and additional consideration of sensitive activities is required. The Plan Change links earthworks rules from other chapters of the RNRP to ensure earthworks at a scale to cause potential air discharges are consented. Smaller earthworks must not cause adverse effects beyond the boundary.
Motiti Island Native/Cultural Policy Management & Administration Plan (2011 revised 2012) Ngati Te Hapu & Korowai Kahui o Te Patuwai Tribal Council	***Issues*** As above ***Provisions*** ▪ That the earthworks must not be left in a barren state that may cause dust pollution. ▪ Applications to discharge pesticides and herbicides:	Agrichemical spray drift is identified as a key issue for air quality in the region. Provisions in the Plan Change require spray drift to be avoided in the first instance, and remedied or mitigated otherwise. The notification requirement for agrichemical spray has been increased in the Plan Change and additional consideration of sensitive

	o must meet management guidelines under health and Safety Act. o must provide a full list of chemicals / fertilisers for the intended purpose and methods of application. o must provide a wash down facility for all equipment that are monitored at six month intervals. o must not impact on flora and fauna around waterways and foreshore. o must inform residents to isolate and disconnect all water catchments including roofs 24 hour before discharge. o must not discharge pesticides and herbicides in winds of more than 5 knots. o must not impact on mahi kai areas on land and sea. o must not operate within 300 metres of residential homes that may impact on health and safety of the residents or 100m of designated waters and foreshore (the latter relating to aerial discharge of fertilisers). o aerial discharge of pesticides and herbicides is prohibited	activities is required.
Ngai Te Ahi Hapu Management Plan (2013) Ngai Te Ahi	***Issue*** ▪ Ensure the Waimapu industrial area does not impact the marae and whanau living in this area – although not currently an issue due to distance	Most industrial discharges to air require resource consent which allows for consideration of potentially affected parties and conditions that minimises any discharges beyond the boundary.
Ngai Tamawhariua Hapu Management Plan (2015) Ngai Tamawhariua	***Issues*** ▪ We want to be notified when any spraying of fertilisers, or poisons are being applied in our rohe. Especially around our waterways, rivers, streams. ▪ Concerns that the Claymark Sawmill could potentially be releasing toxins into the air which hover directly over the flatlands and river of Te Rereatukahia River	Agrichemical sprayers must notify nearby properties before spraying Potential breaches of consent conditions are outside the scope of the plan
Ngati Pukenga Iwi ki Tauranga Trust Iwi Management Plan (2013) Ngati Pukenga Iwi ki Tauranga Trust	***Issues*** • Pollution from: (1) Sprays, poisons, other hazardous substances and (2) Chimney smoke • Consultation requirements for renewals and new consent applications. • Monitoring role to ensure consent conditions are followed.	General issues around pollution addressed by provisions in Plan Change where adverse effects of discharges to air must be avoided, remedied or mitigated beyond the property boundary.
Ngati Tapu Ngai Tukairangi Hapu Management Plan (2014) Ngati Tapu and Ngai Tukairangi	***Issues*** ▪ Horticulture: o That all horticultural regulations are followed to ensure environmental sustainability. o That suitable buffer zones exist where any spraying or application of toxic material does exist - to protect	Agrichemical spray drift is identified as a key issue for air quality in the region. Provisions in the Plan Change require spray drift to be avoided in the first instance, and remedied or mitigated otherwise. The notification requirement for agrichemical spray has been increased in the Plan Change and

	the health of the neighbouring community. o That appropriate signage is always displayed where spraying does occur. o Ensure that pesticide use is consistent with aspirations by community to be more environmentally friendly. o Te Rangi (air, sky and cosmos): Our hapu aims to become more involved in the decision making that impact on our airspace. Specifically noise, chemical and aesthetic pollution. o Hapu are involved in the process as a Treaty partner for the allocation or use of airspace within our rohe	additional consideration of sensitive activities is required. Signage is also required.
Pirirakau Hapu Management Plan (2017) Pirirakau Hapu	▪ Pirirakau regard the nature of air as a natural resource and therefore taonga. ▪ Human health effects associated with use of agrichemicals.	Agrichemical spray drift is identified as a key issue for air quality in the region. Provisions in the Plan Change require spray drift to be avoided in the first instance, and remedied or mitigated otherwise.
Tapuika Environmental Management Plan (2014) Tapuika Iwi Authority	***Issues*** ▪ The effect of discharges from the Affco Rangiuru rendering plant on people suffering from asthma, bronchitis, and other respiratory conditions. ▪ Odour nuisance, at times, from the Affco Rangiuru rendering plant and wastewater treatment facility. ▪ The health effect of spray drift from agricultural and horticultural sprays (e.g. fertilisers, pesticides, Hi-Cane®) near marae, kohanga reo, kura kaupapa facilities and homes. ***Provisions*** Ensure that: Contaminant levels from industrial air discharges are reduced to minimise health effects. ▪ Agricultural or horticultural sprays are not discharged within 100-metre s of a marae, kohanga reo, kura kaupapa or homes. ▪ Agricultural and horticultural industry to ensure Best Management Practices are adopted regarding the use of agricultural and horticultural sprays. ▪ Tapuika is an affected party to any consent application to discharge contaminants to air.	Agrichemical spray drift is identified as a key issue for air quality in the region. Provisions in the Plan Change require spray drift to be avoided in the first instance, and remedied or mitigated otherwise. The notification requirement for agrichemical spray has been increased in the Plan Change and additional consideration of sensitive activities is required. Most industrial discharges to air require resource consent which allows for consideration of potentially affected parties and conditions that minimises any discharges beyond the boundary. A policy in the Plan Change requires plan users to have particular regard to IMPs. Provisions in the Plan Change require adverse effects of discharges to air to be avoided, remedied or mitigated beyond the property boundary.

Tauranga Moana Iwi Management Plan (2016) Ngai Te Rangi, Ngati Ranginui and Ngati Pukenga *This Plan supersedes the Te Awanui Tauranga Harbour Iwi Management Plan 2008*	***Issues*** ▪ Impact of land use activities on the health of air, health, wellbeing and a way of life. Land uses and activities include: o Use of chemical sprays and fertilisers. o Industrial, agricultural and horticultural discharges to land, air and water. ▪ Concerns about the use of methyl bromide: o There is a preference for the use of methyl bromide to be prohibited for the health of the environment, the community and staff involved in fumigation processes. o A Safe Practice Plan as well as Emergency Procedures must be in place for the use of methyl bromide. o Stringent monitoring is carried out to prevent any occurrences of harmful chemical releases into Te Awanui. ***Policies*** ▪ Manage the effects of rural and urban air discharges on the health and wellbeing of our people: o A review of air discharge rules, in particular buffer distances from marae, papakainga, kura kaupapa, kohanga reo or dwelling. ▪ Involvement of Iwi and hapu in resource consent processes for industrial air discharges close to marae, papakainga, kura kaupapa or kohanga reo.	Agrichemical spray drift is identified as a key issue for air quality in the region. Provisions in the Plan Change require spray drift to be avoided in the first instance, and remedied or mitigated otherwise. The notification requirement for agrichemical spray has been increased in the Plan Change and additional consideration of sensitive activities is required. The use of methyl bromide is non-complying in the Plan Change unless recaptured, and any other fumigant use requires a consent as a discretionary activity.
Te Awanui Tauranga Harbour Iwi Management Plan (2008) Ngai Te Rangi, Ngati Ranginui and Ngati Pukenga	▪ Prohibit the use of methyl bromide, for the health of the environment, the community and the staff involved in fumigation processes. ▪ In the event that methyl bromide is used at the Port of Tauranga that safe methods of control are used to prevent any release of this toxic substance into the air or water. A Safe Practice Plan and an Emergency Procedures Plan is required for any use of this substance. An approved handler must be applied during any use of methyl bromide.	The use of methyl bromide is non-complying in the Plan Change unless recaptured, and any other fumigant use is discretionary.
Te Awaroa Ngati Kahu Hapu Environmental Management Plan (2011) Te Runanga o Ngati Kahu	▪ Health impacts of poor air quality	Provisions in the Plan Change require adverse effects of discharges to air to be avoided, remedied or mitigated beyond the property boundary. Health impacts in particular are to be avoided.
Te Mana Taiao O Ngai Tamarawaho Hapu Management Plan (2014) Ngai Tamarawaho	▪ Health impacts from harmful pollutants. ▪ There should be no discharge to air that does not meet necessary and all	Provisions in the Plan Change require adverse effects of discharges to air to be avoided, remedied or mitigated beyond the property boundary. Health

	options should be explored to avoid, mitigate or remedy any such discharges. ▪ Dust caused by building or road construction. ▪ Ngai Tamarawaho expects to be consulted in all cases where a proposal or development anywhere within its rohe seeks to make discharges to air.	impacts in particular are to be avoided.

(147) Council has prepared a 'Review of Iwi and Hapu Management Plans relevant to Plan Change 13' report that can be provided upon request. The panel understands 23 iwi management plans contain provisions relevant to PC13, including:

- Matakana and Rangiwaea islands Hapu Management Plan (2012)
- Nga Aukati Taonga o Tapuika me Waitaha (1993)
- Nga Taonga Tuku Iho: Pirirakau Hapu Environmental Management Plan (2004)
- Ngai Te Ahi Hapu Management Plan (2013)
- Ngai Tamawhariua Hapu Management Plan (2015)
- Ngati Pukenga Iwi ki Tauranga Trust Iwi Management Plan (2013)
- Ngati Tapu Ngai Tukairangi Hapu Management Plan (2014)
- Ngati Whakaue ki Maketu Iwi Resource Management Plan Phase 2 (2011)
- Tapuika Environmental Management Plan (2014)
- Tauranga Moana Iwi Management Plan (2016)
- Te Mahere a Rohe mo Ngati Rangitihi - Ngati Rangitihi Iwi Environmental Management Plan (2012)
- Te Awanui Tauranga Harbour Iwi Management Plan (2008)
- Te Awaroa Ngati Kahu Hapu Environmental Management Plan (2011)
- Te Mana Taiao o Ngai Tamarawaho Hapu Management Plan (2014)
- Te Whatu Natural Resources Environment Management Manual (2002)
- Waitaha Iwi Management Plan (2014)
- Ngati Manawa Environmental Scoping Report (April 2007)
- Ngati Whare Iwi Management Plan (19 March 2011)
- Tawharau o Nga Hapu o Whakatohea (1993)
- Ngati Rangiwewehi Iwi Management Plan (2008)
- Te Taiao o Te Whatuoranganuku. Ngati Tamateatutahi-Ngati Kawiti Hapu Environmental Management Plan (2015)
- Te Rautaki Taiao a Raukawa – Raukawa Environmental Management Plan (2015)
- Te Tuapapa o nga wai o Te Arawa / Te Arawa Lakes Trust Cultural Values Framework (2015)
- Tuhourangi Tribal Authority Enhanced Iwi Environment Resource Management Plan (2011)

5.0 PART 2 MATTERS

(148) **Part 2** is a framework against which all the functions, powers and duties under the RMA are to be exercised for the purposes of giving effect to the RMA. Section 5 has been described as the lodestar of the RMA.[3] It guides decision-making under the RMA towards the over-arching purpose of sustainable management, and directs decision-makers to manage resources so that the reasonably foreseeable needs of future generations can be met and the life supporting capacity of the ecosystem protected.

(149) **Section 5** sets out the Act's overall objective. Its purpose is identified in s.5(1) as "***to promote the sustainable management of natural and physical resources***". In doing this, sustainable management is to be given the meaning stated in s.5(2):

> In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while:
>
> (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
> (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems; and
> (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Section 5 contemplates environmental preservation and protection as an element of sustainable management of natural and physical resources,[4] and protecting the environment from adverse effects of use and development is an aspect (though not the only aspect) of sustainable management.[5] Although s.5 is not itself an operative provision,[6] where applicable the other sections of Part 2 (s.6, s.7 and s.8) are operative, albeit at the level of general principles, directing those administering the RMA, and elaborating[7] on how s.5 is to be applied in the circumstances described in them.

(150) **Section 6** of the RMA identifies matters of national importance, and directs all persons exercising functions and powers under the Act to recognise and provide for them. Those most relevant to PC3 include:

- the protection of areas of indigenous vegetation and significant habitats of indigenous fauna (s.6(c));
- the maintenance and enhancement of public access to and along lakes and rivers (s.6(d)); and
- the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (s.6(e)).

(151) **Section 7** directs that, in achieving the purpose of the Act, all persons exercising functions and powers under it are to have particular regard to some eleven listed matters, nine of which are relevant to PC3. They are:

> (a) Kaitiakitanga;
> (aa) the ethic of stewardship;
> (b) the efficient use and development of natural and physical resources;
> …

[3] *Leigh v Auckland City Council* [1995] NZRMA 241 (PT) at [248].
[4] *Environmental Defence Society v NZ King Salmon Limited & Ors* [2014] NZCSC 38 at [146].
[5] *NZ King Salmon* at [148].
[6] *NZ King Salmon* at [151].
[7] *NZ King Salmon* at [25] and [149].

(c) the maintenance and enhancement of amenity values;
(d) intrinsic values of ecosystems;
…
(f) maintenance and enhancement of the quality of the environment;
(g) any finite characteristics of natural and physical resources;
(h) the protection of the habitat of trout and salmon; and
(i) the effects of climate change;
…

(152) **Section 8**, the final section of Part 2 of the Act, directs persons exercising functions and powers under it to "take into account" the principles of the Treaty of Waitangi "te Tiriti o Waitangi". We understand this direction does not extend the principles that are not consistent with the scheme of the RMA, nor does it provide for allocating resources to Māori.[8] It does not impose a duty on functionaries to "take into account" past wrongs, or to be open to ways to restore imbalance.[9]

(153) Although Part 2 states the purpose of the Act and the principles in elaboration of the purpose, the specific, unqualified prescriptions of a superior instrument by which Part 2 is given effect apply, a decision maker is not free to "***refer back***" to Part 2.[10] To do so would diminish such a prescription. However, the Supreme Court direction is qualified by two constraints:

- the lawfulness and meaning of the prescription must not be in dispute; and
- the prescription must "***cover the field***".

6.0 IMPLICATIONS OF KING SALMON DECISION ON PLAN CHANGES AND RESOURCE CONSENT APPLICATIONS

USE OF THE TERMS 'AVOID' AND 'PROTECT'

(154) A number of submission points on various sections of the plan discuss the implications of the word "avoid" and, to a lesser extent, "protect".

(155) Some submissions refer explicitly to the Supreme Court's decision in *King Salmon* (relating to a private plan change in the Marlborough Sounds), where the plan change was held not to give effect to the directive policies of the New Zealand Coastal Policy Statement 2010 (NZCPS). Other submissions refer to the High Court decision in *Davidson* and the extent to which the reasoning in King Salmon should be applied to resource consent applications, although that decision was appealed. The Court of Appeal has recently released its decision on the *Davidson* matter, and that is discussed further below.

(156) As the discussions will be relevant to several sections of the plan change, some general comments and introduction is included here to avoid extensive repetition. Where matters need to be addressed further in a specific planning provision context, further comments are provided in the relevant sections.

(157) Some submitters have expressed concerns that using the word "protect" imposes too high a requirement, akin to the 'avoidance' of any adverse effects. Some submissions state this goes against the framework of the Act which provides for an ability to avoid, remedy, or mitigate, adverse effects. Similar concerns are expressed by some submitters about the use of the term "avoid" and whether that is to be interpreted in all cases as "not allow" or "prevent the occurrence of" as described in *King Salmon*.

[8] *Minhinnick v Minister of Corrections* NZEnvC A043/2004.
[9] *Waikanae Christian Camp v Kapiti Coast District Council* (HC Wellington 27/10/2004, McKenzieJ).
[10] *King Salmon* at [80] and [88].

(158) It should be remembered that plan changes (such as Plan Change 13) are required by the RMA to 'give effect' to the higher order planning documents. In this case that includes the NZCPS in relation to coastal areas, and the Bay of Plenty Regional Policy Statement (RPS). The meaning of the term 'give effect to' means implement and is well canvassed as a result of the Supreme Court's decision in *King Salmon*. The Supreme Court held that the NZCPS contains specific directive policies which are intended to be in the nature of a bottom line, and as such taking an overall broad judgment approach when undertaking a private plan change would minimise the significance of those directive policies and as such would not 'give effect' to the higher order documents.

(159) As noted above, the Court of Appeal has recently released its decision in *Davidson* which specifically considered the extent to which the reasoning in *King Salmon* should be applied to resource consent applications. It is worthwhile briefly noting this decision, as it appears that a number of the submissions have assumed that by including the word 'avoid' in various objectives and policies in Plan Change 13, that activities which could not 'avoid' such effects might automatically be refused consent.

(160) In summary, the Court of Appeal's decision is clear that the 'overall broad judgment' approach in relation to plan change applications was rejected by the Supreme Court because of the prescriptive nature of the relevant provisions in the NZCPS in that case (Policies 13 and 15) and the statutory obligation to give effect to them. However, if the Supreme Court had intended to reject that approach for resource consent applications, it would have made that explicit.

(161) The decision in *Davidson* also provides that where applications for resource consents fall for consideration under other kinds of regional plans, the appropriate process for consent authorities is to undertake a 'fair appraisal of the objectives and policies as a whole'. The Court states "If it is clear that a plan has been prepared having regard to Part 2 and with a coherent set of policies designed to achieve clear environmental outcomes, the result of a genuine process that has regard to those policies in accordance with s.104(1) should be to implement those policies in evaluating a resource consent application."

(162) As such, it is considered that 'broad brush' comments about the use of the words 'avoid' or 'protect', or their implications on resource consent applications, are not appropriate and matters should be addressed giving consideration to the specific wording of the objectives and policies of the plan change (including reading them 'as a whole'), and should be considered in the context of the higher order planning documents.

(163) At this juncture it is noted that there are some objectives and policies of the plan change which have been designed to achieve clear environmental outcomes through being expressed in specific and directive terms. This is consistent with the purpose of the Act. Those matters are addressed further in other sections of this report.

(164) Most activities in the plan change could cause adverse effects on human health, if not managed appropriately. Objective AQ O1 (summarised) is to protect human health from adverse effects of air discharges. This is achieved by providing policies and rules that manage discharges to avoid adverse effects on human health. A complete prohibition on all these activities would not be appropriate nor practicable and is not consistent with the purpose of the Act. No prohibited activities are included in the plan change.

7.0 PRE-HEARING MEETINGS

(165) No pre-hearing meetings have been held with submitters.

8.0 THE HEARING OF SUBMISSIONS

Table 3 Schedule of the Submitters heard

#	Day 1: Monday, 15th October 2018 - Tauranga	Submitter
1.	James Pengelly	FS15
2.	Tony Christiansen	FS17
3.	Swap Stockfoods – Ariell King & Dudley Clemens	075
4.	Geoffery Oliver	006
5.	GBC Winstone – Treda Hall, Trevor Mackie & Andrew Curtis	027
6.	Andrew Clow	014
7.	Ravensdown – Anna Wilkes & Caren Taylor	050
8.	Ngā Potikii RMU – Arthur Flintoff & Matere Duncan	051

	Day 2: Tuesday, 16th October 2018 - Tauranga	
9.	Tauranga Moana – Te Arawa ki Takutai Partnership Forum - Julie Shepherd	031
10.	Trustpower – Nicola Foran	030
11.	Lawter – Romae Calland	048
12.	Legacy Funeral Homes – Megan Exton	047
13.	Mercury NZ – Jennifer Simpson	036
14.	Port of Tauranga – Rowan Johnstone & Jenny Simpson	067

	Day 3 Wednesday, 17th October 2018 - Tauranga	
15.	New Zealand Kiwifruit Growers – Nikki Johnson, Sarah Cameron & Sean Carnachan	073
16.	Horticulture NZ – Lucy Deverall, Lynette Wharfe & Keith & Adrian Taylor	058
17.	NZ Agrichemical Education Trust – Jane Lamb (NZAET) & Jean-Paul Praat	073
18.	Genera – Keith Frentz & Matt Hill	055
19.	Greg Misson	FS10
20.	Colin Alexander	FS16
21.	Western Bay of Plenty District Council – Matthew Leighton	007
22.	Tauranga City Council – Karren Edlin & Joel Peters	054
23.	Jodie Bruning	021

	Day 4: Thursday, 25h October 2018 - Rotorua	

24.	PF Olsen – Sarah Orion	04
25.	Stakeholders of Methyl Bromide Reduction Inc – Ian Gear	057
26.	Oji Fibre Solution & Whakatane Mill – Gill Chappell, Phillip Millichamp & Adrienne Low	037 & FS04
27.	McAlpines –Graeme Bell & Deborah Ryan	034
28.	Allan Neil	057
29.	Sancra & Craddock Farms - Karla Putt & Stefan Craddock	061 & 062
30.	Department of Conservation – Angus Gray, Paul Cashmore & Graeme Silver	052
31.	Thermal Brewing Company – Lara Burkhardt (HOBEC) & Greg Brown (Thermal Brewing)	072
32.	Ballance Agri-nutrients – Stephanie Hantler & Robert Larman	033

	Day 5: Friday, 26th October 2018 - Rotorua	
33.	Federated Farmers – Martin Meier & Darryl Jensen	076
34.	EnviroSolve – Dr Rene Haeberli	029
35.	Fonterra – Mark Crisp, Abbie Fowler & Ryan Park	045
36.	Toi Te Ora – Dr Jim Miller & Annika Davis	010

NOTE:

The following submitters decided not to attend, but did supply a further written submission

37.	Silver Ferns Farms	063
38.	The Oil Companies	019

8.1 Day One of the Hearing – Monday 15th October 2018

VENUE: BOPRC, TAURANGA

Submitter 1, FS15 - JAMES PENGELLY

(166) Mr. Pengelly submitted in person, stating that he was the owner of Hangar 11 at 101 Aerodrome Road.

(167) Mr. Pengelly asked that emphasis needs to be on "avoidance" on the grounds of public health. He stated the PM_{10} is recognised as harmful to human health, and he stated that it was an issue of "cumulative effects". He believed that this leaves the burden of proof to the Regional Council.

(168) Mr. Pengelly stated that he was strongly opposed to those submitters who want AQ R1 (c) removed. He stated that we need to flip the burden of proof.

(169) Mr. Pengelly noted that the bulk handling facility at 101 Aerodrome Road was established before the hangars were erected, saying that, however, the level of activity has increased significantly.

(170) Mr. Pengelly contended that within 20 to 30 minutes of loading or unloading activities within the bulk storage operations, he could feel an affect in his throat.

Submitter 2, FS17 – TONY CHRISTIANSEN

(171) Mr. Christiansen stated that he was a hangar owner at 101 Aerodrome Road, and that his hangar was established in 2010. He said that he resides above the hangar with his partner, noting that living in the hangars is a permitted activity.

(172) Mr. Christiansen noted that in 2014 Tauranga City Council changed the classification from an industrial site to an airport. He said that Regional Council staff seem to be confused, because living within an industrial zone is not permitted.

(173) Mr. Christiansen stated that the bulk storage at 101 Aerodrome Road included palm kernel, tapioca and canola. He stated that the dust from these products is a "cumulative effect" that makes his eyes very sore.

(174) Mr. Christiansen stated that he had made more than 20 complaints to BOPRC is the past year, and many more in the previous five years – noting that he is yet to receive any satisfaction from Regional Council staff.

(175) Mr. Christiansen noted that the 7 bulk bins at 101 Aerodrome Road has the capacity to hold 10,000 tonnes of bulk storage in each bin.

(176) Mr. Christiansen contended that the issue was that BOPRC owns 54.14% of Port of Tauranga, and that the "poacher is also the gamekeeper". This, he believes, is a total conflict of interest.

(177) Mr. Christiansen referred to a report prepared by Emission Impossible Ltd for Toi Te Ora that assessed the effects of dust emissions from 101 Aerodrome Road. He contended that Toi Te Ora Report clearly states that PM_{10} is harmful to health. He further asked that dust be included in AQ R1 (b) because the zoning is "airport".

(178) Mr. Christiansen concluded by stating that palm kernel extract, when mixed with water, becomes corrosive to aluminium. He said that this is a documented fact, and it made aircraft stored in the hangars to be practically sensitive to palm kernel dust. He stated that another submitter, Mr. Mission, would supply this documentation.

(179) In answering questions of clarification from Commissioners, Mr. Christiansen said the bulk storage door were always open when trucks were unloading and loading. He stated that the quantity of bulk material stored at 101 Aerodrome Road exceeds 10,000 tonnes, indicating a large scale operation.

(180) Mr. Christiansen stated, in response to a Commissioners enquiry, that bulk storage should not be a permitted activity. He said that while the building was established (in 2009) 2 years before the hangars were constructed, the zoning change to "Airport" meant that their permitted activity should be removed.

Submitter 3, 075 – SWAP CONTRACTORS

(181) **Ms. Ariell King (Aecom)** and **Mr. Dudley Clemens (J Swap)** submitted on behalf of **Swap Contractors**.

(182) Ms. King stated that she is a qualified planning consultant, and a Principal Planner at AECOM New Zealand Limited, and she is submitting in support of Swap Stockfoods.

(183) Ms. King stated that J Swap supports the staff 42A Reported recommended change to AQ P1, namely:

> Manage the discharge of contaminants to air according to the following:
>
> (a) Provide for the discharge of contaminants to air by permitting discharges from activities where the discharge can be suitably managed with general conditions to avoid, remedy or mitigate any adverse effects of the discharge.

(184) Ms. King noted that the Section 42A Report does not support the inclusion of new objectives to enable discharges to air. She commented that Swap Stockfoods supports this regulation as it acknowledges that it is possible to manage the discharge of contaminants to air where suitable mitigations are imposed.

(185) Mr. Clemens stated that he is an employee of Swap Stockfoods, and Swap has taken this process seriously, including taking into account the Toi Te Ora Reports. He said that the company wants certainty out of the process, and takes no pleasure or desire to have unworkable and undeliverable facilities for regulators. He stated that Swap needs a defined standard – a target to meet.

(186) Mr. Clemens noted that J Swap would spend between $100,000 and $150,000 on a resource consent, and had already spent $20,000 on air quality monitoring at 101 Aerodrome Road. He concluded that the RMA does provide for discharges to air.

(187) In responding to questions from the Commissioners, Mr. Clemens said that Swap Stockfoods regularly keep the bulk store doors closed, but conceded that ships are unloaded for 12 to 24 hour periods at the Port. He said that loading out of the bulk sheds was more sporadic; being undertaken during normal business hours.

(188) Mr. Clemens said that PM_{10} has not been measured at the boundary, but would like better data to ensure monitoring at the boundary.

(189) Ms. King stated that she had not visited the bulk storage site at Aerodrome Road.

(190) Mr. Clemens said he considered the effects of dust were issues of both health and nuisance, and both need to be dealt with in the rule structure. He said that Swap supports a "polluter pays" principle, so the rule should push back on this.

(191) Mr. Clemens explained that the 101 Aerodrome Road is an overflow site, dictated by the market. He said that AQ R1 (c) doesn't align with lease sites. He stated that Swap have a nationwide distribution of Stockfoods, including Taranaki, Lyttleton etc.

(192) Mr. Clemens noted that Canterbury has a rule that allows for bulk handling and storage of materials as a permitted activity up to a prescribed level. He said potential requirements to obtain consent for individual sites would be costly due to the use of multiple sites.

(193) In response to a question, Mr. Clemens stated that Swap has had limited contact with any affected parties; saying that they leave it to the operator of the site.

Submitter 4, 006 – GEOFFREY OLIVER

(194) **Mr. Geoffrey Oliver** stated that he owns Flavour Queen Mushrooms, at Omokoroa. He stated that he has been in business for 60 years, and processes around 100 tonnes of mushrooms annually.

(195) Mr. Oliver is concerned that AQ R2 (f) will affect his income by requiring consent for his small-scale composting operation that he considered is not causing adverse effects.

(196) Mr Oliver explained that his business undertakes drum composting involving a tumbling core with odorous emissions treated via a charcoal filter before discharge to air. He stated that the drum has a maximum capacity of 25 tonnes and compost is typically held in the drum for 10-14 days. He described his composting operation as small scale, producing approximately 100 tonnes per year compost at present, with a maximum capacity of 200 tonnes per year.

(197) Mr Oliver considered that his mushroom composting operation is consistent with best practice in terms of odour controls and represents a significant improvement over traditional composting techniques used by many large mushroom producers. In response to questions, he stated that he was not aware of any complaints relating to odour emissions from his composting operation.

Submitter 5, 027 – GBC WINSTONE

(198) **Ms. Theda Hall** said that she is employed by Golden Bay Cement as Environment & Sustainability Co-ordinator. She was accompanied by **Trevor Mackie** and **Andrew Curtis** (AECOM).

(199) Ms. Hall stated that Winstone Cement has just one bulk site at Mt Maunganui, adjacent to the Port. She said that the site includes a 7,000 tonne cement silo, that receives shipments 1-2 times per month – noting that it is less frequent over winter. The process delivers cement pneumatically blown at a rate of 300 tonnes/hour.

(200) Ms. Hall said that Winstone has ceased bagging operations as of last week. She stated that approximately 110,000 tonnes of cement are distributed from this site, with no ready mixed product being used.

(201) Ms. Hall stated that it would be very difficult to relocate this facility, because (1) it would be cost prohibitive, and (2) there haven't been any issues to date. She said that there had been no complaints, despite having operated from this site for many years.

(202) Mr. Mackie stated that he wants the bulk storage to be a permitted activity, subject to performance standards. In 7.3 of his verbal submission he said Winstone seeks a specific new rule, based on the rule in the Auckland Unitary Plan. His suggested wording is as follows:

> **AQ RX**
> At Port of Tauranga, Mount Maunganui, the discharge of contaminants to air from cement storage, handling, redistribution or packaging, and associated fly ash and microsilica, is a permitted activity provided the following conditions are complied with:
> (1) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the subject property or into any water body.
> (2) Cement is stored in fully enclosed silos that must be fitted with a filtration system with a filter surface area of at least [24m^2][11].
> (3) There must be no visible discharges of dust.
> (4) Cement must be delivered from ship to silo, and from silo to truck, via a fully enclosed system. Cement additives, such as microsilia, microsilia fume and fly ash, must only be de-bagged and bagged within an enclosed structure fitted with dust control equipment.

[11] The surface area in (2) has been taken from the Auckland Unitary Plan – Operative in Part, for bulk cement storage and handling facilities at Port of Auckland.

(5) Silos must either have an automated remote filling system or be fitted with a high-level alarm that has both an audible and visual indicator and when the alarm is triggered it will stop the filling of the silo.

(203) Mr. Mackie noted that this was a known activity, and not a bi-product pollutant.

(204) Mr. Mackie noted that very few Winstone discharge facilities require a consent. He noted that this proposed Plan Change has focused of a number of problematic air discharge activities, and designed permitted activity standards for them where possible. He stated that it has neglected to identify the industrial and trade activities which appropriately mitigate the adverse effects of discharge activities to air, and which could become permitted activities.

(205) Mr. Curtis stated that cement is a fine powder, and around New Zealand Regional Councils have generally adopted these activities as "permitted" as long as they meet appropriate standards. He stated that a bag filter unit at the top of the silo provides effective dust control and that typically particulate matter emission concentrations after filtration are less than 50mg/m^3. In response to questioning, Mr Curtis noted that the correct sizing of such bag filters is important to achieve an appropriate air to cloth ratio. He stated that such filters should generally be designed so that the velocity of air passing through the filter is less than 3m per minute. He stated that whilst such a standard could be imposed as a condition of a permitted activity rule, it may only be applicable to the GBC Winstone operation.

(206) Mr. Curtis commented that AQ R1 (c) is not appropriate; noting that staff removed it, only to add AQ R22 which would nevertheless require consent for numerous minor discharges from industrial and trade premises. He noted that small operators such as joinery workshops would require consent under the proposed rule structure, whereas such activities are more appropriately classified as permitted activities subject to standards.

Submitter 6, 014 – ANDREW CLOW

(207) **Mr. Andrew Clow** is an avocado orchardist at Te Puna. He identified 2 issues of concern with PC13:

(1) Notification for spraying
(2) Open fires

(208) Mr. Clow stated that, as an orchardist, he doesn't spray unless it is absolutely necessary. He said that he uses a contractor (Avogrow) to monitor his insect levels, to determine the necessity for spraying. He then uses a different contractor to undertake the actual spraying.

(209) Mr. Clow stated that he talks to neighbours about his spray plans, say (for example) "I am likely to spray on Thursday, but if it rains, then it could be Friday or Saturday".

(210) Responding to a Commissioner query, Mr Clow said that the maximum spraying notification period used to be 3 weeks, but he would like it to move down to 1 week rather than the 24 hours proposed; also stating that 12 hours is the minimum period (status quo) but suggesting that 18 hours would be more appropriate.

(211) Mr. Clow then spoke about the issue of open burning. He explained that his orchard is 4.5ha in area and has limited locations where burning of prunings can occur. He said that there was a current "setback" of 40 metres from the open burning area to the nearest neighbouring dwelling. Mr Clow considered that a separation requirement of 30 metres to neighbouring dwellings would be workable.

Submitter 7, 050 – RAVENSDOWN

(212) **Ms. Anna Wilkes**, supported by **Ms. Carmen Taylor** (Planz consultants) made a submission on behalf of Ravensdown.

(213) Ms. Wilkes stated that Ravensdown supports an effects-based approach. She noted that Ravensdown has multiple sites around New Zealand, and generally are not required to hold a consent. She said that Ravensdown has 700 Bay of Plenty based shareholders.

(214) Ms. Wilkes said that Ravensdown would like a definition of fertilizer that was consistent with the National Planning Standard (2019).

(215) Ms. Taylor noted that there is one key matter, and five other matters. The key matter is that Ravensdown does not support AQ R1 (c). She said that their concern was that Bulk Stores are not provided for as permitted activities. She requested a permitted activity rule for the bulk storage and handling of fertiliser within buildings.

(216) In responding to questions by Commissioners, Ms. Taylor said that Ravensdown was not opposed to obtaining a consent, but consenting of numerous individual bulk facilities was problematic.

(217) Ms. Taylor also said that there were no known complaints at the Te Puke bulk storage site.

Submitter 8, 051 – NGĀ POTIKI RESOURCE MANAGEMENT UNIT

(218) **Mr. Arthur Flintoff** and **Ms. Matare Duncan** (Manager) submitted on behalf of the Forum.

(219) Mr. Flintoff stated that the key issue for his hapu is the exposure to agrichemical spray drift. He considered that improved monitoring of the effects of spray drift should be required.

(220) Mr. Flintoff said his hapu has written a hapu/iwi Management Plan, and it is intended to have this registered in November.

8.2 DAY 2 of the Hearing – Tuesday 16th October 2018

VENUE: BOPRC, TAURANGA

Submitter 9, 031 – TAURANGA MOANA, TE ARAWA KI TAKUTAI PARTNERSHIP FORUM

(221) **Ms. Julie Shepherd,** the Environmental Manager submitted on behalf of her Hapu.

(222) Ms. Shepherd expressed concerns about spray applications and drift. She said that her hapu has campaigned for many years to limit the use of Hi-Cane (hydrogen cyanamide). She explained that while she did not want to undermine industry, they should not be allowed to freely discharge harmful sprays.

(223) Ms. Shepherd asked “How does BOPRC monitor successfully?” She noted that the policy clearly states that there are to be no adverse effects on human health, and yet there has been no action taken to prevent this. She stated that in Maori Communities respiratory effects increase during the July spray period – and yet Iwi’s voice is not heard at BOPRC, and concerns are not addressed.

(224) Ms. Shepherd was adamant that “spray drift containment is just not real”. She said that there were no monitoring stations, and no dyes included with sprays to give clear indications of spray drift. She said that a cone outside the orchardist’s gate to warn passers-by was also inadequate

when you are spraying a substance that is damaging to human health. She stated that there is a duty to care, and mitigation actions are neither practical nor fair.

(225) In answering questions of clarification from Commissioners, Ms. Shepherd stated that Te Puna school children suffer during the Hi-Cane season. When asked about the setback between spraying and the school, she said that there was only 8 to 10 metres on the playing field, and 15 to 20 metres for the carpark.

(226) Ms. Shepherd also explained that the local Marae can't anticipate when there is going to be a tangi etc. She said there is a lot of unknown facts on how or not industry is dealing with health effects.

(227) Staff were asked about the possibility of effective monitoring. Mr. Imonger said there were no specific monitoring sites (because of cost) but individual surface samples are collected. He said that the difficulty is trying to work out whether the quantity collected can be directly attributed to health effects.

(228) Staff were then asked about the possibility of using setbacks when spraying in the proximity of "sensitive land use"? The response was that there are no setback provisions in the current rules, the policies and rules in the Plan focus on the avoidance of spray drift.

Submitter 9, 030 - TRUSTPOWER

(229) **Ms. Nicola Foran** presented on behalf of Trustpower. Ms. Foran described her role with Trustpower as being the lead environmental advisor.

(230) Ms. Foran recognised that Trustpower's key issues have been addressed by staff in the s42A Report; noting support for the amended definitions within that report.

(231) In responding to a question from the Commissioners around spray painting and blasting activities, Ms. Foran responded that being a permitted activity under the proposed rule will allow for that.

Submitter 10, 048 - LAWTER

(232) **Ms. Romae Calland,** an Environmental Planner for Aurecon, presented on behalf of Lawter.

(233) Ms. Calland explained that Lawter operated on Totara Street, Mt Maunganui, where the company takes waste from forestry by-products and converts these into various products.

(234) Ms. Calland noted that their issues had not been adequately addressed within the s42A Report.

(235) Ms. Calland said that Lawter supported AQ O1, noting, however, that O1 & O2 have conflicting objectives. He said that O1 deals only with mauri; whereas O2 deals with human health. In relation to AQ P3, he stated that use of the word "avoid" can have the effect of causing consent applications to be declined. He considered that the policy should "avoid new discharges" and "avoid, remedy and mitigate" in relation to existing discharges.

(236) With regards to "King Salmon" and the "Davidson" decision, Ms. Calland contended that Case Law can be challenged over time. She stated that 'avoid' still means 'avoid', and despite the process intended by the Court for decision makers to follow, weighting given to the term 'avoid' can cause an application for resource consent to be declined.

(237) Ms. Calland stated that Lawter wants to include an additional clause in AQ R22, that specifies contaminants listed in Schedule 1 of the NES. He asked that the following words be included:

INSERT (d) contaminants listed within Schedule 1 of the National environmental Standards for Air Quality (2004) (or its amendment or replacement).

(238) Ms. Calland went on to advocate for the inclusion of Reverse Sensitivity provisions in the Plan, suggesting a new policy to that effect.

(239) A Commissioner asked Ms. Calland whether Lawter operated a boiler at its Mount Maunganui plant, and he responded that "no they don't". He went on to explain that the stack discharge has a current consent. Mr. Calland noted that hazardous air pollutants are not defined in the Plan, and Lawter is comfortable with this.

Submitter 11, 047 – LEGACY FUNERAL HOMES

(240) **Ms. Megan Exton**, a legal advisor with Holland Becket Law, submitted on behalf of Legacy Funeral Homes. She noted that Legacy has an issue with replacement versus new crematoria.

(241) Ms. Exton said that an increase in discharge does not necessarily equate to an increase in effects.

(242) Responding to Commissioner questions of clarification, Ms. Exton noted the following:

- Legacy has been operating the Pyes Pa Legacy Crematorium since September 2012. She stated that this was Legacy's only crematorium.
- A land use consent was obtained at the time of establishment, but consent to discharge contaminants to air was not required from the Regional Council.

(243) Ms. Exton was asked to give her view on the fact that most crematoriums around New Zealand do require a consent, and with this in mind if Legacy recognises that the Plan (as proposed) is very lenient with regards to the permitted rule. Ms. Exton responded that Legacy doesn't think that existing operators of crematoria, that were established as a permitted activity, should have that status altered.

(244) A Commissioner asked whether Legacy saw any issues associated with deposition and accumulation of mercury (from tooth fillings) discharged to air from crematoria. Ms. Exton said that she had no knowledge about this issue.

(245) In response to a request from the panel regarding complaints, Ms Exton provided further written information regarding the crematorium operation. She replied in writing:

- **Age of Legacy's crematoria**: September 2012.
- **Other Crematoria**: Legacy has no other crematoria.
- **Annual Cremations**: Legacy undertakes approximately 400 annual cremations, depending on the family's choice between burial and cremation.
- **Crematoria in the Region**: As far as we are aware, there are two cremators at Pyes Pa, and one in Whakatane, Taupo and Rotorua.
- **Complaints**: Neighbours objected in 2011 to the cremator being established, and the land use consent went to a formal hearing. Legacy also dealt with one-off complaints about smoking in late 2013/early 2014 which was investigated and BOPRC determined after undertaking monitoring that the cremator was compliant. As far as we are aware there have been no more complaints – of course, we do not have access to complaints made directly to BOPRC and not provided to Legacy.

Submitter 12, 036 – MERCURY NZ

(246) Mercury NZ was represented by **Ms. Jennifer Simpson** (Technical Director in Environmental Engineering at Tonkin & Taylor) and **Mr. Fraser Graafhuis**.

(247) Ms. Simpson explained that Mercury operates a geothermal electricity generator at Kawerau. She opened by highlighting an issue in relation to AQ O1, where the s42A Report rejects the word "significant" sought by Mercury, offering an alternative, being "intolerable" effects. She noted that in relation to non-threshold contaminants it is not possible to avoid all risk.

(248) In considering AQ P2, Ms. Simpson considered that the policy should be deleted. She noted that there is no policy gap as described in the s42A Report. She said that she believes there could be "unintended consequences" caused by P2, noting that LPG and CNG are classified as hazardous air pollutants but are managed because of flammability, not toxicity. She stated that the plan shouldn't be more restrictive than the NES wording requires.

(249) With regard to AQ P3, Ms. Simpson considered that it is more restrictive than NES Regulation 17 and the term "contributing to exceedance" should be removed. Turning to AQ P4, she expressed concern that the policy is ambiguous with regard to hydrogen sulphide (H_2S), noting that the AAQG for H_2S is not based on health effects. She recommended a specific guidance note to exclude H_2S from AQ P4.

(250) Ms. Simpson asked that AQ R1 be changed to delete clause (c), and that AQ R22 be deleted. She stated that, in lieu of this not being accepted, then changes could be addressed by suggested changes to new Rule AQR23. She considered that, in their current form, these rules would have unintended consequences and require consent for numerous minor discharges to air from industrial or trade premises.

(251) Ms Simpson discussed spray painting activities covered by AQ R16. She noted that discharges from small-scale conventional spray painting would not be covered by the permitted activity rule, as worded, and thus would require consent.

(252) Mr Graafhuis and Ms Simpson explained that AQ R23 is the biggest issue for Mercury NZ and expanded on the operation of diesel fired generators and pumps at drilling sites, noting that discharge typically occurs on relatively isolated farmland sites. They suggested amended wording for R23 to allow for operation of such generators and pumps for up to 3 months, provided a separation distance of 200m is maintained from sensitive areas. In this context they considered that the definition of "sensitive area" should exclude water and unoccupied dwellings. In response to questions Ms Simpson stated that, based on her experience and other dispersion modelling work undertaken for similar activities, concentrations of primary contaminants discharged from the generators or pumps are expected to be within relevant air quality guidelines at a distance of 200m from the source.

(253) In answering a Commissioner's query, Ms. Simpson stated that tit would be appropriate to impose a scale threshold for dust generating activities, such as handling of bulk materials. She said that if the Council needs to require a consent based on complaints and breach of a "no offensive or objectionable dust" threshold, then the horse has already bolted. Mr Simpson added that rules controlling discharges to air from dust generating activities based on scale of the operation are utilised by other plans throughout New Zealand.

Submitter 13, 067 – PORT OF TAURANGA

(254) Port of Tauranga was represented by **Jennifer Simpson** & **Roman Johnstone**. They noted that the Port's submission points are similar to those of Mercury NZ.

(255) Mr. Johnstone explained that Port of Tauranga's key concern with this proposed Plan Change is AQ R23. He stated that generators are used at the port for emergency back-up power and for mobile operations. He noted that the size of these diesel fired generators is comparable to large truck engines, typically being in the order of 600kVA (500kW) for port operations.

(256) Ms Simpson noted that the scale of these units is similar to small boilers classified as permitted activities by the Plan and that SO_2 and PM_{10} emissions would be less than from a similar sized solid fuel fired boiler. However, she noted that mobile generators would not meet the stack requirements of the small boiler permitted activity rule. She stated that a 50m setback from sensitive areas would be sufficient to prevent adverse effects from these discharges.

8.3 DAY 3 of the Hearing – Wednesday 17th October 2018

VENUE: BOPRC, TAURANGA

Submitter 14, 073 – NEW ZEALAND KIWIFRUIT GROWERS (NZKG)

(257) NZKG was represented by their CEO, **Ms. Nikki Johnson**, together with **Ms. Sarah Cameron** and **Mr. Dan Cainachon**.

(258) Ms. Johnson stated that there are two issues of primary concern to NZKG. These include (1) signage, and (2) notification.

(259) In considering signage, Ms Johnson sought amendments to AQ R15 (3). She said that signage needs to be a requirement for private as well as public land (as per the s42A Report recommendation). She said that signs don't usually come down immediately following spraying, with the details (including dates) being given on the signs. She asked for the re-entry date to be included, and suggested additional wording in AQ R15 (3), as follows:

> (f) Where agrichemicals are applied to private land, signs must be displayed at every entrance to the property where agrichemical is being applied before the time of application. The signs must clearly state the following:
>
> i. "CAUTION – SPRAY AREA" or similar wording
> ii. The name and type of agrichemical used
> iii. A start date and the date and time it is safe to re-enter the property
> iv. The name and phone number of the person undertaking the application

(260) Ms. Johnson addressed issues raised regarding the Te Puna School. She said there is a voluntary industry requirement to clearly notify and to avoid times when children are present at the school, but this is not specifically required by the proposed plan change. She noted that she doesn't think such voluntary measures need to be included in this Plan.

(261) Ms. Johnson then raised the issue of letterbox covers (these are yellow plastic bags that go over a letterbox) which are used to indicate to the public that spraying is currently been undertaken. She commented that letterbox covers are supplied to both growers and their neighbouring properties.

(262) Ms. Johnson noted that a big issue with using plastic bags over letterboxes is related to the issue of sustainability, and this will result in a review of the need for these bags going forward.

(263) Ms. Johnson stated that to her knowledge neither NZKG nor the Regional Council have received any complaints from the Te Puna School in recent times. She noted that there had

been a strong emphasis on community communications, including at least 5 years of letterbox leaflet drops. She said that these are usually sent out in the end of July & early August period, to coincide with hi-cane spraying. She stated that an annual growers meeting is held in relation to minimising the risk of impact on Te Puna School.

(264) Ms. Johnson went on to talk about the most appropriate notification period. She said that NZKG supported the s42A Report's recommended alteration from 72 to 12 hours minimum notification period.

(265) Ms. Johnson then answered several questions of clarification from the commissioners. These included:

- A question regarding potential for mitigation of effects of spray drift by using "setback distances from property boundaries". She responded that the economic impact of such an approach would be too great, given the high value of orchard land in the region. In relation to other mitigation options, she said that (1) shelter belts are an effective barrier for spray drift; (2) temporary windbreak shelters can be used in circumstances where vegetative shelter is not in place; and (3) the use of air inclusion spray nozzles and "drift stop" additive are also effective mitigation methods.

- A second question related to managing weather conditions, and Ms. Johnson responded that "best practice" is only to spray when the conditions are right to minimise spray drift.

- The third question related to "The time of day" for spraying, and Ms. Johnson noted that copper (used for PSA management) needs good drying to be effective, whereas some other products are taken up by the plant so can be applied at any time. She noted that the role of bees for pollination meant that spray timing must be managed to protect the bees. This means ensuring that spray operators work closely with hive operators. She also noted that for kiwifruit spraying, all products need Zespri approval.

- When asked about NZKG's involvement in preparing Spray Management Plans, Ms. Johnson responded that NZKG does assist with spray plans; and she explained that the orchardists' main mitigation for spray drift has been the planting of shelter-belts to prevent drift. Most growers maintain permanent shelter that is typically topped at a height of 40 feet. She said that growers can manage drift within their properties. She noted that a 30-metre buffer zone requirement to the property boundary would have a very substantial economic burden on orchardists.

- Ms Johnson explained that orchardists take spray drift very seriously, including recognising the dangers that some sprays (for example hi-cane) can have on human health. She recognised that some neighbours actually move out of their homes in the period that hi-cane is being applied (in the order of 30 days). She stated that growers understand that their "bottom line" responsibility is for no spray drift beyond their properties.

- Ms. Johnson was asked whether there is any science to show the effectiveness of shelter-belts as a curtain to prevent drift. She stated that she believed that Zespri would have this information, but did not have any supporting data to hand.

- Staff then asked for clarification: "What does a typical annual orchard spraying programme look like?" Ms. Johnson explained that Zespri sets both product type and timing of sprays according to a crop protection programme.

Submitter 15, 058 – HORTICULTURE NZ (HORT NZ)

(266) **Ms. Lucy Deverall** (Environmental Policy Advisory at Hort NZ), supported by Ms. **Lynette Wharfe** (Planner) and **Mr. Keith Taylor & Adrian Taylor** (Strawberry growers) submitted on behalf of Hort NZ.

(267) Ms. Deverall recognised the need to manage the soil to adequately protect plant health and that agrichemical sprays and fumigants are part of current best practice. She said that spraying and fumigating is necessary to protect export crops, but is also necessary to maintain domestic food supplies. She noted that not all standards are enforceable.

(268) Mr. Taylor stated that there are just three commercial strawberry growers in Katikati, and these three produces around 90% of all New Zealand strawberries grown. He contended that soil fumigation (for strawberry production) using chloropicrin is not a discharge to air, but is injected as a liquid into the soil. Soil injected with fumigant is immediately covered with an impermeable plastic film. He explained that following fumigation the soil is left untouched for 14 days – with the plastic film having been glued to ensure a total covering of the soil. He said that any discharge could only happen (and this is very rare) when changing injectors. Mr Taylor noted that the business of strawberry runner growing would not be viable without soil fumigation.

(269) Ms. Wharfe stated that Hort NZ Is concerned regarding the use of the word "protect" in AQO1. She said that Hort NZ seeks that AQ O1 be modified to require the management of discharges to air.

(270) Ms. Wharfe noted concerns regarding AQ O2 [5.12]. She supported deletion of reference to the NZ Ambient Air Quality Guidelines) AAQGs), noting that there is an issue with the inclusion of any future amendments or replacements to the AAQGs during the life of the Plan.

(271) Regarding AQ O3, Ms. Wharfe said that Hort NZ seeks that the objective refer to the "relevant receiving environment".

(272) Ms. Wharfe stated that some of PC13's proposed policies create confusion and considerable uncertainty. She said that a policy of "avoid" provides a very strong directive, noting that the terms "Avoid, remedy or mitigate" would be more reasonable. With regard to AQ P3, she considered that the reference to hazardous air pollutants would cause uncertainty for users, with these pollutants being listed in three separate documents. She stated that, in her opinion, including a new policy specifically addressing soil fumigation is not appropriate.

(273) Regarding the plan rules, Ms. Wharfe said that AQ R3 is retrofitting the definition of fertiliser from the RNRP. Her request is to make a separate definition for fertiliser (specific for Air Quality).

(274) Regarding the definition of "buildings", Ms. Wharfe stated that this should only relate to impervious structures. She contended that the definition of "public amenity areas" was not specific enough. She also sought amendments to the definition of "sensitive area".

(275) Ms. Wharfe also commented on the use of the term "offensive, objectionable, noxious, or dangerous" – advising caution on how this term is used as a condition of permitted activity rules. She advocated that the definition of "applicator" should be the person, as distinct from the equipment.

(276) Ms. Wharfe, in discussing New Regulatory Methods, suggested the need to include a method specifically for open burning material. She noted that there had been no s.32 analysis on the suggestion of 100m setback to dwellings provisions for open burning. She queried whether this setback distance would be necessary if the wind was blowing in the opposite direction. She also noted that there should be allowance for burning for biosecurity reasons.

(277) Ms. Wharfe also sought for an amendment to AQ R15 to better describe "best practice" for agrichemical spraying. She stated that "best practice" needs to include both training and standards. She said that training and competency for agrichemical users' needs to be included in the Plan Change. She stated that Hort NZ wants specific provisions of NZS8409:2004 - Management of Agrichemicals to be included in AQ R15 (1) – General use of agrichemicals. She stated that keeping accurate records is essential, in case there is a subsequent issue with spray drift.

(278) In considering the issue of signage, Ms. Wharfe said that Hort NZ would supply the appropriate wording for suggested changes to the rule. She supported the alteration to no less than 12 hours for notification.

(279) Ms. Wharfe's final verbal submission point related to Reverse Sensitivity, to which she urged that it be included in the plan, so that where there is a complaint the issue can be assessed with clarity.

(280) In answering questions for clarification, Ms. Wharfe stated that strategies to minimise spray drift are included in NZS 8409:2004 in the Spray Management Plan section. She considered training to be a critical component and noted support for the GROWSAFE programme that has been operating since 1990.

(281) When asked about the proposed 100-metre open burning setback to neighbouring dwellings, Ms. Wharfe said that many orchardists mulch prunings rather than burn them. She noted, however, that with PSA it is necessary to burn on site (noting the exemption for Biosecurity under AQ R7).

Submitter 16, 065 – NZ AGRICHEMICAL EDUCATION TRUST (NZAET)

(282) NZAET was represented by **Mr. John-Paul Praat** of consultancy firm Groundtruth Ltd.

(283) Mr. Praat asked that the proposed wording in AQ P8 be amended to ensure best practice. His proposed wording is:

> "(d) ensuring that best practice is used to manage potential adverse environmental effects on air quality in all agrichemical applications."

(284) Mr. Praat asked that NZS 4809: 2004 be included in the Plan, rather than just in the Advice Note.

(285) Mr. Pratt noted that there is a problem regarding the gap between HSNO and NZAET in legislation. He said the risk is, if training is not specifically required in the plan, then people could opt for a cheaper training option. He noted that the primary objective of NZAET is to ensure education of agrichemical users so it would support a training objective along the lines of:

> "Users of agrichemicals must have undertaken auditable training and/or instructions in the management of the environmental risks of their agrichemical use,"

(286) Mr. Praat tabled a copy of "Growsafe", and confirmed that "Growsafe" certification has been required by rules in plans prepared by other regions around the country.

(287) When asking staff for any reasons not to include Growsafe as a requirement under AQ R15, the response from Ms. Parcell was that "compliance has never focused on Growsafe training",

noting that if the operator is properly trained, they will implement mitigation measures to prevent spray drift risk.

(288) When asked about the effectiveness of canopy versus shelterbelts in reducing spray drift, Mr. Praat stated that there is published data on this; including the differences in effectiveness of types of vegetation.

(289) Staff were then questioned regarding industry requirements regarding Growsafe certification. Ms. Parcell stated that both Zespri and NZ Avocado demand certification before they will accept fruit. She said, however, that local product operators and smaller growers don't all require Growsafe certification. She noted that pastural farmers are also not currently required to undertake Growsafe training, although Fonterra has it included in their Farm Management Plans.

(290) In response to a question relating to whether there is an update to NZS 4809:2004, Mr. Praat said that they are currently scoping an update and it is expected that this would be completed with 18 months.

Submitter 17, 055 – GENERA

(291) Genera was represented by **Mr. Keith Frentz** (a Consultant employed by BECA) and **Mr. Matt Hill** (an employee of Genera).

(292) Mr. Frentz highlighted perceived inconsistencies in AQ R20 – Recapture. He said that the requirement for 100% recapture of methyl bromide by 28th October 2020 was inconsistent with EPA requirements, and could never be achievable. He explained that the EPA requires recapture of methyl bromide by 2020 "to a level of risk to workers and the general public that is negligible", noting that this does not require recapture of all methyl bromide. He submitted that the use of recapture, as defined by the EPA, should result in fumigation being classified as a controlled, non-notified activity.

(293) Mr Frentz and Mr Hill described the procedures used to fumigate log stacks, containers, machinery and ship holds. In answering a Commissioner's question, Mr. Frentz noted that "break bulk" included machinery like tractors etc. that can require fumigation. He said that Genera uses roving hand-held PID monitors around the site, noting that there are fixed monitors on the boundary. He said that these monitors measure total organic compounds and do not detect methyl bromide solely.

(294) Mr. Frentz explained that recapture equipment involves forced air extraction and capture of methyl bromide using a chemical liquid scrubber or carbon filter.

(295) In response to a question of staff, Mr. Wise responded that there is merit in aligning with the Environmental Protection Authority (EPA) requirements for methyl bromide recapture. He explained that Genera currently operate under a resource consent and discussed the conditions of that consent.

(296) Mr. Wise then asked (through the Chair) for clarification from Genera concerning the measured concentrations of methyl bromide around fumigation areas relative to the Workplace Exposure Standard (WES), 8-hour average? Mr. Hill answered that the WES is 5 parts per million (ppm)(8-hour average), stating that Genera reports measurements on a monthly basis to both the Port and the Regional Council. Mr. Hill stated that at times there are short-term average concentration spikes measured at the perimeter of the fumigation areas that exceed the 5 ppm WES.

(297) Mr. Hill commented that when venting methyl bromide there is a coned off area that doesn't allow entry. He said that Plant & Food Research Institute has done recapture research for STIMBR, but that information is controlled by STIMBR.

Submitter 18, 044 – Hendrik Pieters

(298) **Mr. Hendrik Pieters** submitted on his own behalf as an orchardist neighbour of Pukepine Sawmills (PPK) He submitted that emissions from PPK spray painting and curing operations are causing adverse effects at his property. He asked that AQ R16 be strengthened, and supported the retention of AQ R18.

(299) Mr. Pieters referred to AQ R16, stating that he currently experiences poor air quality as a result of noxious and offensive odour discharges from the sawmill crossing the PPK property boundary. He questioned whether PPK was complying with its consent conditions, particularly in relation to forced air drying of spray-painted products. He noted that solvent type odours from the mill had increased in recent years and are typically experienced during summer in calm conditions or during light onshore winds. He is seeking a strengthening of the rule to ensure enforcement capability.

(300) Staff were asked by the Commissioners whether there is effective mitigation in place at PPK. Mr. Iremonger said that PPK has a consent, and is currently going through a renewal. He wasn't sure that the painting operation (including air drying) was part of this consent application. Staff said that there were two paint operations being undertaken on the site, and the issue is that one of those operations may be "loosely controlled".

(301) In answering a Commissioner's question, Mr. Pieters said that he did not consider a scale cut-off would be appropriate for inclusion in AQ R16.

Submitter 19, FS10 – GREG MISSON

(302) **Mr. Greg Misson** submitted on his own behalf as a hangar owner at De Havilland Way (Hangar 8), near the bulk materials handling operation at 101 Aerodrome Road.

(303) Mr. Misson stated that he is a business consultant, and a hobby pilot. He said his hangar was constructed in 2011, and the accommodation area had been tenanted. However, the tenant became ill, reportedly from respiratory issues, and left.

(304) Mr. Misson said his hangar is just 45m metres from the nearest access door of the bulk store at 101 Aerodrome Road. He noted that the dust issues are much worse in the summer season, noting a strong seasonal variance.

(305) Mr. Misson stated that he has only had one consultation with the staff from J Swap Contractors, being on 5th March 2015. He disagrees with Council staff, who say that dust isn't a hazardous substance. He said that animal feed (including palm kernel extract – PKE) handled at 101 Aerodrome Road has endotoxins (mould) and is a genuine health issue. He referred to low OSH limits for endotoxin exposure that are three orders of magnitude less than the 50µg/m^3 PM_{10} standard.

(306) Mr. Misson stated that he had made complaints approximately 30 times in the last year regarding dust from 101 Aerodrome Road, and was very frustrated that no action appears imminent. His recommendation is that the Plan Change shifts to an effects-based system. He submitted that a notified resource consent should be required for the site.

(307) The commissioners asked questions of clarification of Mr Misson, seeking confirmation if the Plan as recommended would require the bulk store operator to obtain a resource consent to discharge dust from the site. The same question was asked of staff.

(308) In response to questions, staff commented that no enforcement action has been taken to date in relation to the discharge from 101 Aerodrome Road. They noted that the lack of enforcement was in part due to the need to gather sufficient monitoring evidence regarding the effects of the dust discharge. It was noted that a PM monitor has now been installed at the perimeter of the bulk handling operation.

Submitter 20, FS16 – COLIN ALEXANDER

(309) **Mr. Colin Alexander** submitted as an individual. He stated that he is a hangar owner, who operates his business, Solo Wings, from a hangar at 2 De Havilland Way at the airport. He lives at an airport location approximately 1km from the hangar.

(310) Mr. Alexander stated that he has severely deteriorating health as a result of dust from 101 Aerodrome Road penetrating his premises. He tabled confidential medical records to substantiate his concerns, including a severe deterioration of his eye sight, which puts his pilot's licence in jeopardy. He employs six staff members, some of which have reported allergic issues. Mr Alexander also stated that penetration of dust within the hangar has caused corrosion issues for aircraft and significant cleaning expenses.

(311) Mr Alexander submitted that the plan should include appropriate tools to address the significant adverse effects caused by dust emissions at 101 Aerodrome Road.

Submitter 21, 007 – WESTERN BAY OF PLENTY DISTRICT COUNCIL (WBOPDC)

(312) **Mr. Matthew Leighton**, a senior Policy Analyst at WBOPDC, submitted on behalf the Council. He said that while WBOPDC is supportive of the thrust of this Plan Change, it was concerned with a few issues.

(313) Mr. Leighton queried the appropriateness of AQ P4 (a), saying that this clause should be amended to improve clarity.

(314) Mr. Leighton asked that AQ R21 – Free-range farming be amended to clarify the intent of the rule. He stated that the change recommended in the S42A report to address potential increases to existing operations is appropriate. However, Mr Leighton noted that WBOPDC did not submit on this point in either its original, nor its further submission.

(315) Mr. Leighton also asked that the definition of "intensive farming" be reconsidered. He said that to limit it to poultry farms and piggeries may unintentionally miss some other activities. He noted that the Draft National Planning Standards define intensive primary production as "primary production activities that involve the production of fungi, livestock or poultry that principally occur with buildings".

(316) Mr. Leighton stated that he was pleased that the s42A Report included a recommendation to add a 100-metre setback provision with regards to the open burning rule, but asked that the wording "urban property" and "urban properties" be removed from the Plan. In response to a question of clarification from the Panel, staff stated that the suggested amendment would be appropriate.

(317) With regard to agrichemical spraying, Mr. Leighton asked that AQ R15 (a) be altered to read:

> "(a) Where **agrichemicals** are sprayed on **public amenity areas** signs must be displayed at every entrance where the public usually have entry to the particular area where the **agrichemical** is being …"

(318) Mr. Leighton also asked that the definition of "Sensitive Area" be amended to read:

> "Sensitive **area** means land which ~~an activity that~~ is particularly sensitive to adverse effects associated with air contaminant discharges either due to the vulnerability of the ~~population~~ people in the area or specific natural environment area exposed to the contaminant, or due to the potential for prolonged exposure and may include:"

Submitter 22, 054 – TAURANGA CITY COUNCIL (TCC)

(319) Tauranga City Council was represented by **Ms. Karen Edlin** and **Mr. Joel Peters**.

(320) Ms. Edlin stated that she is currently employed at TCC as a Principal Strategic Advisor.

(321) Regarding crematoria, Ms. Edlin's verbal submission noted that TCC owned one crematorium at Pyes Pa, and she asked that existing crematoria (including replacements) be allowed for as a permitted activity. She seeks this to be explicit, and suggests an addition to AQ R3 for crematoria as a miscellaneous discharge.

(322) Ms. Edlin discussed the agrichemical spraying rules, focussing on "Definitions". She said that TCC would like "sensitive areas" to be changed to "sensitive activities".

(323) In relation to the open burning rules, Ms Edlin stated that TCC supported the amended 100-metre set-back from dwellings provision.

Submitter 23, 021 – JODIE BRUNING

(324) Ms. Bruning made an impassioned personal submission based around the use of "Anticipatory Governance". She said that she was undertaking research at Auckland University.

(325) Ms. Bruning stated that agriculture is a primary cause of environmental failure, and that chemical bioaccumulation is a significant concern. She stated that "The main reasons for failure to achieve good status are atmospheric deposition and discharges from urban waste water treatment plants".

(326) Ms Bruning advocated for the setting of exposure levels with regular monitoring of contaminants in air. She noted that the cost of monitoring equipment has reduced substantially in recent years. She sought that the plan prevent fumigation within 400m of schools. She stressed that there is a failure to interconnect discharges to air with those to land and water.

(327) Ms. Bruning quoted P.A Joseph, saying "An authority may unlawfully abdicate its statutory function by refusing or failing to act. A public body must not renounce its decision-making responsibility, nor preclude itself from inquiring into matters relevant to its inquiry[12]."

(328) Ms. Bruning urged decision-makers to be Future-Focused, and to insist on Best Practice in both frameworks and processes.

[12] PA Joseph, Constitutional and Administrative Law in New Zealand, 4th Ed., 23.2.3 p.972

8.4 DAY 4 of the Hearing – Thursday 25th October 2018

VENUE: SUDIMA HOTEL, ROTORUA

Submitter 24, 004 – PF OLSEN

(329) PF Olsen was represented by **Sarah Orion**.

(330) Ms. Orion stated that she is making this submission on behalf of the wider forestry industry, but in particular, on behalf of PF Olsen, Rayonier Matariki Forests, Timberlands Ltd, and Hancock Forest Management.

(331) Ms. Orion noted that within the Bay of Plenty region there are approximately 305,000 hectares of plantation forests, with 343 substantive forest blocs. She said that 85% of forests are less than 500 hectares in size, and so there are plenty of neighbours (in total 5,800 adjacent land owners).

(332) Ms. Orion stated that currently forest owners use the full 20 days allowed for spraying notification, providing sufficient time for contact, meeting and follow-up. She said that aerial spraying operations are used for both forest health, as well as weed control. She indicated that both letter-drops and door-knocking are used in the notification process. She said that typically there is a follow-up the day prior to spraying, aimed at key stakeholders.

(333) Ms. Orion stated that 62,000 hectares are sprayed annually, with only one incident (a notification failure) from the four major forest owners that she is aware of during the past 15 years. She considered that this incident occurred as a result of insufficient time available for notification. She was concerned that the incident rate might rise if the notification period was condensed.

(334) Ms. Orion concluded by saying that she can't find any rationale in the Plan for a decrease in the notification period from 20 days to 10 days, and any decrease in notification time would be likely to have adverse effects.

(335) Staff asked for clarification on the number of times, on an annual basis, that forests would typically be sprayed. Ms. Orion replied that in a warm, humid season it could be necessary to increase spraying, but over a 25-year lifespan of a forest it would tend to be up to 5 times annually, equating to approximately two weeks of spraying per year.

Submitter 25, 057 – STAKEHOLDERS OF METHYL BROMIDE REDUCTION INC (STMBR)

(336) **Mr. Ian Gear** submitted on behalf of STMBR. He explained that he was Wellington based, and STMBR is a forestry stakeholder body.

(337) Mr. Gear noted that forestry is a key driver of New Zealand's economy. He did, however, acknowledge the need to "take into account" environmental issues associated with fumigation.

(338) Mr. Gear emphasised that methyl bromide is not a greenhouse gas and that alternatives to this fumigant are limited. He commented that current phytosanitary treatments for export logs include methyl bromide and phosphine (only accepted by China, as is debarking). He stated that it is not practical to debark all logs, as this would create other issues. He said that China sees debarking as a risk mitigation method.

(339) Mr. Gear stressed that robust science is vital in addressing fumigation issues. He asked for consistency with rules, across the country. He said that his industry has invested $22m in research into alternatives to methyl bromide. He stated that this is funded using a levy system.

(340) Mr. Gear asked that regional councils be properly informed on this issue. He said that while methyl bromide is an ozone depleting agent, the sea, rice paddies etc naturally produce methyl bromide.

(341) Mr. Gear stated that taking a precautionary principle is not about taking away all risk. This just isn't possible, he said.

(342) Mr. Gear discussed alternative treatments to methyl bromide currently being developed. He stated that EDN has been identified as an alternative fumigant and is currently being vetted by the EPA. He noted that EDN doesn't persist in the environment and expects that EDN has a future for fumigation use, but he stressed that we shouldn't believe that methyl bromide can be removed completely from the toolbox. He noted that dual heating using electricity is being trialled and may become another option in future.

(343) With regards to recapture of methyl bromide, Mr. Gear applauded the work of Genera. He noted that nowhere else in the world have people been able to effectively recapture methyl bromide, and destroy it. An issue is the amount of activated carbon (7 to 10 tonnes) for every tonne of methyl bromide that is required. He said that this would result in a huge landfill requirement, which in itself is environmentally problematic.

(344) Mr. Gear stated that liquid scrubbing technology is also being developed. He stated that in July 2015, tests indicated that 85% recapture of methyl bromide was possible. He confirmed that recently recapture up to 95% was observed, but emphasised that 100% recapture was not a realistic expectation.

(345) In answering questions from commissioners, Mr. Gear stated that, at this time we should be aiming for 80% recapture of methyl bromide – noting that this could be consistently achieved using current technology. He said that we need to be reasonable as decision makers, noting that the EPA consider that the recapture requirements must be "fit for purpose".

(346) In response to questioning from the Panel, Mr Gear stated that he considered that the current EPA requirements for methyl bromide control are adequate.

Submitter 26, 037 - OJI FIBRE SOLUTION (OJIFS) & FS04 - WHAKATANE MILL

(347) Oji Fibre Solution & Whakatane Mill were represented by **Mr. Gill Chappell** (Legal Counsel for OjiFS), **Mr. Philip Millichamp** (Group Manager, Environment & External Relations for OjiFS) & **Ms. Adrienne Low** (Planner with Mitchell Daysh).

(348) Mr. Chappell stated that the term "avoid" is used in two key policies of relevance to OjiFS. These are AQ P2 (which relates to hazardous substances), and AQ P3 (which addresses the management of discharges). He stated that it is important for the plan to distinguish between those discharges where there is a clear intention to create a bottom line to "avoid" or "prevent the occurrence of" an activity, as opposed to those discharges where it is intended that as a result of a "fair appraisal of the objectives and policies as a whole" an activity might be granted consent.

(349) In regard to AQ P2 Mr Chappell submitted that the term "avoid" is in conflict with the term "best practicable option" in that policy. He sought removal of the reference to AAQGs in AQ P3. Mr. Chappell contended that this would create a framework that is unjustifiably more restrictive than the NESAQ.

(350) Mr. Millichamp stated the OjiFS is one of Australasia's leading pulp, paper and packaging companies, employing 1,700 people at its New Zealand facilities. He said that three quarters of its energy comes from renewable resources. He said that its discharges to air, namely products

of combustion and odour, are unavoidable. He stated that OjiFS was a regionally significant industry for the Bay of Plenty; noting that location is important, and that this is a strategic asset for New Zealand.

(351) Mr. Millichamp stated that Whakatane Mill fully support the OjiFS submission. In relation to the Tasman Mill, he stated that the Environment Court granted long-term consents for the discharges from the site in 2010. He emphasised that it is important for the Plan to provide for "reverse sensitivity" and prevent the encroachment of sensitive development. He noted that reverse sensitivity also needs to be taken into account in district plans.

(352) In responding to a Commissioner query, staff said that AQ P3(b) was written with discharges to the Rotorua Airshed in mind. This clause of the policy is intended to prevent discharges into an airshed that may cumulatively cause exceedance of the NES.

(353) Ms. Low said that reverse sensitivity is a key issue for OjiFS. She proposed new objectives to address the issues of concern, adopted from the Canterbury Air Regional Plan and the Auckland Unitary Plan.

(354) In relation to AQ P2, Ms Low stated that specific policy direction regarding hazardous air pollutants is not required. In respect of AQP3, she submitted that the exemptions allowed by the NES (such as replacement PM_{10} discharges) are not carried through to the policy.

Submitter 27, 034 – McALPINES ROTORUA LIMITED

(355) McAlpines was represented by **Ms. Deborah Ryan** and **Mr. Graeme Bell**.

(356) Ms Ryan is employed as a Senior Air Quality Consultant with Jacobs New Zealand Limited, and she stated that McAlpines agrees with the s42A Report's recommendations. She noted that renewal of the consent to discharge contaminants to air from the McAlpines site is in process.

(357) Ms Ryan was asked a question by a Commissioner as to whether there were any other antisapstain treatment chemicals that could be problematic if burnt. In response, she noted that some antisapstain chemicals contain copper that would be discharged, but that the antisapstain treatment used by McAlpines did not contain copper and was not expected to cause adverse effects when burned.

Submitter 28, 057 – ALLAN NEIL

(358) Mr. Allan Neil submitted on his own behalf, stating that he lived at 5 Hapi Street, Rotorua (within the Rotorua Airshed), and he was opposed to this Plan Change, because he operated a 34-year-old multi-fuel burner in his home, and didn't think he should have to replace it. He submitted that Regional Council staff have provided no evidence as to actual recorded effects of particulate matter in Rotorua.

(359) Mr. Neil contended that the Regional Council has not consulted with the Rotorua community in a reasonable and direct manner. He stated that staff are erroneously exaggerating the actual situation.

(360) Mr. Neil also contended that the PM_{10} monitoring station in Rotorua was not located in an appropriate site that was representative of the wider airshed.

(361) Responding to questions of clarification, staff member Ms. Marion Henton replied that (1) there has been substantive consultation over many years, and (2) regarding the siting of the

monitoring station, a lot of work went to ensure an effective location. She said that the highest PM_{10} concentration area was selected, as recommended by the Ministry for the Environment.

(362) Mr. Neil explained that his 34-year-old wood burner has operated annually 24/7 in winter. He said that his home has no insulation, so he burns wood during the day, and then fires it with coal overnight. Staff responded that the programme has been implemented over many years, and interest on loans for replacement burners has only been introduced recently. In response to questioning from the commissioners, staff assured Mr. Neil that there will be reasonable flexibility in timing for replacement burners, but it is essential that compliance is attained if we want to meet NES standards. Asked for clarification by the panel, staff confirmed that the plan rules would require replacement of approximately 3000 domestic solid fuel burners by September 2020 to meet the NES requirements. They accepted that the large number of burner replacements would be logistically problematic, requiring an implementation plan to be phased in by the council with some flexibility.

Submitter 29, 061 & 062 – SANCRA & CRADDOCK FARMS

(363) – **Ms. Karla Putt**, a consultant with Stratum Consultants, and **Mr. Stefan Craddock**, of Sancra & Craddock Farms submitted on behalf of the applicant.

(364) Ms. Putt explained that Sancra and Craddock Farms run free-range poultry operations, and want free-range farming to have a different classification to intensive farming. With regard to AQ R21 she submitted that free range farming has lesser effects than other listed activities. Therefore, she considered it should be treated differently with specific assessment criteria or separate policy direction. She supported the changes recommended in the S42A report that would allow existing free-range farming operations to continue without consent.

(365) Mr. Craddock stated that Sancra Farms operates a free-range farm in Rotorua District with a current capacity of 75,000 hens. He said that the maximum farm capacity on this site of 127 acres would be 100,000 hens. He commented that the farm was established in November 2015 at a cost of approximately $10 million. He noted that Craddock Farms has also obtained consent to build a 75,000-hen free range farm. He confirmed that free-range egg farming is growing as an industry in New Zealand.

(366) Mr. Craddock stated that the uncertainty around consenting was a substantial barrier to investment. He maintained that the RMA is now sometimes used as a way to stop developments by raising objections on the basis of environmental effect when the real objective is more around competition for land or land use.

(367) Mr. Craddock stated that the issue of odour is hugely subjective, and each of the FIDOL factors are debatable and arguable, difficult to clearly define, and subject to emotive viewpoints.

(368) In answering questions of clarification from Commissioners, Mr. Craddock said that Craddock Farms also has a site in Auckland. He stated that new policy direction specific to free range farming is required.

(369) Staff explained that there was no mention of scale in relation to free range farming in the Definition section of the Plan. They said that, based on MPI guidance, more than 100 hens would be considered a commercial activity.

Submitter 30, 052 – DIRECTOR-GENERAL OF CONSERVATION (DOC)

(370) The Director-General, on behalf of the Department of Conservation, was represented by **Mr. Angus Gray** (an RMA Planner at DOC), **Mr. Paul Cashmore** (a DOC Ranger) & **Mr. Graeme Silver** (an RMA Planner).

(371) Mr. Cashmore said that the Director-General's (on behalf of DOC) key issues related to agrichemical spraying notification. He stated that, because of the large number of pest plant sites being controlled across the Bay of Plenty, DOC is requesting more flexibility around its lead in time for the notification process. He noted that most spraying is undertaken by knapsack on the 165 sites currently controlled throughout the region. He submitted that typically neighbours are well removed and the risk of spray drift effects on them is usually small.

(372) Mr. Cashmore also advocated for notification only to be required if the spray site was within a setback distance from the boundary. He said this would reduce some of the burden imposed with notification currently. Where notification is required under AQ R15(4)(e), he requested a four-week notification period for hand held spraying on public amenity areas.

(373) Mr. Gray stated that Doc has only submitted on rule AQ R15. He said that DOC was generally supportive of the proposed plan, with the exception of the notification issue – noting that knapsack spraying didn't require notification.

(374) Mr. Gray explained that the Director-General submits that AQ R15(4)(e) should be amended so that spraying undertaken on public conservation land/public amenity areas is given a wider window of notification. He noted that this change would be consistent with the requirements of the Auckland Unitary Plan.

(375) In answering a question of clarification, Mr. Gray said that most notification was undertaken via the DOC website when work is planned on a reserve.

(376) In response to questioning from the panel, staff stated that the DOC recommendation for change to AQ R15(4)(e) is considered to be appropriate.

Submitter 31, 072 – THERMAL BREWING COMPANY (TBC)

(377) Thermal Brewing Company was represented by **Mr. Greg Brown** (Thermal Brewing owner), **Ms. Lara Burkhardt** (Legal Counsel with HOBEC) and **Ms. Ella Tennent** (an RMA Planner).

(378) Mr. Brown stated that he is the owner of Thermal Brewing Company Limited, which has owned and operated the Pig & Whistle Historic Pub for the past 23 years. He installed an open fire in the covered outdoor area in 2016 to increase the winter ambience that a fire creates. He stated that the fire is effectively carbon neutral because he is using wood from his 53-hectare farm at Okareka. The firewood is sold to the Pig & Whistle, and the proceeds allow the purchase of native plants to replace the weed infested area where the firewood originates.

(379) Ms. Burkhardt said that Thermal Brewing seeks a permitted activity status for this existing fireplace, on an 'exceptions' basis. She said that in 2008 the Regional Council developed and released a range of actions to reduce discharges of PM_{10} in the Rotorua airshed. This fireplace was installed in 2016, and no consent was needed at that time. She noted that if it had been built indoors it would never have been given a consent, and for this reason she submitted that "exceptional circumstance" should prevail. She added that the Plan allows exceptions for indoor open fires in heritage buildings.

(380) Ms. Ella Tennent argued that the outdoor open fire should be permitted under AQ R12. She submitted that it should be allowed as an exception because the bylaw didn't control outdoor open fireplaces within the City Zone. Consequently, the Plan represents a large shift in the status of outdoor open fires in Rotorua.

(381) Mr. Brown explained, to a query from a Commissioner, that the fireplace is mainly used in the period between late April and mid-September, noting that it is consistently used from May to August. He stated that during winter weekends the fire can be operated all day during opening

hours. He conceded that it is a unique feature of his establishment and does give him a "trade advantage".

(382) Mr. Brown explained that he did check with both councils in 2015 to ensure that he didn't need a resource consent for this fireplace at the time of installation. In response to a question from the panel, he stated that conversion of the fireplace to burn gas was an option if the Plan prevented ongoing wood burning.

Submitter 32, 033 – BALLANCE AGRI-NUTRIENTS

(383) Ballance Agri-nutrients was represented by **Mr. Robert Larman**, Operations Manager at Balance & **Ms. Stephanie Hantler**, Environmental Planner at Enspire.

(384) Mr. Larman noted that Balance has 800 staff, and 19,000 shareholders across New Zealand. He said that they produce over 300,000 tonnes of fertiliser annually, and that all fertiliser is loaded within the buildings to minimize emissions. He said that wherever possible they keep the storage doors shut during both loading and unloading. He stated that recent upgrades had been made to the Mount Manganui plant to significantly reduce SO_2 emissions and that SO_2 from the acid plant stack is now continuously monitored.

(385) Ms. Stephanie Hantler noted that Ballance supports the majority of the recommendations from the s42A Report. However, she asked for some amendments to include a definition or explanatory text regarding the term "mauri" as it specifically relates to air quality. She also sought provisions that specifically address reverse sensitivity issues in the Plan.

(386) Ms. Hantler said that the link between AQ R1 and AQ R22 is vexing as to how these rules inter-relate. She stated that AQ R22 places the burden of proof on to the discharger, which is a significant step change from the operative Air Plan. She considered that R22 should only apply to industrial and trade activities that can't comply with R1. She believes that it is appropriate to continue to provide for bulk storage activities such as fertiliser depots as a permitted activity, subject to there being no noxious or dangerous, offensive or objectionable effect beyond the boundary. She agreed to provide further detail in writing regarding the number and storage capacity of Ballance fertiliser bulk stores in the region.

8.5 DAY 5 of the Hearing – Friday 26th October 2018

VENUE: SUDIMA HOTEL, ROTORUA

Submitter 34, 076– FEDERATED FARMERS NZ (FFNZ)

(387) Federated Farmers was represented by **Mr. Martin Meier** and **Mr. Darryl Jensen**.

(388) Mr. Meier commended staff, saying that PC13 was a very good plan, and the s42A Report indicates that staff have listened. He said that 2 issues remain, and these are (1) Burning of plastics, and (2) Agrichemical spraying.

(389) Mr. Meier said that agricultural bale wrap can only be recycled if it is clean and dry. He stated that this just isn't often possible with pastural farming. He noted that burning and burying waste on farms is a last resort that farmers are sometimes forced into by a lack of other practical options and a desire (and need) to keep farms looking tidy. Mr. Meier said that FFNZ invites the Regional Council and territorial authorities to investigate alternatives and practical options for disposing of agricultural wrap and other recycling initiatives. He submitted that disposal to landfill has adverse effects and that limited burning of agricultural wrap should be

allowed where recycling is not available. In relation to AQ R6, he sought that the term "dwelling" be qualified to refer to "dwelling on another property".

(390) In answering questions of clarification, Mr. Meier said that recycling of bale wrap was a better option than burning but is not currently available in all parts of the region. Asked whether there are burning practices that would mitigate the risk, he said this often happened on larger properties, where close neighbouring properties are well removed from the burn site.

Submitter 35, 029 – ENVIROSOLVE

(391) **Dr. Rene Haeberli** submitted on behalf EnviroSolve. He stated that he lives in Raetihi, and supplies ultra-low emission burners (ULEBs), electrostatic precipitators (ESPs) and biomass burning boilers.

(392) Dr. Haeberli explained that he distributes the bionic fire – the first fully automatic down draught ULEB available in New Zealand, approved under Canterbury Method 1 (CM1) testing regime specifically designed for ULEBs by Environment Canterbury. He explained that particulate matter emissions from traditional wood burners are tested according to NZS 4012/4013. His concern is that the NZS 4013 tests are only done with pine (a soft wood), whereas in reality most burners use a combination of soft and hard wood. He said that BOPRC has changed the PM limit for this test method from 0.7 to 0.6g/kg of wood burned. He expressed concern that the Bionic Fire ULEB would be excluded because of tested PM emissions of 0.7g/kg under NZS 4013, whereas "real life" operating emissions measured under CM1 are significantly less than from modern NES compliant wood burners. Dr Haeberli requested that the rules in the Plan be changed to allow for the installation of ULEBs in circumstances where modern wood burners are permitted.

(393) Dr. Haeberli also described the Oekotube ESP units that can be retrofitted to the flues of domestic solid fuel burners to reduce PM emissions. He described tests demonstrating the effectiveness of these ESP units in removing PM from the discharge. He submitted that rules in the Plan should be changed to allow for ESPs. With regards to modern biomass boilers, he noted that small PM emission concentrations of less than 50mg/m^3 can be achieved, significantly less than the permitted activity PM limit of 400mg/m^3 for small boilers in the Plan. He considered that the Plan should allow for new technology to be adopted.

Submitter 36, 045 – FONTERRA

(394) Fonterra was represented by **Mr. Mark Crisp**, an Environmental Planner at Mitchell Daysh Ltd, and accompanied by **Ms. Abbie Fowler** (also from Mitchell Daysh) and **Mr. Ryan Park** (a Fonterra Company Manager).

(395) Mr. Crisp stated that he has undertaken work for Fonterra for 25 years, including for the Edgecumbe Site. He explained that Fonterra seeks enabling objectives in the Plan, consistent with those in the Auckland Unitary Plan.

(396) Mr. Crisp stated that Fonterra disagrees with the contention in the s42A Report that the plan change provides for appropriately managed discharges, on the basis that there are no prohibited activities.

(397) Mr. Crisp contended that AQ P1, as amended in the S42A report, doesn't adequately address the points made by Fonterra. He also said that Fonterra disagrees with the wording in AQ P2, and suggests the following amendment:

Hazardous substances

> Seek to avoid adverse environmental effects associated with the discharge of hazardous substances and hazardous air pollutants to air and otherwise ~~where avoidance is not possible~~, remedy or mitigate the ~~discharge~~ effects of such discharges using the best practicable option.

(398) Mr. Crisp said that Fonterra seeks that regionally significant industry be included in AQ P3 (e), and that a new definition be inserted. He also sought an addition to AQ P4 to specifically allow for consideration of reverse sensitivity effects. He requested that an amendment be made to either AQ R3 or the definition of liquid waste.

(399) Mr. Crisp asked that regional consistency with the Waikato Region be considered in terms of the rules in the Plan.

(400) With regard to the rules, Mr. Crisp stated that AQ R3 was effectively one step forward, and two steps backwards. He submitted that while this rule allowed for wastewater discharge as a permitted activity, the definition of liquid waste under the Plan would default it to a discretionary activity, requiring resource consent.

(401) Regarding Reverse Sensitivity, Mr. Crisp stated that the Edgecumbe site has undergone a $61m upgrade of its wastewater and effluent operations, and the abatement notices issued were not related "to air" but to discharges to land/water.

(402) In response to questions from the panel, Mr. Crisp discussed various setback distances from dairy plant wastewater discharges to land that have been established through the consent process. He agreed to provide a copy of a recently granted consent in the Rangitaiki area that details mitigation measures and setbacks imposed in that case. He submitted that effects of irrigating wastewater are well known and conditions could be set as part of a permitted activity rule.

(403) Mr. Crisp also requested changes to the definition of "noxious or dangerous", seeking removal of clause (d).

(404) In responding to a Commissioner question asking if there have been any odour complaints in relation to Fonterra's current consents to discharge wastewater to land, staff responded that they didn't believe so. It was noted that Fonterra is trying to reduce discharges to water (via the Rangitaiki River).

Submitter 37, 010 – TOI TE ORA

(405) **Dr. Jim Miller** and **Ms. Annika Davis** submitted on behalf Toi Te Ora. Dr. Miller explained that Toi Te Ora covers both Health Boards (BOP and Lakes).

(406) Dr. Miller stated that it is hard to clean up the air, so we should look to be preventative and precautionary. He said that it just isn't acceptable to cause harm to human health. He stated that it is important to address cumulative effects in the Plan.

(407) Dr. Miller commended the s42A Report, including the revised recommendations. He said that the New Zealand ambient air quality guidelines do need to be given a high level of importance. They shouldn't be seen as a target, but instead we should continue to improve, which will result in improved human health. He considered that the AAQGs are sufficiently robust to include in the Plan.

(408) When asked about the use of methyl bromide, Dr. Miller responded that it is known to be a hazardous substance that should only be used in a highly controlled workplace. He said that mostly all parties seem to take the relevant guidelines very seriously, and he hasn't any reason

to believe there is any inappropriate use. When asked about health issues regarding methyl bromide around the Port, Dr. Miller said that human health effects can be a long-term issue, and these can be very hard to identify and quantify.

(409) Dr. Miller was then asked about the health effects of breathing in palm kernel dust. said he responded that palm kernel and other organic dust is known to cause adverse health effects, just because of the small size of the particles. He also said that organic substances can cause allergic reactions, with adverse outcomes.

(410) In response to a question about crematoria, Dr. Miller stated that the compromise in the Plan to only require consent for substantive alterations in the operating use of existing crematoria seemed sensible. He also said, in response to a Commissioner question about potential mercury accumulation, that he hasn't considered it to be a significant issue.

(411) The hearing was adjourned at 11:41 am.

9.0 SITE VISITS

(412) The Hearing Committee conducted three site visits. The first site visit was to the Mount Maunganui Industrial area. The second site visit was to the monitoring site in the Rotorua Airshed, and the third site visit was to the Port of Tauranga.

SITE VISIT TO MOUNT MAUNGANUI INDUSTRIAL AREA

(413) The first site visit was at the conclusion of the first days hearing in Tauranga on 15th October 2018. All three Commissioners undertook this visit with staff.

SITE VISIT TO ROTORUA AIRSHED MONITORING STATION

(414) The second site visit was conducted at the conclusion of the first day of the Rotorua section of the Hearing process. Commissioner von Dadelszen & Iseli undertook this site visit with staff.

SITE VISIT TO GOLEN BAY CEMENT & PORT OF TAURANGA

(415) The third site visit was conducted on Tuesday 6th November. This site visit was undertaken by Commissioners' Iseli and McDonald.

10.0 MATTERS FOR CONSIDERATION

10.1 Staff responses to the Submission Process

(416) Following the Hearing a number of questions were raised by the Proposed Plan Change 13 Air Quality Hearings Panel on 16 October 2018. The following is advice provided by staff in response to those questions:

RULE AQ R1(C), RULE AQ R3, RULE AQ R21, AND RULE AQ R22 – THE BALANCE BETWEEN THESE PROVISIONS

i. *The Hearing Panel is interested in the balance between permitted and consented activities under these rules, and whether there are additions to the rules that would strengthen the control around activities of concern.*

ii. *Are provisions that address the scale of activities useful and, if so, what might they be?*

iii. Are there any common areas of complaint about activities that could be added to the discretionary list - so that it is clear that these do not fall into the permitted activity area?

iv. Rule 3 permitted activity list: Are there some activities that could be added to the list because they are not caught elsewhere. Things like small-scale composting and bulk cargo handling (non-dust)?

STAFF RESPONSE:

(417) Staff advised that bulk solid material handling has been a significant source of complaints in the region, as indicated by submissions. An option open to the Panel is to delete Rule AQ R22 as presented in the section 42A report, because it would potentially require consent from a wide range of minor discharges that are not causing significant adverse effects, and formulate a new Rule 22 that specifically addresses dust emissions from the storage and handling of bulk materials. Such a rule could be formulated to apply to activities above a scale threshold (tonnes per hour handled) with distance from sensitive areas considered as an associated factor.

AQ R22 – CROSS BOUNDARY EFFECTS

(418) *Please provide advice on the idea of adding a qualifier to AQ R22 to the effect of "to the extent that it causes adverse effects beyond the boundary".*

STAFF RESPONSE:

(419) The addition of the qualifier would ensure that the rule only targets those activities that cause adverse effects beyond the boundary. This would not inadvertently capture activities that are causing no adverse effect. However, it would be subject to uncertainty and would not resolve the dust issue at Aerodrome Road that was the subject of numerous submissions, as the dischargers and the complainants in that case are within the same legal boundary.

(420) This second issue could be resolved by the addition of bulk cargo handling activity to AQ R21, which would capture the activity of concern at Aerodrome Road. However, this may also capture other bulk handling by operators that do not cause significant dust issues, such as smaller fertiliser distribution centres, and thus a scale limit may be appropriate.

ACTIVITIES OF CONCERN

(421) *Please provide information on the number/types of activities that are of concern in the sense that they are industrial and trade activities that are subject to complaints or that are known to Council as causing problems.*

STAFF RESPONSE:

(422) This question was answered verbally as part of discussions at Deliberations.

MITIGATION OF SPRAY DRIFT IMPACTS

(423) *Are there "infrastructure" methods – as opposed to management techniques – for reducing spray drift and protecting sensitive uses (such as schools)?*

STAFF RESPONSE:

(424) The only current infrastructure methods available to prevent or mitigate spray drift are shelter belts and screens, including structures that fully enclose orchards. The cost of these are significant and generally there are structures already in place for orchard boundaries. There may be some variability in quality however.

AQ R6 - OPEN BURNING

(425) *Please explain further the rationale behind the open burning limitations relating to urban land and the 100-metre distance. Are there other options for identifying sensitive uses – such as schools that may be useful?*

STAFF RESPONSE:

(426) The original proposed rule only referred to open burning on urban properties. Urban burning or backyard burning is causing significant adverse effects on amenity in built up areas and there are no practicable methods for mitigating the adverse effects. Addressing this adverse effect has been the policy intent from the first drafting, and there has been no opposition to this throughout consultation (provided recreational use was not affected).

(427) The rule hinges on the definition of 'urban property' which has been challenging to establish. If the NESAQ cut-off of 2 hectares is used, it would include smaller rural properties which wasn't the intent. Adding in the requirement for a connection to municipal sewerage narrowed the capture to urban areas. Staff accepted that some urban areas would not be covered by this rule as they did not have municipal sewerage schemes.

(428) Submitters 7 and 54 requested the replacement of 'urban property' with a setback distance of 100 metres from dwellings. This would be more effects based but would capture those smaller rural properties which the definition of 'urban property' was specifically designed to avoid. It broadens the restriction on open burning to include rural areas. This is a change from the original policy intent. Many members of the community may not have had an opportunity to submit on this issue as it was not in either the draft or proposed plan change and was only raised in a submission.

(429) However, although the emphasis was on urban burning, the policy intent was still to manage open burning in situations where dwelling houses are located in close proximity to areas where burning is carried out. As discussed in the s.42A Report (set out in page 90 paras 612-613), this policy intent should include houses in rural areas as they will experience the same adverse effects as those in urban areas (potentially more so, due to the larger scale of burnoffs carried out on production land -for example shelter belt trimmings). In the report, staff recommended the inclusion of the 100-metre setback for this reason, however staff recommended retaining the 'urban property' requirement as this is a clear-cut assessment for enforcement purposes and is consistent with the original policy intent.

(430) Upon reflection, it was advised that the inclusion of both terms is unnecessary. The 100-metre setback from dwellings overrides the definition of 'urban property' and includes the smaller rural properties that the definition of urban property was designed to exclude.

(431) The Panel have three options:

(a) To retain the amended rule as set out in Version 6.0 of the Plan Change with reference to both urban property and the 100-metre setback, accepting that the urban property definition is redundant as the 100-metre setback overrides the requirement.

(b) To retain urban property and remove the 100-metre setback, accepting that the definition of urban property does not capture all urban areas (but will be covered by AQ R1).

(c) To retain the 100-metre setback and remove urban property, accepting that this broadens the coverage of the rule to include smaller rural properties.

Staff recommend option (c).

(432) Staff also recommend adding "neighbouring" before dwelling house, to ensure the house on the property where the fire is located is not included. This has been requested by submitters.

(433) Other types of sensitive areas have not been considered for inclusion in this rule. Smoke and odour from backyard burning are primarily amenity issues rather than a health issue, therefore protecting dwelling houses where people eat, relax, sleep, hang washing, entertain etc is considered to be the main goal here. Where open burning is affecting the amenity value of schools or other similar activities, AQ R1 may be used.

AQ R10 – BURNING OF MATERIALS

(434) *Please explain the logic behind the exclusion in (g). Would different wording assist implementation of the Plan Change provisions?*

STAFF RESPONSE:

(435) The exclusion of fuel burning equipment in (g) has been added in response to submission point 34-7 (McAlpines Rotorua). As set out in this submission point, coal contains trace heavy metals, as listed in condition (g); therefore, the use of this fuel in fuel burning equipment in accordance with permitted activity rule AQ R18 is in conflict with this non-complying activity. The exclusion removes this conflict. In addition, submission point 34-3 requested either the amendment of condition (a) to allow burning of timber treated only with antisapstain compounds, or the inclusion of a definition of treated timber which excludes timber treated only with antisapstain compounds. Staff recommended both changes, however one is now redundant. Therefore, staff recommend that condition (a) is amended to remove the phrase "…where timber is used in fuel burning equipment or…" as this issue has been resolved.

AQ P7 – EXCEPTIONAL CIRCUMSTANCES

(436) *In policy AQ P7 - how is the phrase "Exceptional circumstances" expected to be implemented?*

STAFF RESPONSE:

(437) The dictionary definition of 'exceptional'' is 'unusual, not typical', therefore staff expect that solid fuel burners that are used in any circumstance that is unusual or not typical fall into this category, for example the burner in the Pig and Whistle pub. The implementation of this framework would be through a resource consent under Rule AQ R14.

(438) It is not realistic to provide further definition of the circumstances where the term would be applied as, due to the nature of the situations, they will be different and to a large degree unknown.

AQ R16 – SPRAY-PAINTING

(439) *The spray-painting rule is focussed on the use of booths to control discharges. Where the use of spray booths is not possible (for example, spraying transmission pylons) or spray painting is of a temporary nature how would the Proposed Plan Change provisions be implemented? Are there other options to provide an alternative rule pathway?*

(440) *Is there any advice on a cut-off for scale? For example, is there the ability to use a "litres per hour" as a criteria? Do staff have any commentary from the Compliance monitoring team around spray painting and if a scale approach would be useful.*

STAFF RESPONSE:

(441) Staff have recommended providing for structures that cannot be painted using booths in the Section 42A report (page 72 paragraph 491) and recommend amendments to this effect. Using

a litres per hour approach could be difficult to determine and enforce. However, staff verbally recognised that such an approach is used in other Air Plans.

AQ R18 – SPECIFICITY OF RULE

(442) *Is there scope to amend rules to specify limits for discharges – for example sulphur under AQ R18 (1)(c) or particulate matter under AQ R18(d)(iii)?*

STAFF RESPONSE:

(443) Submission point 26-24 has requested for consideration of the requirement for existing burners to meet higher standards, for example by improving the type of fuel.

(444) Submission point 48-6 (Lawter) has also requested the exclusion of new discharges of particulates in the Mount Maunganui area.

AQ R21 (F) COMPOSTING

(445) *Composting manufacturing operations re captured under this provision however it appears that significant users of compost are not. Was it intended that the use of compost was to be captured under this provision? Is there alternative wording and scope to amend this rule?*

STAFF RESPONSE:

(446) Due to the issues with odour discharged from large mushroom growing operations in other regions, the term "mushroom based processes" was added to ensure that this type of activity was assessed by resource consent to avoid similar difficulties. However, it was not intended to broadly target significant users of finished compost and therefore the term can be removed.

(447) Staff are unaware of current issues involving large scale use of compost. One recent issue has emerged with odour from pure chicken manure spread on land as fertiliser. This can be addressed through AQ R3 or AQ R1 and no amendment to this rule AQ R21(f) is required.

AQ R12-14 – TREATMENT OF ULTRA LOW EMISSION BURNERS

(448) *Can* Canterbury Method 1 *be used to allow Ultra Low Emission Burners that do not meet the NES thresholds being sought by the Plan Change – specifically the 0.60 g/kg?*

STAFF RESPONSE:

(449) ULEBs are a type of wood burner and are already permitted under the plan change provided they comply with rule AQ R12(d) which includes having an emission rate (measured according to the NZS laboratory standard method) of 0.6g/kg or less.

(450) Canterbury Method 1 can be used to specifically define ULEBs in the plan change to support specific rules for this subset of wood burners. The definition of a ULEB is a burner that complies with emission and efficiency criteria when measured using CM1. Therefore, PC13 can define a ULEB in a similar way. However, it would need to reference outside the plan to a method that is included as Schedule 9 in another council's plan (the Canterbury Air Regional Plan). This represents a procedural risk in the event that CM1 is amended or removed, but this is judged to be a minor risk. Alternatively, the plan could reference a list of Authorised ULEBs compiled by the Regional Council, as Nelson City Council has done in their plan.

(451) When considering this, the Panel should note the following:

In order to be installed and used in Canterbury's Clean Air Zones, ULEBs must have emission rates of 0.77g/kg or less when tested using Canterbury Method 1 (which includes 'real-life' burning conditions). To comply, the burner must be designed to burn cleaner even when using wet wood and in low burn phases. Therefore, when ULEBs are tested using the standard laboratory method, where wood is dried and cut to specific requirements, they have significantly lower emissions, ranging from 0.1 to 0.36 g/kg in most cases.

(452) The Bionic ULEB distributed by EnviroSolve Limited is an anomaly. Its emission rate, when tested using the NZS laboratory method is 0.7g/kg, almost the same as the emission rate when tested under CM1. This appears counter-intuitive and this burner should be treated with caution until more is known about emissions from this brand/type of burner.

AQ R12-14 – NEW AIR QUALITY TECHNOLOGY

(453) *Is there a consenting pathway (for example discretionary activity) for new technology (e.g. secondary control emissions devices, such as ESPs) that may arise where this supports the objectives of achieving cleaner air for Rotorua/Bay of Plenty?*

STAFF RESPONSE:

(454) The overall goal of the Rotorua burner rules AQ R12-14 is to meet AQ O2 by phasing out all non-complying burners by early 2020.

(455) Environment Canterbury has included a restricted discretionary rule to allow a "small-scale heating appliance burning solid fuel and fitted with a secondary emission reduction device". This allows a consenting pathway for these devices within Canterbury's Clean Air Zones.

(456) The Panel should note that Environment Canterbury has had rules targeting older burners in their Clean Air Zones for several years and air quality in these zones has improved. This leaves Environment Canterbury with the luxury of being able to take more risks with their rule framework and to allow options.

(457) The Rotorua Airshed is not yet at this stage as it is breaching the NESAQ and will continue to do so if old, non-compliant burners are not phased out. The primary method to achieve this is AQ R14. Therefore, staff do not recommend any change to this rule that allows secondary emission reduction devices to be fitted to these older burners.

(458) However, to allow for situations where secondary emission reduction devices may be an option, the Panel may consider an additional discretionary activity rule for woodburners fitted with secondary emission reduction devices. Staff recommend that this be restricted to only to woodburners (not coal or multi fuel), installed after 1 September 2005.

(459) The rules could also remain silent on this issue, and the use of secondary emission reduction devices would be considered as an exceptional circumstance under AQ R14.

BULK SHIP OFF-LOADING

(460) *How is bulk handling off ships dealt with under the Plan Change currently? Is there scope via submissions to provide any further attention to this issue?*

STAFF RESPONSE:

(461) Bulk handling off ships is carried out in the coastal marine area (CMA). While this is known to be an issue, no specific rules have been proposed to address this. This is consistent with the approach approved by the Regional Council to not include specific rules for the Mount Maunganui area at this stage.

(462) Until this airshed approach is developed, these discharges are managed by AQ R1 or AQ R2. It was recognised that this issue could be addressed by a new general rule in relation to handling of bulk solid materials.

(463) Submission points do not specifically relate to bulk handling of materials from ships. However, there submissions expressing concern about air quality from discharges in the Port area in general.

AQ R21 – FREE-RANGE FARMING

(464) *Is there an appropriate permitted activity scale for free range farming e.g. 100 chickens (consistent with MPI guidelines)?*

STAFF RESPONSE:

(465) This question was answered verbally as part of discussions at Deliberations. After discussion the Hearing Panel considered that there does need to be a minimum activity scale for poultry birds, and this was set at 100.

AQ R20 – METHYL BROMIDE

(466) *The Plan Change implies 100% recapture by the way it is worded: "capturing fumigant so it is not released". Is the Plan Change in conflict with EPA requirements in any way? Can the Plan Change be linked in some way to an EPA standard?*

STAFF RESPONSE:

(467) The basic policy intention of PC13 regarding the use of methyl bromide is to enforce the best practicable option, which at this stage, is recapture as indicated by the EPA reassessment recommendations. Therefore, the rule AQ R20 provides a tiered approach. Where recapture is applied, use of methyl bromide is discretionary. This was intended to encourage recapture by providing an easier consenting pathway. The use of methyl bromide without recapture is non-complying, which means assessment of the consent application has to pass the "gateway" test of section 104D of the RMA which is more stringent. The overall intention of this was to provide support in the plan for the direction Council is already enforcing through resource consent conditions requiring recapture of methyl bromide.

(468) Determining which activity status applies depends on the definition of "recapture". The definition proposed in PC13 is not identical to the one provided in the EPA reassessment recommendations and this has created considerable concern for both staff and the Commissioners. It is recognised that the proposed wording (in the definition) implied a 100% recapture which is not feasible.

(469) Defining what recapture means is difficult due to considerable uncertainty as to whether it is possible to carry it out to the level indicated by the EPA in the reassessment recommendations.

(470) Ultimately it is not necessary to be this precise, as the definition is only needed to determine whether the activity is discretionary or non-complying. In both cases it needs a consent and the fine details of recapture would be determined through consent processes.

(471) Compliance staff do not fully agree and there is a concern that including a less precise definition of recapture will lead to difficulties in future consent processes as the "looser" definition in the plan change may provide a pathway that conflicts with the EPA and may create difficulties for Council staff when considering consent applications and enforcing current consent conditions.

(472) Following discussions, it is clear that the only reason recapture is included is to determine whether the use of methyl bromide is discretionary or non-complying. In this case, the difference between these two activity statuses is fine. Therefore, there is no specific need to provide the two-tiered structure and it is recommended that AQ R20 is amended to read "the discharge of contaminants to air from fumigation for quarantine application or pre-shipment application (including the use of methyl bromide), is a discretionary activity."

(473) Given its substantial simplification rule AQ R20 could be condensed into AQ R21.

(474) The definition of recapture would therefore no longer be required and could be removed in its entirety.

(475) Staff are comfortable that a discretionary activity status is appropriate for the use of methyl bromide and any other fumigant. Details regarding recapture or other best practicable options can be discussed and assessed through the consenting process. Nevertheless, staff verbally recognised that the tiered approach proposed in the plan could be retained and would offer guidance to consent staff, subject to a revised definition of "effective recapture".

11.0 PANEL RECOMMENDATIONS

(476) In making its recommendations, the panel considered written submissions and further submissions, the council summary report of these submissions, verbal submissions, the staff-produced section 42A report and evidence presented at the hearing.

(477) In terms of "reasons" for its decisions, the panel has considered the Section 42A discussion and recommendations and, where appropriate, made reference to that report. Where changes to the section 42A recommendations have been made, the panel's report notes both the change and reason. Where no change to PC13 is recommended over the notified version and no comment is provided the panel relied on Council's section 42A report, and no further comment has been made in this decisions report.

(478) The panel has considered and supports the section 32AA report prepared by staff in relation to the more significant changes recommended by the panel.

(479) The following recommendations are made by topic as detailed below.

(480) It should be noted that the sections below show **those changes recommended by the panel during deliberations as track changes (redline/strikeout) in red font.** Any change recommended by staff in the section 42A report (as shown in the staff recommendations version 6.0 of PC13 presented to the Hearing Panel), and not amended by the panel during deliberations, are shown in grey text. This allows readers to track all changes made to the provisions since public notification of version 4.0, but highlights the most recent changes made by the panel.

11.1 AQ O3 Local air quality

Submission Points:	7-2, FS8-16, FS13-14, FS20-3, FS21-29, 17-3, FS21-21, 19-3, FS8-17, FS13-15, FS23-6, 21-1, FS8-3, FS8-18, FS13-16, FS20-4, 26-3, FS21-22, 31-1, FS21-23, 33-3, FS5-3, FS8-19, FS12-8, 36-4, FS21-24, 37-4, FS21-25, 45-3, 50-7, FS21-26, 51-3, 58-3, FS8-20, 66-3, FS21-27, 67-4, 68-3, FS21-28, 76-2, FS8-21.

(481) This objective sets out a clear environmental outcome, but allows considerable room for movement to achieve the outcome. It was derived from Section 5 of the Act and allows for the full hierarchy of management options for adverse effects – avoid, remedy or mitigate. Based on consideration of submissions, including from Horticulture NZ, the Hearing Panel decided to amend this objective so that it is specific to effects on the receiving environment, rather that the environment in general. This change recognises that various receiving environments have differing sensitivities and it is appropriate to take into account the nature of the receiving environment relevant to each case.

(482) AQ O3 to read as follows:

> Sustainable management of discharges of *contaminants* to air according to their adverse *effects* on human health, cultural values, amenity values and the receiving *environment*.

11.2 AQ P2 Hazardous substances

Submission Points:	19-5, FS21-35, 21-5, FS8-23, FS13-21, FS21-32, 22-1, FS21-36, 26-5, FS21-37, 30-3, FS8-24, FS12-7, FS13-22, FS23-10, 31-2, FS7-1, FS13-23, FS20-14, FS21-33, FS223-11, 33-5, FS21-38, 36-6, FS3-4, 37-6, FS8-25, FS10-2, FS15-2, FS16-2, FS17-2, 456, FS7-2, FS13-24, 48-1, 51-4, FS21-34, 58-14, FS8-26,67-6, FS7-3, FS8-27, FS10-10, FS13-25, FS15-10, FS16-10, FS17-10, FS23-12, 68-5, FS21-39, 76-7, FS8-28, FS10-33, FS15-34, FS16-34, FS17-34, FS20-27

(483) AQ P2 sets out the policy approach for management of the discharge of hazardous substances. This policy was adapted from Policy 3 of the operative Regional Air Plan which manages the discharge of hazardous air pollutants.

(484) After considering the submissions, and in particular those of Fonterra (Submitter 045), the Hearing Panel decided to seek the avoidance of adverse effects of discharges, instead of the discharges alone. The amended policy is less restrictive, recognising that it is not feasible to avoid all discharges of hazardous substances and hazardous air pollutants to air. The changes to AQ P2 are as follows:

> Seek to avoid adverse *effects* from discharges of **hazardous substances** and hazardous air pollutants to air and where avoidance is not practicable~~possible~~, remedy or mitigate the adverse *effects* of the discharges using the *best practicable option.*

11.3 AQ P3 Management of discharges

(485) **Clause (b)**

Submission Points:	7-4, 10-1, FS8-41, FS20-13, FS20-15, 22-4, FS7-7, FS23-21, 30-15, FS22-15, FS23-22, 36-20, FS5-6, FS23-23, 37-13, FS10-5, FS13-31, FS15-5, FS16-5, FS17-5, FS22-9, 48-15, 50-22, FS23-24,58-15, FS8-42, 67-20, FS7-8, FS8-43, FS10-15, FS13-32, FS15-15, FS16-15, FS17-15, FS22-14, FS23-25

(486) After considering various submissions that it was overly stringent, the Hearing Panel agreed to delete the words 'may contribute to' from AQ P2 decided to seek the avoidance of adverse effects of discharges, instead of the discharges alone. The amended policy is less restrictive, recognising that it is not feasible to avoid all discharges of hazardous substances and hazardous air pollutants to air. The changes to AQ P2 are as follows:

(b) avoid the discharge of *contaminants* at a rate or volume that may ~~contribute to, or~~ cause an exceedance or breach of the *ambient air* quality standards of the ~~NESAQ~~ National Environmental Standards for Air Quality (or its replacement or amendment). ~~or exceed the health-based values of the AAQGs.~~

(487) **Clause (d)**

Submission Points:	8-13, FS21-44, 22-2, 30-16, FS13-33, 33-6, FS8-31, FS26-2, FS30-10, 36-21, FS7-9, FS30-11, 37-14, FS8-44, FS13-34, FS21-55, 45-19, FS8-45, FS23-26, 50-24, FS8-46, FS30-12, 58-46, FS8-47, FS30-13, 66-5, FS30-14, 67-21, FS7-10, FS30-15

(488) Include the word "industry" after infrastructure, to read as follows:

(d) avoid, remedy or mitigate the discharge of *contaminants* that may cause adverse *effects* on regionally significant **infrastructure**/industry

11.4 AQ P4 Matters to consider

(489) The Hearing panel agreed with the s.42A Report that this policy is not directive and allows for considerable flexibility when implementing. Each clause is intended to be assessed on balance with all other clauses, and the entire policy itself should be assessed with other policies as a whole.

(490) It was noted that Submitter 036 (Mercury NZ) had a concern with this policy, with regards to its interpretation for hydrogen sulphide emissions. The NZ Ambient Air Quality Guideline for that contaminant is based on odour effects, not health effects which occur at a significantly higher concentration. In the Rotorua area hydrogen sulphide concentrations can exceed the Ambient Air Quality Guideline (based on odour) without causing health effects. The change is expected to address the concerns of Mercury NZ.

(491) The Hearings Panel gave consideration to the submissions, and took their views into account, but recognised the "Have particular regard to…" the listed matters is the appropriate wording for this policy. CAQ P4 (b) was amended to read:

(b) ~~The location of any **Gazetted airsheds**, or~~ Areas where the discharge may cause an exceedance or breach of the **ambient air** quality standards of the ~~NESAQ~~ National Environmental Standards for Air Quality or exceed the Health-based Guideline Values in Table 1 of the ~~AAQGs~~ Ambient Air Quality Guidelines (or their replacements or amendments).

11.5 AQ P5 Open burning

(492) The scope of the proposed provisions was to manage open burning in urban areas. The amended provisions include any burning carried out within 100 metres of a neighbouring dwelling house.

(493) The Hearings Panel decided to include the word "neighbouring" before the word "dwelling" in AQ P5 in response to several submissions. The change ensures that effects on dwellings within the discharger's property are not considered. The amended wording in AQ P5 reads as follows:

(a) avoiding the discharge of *contaminants* to air from **open burning** ~~on **urban properties** or while permitting **open burning**~~ within 100 metres of any neighbouring **dwelling house**, except where carried out as part of a

recreational/cultural activity, ~~and/or outside urban areas, areas~~, provided the burning is managed to minimise production of noxious or dangerous, offensive or objectionable discharges

(494) The Section 32AA Report considered this matter and concluded:

> "This has broadened the scope and intent of the provisions and is a more stringent option than the recommended option in the original section 32 evaluation. The scope of these changes is low to moderate and a further assessment is required."
>
> The further assessment concludes "The overall effectiveness of the amended provisions has increased as they are more effects based. The rules are also fairer as they apply in all areas of the region where open burning is carried out, instead of only in urban areas that fit the definition. The costs of the activity have potentially increased for landowners that use open burning regularly, within 100 metres of neighbouring houses. The benefits, particularly improved health and amenity for those in neighbouring houses, outweigh the costs."

11.6 AQ P7 Solid fuel burners in Rotorua Airshed

(495) The Hearing Panel, after hearing a strong submission from EnviroSolve, decided to add ultra-low emission burners (ULEBs) as a specified burner category in AQ P7. These modern ULEBs are designed to minimise PM_{10} emissions such that their effects are predicted to be less than emissions from modern wood burners approved by the Plan. PM_{10} emission testing of ULEBs under "real life" operating conditions has measured lower emission rates than from real life testing of modern wood burners. The amended wording in AQ P7 (a) reads:

> new **solid fuel burners**, except **pellet burners**, ~~and~~ replacement low emissions **woodburners**/**ultra-low emission burners**, and new **woodburners**/**ultra-low emission burners** where an **offset** is provided

11.7 AQ P8 Agrichemical spraying

(496) The Hearing Panel decided to alter the wording in AQ P8 (a) to read:

(a) avoiding spray drift beyond the boundary of the **subject property** and into non target *water bodies* where ~~possible~~ reasonably practicable

(497) Further, as a result of a submission from NZAET, the Hearing Panel resolved to include a new clause (d) to encourage best practice measures. Clause (d) reads:

(d) encouraging best practice to manage potential adverse effects on air quality

11.7 AQ P10 Offsets in Rotorua Airshed

(498) The Hearing Panel decided to alter the calculations in Table AQ1 to include the most up to date emissions data for solid fuel burners as follows:

Source	**PM_{10}** Emission Factor Grams per kilogram (g/kg*)	Annual Fuel Use Tonnes per year	**PM_{10}** Annual Emission Kilograms per year	Number of **solid fuel burners** to equal 1 tonne per year of **PM_{10}**
Pre-2005 **woodburners**	~~11~~10	~~1.1~~2.5	~~12~~25	~~87~~40
Post-2005 (NESAQ compliant) **solid fuel burners**	~~3.7~~4.5	~~1.0~~2.5	~~3.7~~11	~~270~~91
Multifuel burners (wood)	~~11~~10	~~1.5~~2.5	~~17~~25	~~61~~40
Multifuel burners (coal)	19	~~1.1~~1.8	~~21~~34.2	~~48~~29
Pellet burners	1.4	1.0	~~1.3~~1.4	~~742~~714

11.8 AQ R2 General activities - Discretionary

(499) The Hearing Panel decided to make a minor change to add clarity to AQ R2, as follows:

> Any discharge of *contaminants* into air that cannot comply with any permitted activity rule, ~~is not discretionary under any other rule,~~ and is not ~~otherwise a controlled or non complying activity under~~ specifically addressed by any other rule of this Air Quality chapter, is a discretionary activity.

11.9 AQ R3 Miscellaneous discharges - Permitted

(500) As a result of a submission by Mr. Geoffrey Oliver regarding his business' composting operation, the Hearing Panel decided to add "composting" as a specific activity. The change to clause (7) applies only to small-scale in-vessel composting with filter emissions. In those circumstances, odour is contained and treated and is expected to cause no more than minor effects at neighbouring properties. The Panel also agreed, under a new clause (8), to specifically provide for small free-range poultry farms as a permitted activity.

(501) The Panel has considered the submission of Fonterra that requested inclusion of irrigation of dairy factory wastewater to land as a permitted activity. We were provided with a copy of a consent held by Fonterra for irrigation onto farms and received details regarding the various matters, such as setback distances from sensitive receptors, that could be applied as conditions of a permitted activity rule. Numerous conditions would be required for a rule of this type and it is difficult to develop an effective rule that addresses all likely situations without a comprehensive assessment of effects. The Panel recommends that the definition of the "liquid waste" in the Proposed Plan be retained, requiring consent for dairy wastewater irrigation.

(502) The revised wording of AQ R3 is proposed as follows:

> The discharge of **contaminants** to air from:
>
> (1) spray irrigation, soil injection, truck spreading, or land soakage of **liquid waste**
> (2) the ventilation and displacement of liquids in storage tanks and tankers
> (3) the use and application of **fertiliser** or lime
> (4) the disturbance of land and soil carried out according to rules LM R1, LM R2, and LM R3 of this regional plan

(5) **contaminated land remediation** permitted by DW R24 of this regional plan
(6) roasting of coffee beans
(7) **fully enclosed in-vessel composting** producing up to 200 tonnes per year (of finished product) where emissions are captured and filtered
(8) **free range farms** of up to 100 **poultry** birds

are permitted activities provided the discharge does not cause any ~~is not~~ **noxious or dangerous,** offensive or objectionable *effect* beyond the boundary of the subject property ~~or into any *water body*~~.

Advice Note - Discharge of **liquid waste**, and the use and application of **fertiliser** or lime must also meet all other requirements of this regional plan (see DW Discharges to Water and Land and OSET On-site Effluent Treatment).

11.10 AQ R5 Venting of geothermal gas and steam - Permitted

(503) After considering the submission from Mercury NZ, the Hearing Panel agreed to alter the wording in Clause (a). The change is less restrictive in providing for a variety of typical existing geothermal vent designs. The amendment also allows for circumstances where isolated discharges with alternative venting arrangements are unlikely to cause adverse effects, due to separation from sensitive receptors. Clause (a) is amended to read:

(a) The gas or steam must be a~~n~~ ~~**unimpeded**~~ **vertical discharge** from a vent unless the discharge is located at least 200 metres from a **sensitive area**.

~~(b) All vents must have sufficient height to ensure that the plume is unaffected by downdraft and must rise a minimum of 6 metres above ground level including 3 metres above the highest ridge line of any roof within 30 metres~~

11.11 AQ R6 Open burning – Permitted

(503) As a result of consideration of a submission, the Hearing Panel agreed to delete the word 'urban', and add reference to a 100-metre setback from any neighbouring dwelling house. This approach is considered to be more effects-based because it focusses on separation from sensitive receptors rather than zoning of the underlying land. In addition, the Panel has resolved to include an allowance for written approvals to be obtained from the occupier of dwellings within 100m of the fire. This provides an opportunity for burning to occur in some cases, such as rural areas, if agreement is obtained from nearby neighbours that could be adversely affected. The change ensures that effects on dwellings within the discharger's property are not considered.
The amended AQ R6 reads as follows:

> Except where AQ R7 and AQ R8 apply, the discharge of *contaminants* to air from **open burning** is a permitted activity provided the fire is not located ~~on an **urban property** or~~ within 100 metres of any neighbouring **dwelling house**, unless written approval is obtained from the occupier(s) of ~~any~~ all such neighbouring **dwelling houses**, and the following conditions are complied with:
>
> (a) No materials either listed in AQ R10 or prohibited by the regulations of the National Environmental Standards for Air Quality are burned.
> (b) The discharge of smoke must not adversely affect the safety of any vehicle, aircraft, or *ship.*
> (c) The discharge must not be noxious or dangerous, offensive, or objectionable
> beyond the boundary of the **subject property**.

Advice Note: This rule manages **open burning** according to the potential for adverse *effects* on air quality. **Open burning** must also be carried out according to local bylaws
and the ~~Forest and Rural Fires Act 1977~~ Fire and Emergency New Zealand Act 2017.

11.12 AQ R9 Open burning ~~in urban areas~~ – Non-complying

(504) Having considered the submissions, the Hearing Panel agreed to delete the words 'on an urban property', and add words to make allowance for written approval by a nearby dwelling occupiers. The reasons for the changes are explained in relation to Rule AQ R6. Rule AQ R9 is amended as follows:

> Except where AQ R7 and AQ R8 apply, the discharge of *contaminants* to air from **open burning** ~~on an **urban property** or~~ within 100 metres of any neighbouring **dwelling house** is a non-complying activity unless:
>
> (a) written approval is obtained from the occupier/s of all neighbouring **dwelling house** within 100 metres of the **open burning**, or
>
> (b) ~~unless~~ the fire is for **recreational/cultural** purposes only.

(505) The result of this amendment ensured the alignment between AQ P5, AQ R5 and this rule (AQ R9).

11.13 AQ R10 Burning of specified material – Non-complying

(506) The Hearing Panel recognised the issues pertaining to disposal of farm silage wrap raised in the submission by Federated farmers. Only limited alternatives to burning are in place, and recycling of silage wrap does not currently occur in all parts of the region. However, the evidence is that uncontrolled burning of such plastics has potential to cause significant adverse effects. The Hearing Panel has therefore decided not to exclude silage wrap from the materials listed in AQ R10. Further development of alternatives, particularly recycling options for silage wrap, is encouraged.

(507) A minor change is made to clause (a), recognising that the definition of treated timber allows for burning of timber treated only with anti-sapstain chemicals in fuel burning equipment. AQ R10 is amended as follows:

> Except as provided for in AQ R8 and AQ R21 the discharge of *contaminants* to air from the combustion of any of the following materials is a non-complying activity:
>
> (a) **treated timber** or painted timber (except ~~where timber is used in **fuel burning equipment** or~~ pellets used in **pellet burners**) **burners** ~~as specified in AS/NZS 4014.6:2007 Domestic solid fuel burning appliances – Test fuels – Wood pellets or the functional equivalent)~~
>
> …
>
> Advice Note: In addition to the materials in this rule, National Environmental Standards for Air Quality regulations prohibit the discharge of *contaminants* to air from the burning of the following materials:
> - bitumen on a road
> - coated wire
> - tyres

- *oil* (in the open air)
- *waste* at landfills

except where the regulations provide otherwise. For full understanding of these restrictions, ~~Regional plan users should~~ check the regulations of the National Environmental Standards for Air Quality ~~NESAQ~~ as well as the provisions of this regional plan.

11.14 AQ R12 Solid fuel burners in the Rotorua Airshed – Permitted

(508) After hearing submissions, notably the submission from Thermal Brewing, the Hearing Panel agreed to add a clause to AQ R12 to include existing authorised outside open fires in a commercial setting within the Rotorua Airshed. This provides for an existing outside fire to be a permitted activity until 1st February 2020. The change recognises that such open fires are the source of significant PM_{10} emissions to the Rotorua Airshed, significantly exceeding emissions from modern wood burners, but provides time for alternatives to be investigated. Rule AQ R13(a) classifies such outdoor fires as discretionary activities after February 2020, requiring consent. This change will allow a full assessment of effects to be considered at that time.

(509) The panel also resolved to create a separate clause to permit Ultra Low Emission Burners (ULEBs), for the reasons given in relation to AQ P7.

The discharge of *contaminants* to air from a **solid fuel burner** installed in any **dwelling house** or building inside the boundary of the **Rotorua Airshed** is a permitted activity if:

(c) the discharge is from either:

....

(iv) an **existing** outdoor **solid fuel burner** on a business premises, until 31 January 2020

OR

(d) the discharge is from a **woodburner** or **ultra-low emission burner** that:

(i) **replaced** an **existing woodburner**, **coal burner**, or **multifuel burner** that was used primarily as a **space heater** in the same **dwelling house** or *building*, and

(ii) the **woodburner** has an **emission rate** less than or equal to 0.60, and

(iii) has a **thermal efficiency** of no less than 65%, and

(iv) is an **Authorised solid fuel burner**

11.15 AQ R13 Solid fuel burners in the Rotorua Airshed – Discretionary

(510) After hearing a submission from submitter EnviroSolve, the Hearing Panel agreed to add ULEBs as a specified burner category in AQ R13.

(511) The Hearing Panel recommends a new rule AQ R13A in response to the submission of Thermal Brewing Company for the inclusion of existing outdoor open fires in a commercial premise. Reasons are given in relation to Rule AQ R12.

(512) The amended AQ R13 reads as follows:

The discharge of *contaminants* to air from a **woodburner** or **ultra-low emission burner** installed in any **dwelling house** or *building* inside the boundary of the **Rotorua Airshed** that is not otherwise permitted by AQ R12(c) or AQ R12(d):

(a) was **offset** by replacing or removing an **existing woodburner**, **coal burner** or **multifuel** burner with an **emission rate** of 0.60 or greater, in a **dwelling house** or building within the **Rotorua Airshed**, and

(b) the **woodburner** has an **emission rate** less than or equal to 0.60, and

(c) has a **thermal efficiency** of no less than 65% and

(d) is an **Authorised solid fuel burner**

is a discretionary activity.

11.16 AQ R13A Existing outdoor solid fuel burners in the Rotorua Airshed – Discretionary

(513) The Hearing Panel recommends a new rule AQ R13A in response to the submission of Thermal Brewing Company for the inclusion of existing outdoor open fires in a commercial premise. The wording to read:

> After 1 February 2020, the discharge of *contaminants* to air from an **existing** outdoor **solid fuel burner** inside the boundary of the **Rotorua Airshed** is a discretionary activity.

11.17 AQ R13B Solid fuel burners with secondary emission reduction devices in the Rotorua Airshed – Discretionary

(514) A submission was received from EnviroSolve that requested allowance in the Plan for the installation of ESPs to control particulate emissions from wood burners. The Panel considers that it is appropriate to provide for future situations where secondary emission reduction devices may be used. Given the limited information available at this time, it is considered that the effectiveness of these devices should be assessed via the resource consent process. The Panel recommends an additional discretionary activity rule AQ R13B for wood burners fitted with secondary emission reduction devices, restricted to wood burners (not coal or multi fuel), installed after 1 September 2005. The Hearing Panel recommends the inclusion of a new clause AQ R13B as follows:

> The discharge of contaminants to air from a woodburner installed in any **dwelling house** or *building* after 1 September 2005 that is fitted with a **secondary emission reduction device**, is a discretionary activity

11.18 AQ R15 Agrichemical spraying – Permitted

(515) After hearing the submissions from New Zealand Agrichemical Education Trust and New Zealand Kiwifruit Growers, the Hearing Panel decided to include a clause requiring training to encourage best practice to prevent spray drift. Having regard to the potential adverse effects associated with spray drift, the Panel considered that a specific training requirement should apply to all operators, except those using hand-held equipment. The Hearing Panel recommends the inclusion of a new clause (1) (d) in AQ R15 as follows:

> **AQ R15 (1) (d)**
> Persons carrying out spraying of agrichemicals, other than the use of hand-held application methods, must be certified by an industry approved training programme, designed to encourage best practice to prevent spray drift in accordance with NZS 8409:2004 (or its replacement or amendment).

(516) Having considered the submission from New Zealand Kiwifruit Growers, the Hearing Panel rejected the request that asked for signage to remain up following spraying. To ensure that

signs are effective as a means of warning persons that spraying is occurring, it is important that signs do not remain in place for extended periods. However, the Hearing Panel does recommend the inclusion of a Clause (d) in Signage section (3), to read:

AQ R15 (3)

(d) Signs required by 3(a) or 3(b) should remain in place until all airborne spray has settled and the **agrichemical** has dried on its target surface. Signs must be removed within 5 days once the area is safe to re-enter.

(517) After hearing submissions from the Department of Conservation and the forestry sector, the Hearing Panel decided to amend AQ R15(4)(d) to allow notification as early as 20 days prior to spraying on forestry or conservation areas. The panel accepts that the additional time period in these circumstances, where large blocks of land with multiple neighbours are often involved, allows for notification and potential subsequent discussion or meetings with affected parties. The Hearing Panel recommends the inclusion of a new Clause (d) in this section, to read:

AQ R15 (4)

(a) The owner/occupier or agent must notify the occupier of any properties within 50 metres (**ground-based application** or **drone application** complying with condition 1(c)) and 200 metres (**aerial application** excluding **drone application** complying with condition 1(c)) of where the **agrichemical** is being sprayed:

(i) by notification, required no earlier than 72 hours, or ~~10~~ 20 days for spraying carried out on plantation forestry or in a conservation area, and no later than ~~24~~ 12 hours before the **agrichemical** spraying. Notification must include the following:

- the address and location of proposed application
- the date/s of proposed application
- name and type of **agrichemical** to be applied
- name and phone number of the ~~applicator~~ person carrying out the spraying

(d) Where **agrichemicals** are sprayed on **public amenity areas**, the owner/occupier or agent must publicly notify (according to section 2AB(1)(a) of the Act) the **agrichemical** spraying ~~using an appropriate method from~~ no earlier than 10 days or 20 days for spraying carried out on plantation forestry or in a conservation area, and no later than ~~at least~~ 24 hours ~~prior, up to one week prior~~ before the ~~to the~~ agrichemical ~~use~~ spraying. Notification must include the following information:

(i) The name and type of **agrichemical** used.
(ii) A start and end date for spray operations.
(iii) Contact details of the authority responsible for the spraying.

(518) Following consideration of all submissions the Panel carried out a final review of clause AQ R15(2) to ensure that all consequential changes required as a result of submissions and panel discussions were made. The Panel recommends the following changes to AQ R15(2) to ensure consistency with numbering and requirements:

AQ R15(2)

(2) Method of application of **agrichemicals**

(a) The discharge of *contaminants* into air from **agrichemical** spraying using **hand-held non-motorised application** methods is a permitted activity provided conditions 3(a) ~~3(c), 3(d)~~ and 4(d~~e~~) are complied with.

(b) **Hand-held motorised application** methods or application methods using a **low-pressure boom** is a permitted activity provided conditions 3(a), ~~3(c),~~ 3(d)~~, 3(e),~~ 4(c), 4(d), ~~4(e),~~ are complied with.

(c) Any other application method ~~(including **drone application** complying with condition 1(c))~~ is a permitted activity provided conditions 3(a), 3(b), 3(c), 4(a), 4(b), 4(c), 4(d), 5(a), 5(b), 5(c) and 5(~~d~~e) are complied with.

11.19 AQ R16 Spraypainting – Permitted

(519) After hearing the submission from Mr. Hendrik Pieters, the Hearing Panel decided to add a specific Clause to AQ R16(a) to limit the scale of permitted surface coating discharges from enclosed buildings to less than 2 litres per hour. This scale limit has been applied to spray painting in other regional plans. This allows for small scale operators such as panel beaters who undertake automotive spray painting to be classified as permitted activities, while discharges from larger surface coating businesses with greater potential to cause adverse effects would require consent and assessment on a case by case basis. The effects experienced by Mr Pieters, as described in his submission, indicate that specific assessment and control of large-scale spraypainting operations is appropriate.

(520) The Hearing Panel also recognised that clause (b) of AQ R16 should be qualified so that temporary work outside a spray booth is limited to fixed or large structures that cannot practicably be dismantled and transported to a spray booth. Further, the Panel decided that the rule should apply to spray coatings (not just those containing di-isocyanates or anti-fouling paint) and should include filtration of spray booth emissions in line with good practice. The Hearing Panel recommends the inclusion of changes to Clauses (a), (b) and (c) in this section, to read:

AQ R16

The discharge of *contaminants* to air from the spray application, of surface coatings, including those containing di-isocyanates, ~~organic plasticisers~~ or spray on anti-fouling paint (excluding the application of protective coatings to **transmission line support structures**, the use of water based paints, or up to 0.5 litres per hour and 5 litres per month of solvent based paints) is a permitted activity if: ~~provided the following conditions are complied with:~~

(a) The spraying is carried out, at a rate of no more than 2 litres per hour, in a spray booth, room, or enclosure fitted with an air extraction system and air filtering system to control the discharge of **particulates** and where the systems are maintained in accordance with the manufacturer's instructions

(b) All *contaminants* and exhaust air from the enclosed spraying and drying areas must discharge to an emission stack or stacks, and the discharge from the emission stack or stacks is an **unimpeded vertical discharge** from the emission stack at least 3 metres above the ridge height of the building and 3 metres above the highest ridgeline of any roof within 30 metres.

(c) Where spraypainting is carried out, on surfaces of fixed or large structures that cannot practicably be dismantled and transported to a spray booth, the discharge must be controlled using the *best practicable option* such as screening and paint technologies; and, when surface coatings containing di-isocyanates or anti-fouling paints are used:

(i) The owner/occupier/agent must notify the occupier of any property within 50 metres of the spray application site at least 24 hours prior to commencing the work.

(ii) An exclusion zone must prevent any public access within 15 metres of the spray application site.

(d) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

11.20 AQ R17 Abrasive blasting – Permitted

(521) Whilst formulating changes to AQ R16 the panel recognised that both spray painting and abrasive blasting outside of a booth at any one location should only be allowed on a temporary basis for treating fixed or large structures that cannot be transported to a booth, to prevent potential adverse effects at neighbouring properties. Consequential minor changes are made to clause (a)(ii) of AQ R17, as follows:

(a) (ii) Where abrasive blasting is carried out on surfaces of fixed or large structures that cannot practicably be dismantled and transported to a blasting booth ~~where a sealed abrasive blasting booth cannot be used~~ the discharge must be controlled using a current, best practice method such as screening, wet nozzles, or vacuum.

11.21 AQ R20 Fumigation for quarantine application or pre-shipment application – Discretionary or Non-complying

(522) The issue of fumigation with methyl bromide was the subject of detailed submissions. The Panel has considered this matter carefully. We consider that a tiered approach is appropriate whereby "effective recapture" of methyl bromide is encouraged by classifying such discharges as discretionary activities. Where effective recapture cannot be achieved for any fumigation treatment with methyl bromide, the discharge is to be classified as a non-complying activity and therefore would need to pass the higher hurdle of the threshold test under Section 104D of the Act.

(523) The Panel recommends that the definition of "effective recapture" requires that the concentration of fumigant (not absorbed by the target product) within a fumigation enclosure at the beginning of the fumigation period be reduced by 80% prior to ventilation of the fumigation enclosure. This definition takes into account the advice of staff and the submission of STIMBR, who stated that 80% recapture of methyl bromide is consistently achievable using current technology. We accept the submission of Genera that 100% recapture of methyl bromide is not practical at present and is not consistent with EPA requirements. The Panel notes that all fumigation using methyl bromide will require consent, and the definition of effective recapture is not critical to the extent that failure to comply triggers prohibited activity status. However, we consider that the rule structure will provide clear guidance to resource consent applicants and decision makers that a minimum of 80% methyl bromide is sought for all sources, including fumigation of log stacks, containers, machinery and ship holds.

(524) After hearing from submitters, including Genera and STIMBR, the Hearing Panel decided to include the wording 'effective' before the word recapture and include a definition of **effective recapture** as discussed above.

AQ R20
The discharge of *contaminants* into air from fumigation for **quarantine application** or **pre-shipment application**:

(a) Using fumigants other than methyl bromide, is a discretionary activity.
(b) Using methyl bromide with **effective recapture**, is a discretionary activity.
(c) Using methyl bromide without **effective recapture,** is a non-complying activity.

11.22 AQ R21 Specific activities – Discretionary

(525) After hearing from submitters regarding crematoria discharges, the Hearing Panel decided to amend clause (g) to specify that only new crematoria (established after 27 February 2018) be classified as discretionary activities. Taking into account the concerns expressed by existing crematoria operators regarding possible consent requirements, the Panel recommends that existing crematoria be classified as controlled activities. This will allow the effects of existing cremator discharges to be assessed to ensure appropriate controls are in place, while providing assurance to the operators that consent would be granted to these existing permitted facilities, subject to conditions.

(526) Under AQ R21(j)(ii) Free-range farming the Hearing Panel recommends a wording change to ensure that small "hobby" poultry farms do not require consent. A minor change to clause (f) is also made to provide clarity that all large-scale production or use of compost requires consent as a discretionary activity.

(f) Composting except where provided for by AQ R3 ~~(including mushroom based processes)~~ where the compost is for sale or commercial use.

(g) Crematoria ~~where either:~~ a new facility with a new discharge to air is being established after 27 February 2018~~, or~~

~~(i) an existing facility is increasing the character, intensity or scale of the effects of the discharge to air after 27 February 2018.~~

(h) Distilling operations including but not limited to petroleum refining.

(i) **Enclosed incinerators** where any of the materials listed in AQ R10 are burned.

(j) Farming activities as follows:

(i) **Intensive farming** not controlled by AQ R19, or

(ii) ~~and~~ **Free-range farming** of pigs, or more than 100 **poultry** birds, where either a new farm is being established or where an existing farm is increasing the character, intensity or scale of the effects of the activity, after 27 February 2018.

11.23 AQ R22 Industrial and trade premises – Discretionary

(527) Several submissions were received from industry regarding Rule AQ R22. Concern was expressed that this rule, as recommended in the s42A report, is overly stringent and would effectively require consent for a large number of minor discharges from industrial and trade processes. We accept those submissions and have decided to delete the current wording of Rule AQ R22. Changes recommended to other rules in the Plan, including AQ R1 and new Rule AQ R22 discussed below, are considered to be sufficient to ensure that consent is required for discharges with potential to cause significant adverse effects.

(528) Several submissions were heard regarding the adverse effects experienced in relation to a large bulk handling facility at 101 Aerodrome Road. Taking into account the submissions, the Hearing Panel decided that large bulk handling facilities of this type have potential to generate significant dust emissions and should be subject to consent. That would allow the effects of the dust discharge on sensitive receptors to be properly assessed, with mitigation measures applied as appropriate. The Panel is aware that such controls are commonly applied to large bulk handling facilities in other regions, and has had regard to scale limits applied in other regional plans. Regard has also been had to the submission from Ballance and subsequent information provided regarding the scale of bulk fertiliser stores. Consideration has also been given to the submission of Ravensdown. The scale limit has been set such that consent is

unlikely to be required for facilities such as small rural fertiliser depots, particularly those that are well separated from sensitive receptors, where dust effects are typically minor.

(529) The Panel undertook a site visit to the Port and observed the bulk cargo handling operation during calm weather conditions. We are aware that submissions have expressed concern about air quality from discharges in the Port area. Tauranga City Council supports investigation of air quality and emission sources in the Mount Industrial Area. Whilst we note that the Plan does not include specific rules for this industrial area, we have decided that it is appropriate for handling of bulk cargo at the port, including transfer to and from ships, to be covered by new Rule AQ R22.

11.24 AQ R22 Handling of bulk solid materials - Discretionary

(530) For the reasons discussed above, the Hearing Panel recommends that the originally proposed rule AQ R22, being 'Industrial and trade premises – Discretionary' be replaced with a new rule AQ R22; to read:

~~The discharge into air from *industrial or trade premises* that is not otherwise provided for any other rule of this Air Quality chapter and includes any of the following *contaminants*:~~

~~(a) **particulates**~~

~~(b) odorous compounds~~

~~(c) hazardous air pollutants~~

Unless otherwise permitted by AQ R26, the discharge of *contaminants* to air from the **handling** of **bulk solid materials** where:

(a) the discharge occurs less than 100 metres from any **sensitive area** and the rate of **bulk solid material handling** exceeds 20 tonnes in any hour, or

(b) the rate of **bulk solid material handling** exceeds 50 tonnes in any hour

is a discretionary activity.

11.25 AQ R23 Mobile or emergency diesel generators and pumps – Permitted

(531) After hearing submissions from Mercury Energy and Port of Tauranga, the Hearing Panel agreed to include 'mobile generators' and 'pumps', in addition to emergency generators under rule AQ R23. All these sources are powered by diesel internal combustion engines with similar contaminant emissions.

(532) Mercury Energy requested a specific clause (b) that applies to diesel-fired combustion sources at geothermal drilling and generation sites. Whilst the combined scale of these generators and pumps is relatively large, we are cognisant of strict limitations imposed by the sub-clauses. Namely discharge is limited to 3 months per site and a 200m separation distance from sensitive areas must be maintained. We accept the advice of Ms Simpson, air quality consultant to Mercury Energy, that the effects of contaminants discharged are expected to be minor under these circumstances. We therefore recommend that clause AQ R23(b) be added to provide for geothermal drilling and electricity generation sites.

(533) The Panel recommends that rule AQ R23 be amended as follows:

(a) The discharge of *contaminants* to air from the internal combustion of diesel in any mobile or emergency generator or pump with a maximum load of 600 kilovolt-amperes is a permitted activity provided the following conditions are met:

(i) the discharge must not occur for more than 48 hours within 50 metres of a **sensitive area**, and

(ii) fuel used in the ~~emergency~~ generator or pump must comply with the Engine Fuel Specifications Regulations 2011, and

(iii) the discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

(b) For the internal combustion of diesel in any mobile or emergency generator or pump with a total combined output of less than 5000 kilovolt-amperes, the discharge is a permitted activity provided:

(i) the discharge is associated with geothermal electricity generation activities, including geothermal drilling, and

(ii) the discharge must not occur for a period of more than 3 months per wellhead or generation site, and

(iii) the discharge must not occur within 200 metres of a **sensitive area**, excluding discharges to air from pumps which may be located adjacent to *water bodies* and buildings that are defined as a **sensitive area** and are uninhabited for the duration of the discharge, and

(iv) fuel used in the generator or pump must comply with the Engine Fuel Specifications Regulations 2011, and

(v) the discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

11.26 AQ R26 Cement storage and handling - Permitted

(534) After considering submissions, notably from GBC Winstone, the Hearing Panel decided that a separate rule specifically addressing cement storage and handling is appropriate. We visited the GBC Winstone site as part of our site visit to the wider port area and observed the dust emission controls in place. We accept the evidence of Mr Curtis, air quality consultant to GBC Winstone, that cement storage and handling can be adequately controlled via conditions of a permitted activity rule. We recommend a new rule AQ R26 follows:

The discharge of *contaminants* to air from the storage, **handling**, redistribution, or packaging of cement, and cement additives, is a permitted activity provided the following conditions are complied with:

(a) The cement is delivered using a fully enclosed conveyance system and stored in silos.

(b) The silos must be fully enclosed and fitted with a **fabric** filtration system that is installed and maintained in accordance with the manufacturer's specifications.

(c) Cement additives such as fly ash and microsilica must be bagged and debagged within an enclosed structure fitted with appropriate dust control equipment that is installed and maintained in accordance with the manufacturer's specifications.

(d) There must be no accumulation of dust or **particulates** on site.

(e) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property** or into any *water body*.

11.27 AQ R27 Crematoria - Controlled

(535) Having considered submission from Legacy Funeral Homes and Tauranga City Council, the Hearing Panel recommends a specific controlled activity rule to cover existing crematoria in the region. This will allow the effects of existing cremator discharges to be assessed to ensure appropriate controls are in place, while providing assurance to the operators that consent would be granted to these existing permitted facilities, subject to conditions. Ongoing permitted activity status for crematoria is not considered to be appropriate as it does not allow for a site-specific assessment of effects, including where there is potential for the number of cremations to increase in future. The Panel that the controlled activity rule for existing crematoria commences in February 2020 to allow for the preparation of consent applications.

(536) The hearing panel recommends a new rule AQ R27 as follows:

> From 1 February 2020, the discharge of *contaminants* to air from crematoria facilities that were established before 27 February 2018, is a controlled, non-notified activity for which applications will be considered without the need to obtain the written approval of affected persons.
>
> The Regional Council reserves control over the following matters:
>
> (a) Setting conditions to control **cremator operation, the number of cremations and** contaminants **discharged** from the facility, including but not limited to any matter contained in relevant industry codes of practice.
>
> (b) **Setting conditions to require stack emissions monitoring and testing of soil samples to assess mercury accumulation.**
>
> (c) Duration of consent and consent condition review including the timing and purpose of the review.
>
> (d) Compliance monitoring.
>
> (e) Payment of administrative charges.

11.28 Definitions of Terms

(537) The Hearing Panel decided that additional/amended Definition of Terms are required to better describe this proposed Plan Change 13. These include:

(538) **Bulk solid material** means means materials consisting of, or including, fragments that could be discharged as dust or particulate. These materials include but are not limited to: gravel, quarried rock, fertiliser, coal, cement, flour, rock aggregate, grains, compost, palm kernel **extract**, tapioca, and woodchip.

(539) **Effective r****ecapture** in relation to fumigation means a process that ~~eliminates~~ ~~mitigates~~ ~~methyl bromide~~ ~~fumigant~~ ~~emissions from fumigation enclosures (such as buildings, shipping containers or gas proof sheets)~~ ~~used to cover target product,~~ ~~by:~~

(a) capture~~sing~~ ~~methyl bromide~~ any fumigant ~~not absorbed by the target product~~ from fumigation enclosures (such as buildings, shipping containers or gas proof sheets covering target product) on activated carbon or other medium so that it is not released into the atmosphere when the fumigation enclosure is ventilated ~~or any time after,~~ ~~or~~

~~(b) destroying the methyl bromide fumigant not absorbed by the target product before a fumigation enclosure is ventilated~~

such that the concentration of fumigant (not absorbed by the target product) within the fumigation enclosure at the beginning of the fumigation period is reduced by 80% prior to ventilation of the fumigation enclosure.

(540) **Free-range farming** means farms where **poultry** or pigs (other than those kept as pets) are housed indoors, but have free access to the outdoors.

(541) **Fully enclosed in-vessel composting** means composting produced within a container (including but not limited to tanks, drums, silos, bunkers, or tunnels) where air flow and temperature are fully controlled during the composting process.

(542) **Handling** in relation to bulk solid material means extraction, quarrying, mining, processing, screening, conveying, **transferring**, blasting, loading, unloading or crushing of any material.

(543) **Intensive farming** means ~~agricultural production~~ **poultry** farms, piggeries, other livestock farms, and mushroom production carried out within buildings, structures, pens or yards where the stocking density limits, or prevents, dependence on natural soil ~~quality~~ on the site, and/or where food is required to be brought to the site. ~~Includes poultry farming, piggeries, mushroom production but~~ Excludes **free-range farming**, and greenhouses.

(544) ~~**Recapture** in relation to fumigation means a process that mitigates fumigant emissions from fumigation enclosures such as buildings, shipping containers or gas proof sheets used to cover target product, by:~~

~~(c) capturing any fumigant (not absorbed by the target product) on activated carbon or other medium so that it is not released into the atmosphere when the fumigation enclosure is ventilated or any time after, or~~

~~(d) destroying the fumigant (not absorbed by the target product) before a fumigation enclosure is ventilated.~~

(545) **Secondary emission reduction device** in relation to **solid fuel burners** means a secondary air emission treatment device that reduces the particulates from a **solid fuel burner.**

(546) **Sensitive** ~~**activity**~~ **area** means an activity that is particularly sensitive to adverse *effects* associated with air contaminant discharges either due to the vulnerability of the population or area exposed to the contaminant, or due to the potential for people to be exposed for prolonged periods ~~exposure may be adversely affected by contaminants~~ and may include~~s~~:

(a) residential buildings and areas (including marae)
(b) childcare centres, schools, educational facilities
(c) hospitals, nursing homes, aged care facilities
(d) offices, consulting rooms, gymnasiums, community centres
(e) hotels, motels, caravan parks, camping areas, tourist accommodation
(f) correctional facilities
(g) **public amenity areas**
(h) manufacturing or storage of food or beverages
(i) manufacturing or storage of electronics
(j) public water supply catchments and intakes.
~~(k) water bodies, watercourses (as listed in Schedule 3) and associated riparian vegetation~~
(l) incompatible crops or farming systems (e.g. organic farms, greenhouses)
~~(m) wetlands, indigenous vegetation habitat areas and reserves~~
(n) household water supplies (including roofs from which a water supply is obtained).

(547) **Solid fuel burner** means a solid fuel burning appliance where combustion of the **solid fuel** occurs within a firebox, and where there may be a regulated supply of air to the fire. It includes (but is not limited to), **indoor open fires**, outdoor open fires, freestanding or built in

woodburners, **pellet burners**, potbelly stoves, coal ranges, **coal burners**, chip heaters, water heaters or central heating units, **multifuel burners**, and similar appliances. It excludes small-scale domestic devices for smoking food, any portable un-flued heaters fuelled by gas, alcohol or other liquid fuels, gas hobs or gas ranges used for cooking, any fuel burning appliance installed in a boat, caravan or motor home, and **fuel burning equipment** as defined by this regional plan.

(548) **Ultra-low emission burner** means a woodburner that:

(a) when tested according to Canterbury Method 1 (revision 1.6 June 2015) discharges no more than 0.77 grams of particulates per kilogram of dry wood burnt, **and**

(b) is on the Regional Council's List of Approved Ultra-low Emissions Burners. This list will be available on the Regional Council's website and may be updated without further formality.

(549) ~~**Urban property** in relation to **open burning** means any property that is less than 2 hectares and is connected to a municipal wastewater system~~

11.29 Consequential Changes

(550) A number of definitions of terms included in the Plan Change are sourced from Acts of Parliament or regulations other than the RMA. The Hearing Panel recommends minor changes to the relevant definitions (**airshed**, **forestry road**, **forestry track**, **oil**, and **ship**), to identify their respective sources, and a consequential change to the introductory text in the Definitions of Terms section in the RNRP as follows:

> Terms in italic text are defined by the Act, unless otherwise stated. The ~~Act~~ italicised definitions are included in this regional plan for information only, and are correct at the date of their inclusion in ~~public notification of~~ this regional plan.

12.0 EVALUATION DUTIES

(551) If our recommendations are adopted by the Council, this report (including its appendices) is intended to form part of the Council's decision-making record. Therefore, in compliance with Schedule 1, we adopt the officers' section 32AA report, Section 32AA evaluation of changes, and recommend that the Council have particular regard to this when making its decision.

13.0 CONCLUSIONS AND RECOMMENDATIONS

(552) We appreciate the time and expertise that have been dedicated by all parties to ensuring the outcome is one which will add to the effectiveness of the Regional Natural Resources Plan. In particular, we wish to acknowledge the efforts of staff and all submitters during the hearings, and in particular the helpful and positive approach all parties adopted throughout the process.

(553) We are satisfied that our final recommended amendments to the PC13 (as set out in Appendix B to this report) are the most appropriate for giving effect to Council's statutory and legal responsibilities.

(554) We recommend to the Regional Council:

(a) That it has particular regard to the "Section 32AA evaluation of changes" report (Appendix C) when making its decision on submissions.

(b) That the Hearing Recommendations, as outlined in this report with recommendations on provisions with submissions and further submissions, and the reasons, including those set out in this report, be adopted.

Dated 4th February 2019

Andrew von Dadelszen, Councillor and Hearing Committee Member (Chair)

John Iseli, Independent Hearing Committee Member (Deputy Chair)

Matemoana McDonald, Councillor and Hearing Committee Member

APPENDICES

APPENDIX A Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan Hearing Committee Recommendations, Version 7.4 (Track changes version) and Consequential changes resulting from Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan, Version 7.4

APPENDIX B Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan Hearing Committee Recommendations, Version 7.4 (Clear copy)

APPENDIX C Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan Section 32AA Report

APPENDIX A

Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan
Hearing Committee Recommendations, Version 7.4 (Track changes version) and
Consequential changes resulting from Proposed Change 13 (Air Quality) to the Bay of Plenty
Regional Natural Resources Plan

Version 7.4
February 2019

PROPOSED

Plan Change 13 (Air Quality)
to the Regional Natural Resources Plan

HEARING RECOMMENDATIONS

Redline/Strikeout

This version incorporates changes to Proposed Plan Change 13 recommended by the Hearing Committee in its recommendations report

Bay of Plenty Regional Council
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New Zealand

Contents

AQ Air Quality

He tapu te hā – the breath is sacred.

This chapter of the regional plan provides policies and rules to manage the discharge of *contaminants* to air from **anthropogenic** sources. **Anthropogenic** means created by or caused by humans. **Anthropogenic** discharges include odour, dust, **particulates**, smoke and spray which come from a variety of human activities. Natural sources of *contaminants* such as pollen, and gas and odour discharges from **geothermal fields** or volcanoes, are not managed by this regional plan.

Other than the adverse *effects* on ambient or local air quality, this regional plan does not address greenhouse gases or climate change. Nor does the regional plan take into account indoor air quality (for example in workplace buildings) and it does not address health and safety issues related to air quality on work sites or in private homes as these matters are covered by other legislation.

Terms in this chapter that are defined in the Definition of Terms are highlighted in bold. Terms defined in the Act, in other Acts of Parliament, or in national regulations, that have been included in the Definition of Terms for information only, are shown in italics.

Objectives

AQ O1 **Protect air from adverse effects — Te tiaki i te hau mai i ngā pānga kino**

Protection of the mauri of air and human health from adverse *effects* of **anthropogenic** *contaminant* discharges to air~~, and enhance air quality where degraded~~.

AQ O2 **Ambient air quality — Te pai o te hau**

The region's **ambient air** quality meets the National Environmental Standards for Air Quality (2004) (or its amendment or replacement)~~and the Ambient Air Quality Guidelines (2002)~~.

AQ O3 **Local air quality — Te pai o te hau o te rohe**

Sustainable management of discharges of *contaminants* to air according to their adverse *effects* on human health, cultural values, amenity values and the receiving *environment*.

Policies

AQ P1 **Classification of activities — Te wehewehenga o ngā mahinga**

Manage the discharge of *contaminants* to air according to the following:

(a) Provide for the discharge of *contaminants* to air by permitting discharges from activities where the discharge can be suitably managed with general conditions to avoid, remedy or mitigate any adverse *effects* of the discharge.

(b) Classify all other discharges where (a) does not apply, as controlled, restricted discretionary, discretionary, or non-complying activities.

AQ P2 **Hazardous substances — Ngā matū mōrearea**

Seek to avoid adverse *effects* from discharges of **hazardous substances** and hazardous air pollutants to air and where avoidance is not practicable~~possible~~, remedy or mitigate the adverse *effects* of the discharge using the *best practicable option.*

AQ P3 **Management of discharges — Te whakahaere i ngā tukunga**

Activities that discharge *contaminants* to air must be managed, including by use of the *best practicable option*, to:

(a) safeguard the life supporting capacity of the air, ~~avoid adverse effects on~~protect human health, and ~~manage~~ avoid, remedy or mitigate adverse *effects* on cultural values, amenity values, and the *environment*

(b) avoid the discharge of *contaminants* at a rate or volume that may ~~contribute to, or~~ cause an exceedance or breach of the **ambient air** quality standards of the ~~NESAQ~~ National Environmental Standards for Air Quality (or its replacement or amendment). ~~or exceed the health-based values of the AAQGs~~

(c) avoid reduction in visibility where it may cause adverse *effects* on vehicle, aircraft, or *ship* safety

(d) avoid, remedy or mitigate the discharge of *contaminants* that may cause adverse *effects* on regionally significant **infrastructure**/industry

~~(e) minimise the discharge of contaminants into areas beyond the boundary of the subject property where it may cause adverse effects on human health, cultural values, amenity values, or the environment.~~

AQ P4 **Matters to consider — Ngā take hei whiriwhiri**

~~When considering the acceptability of any discharge of contaminants to air, regional plan users must~~Have particular regard to the following matters when considering the acceptability of any discharge of *contaminants* to air:

(a) The proximity of **sensitive ~~activities~~areas** to the discharge including the *effect* of new activities discharging *contaminants* into air near established **sensitive areas.**

(b) ~~The location of any **Gazetted airsheds**, or~~ Areas where the discharge may cause an exceedance or breach of the **ambient air** quality standards of the ~~NESAQ~~ National Environmental Standards for Air Quality or exceed the Health-based Guideline Values in Table 1 of the ~~AAQGs~~Ambient Air Quality Guidelines (or their replacements or amendments).

(c) Adverse *effects* on air quality values identified in the relevant iwi and hapū resource management plans during assessments of resource consent applications.

(d) The *effect* of the prevailing weather conditions, including rainfall, wind speed and wind direction.

(e) The *effect* of the discharge on human health, cultural values, amenity values, the *environment*, and regionally significant **infrastructure**.

(f) Cumulative *effects*.

~~(g) the effect of new activities discharging contaminants into air near established **sensitive activities.**~~

(g) Whether a change to an activity expressly allowed by an existing resource consent will cause a net increase of **particulates** into an **airshed** in breach of the ambient air quality standard for **particulates** of the National Environmental Standards for Air Quality.

(h) The operational requirements and locational constraints relevant to the discharge and/or activity.

(i) Any other recognised air quality guidelines or standards (not listed) that are appropriate to the discharge.

(j) The FIDOL factors (frequency, intensity, duration, offensiveness, location) when determining adverse *effects* in relation to odour and dust discharges.

(k) The investment of existing **infrastructure** that mitigates adverse *effects* of discharges of *contaminants* to air.

AQ P5 Open burning — Te tahutahu ahi

Manage **open burning** by:

(a) avoiding the discharge of *contaminants* to air from **open burning** ~~on **urban properties** while permitting **open burning**~~ within 100 metres of any neighbouring **dwelling house**, except where carried out as part of a **recreational/cultural** activity, ~~and/or outside urban areas,~~ provided the burning is managed to minimise production of noxious or dangerous, offensive or objectionable discharges

(b) permitting **open burning:**

(i) provided the burning is managed to minimise production of noxious or dangerous, offensive or objectionable discharges

(ii) of animal carcasses and/or vegetative material burned in accordance with quarantine or disease control requirements

(iii) for the purposes of firefighting research or training.

AQ P6 Solid fuel burners — Ngā pāka ahi

Avoid significant adverse *effects* on the *environment* from the operation of **solid fuel burners** installed in **dwelling houses** or buildings by avoiding:

(a) excessive discharge of **particulates** (eg. caused by burning wet wood or restricting oxygen flow to the fire)

(b) any discharge that is noxious or dangerous, offensive or objectionable (eg. burning painted or **treated timber** or *waste*).

AQ P7 Solid fuel burners in Rotorua Airshed — Ngā pāka ahi i te Takiwā Hau o Rotorua

Avoid ~~a net increase in~~ discharges of **particulates** to air from certain **solid fuel burners** ~~installed in **dwelling houses** or buildings~~ in the **Rotorua Airshed**, in particular discharges from:

(a) new **solid fuel burners**, except **pellet burners**, ~~and~~ replacement low emissions **woodburners/ultra-low emission burners,** and new **woodburners/ultra-low emission burners** where an **offset** is provided

(b) **indoor open fires**, **coal burners**, **multifuel burners**, and **woodburners** installed before September 2005

(c) **solid fuel burners** that have been **refurbished** since their installation

(d) **solid fuel burners** used or designed for use other than as a **space heater**

except where exceptional circumstances apply.

AQ P8 **Agrichemical spraying — Te tōrehu matū ahuwhenua**

Agrichemical sprayers will manage adverse *effects* on human health and the *environment* by:

(a) avoiding spray drift beyond the boundary of the **subject property** and into non target *water bodies* where ~~possible~~reasonably practicable

(b) mitigating *effects* particularly on **sensitive** ~~**activities**~~**areas** where avoidance of spray drift is not possible

(c) ~~using a risk management approach for~~ managing **agrichemical** spraying activities according to the ~~with a higher~~ risk of spray drift becoming noxious or dangerous, offensive or objectionable

(d) encouraging best practice to manage potential adverse *effects* on air quality.

AQ P9 **Fumigation for quarantine application or pre-shipment application — Auahina ki te paitini mō te tono taratahi, tono utanga-tōmua rānei**

Protect human health and the *environment* from adverse *effects* from use of fumigants for **quarantine application** or **pre-shipment application** by:

(a) enforcing the *best practicable option* for use of the fumigant, including via the use of **effective recapture** technology of fumigant gases, the use of safer fumigants, or alternative methods

(b) ensuring compliance with relevant exposure levels and management regime set by the New Zealand Environmental Protection Authority to protect human health

(c) having particular regard to protecting the health of persons in **sensitive** ~~**activities**~~**areas** from fumigant exposure.

AQ P10 **Offsets in Rotorua Airshed — Ngā whakatautika i te Takiwā Hau o Rotorua**

Any **offsets** required in the **Rotorua Airshed** by Regulation 17 of the ~~NESAQ~~ National Environmental Standards for Air Quality must:

(a) be expressed in kilograms per year and calculated using annual mass emission rates based on the maximum consented discharge rate

(b) be based on quantifiable emissions reduced from another source or sources that can be shown to have occurred, either by measurement, monitoring or other robust means

(c) permanently remove the emissions used as **offsets** from the **Rotorua Airshed**

(d) be located within the **Rotorua Airshed** or where emissions can be shown to contribute to the **Rotorua Airshed**

(e) be carried out as close as practicable to where the *effects* of the emissions being **offset** may occur

(f) be above and beyond any emissions decrease that would otherwise occur or would otherwise be required by the Regional Council

(g) assume that all **TSP** is **PM_{10}** unless demonstrated otherwise

(h) treat all **PM_{10}** as equal, having the same health *effects* irrespective of the source of **PM_{10}**

(i) be effective before any emission from the proposed activity occurs

(j) use the emission factors set out in Table AQ1 for each **solid fuel burner** type, where domestic sources are selected to provide reductions of emissions unless alternative emission factors for domestic sources have been determined based on robust evidence consisting of, but not limited to, actual measurements based on a suitable methodology.

Table AQ1 Emission factors for domestic sources

Source[1]	**PM_{10}** Emission Factor Grams per kilogram (g/kg*)	Annual Fuel Use Tonnes per year	**PM_{10}** Annual Emission Kilograms per year	Number of **solid fuel burners** to equal 1 tonne per year of **PM_{10}**
Pre-2005 **woodburners**	~~11~~10	~~1.1~~2.5	~~12~~25	~~87~~40
Post-2005 (NESAQ compliant) **solid fuel burners**	~~3.7~~4.5	~~1.0~~2.5	~~3.7~~11	~~270~~91
Multifuel burners (wood)	~~11~~10	~~1.5~~2.5	~~17~~25	~~61~~40
Multifuel burners (coal)	19	~~1.1~~1.8	~~21~~34.2	~~48~~29
Pellet burners	1.4	1.0	~~1.3~~1.4	~~742~~714

*Wet weight

Rules

Rules in this chapter apply to the management of discharges of *contaminants* to air from sources within the Bay of Plenty Region, including the *Coastal Marine Area*.

AQ R1 **General activities – Permitted — Ngā mahinga noa – E whakaaehia ana**

Any discharge of *contaminants* into air which is not subject to any other rule in this regional plan and excluding the discharge of dust to air associated with a plantation forestry activity, is a permitted activity provided the following conditions are complied with:

(a) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property** or into any *water body*.

(b) The discharge of smoke or water vapour must not adversely affect the safety of any vehicle, aircraft, or *ship*.

~~(c) The discharge is not from industrial or trade premises.~~

Advice Note - Discharges of dust into air associated with activities within a plantation forestry activity are managed by the National Environment Standards for Plantation Forestry (2017). The plantation forestry activities are as listed in subparts 1-9 of the National Environment Standards for Plantation Forestry and do not include discharges or from roads or tracks managed by local authorities, the Department of Conservation or the New Zealand Transport Agency.

AQ R2 **General activities – Discretionary — Ngā mahinga noa – Ka whiriwhirihia**

Any discharge of *contaminants* into air that cannot comply with any permitted activity rule, ~~is not discretionary under any other rule,~~ and is not ~~otherwise a controlled or non-complying activity under~~ specifically addressed by any other rule of this Air Quality chapter, is a discretionary activity.

[1] Emission factors based on ~~information in Bay of Plenty Regional Council Strategic Publication 2014/03 *Offsets Guidance for the Rotorua Airshed*, October *2014*~~*Rotorua Domestic Heating Survey* (2005) and the Ministry for the Environment's *Home heating emission inventory and other sources evaluation* (2015).

AQ R3 **Miscellaneous discharges – Permitted — Ngā tukunga matahuhua – E whakaaehia ana**

The discharge of *contaminants* to air from:

(1) spray irrigation, soil injection, truck spreading, or land soakage of **liquid waste**

(2) the ventilation and displacement of liquids in storage tanks and tankers

(3) the use and application of **fertiliser** or lime

(4) the disturbance of land and soil carried out according to rules LM R1, LM R2, and LM R3 of this regional plan

(5) **contaminated land remediation** permitted by DW R24 of this regional plan

~~(5)~~(6) roasting of coffee beans

~~(6)~~(7) **fully enclosed in-vessel composting** producing up to 200 tonnes per year (of finished product) where emissions are captured and filtered

~~(7)~~(8) **free range farms** of up to 100 **poultry** birds

are permitted activities provided the discharge does not cause any ~~is not~~ noxious or dangerous, offensive or objectionable *effect* beyond the boundary of the **subject property** ~~or into any *water body*~~.

Advice Note – Discharge of **liquid waste**, and the use and application of **fertiliser** or lime must also meet all other requirements of this regional plan (see DW Discharges to Water and Land and OSET On-site Effluent Treatment).

AQ R4 ~~**Vehicles and**~~ **Roads – Permitted —** ~~**Ngā waka me**~~ **Ngā huarahi – E whakaaehia ana**

The discharge of *contaminants* to air from

~~(a) any internal combustion engine used to power vehicles and aircraft (but not *ships*) is a permitted activity provided there is no clearly visible smoke for a continuous period of 5 seconds or more when the engine is idling~~

~~(b)~~ vehicle movements on **unsealed roads** is a permitted activity.

AQ R5 **Venting of geothermal gas and steam – Permitted — Te tuku kapuni ngāwha me te koromamao – E whakaaehia ana**

The discharge of geothermal gases and steam into air from any **bore** or soakage hole associated with the **anthropogenic** use of *geothermal water* and *geothermal energy* is a permitted activity, provided the following conditions are complied with:

~~(c)~~(a) The gas or steam must be a~~n **unimpeded**~~ **vertical discharge** from a vent unless the discharge is located at least 200 metres from a **sensitive area**.

~~(d) All vents must have sufficient height to ensure that the plume is unaffected by downdraft and must rise a minimum of 6 metres above ground level including 3 metres above the highest ridge line of any roof within 30 metres.~~

~~(e)~~(b) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property.**

~~(f)~~(c) The take or discharge of *geothermal water* must be less than 1,000 tonnes per day

Advice note – This rule manages the discharge to air from *geothermal water* and/or *geothermal energy* use. The use of *geothermal water* and *geothermal energy* must comply with the rules in the GR Geothermal Resources module and the Rotorua Geothermal Regional Plan.

AQ R6 **Open burning – Permitted — Te tahutahu ahi noa – E whakaaehia ana**

Except where AQ R7 and AQ R8 apply, the discharge of *contaminants* to air from **open burning** is a permitted activity provided the fire is not located ~~on an **urban property**~~ within 100 metres of any neighbouring **dwelling house**, unless written approval is obtained from the occupier/s of all such neighbouring **dwelling houses**, and the following conditions are complied with:

(a) No materials either listed in AQ R10 or prohibited by the regulations of the ~~NESAQ~~ National Environmental Standards for Air Quality are burned.

(b) The discharge of smoke must not adversely affect the safety of any vehicle, aircraft, or *ship.*

(c) The discharge must not be noxious or dangerous, offensive, or objectionable beyond the boundary of the **subject property**.

Advice Note: This rule manages **open burning** according to the potential for adverse *effects* on air quality. **Open burning** must also be carried out according to local bylaws and the ~~Forest and Rural Fires Act 1977~~ Fire and Emergency New Zealand Act 2017.

AQ R7 **Open burning for emergency disposal of diseased carcasses and vegetation – Permitted — Te tahutahu ahi noa mō te whakawātea ohotata – E whakaaehia ana**

The discharge of *contaminants* to air from the emergency **open burning** ~~in the open~~ of dead diseased marine mammals, dead diseased livestock, or infected or diseased vegetation is a permitted activity provided the following conditions are complied with:

(a) Disposal must be carried out under the instruction of the responsible authority.

~~(b) Regional Council's Pollution Hotline (or its equivalent) must be notified a minimum of one hour before burning begins.~~

~~(c)~~(b) The discharge of smoke must not adversely affect the safety of any vehicle, aircraft, or *ship*.

Advice Note: Appropriate government departments at the time of notification are the Ministry for Primary Industries (livestock and vegetation) or the Department of Conservation (marine mammals). Regional Council's Pollution Hotline (or its equivalent) should be notified before burning begins, or as soon as practicable after burning commences.

AQ R8 **Open burning for firefighter training – Permitted — Te tahutahu ahi noa mō te whakangungu tinei ahi – E whakaaehia ana**

The discharge of *contaminants* to air from the burning of materials (including buildings and vehicles) for the purpose of firefighting research or training firefighters is a permitted activity provided the following conditions are complied with:

(a) The fire must be under direct control of Fire and Emergency New Zealand, a **defence fire brigade**, or **industry brigade**. ~~or other nationally recognised body authorised to undertake firefighting research or training activities~~.

(b) The recognised body under (a) must notify:

  (i) the Regional Council at least 24 hours before the training takes place and

  (ii) the occupier of any properties within a 100 metre radius of the training site, no earlier than 72 hours and no later than 12 hours before the training takes place.

(c) Notification under (b) must include:

  (i) intended time and location of the training activity, and

  (ii) details of any materials listed in AQ R10 that may be burned as part of the training and the potential adverse *effects* of these discharges.

(d) No burning may be carried out within the **Rotorua Airshed** between the months of April to September of any calendar year.

(e) The discharge of smoke must not adversely affect the safety of any vehicle, aircraft, or *ship*.

Advice Note: Regulation 9 of the ~~NESAQ~~ National Environmental Standard for Air Quality prohibits the burning of coated wire except in certain cases such as when burnt as part of firefighter training.

AQ R9 **Open burning ~~in urban areas~~ – Non-complying — Te tahutahu ~~noa i ngā wāhi tāone~~ – Tautuku-kore**

Except where AQ R7 and AQ R8 apply, the discharge of *contaminants* to air from **open burning** ~~on an **urban property**~~within 100 metres of any neighbouring **dwelling house** is a non-complying activity unless:

(a) written approval is obtained from the occupier/s of any neighbouring **dwelling house** within 100 metres of the **open burning,** or

(b) ~~unless~~ the fire is for **recreational/cultural** purposes only

AQ R10 **Burning of specified material – Non-complying — Te tahutahu i ngā papanga kua tautuhia – Tautuku-kore**

Except as provided for in AQ R8 and AQ R21~~(i)~~ the discharge of *contaminants* to air from the combustion of any of the following materials is a non-complying activity:

(a) **treated timber** or painted timber (except ~~for approved fuel for~~ pellets used in **pellet burners** ~~as specified in AS/NZS 4014.6:2007 Domestic solid fuel burning appliances – Test fuels – Wood pellets, or the functional equivalent)~~

(b) any plastics (including packaging), foam, nappies or polystyrene

(c) chlorinated organic chemicals including but not limited to **dioxins**, furans, polychlorinated biphenals (PCB)

(d) contaminated material from contaminated sites and buildings

(e) commercial food *waste*

(f) domestic *waste*, except paper and cardboard

(g) material that may contain heavy metals including but not limited to lead, zinc, arsenic, chromium, cadmium, copper, mercury, thorium (except **solid fuels** used in **fuel burning equipment**)

(h) materials or metals used in motor vehicles

(i) mineral fibres including but not limited to asbestos and insulation material

(j) paint and other surface protective coatings

(k) **pathological waste**

(l) pesticides and pesticide *waste* (excluding cardboard pesticide containers)

(m) rubber

(n) soft furnishings and upholstery.

Advice Note: In addition to the materials in this rule, National Environmental Standards for Air Quality ~~NESAQ~~ regulations prohibit the discharge of *contaminants* to air from the burning of the following materials:

- bitumen on a road
- coated wire
- tyres
- *oil* (in the open air)
- *waste* at landfills

except where the regulations provide otherwise. For full understanding of these restrictions, ~~Regional plan users should~~ check the regulations of the National

Environmental Standards for Air Quality ~~NESAQ~~ as well as the provisions of this regional plan.

AQ R11 **Solid fuel burners outside the Rotorua Airshed – Permitted — Ngā pāka ahi i waho o te Takiwā Hau o Rotorua – E whakaaehia ana**

The discharge of *contaminants* to air from a **solid fuel burner** installed in any **dwelling house** or *building* outside the boundary of the **Rotorua Airshed,** is a permitted activity provided:

(a) The discharge from the **solid fuel burner** complies with the regulations of the ~~NESAQ~~ National Environmental Standards for Air Quality and any local bylaw

(b) The **solid fuel burner** is operated so that all reasonable steps are taken to minimise the amount of smoke discharged

(c) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**

(d) No materials either listed in AQ R10 or prohibited by the National Environmental Standards for Air Quality ~~NESAQ~~ regulations are burned.

AQ R12 **Solid fuel burners in the Rotorua Airshed – Permitted — Ngā pāka ahi i roto i te Takiwā Hau o Rotorua – E whakaaehia ana**

The discharge of *contaminants* to air from a **solid fuel burner** installed in any **dwelling house** or building inside the boundary of the **Rotorua Airshed** is a permitted activity if:

(a) the discharge is from an **existing indoor open fire** provided the **indoor open fire** is:

  (i) located within a building which has been entered onto the **Heritage List** by **Heritage New Zealand**; or

  (ii) on *industrial or trade premises* where the **indoor open fire** is used exclusively for the smoking and cooking of food for wholesale or retail sale

OR

(b) the discharge is from a **pellet burner**, provided the **pellet burner** only burns the approved fuel for the device as specified in AS/NZS 4014.6:2007 Domestic solid fuel burning appliances – Test fuels – Wood pellets, or the functional equivalent

OR

(c) the discharge is from either:

  (i) an **existing woodburner** installed before 1 September 2005, until 31 January 2020, or

  (ii) a **coal burner or multifuel burner**, until 31 January 2020, or

  (iii) an **existing woodburner** installed after 1 September 2005, or

  (iv) an **existing** outdoor **solid fuel burner** on a business premises, until 31 January 2020

OR

(d) the discharge is from a **woodburner** or **ultra-low emission** burner that:

  (i) **replaced** an **existing woodburner**, **coal burner**, or **multifuel burner** that was used primarily as a **space heater** in the same **dwelling house** or building, and

  (ii) the **woodburner** has an **emission rate** less than or equal to 0.60, and

  (iii) has a **thermal efficiency** of no less than 65%, and

  ~~(iii)~~(iv) is an **Authorised solid fuel burner**

AND

(e) the discharge from **solid fuel burners** permitted in (a) to (d) complies with the following conditions:

(i) the **solid fuel burner** is operated so that all reasonable steps are taken to minimise the amount of smoke discharged

(ii) the discharge is not noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**

(iii) no materials either listed in AQ R10 or prohibited by the ~~NESAQ~~ National Environmental Standards for Air Quality regulations are burned.

AQ R13 Solid fuel burners in the Rotorua Airshed – Discretionary — Ngā pāka ahi i roto i te Takiwā Hau o Rotorua – Ka whiriwhirihia

The discharge of *contaminants* to air from a **woodburner** or **ultra-low emission burner** installed in any **dwelling house** or building inside the boundary of the **Rotorua Airshed** that is not otherwise permitted by AQ R12(c) or AQ R12(d):

(a) was **offset** by replacing or removing an **existing woodburner**, **coal burner** or **multifuel** burner with an **emission rate** of 0.60 or greater, in a **dwelling house** or building within the **Rotorua Airshed**, and

(b) the **woodburner** has an **emission rate** less than or equal to 0.60, and

(c) has a **thermal efficiency** of no less than 65% and

~~(c)~~(d) is an **Authorised solid fuel burner**

is a discretionary activity.

AQ R13A Existing outdoor solid fuel burners in the Rotorua Airshed – Discretionary — (tba) – Ka whiriwhirihia

After 1 February 2020, the discharge of *contaminants* to air from an **existing** outdoor **solid fuel burner** on a business premises inside the boundary of the **Rotorua Airshed** is a discretionary activity.

AQ R13B Solid fuel burners with secondary emission reduction devices in the Rotorua Airshed – Discretionary – (tba) – Ka whiriwhirihia

The discharge of contaminants to air from a **woodburner** installed in any **dwelling house** or building after 1 September 2005 that is fitted with a **secondary emission reduction device**, is a discretionary activity.

AQ R14 Solid fuel burners in the Rotorua Airshed – Non-complying — Ngā pāka ahi i roto i te Takiwā Hau o Rotorua – Tautuku-kore

Within the **Rotorua Airshed** the discharge of *contaminants* to air from any **solid fuel burner** that is not a permitted or discretionary activity according to a rule in this regional plan, is a non-complying activity. This applies from 27 February 2018~~the date of notification of this regional plan~~ except in the following cases:

(a) The discharge of *contaminants* to air from any **woodburner** that was installed in any **dwelling house** or building before 1 September 2005, or from any **refurbished solid fuel burner**, ~~(including **refurbished woodburners**)~~ is a non-complying activity from 1 February 2020.

(b) The discharge of *contaminants* to air from any **coal burner** or **multifuel burner** in any **dwelling house** or building is a non-complying activity from 1 February 2020.

AQ R15 Agrichemical spraying – Permitted — Tōrehu matūahuwhenua – E whakaaehia ana

All discharges of *contaminants* to air from the use of **agrichemicals** under any part of this rule must comply with the following conditions:

(1) General use of **agrichemicals**

(a) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**, in any non-target *water body*, or in any non-target watercourse listed in Schedule 3 of this regional plan.

(b) Where the use of the **agrichemical** is for the prevention, eradication or management of unwanted organisms or pests~~in a declared biosecurity emergency under the Biosecurity Act 1993~~, the **agrichemical** must be used under the direction of the responsible authority under the Biosecurity Act 1993.

(c) Where the **agrichemical** is sprayed using **drone application**, the **drone** must not operate more than ~~5~~10 metres above the target while **agrichemicals** are being distributed from the **drone**. If this condition cannot be complied with, the spray method is **aerial application**, and conditions relevant to **aerial application** must be complied with.

(d) Persons carrying out spraying of **agrichemicals**, other than the use of hand-held application methods, must be certified by an industry approved training programme, designed to encourage best practice to prevent spray drift in accordance with New Zealand Standard 8409:2004 (or its replacement or amendment).

(2) Method of application of **agrichemicals**

(a) The discharge of *contaminants* into air from **agrichemical** spraying using **hand-held non-motorised application** methods is a permitted activity provided conditions 3(a)~~, 3(c), 3(d)~~ and 4(d~~e~~) are complied with.

(b) **Hand-held motorised application** methods or application methods using a **low pressure boom** is a permitted activity provided conditions 3(a), ~~3(c),~~ 3(d), ~~3(e),~~ 4(c), 4(d), ~~4(e)~~ are complied with.

(c) Any other application method ~~(including **drone application** complying with condition 1(c))~~ is a permitted activity provided conditions 3(a), 3(b), 3(c), 4(a), 4(b), 4(c), 4(d), 5(a), 5(b), 5(c) and 5(d~~e~~) are complied with.

(3) Signage

Where specified by condition (2), the following conditions apply:

(a) Where **agrichemicals** are sprayed on **public amenity areas** signs must be displayed at every entrance where the public usually have entry to the area where the **agrichemical** is being sprayed (except where the entrance is from private property). Where **agrichemicals** are sprayed on other areas, signs must be displayed at the main entrance to the property. Signs required by this condition ~~and~~ must clearly state:

(i) "CAUTION – SPRAYING IN PROGRESS" or similar wording

(ii) the name and type of **agrichemical** used

(iii) a start and end date for spray operations

(iv) the name and phone number of the ~~applicator~~person carrying out the spraying

(v) that while signs are in place, it is not safe to enter.

(b) Where **agrichemicals** are sprayed within 50 metres of any **public amenity area** (**ground-based application** or **drone application** complying with condition 1(c)) or 200 metres (**aerial application**

excluding **drone application** complying with condition 1(c)), signs must be prominently displayed on the boundary of the **public amenity area** and must clearly state "caution – spraying in progress" or similar wording.

~~(c) Where **agrichemicals** are sprayed within 10 metres of any **public amenity area**, signs must be prominently displayed on the boundary of the **public amenity area** and must clearly state "caution – spraying in progress" or similar wording.~~

~~(d)~~(c) Signs required by 3(a) or 3(b) ~~or 3(c)~~ should remain in place until all airborne spray has settled and the **agrichemical** has dried on its target surface. Signs must be removed within 5 days once the area is safe to re-enter.

~~(e)~~(d) Any vehicles ~~associated with~~ being used to apply **agrichemical** spray~~ing~~ on **public amenity areas** must display prominent signs front and back that clearly state "CAUTION – SPRAYING IN PROGRESS" or similar wording.

(4) Notification

Where specified by condition (2), the following conditions apply:

(a) The owner/occupier or agent must notify the occupier of any properties within 50 metres (**ground-based application** or **drone application** complying with condition 1(c)) and 200 metres (**aerial application** excluding **drone application** complying with condition 1(c)) of where the **agrichemical** is being sprayed:

EITHER

(i) by notification, required no earlier than 72 hours, or 20 days for spraying carried out on plantation forestry or in a conservation area, and no later than ~~24~~ 12 hours before the **agrichemical** spraying. Notification must include the following:

- the address and location of proposed application
- the date/s of proposed application
- name and type of **agrichemical** to be applied
- name and phone number of ~~applicator~~person carrying out the spraying.

OR

(ii) according to a notification agreement with the occupier. The notification agreement must:

- contain (as a minimum) method of notification and minimum time for notification prior to spraying
- be recorded in writing and signed by all parties
- be reviewed and re-signed annually.

(b) Details of notification (including but not limited to date and time of notification, parties notified, method of notification) must be recorded.

(c) Where **agrichemical** spraying is being carried out by any person other than the owner/occupier or agent responsible for notification, the person carrying out the spraying must confirm that notification requirements have been met before spraying takes place.

~~(d) The owner/occupier or agent must notify the occupier of any properties within 10 metres of **agrichemical** spraying according to 4(a)(i) or 4(a)(ii), 4(b) and 4(c), except where **agrichemicals** are sprayed on land under management by the Regional Council for maintenance of rivers and drainage schemes, land used for road or rail purposes, or land designated as an esplanade strip or esplanade reserve.~~

~~(c)~~(d) Where **agrichemicals** are sprayed on **public amenity areas**, the owner/occupier or agent must publicly notify (according to section 2AB(1)(a) of the Act) the **agrichemical** spraying ~~using an appropriate method from~~ no earlier than 10 days or 20 days for spraying carried out on plantation forestry or in a conservation area, and no later than ~~at least~~ 24 hours ~~prior, up to one week prior~~ before the ~~to the~~ **agrichemical** ~~use~~spraying. Notification must include the following information:

(i) The name and type of **agrichemical** used.

(ii) A start and end date for spray operations.

(iii) Contact details of the authority responsible for the spraying.

(5) Spray Risk Management Plan

Where specified by condition (2), the following conditions apply:

(a) Prior to the **agrichemical** spraying, a spray risk management plan must be prepared and implemented by the owner/occupier or agent.

(b) The spray risk management plan must contain the following information:

(i) A plan or map identifying the location of any **sensitive ~~activities~~areas** within 50 metres of the land being sprayed by **ground based application** or **drone application** (complying with condition 1(c)), or within 200 metres of the land being sprayed by **aerial application** (excluding **drone application** complying with condition 1(c)).

(ii) Areas to be sprayed, type of **agrichemical** likely to be used during the year and the times of year that spraying is likely to occur.

(iii) Strategies used to avoid contamination of **sensitive ~~activities~~areas**.

(iv) Strategies to mitigate any spray drift caused by particular weather conditions,

(v) Strategies to manage any specific hazard associated with the **agrichemical** to be sprayed (eg. toxicity to bees).

(c) The spray risk management plan must be reviewed and updated each year that spraying will be carried out.

(d) The spray risk management plan must be made available ~~to the Regional Council and to potentially affected parties~~ upon request within 20 working days of such a request being made.

Advice Note: This rule manages the air discharge component of **agrichemical** use. Users must also comply with all other rules in this regional plan (see DW Discharges to Water and Land). Other matters that should be considered when using **agrichemicals** include: certification, personal protection equipment, storage, transport, and disposal. Users (particularly large-scale) should also comply with the New Zealand Standard Management of Agrichemicals NZS 8409:2004.

AQ R16 Spraypainting – Permitted — Peita tōrehu – E whakaaehia ana

The discharge of *contaminants* to air from the spray application, of surface coatings, including those containing di-isocyanates, ~~organic plasticisers,~~ or spray on anti-fouling paint (excluding the application of protective coatings to **transmission line support structures**, the use of water based paints, or up to 0.5 litres per hour and 5 litres per month of solvent based paints) is a permitted activity if: ~~provided the following conditions are complied with:~~

(a) The spraying is carried out, at a rate of no more than 2 litres per hour, in a spray booth, room, or enclosure fitted with an air extraction system and air filtering system to control the discharge of **particulates** and where the systems

are maintained in accordance with the manufacturer's instructions ~~that discharges~~

(b) All *contaminants* and exhaust air from the enclosed spraying and drying areas must discharge to an emission stack or stacks, and the discharge from the emission stack or stacks ~~must be~~is an **unimpeded vertical discharge** from the emission stack at least 3 metres above the ridge height of the building and 3 metres above the highest ridgeline of any roof within 30 metres.

(c) Where spraypainting is carried out, on surfaces of fixed or large structures that cannot practicably be dismantled and transported to a spray booth, the discharge must be controlled using the *best practicable option* such as screening and paint technologies; and, when surface coatings containing di-isocyanates or anti-fouling paints are used:

(i) The owner/occupier/agent must notify the occupier of any property within 50 metres of the spray application site at least 24 hours prior to commencing the work.

(ii) An exclusion zone must prevent any public access within 15 metres of the spray application site.

~~(c)~~(d) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

Advice Note: The discharge of *contaminants* to air from blasting and applying protective coatings to a **transmission line support structure** is managed by the ~~Resource Management (~~National Environmental Standards for Electricity Transmission Activities~~) Regulations~~ 2009.

AQ R17 Abrasive blasting – Permitted — Te whakapahū pākaha – E whakaaehia ana

The discharge of *contaminants* to air from an abrasive blasting operation (excluding blasting of **transmission line support structures**) is a permitted activity provided the following conditions are complied with:

(a) The discharge from any abrasive blasting operation must be controlled either:

(i) through use of a sealed abrasive blasting booth where the air is extracted from the booth using a filtering system maintained according to the manufacturer's instructions

OR

(ii) where abrasive blasting is carried out on surfaces of fixed or large structures that cannot practicably be dismantled and transported to a blasting booth ~~where a sealed abrasive blasting booth cannot be used~~ the discharge must be controlled using a current, best practice method such as screening, wet nozzles, or vacuum.

(b) Material used for blasting must not contain more than 5% free silica on a dry weight basis.

(c) The site and work areas must be kept clean and free of accumulations of deposited abrasive blasting material and other debris.

(d) For mobile abrasive blasting operations:

(i) the owner/occupier/agent must notify the occupier of any properties within 50 metres of the blasting site at least 24 hours prior to commencing the work

(ii) all blasting material and other debris must be removed from site once the operation is completed.

(e) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**, or discharge into any *water body*.

Advice Note: The discharge of *contaminants* to air from blasting and applying protective coatings to a **transmission line support structure** is managed by the ~~Resource Management (~~National Environmental Standards for Electricity Transmission Activities~~) Regulations~~ 2009.

AQ R18 Fuel burning equipment (Boilers) – Permitted — Ngā taonga ngingiha kora (Ngā kōhua nunui) – E whakaaehia ana

(1) General discharges from **fuel burning equipment**

All discharges of *contaminants* to air from **fuel burning equipment** under any part of this rule must comply with all of the following conditions:

(a) The discharge must be an **unimpeded vertical discharge** from an emission stack.

(b) The **fuel burning equipment** and any emission control equipment must be maintained in accordance with the manufacturer's specifications at least once every year by a person competent in the maintenance of that equipment.

(c) The sulphur content of any fuel burnt must be less than 1% by weight.

(d) The discharge of smoke or water vapour must not adversely affect vehicle safety, aircraft safety, or *ship* safety.

(e) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property** or into any *water body*.

(2) Equipment installed before 27 February 2018

(a) For **fuel burning equipment** generating a gross heat energy output (within the combustion chamber) of less than 40kW (of any fuel), the discharge is a permitted activity.

(b) For **fuel burning equipment** generating a gross heat energy output within the combustion chamber:

A. between 40kW up to 500kW, from the combustion of clean *oil*, coal or **untreated wood**

OR

B. between 40kW up to 1MW from the combustion of natural or liquefied petroleum gas

the discharge is a permitted activity provided conditions (1)(a) to (1)(e) are met and any ~~all~~ emission stacks constructed after December 2003 rise at least 6 metres above the ground and 3 metres above the highest ridgeline on the roof of any building less than 20 metres from the emission stack.

(c) For **fuel burning equipment** generating a gross heat energy output within the combustion chamber:

A. greater than 500kW up to 2MW from the combustion of clean *oil*, coal or **untreated wood**

OR

B. greater than 1MW up to 4MW from the combustion of natural or liquefied petroleum gas

the discharge is a permitted activity provided:

(i) conditions (1)(a) to (1)(e) are met and any ~~all~~ emission stacks constructed after December 2003 rise at least 12 metres above ground level and at least 3 metres above the highest ridgeline on the roof of any building less than 20 metres from the emission stack

(ii) the emission stack is designed so that the minimum velocity of the discharge as it leaves the chimney at full load is 7 metres per second.

(d) For **fuel burning equipment** generating a gross heat energy output within the combustion chamber:

A. greater than 2MW up to 5MW from the combustion of clean *oil*, coal or **untreated wood**

OR

B. greater than 4MW up to 10MW from the combustion of natural or liquefied petroleum gas

the discharge is a permitted activity provided:

(i) conditions (1)(a) to (1)(e) are met and any ~~all~~ emission stacks constructed after December 2003 rise at least ~~15~~ 14.9 metres above ground level and at least 3 metres above the highest ridge line on the roof or any building within 20 metres

(ii) the emission stack is designed so that the minimum velocity of the discharge as it leaves the chimney at full load is 7 metres per second

(iii) The concentration of **particulates** shall not exceed 400 milligrams per cubic metre corrected to 0 degrees Celsius dry gas basis, 1 atmosphere pressure and 8% oxygen

(iv) The mass discharge of **particulates** shall not exceed 2.5 kilograms per hour.

(3) Equipment installed after 27 February 2018

The discharge of *contaminants* to air from **fuel burning equipment** generating a gross heat energy output within the combustion chamber of up to and including:

A. 500kW gross heat energy output from the combustion of clean *oil*, coal or **untreated wood**

OR

B. 10MW gross heat energy output from the combustion of natural or liquefied petroleum gas

is a permitted activity provided the following conditions are complied with:

(a) The total combined gross heat output from all **fuel burning equipment** installed on the property after 27 February 2018 must not exceed the limits in 3(A) and 3(B). Where more than one fuel type is used, the combined gross heat output must not exceed the lowest kilowatt or megawatt threshold of any of the fuel types used.

(b) The emission stack exit velocity must not be less than 10 metres per second except for a 15 minute period during start-up.

(c) All emission stacks must rise at least:

(i) 12 metres above the ground

AND

(ii) and 3 metres above the highest ridgeline on the roof of any building within 20 metres from the emission stack.

(d) **Fuel burning equipment** using clean *oil*, coal or **untreated wood**, must not discharge any amount of **particulates** into any part of the **Rotorua Airshed** at any time.

AQ R19 Intensive farming – Controlled — Ngā mahi ahuwhenua – E whakahaerehia ana

The discharge of *contaminants* into air from a permanent, **intensive farming** operation established prior to 1 January 2001, is a non-notified, controlled activity for which applications will be considered without the need to obtain the written approval of affected persons.

The Regional Council reserves control over the following matters:

(a) Setting conditions to control dust, odour, **particulates**, including but not limited to any matter contained in relevant industry codes of practice.

(b) Duration of consent.

(c) Compliance monitoring.

(d) Review of the conditions of the consent and the timing and purpose of the review.

(e) Payment of administrative charges.

AQ R20 **Fumigation for quarantine application or pre-shipment application – Discretionary or Non-complying — Auahina ki te paitini mō te tono taratahi, tono utanga-tōmua rānei – Ka whiriwhirihia, Tautuku-kore rānei**

The discharge of *contaminants* into air from fumigation for **quarantine application** or **pre-shipment application**:

(a) Using fumigants other than methyl bromide, is a discretionary activity.

(b) Using methyl bromide with **effective recapture**, is a discretionary activity.

(c) Using methyl bromide without **effective recapture,** is a non-complying activity.

AQ R21 **Specific activities – Discretionary— Ngā mahinga tauwhāiti – Ka whiriwhirihia**

The discharge of *contaminants* into air from any of the following activities is a discretionary activity:

(a) **Agrichemical** manufacture.

(b) Asphalt or bitumen manufacture or processing.

(c) Breweries.

(d) Cement manufacture.

(e) Chemical manufacture or mixing.

(f) Composting, except where provided for by AQ R3, ~~(including mushroom based processes)~~where the compost is for sale or commercial use.

(g) Crematoria where a new facility with a new discharge to air is being established ~~installed~~ after 27 February 2018.

(h) Distilling operations including but not limited to petroleum refining.

(i) **Enclosed incinerators** where any of the materials listed in AQ R10 are burned.

(j) Farming activities as follows:

(i) **free range farming** of pigs, or more than 100 **poultry** birds, where either a new farm is being established or where an existing farm is increasing the character, intensity or scale of the **effects** of the activity, after 27 February 2018 ~~and~~

(ii) **intensive farming** not controlled by AQ R19.

(k) Glass making.

(l) Industrial resin or glue manufacture.

(m) Kraft and chemical pulping or reconstituted wood panel manufacture.

(n) Metal processing including (but not limited to) aluminium smelters, commercial foundries and metallurgical processing, steel galvanising and steel mills.

(o) Milk powder or milk based powder manufacture.

(p) Paint manufacture.

(q) Pesticide manufacture.

(r) Pet food manufacture by the application of heat.

(s) Processing of animal products including (but not limited to) animal rendering and by-product processing plants, commercial fellmongering, woolscourers, and dag crushing plants.

(t) Processing of radioactive substances.

(u) Pulp, paper, or paper board manufacturing

(v) Pyrolysis, torrefaction, or gasification of carbonaceous material.

(w) Synthetic **fertiliser** manufacture

(x) *Waste* processing activities as follows:

(i) municipal sewage treatment plants (excluding pump stations and associated odour beds)

(ii) *waste* facilities including refuse transfer stations, resource recovery, recycling centres, baling stations

(iii) landfills (excluding **untreated wood** *waste* and **cleanfill**).

Advice Note: The operation of an **incinerator** at a school or healthcare institution is prohibited under the ~~NESAQ~~National Environmental Standards for Air Quality, unless a resource consent was granted before 30 October 2006.

AQ R22 Handling of bulk solid materials – Discretionary – (tba) – Ka whiriwhirihia

Unless otherwise permitted by AQ R26, the discharge of *contaminants* to air from the **handling** of **bulk solid materials** where:

(a) the rate of **bulk solid material handling** exceeds 20 tonnes in any hour, and the discharge occurs less than 100 metres from any **sensitive area**, or

(b) the rate of **bulk solid material handling** exceeds 50 tonnes in any hour,

is a discretionary activity.

AQ R23 Mobile or emergency diesel generators and pumps – Permitted – (tba) – E whakaaehia ana

(a) The discharge of *contaminants* to air from the internal combustion of diesel in any mobile or emergency generator or pump with a maximum load of 600 kilovolt-amperes is a permitted activity provided the following conditions are met:

(i) the discharge must not occur for more than 48 hours within 50 metres of a **sensitive area**, and

(ii) fuel used in the generator or pump must comply with the Engine Fuel Specifications Regulations 2011, and

(iii) the discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property.**

(b) For the internal combustion of diesel in any mobile or emergency generator or pump with a total combined output of less than 5000 kilovolt-amperes, the discharge is a permitted activity provided:

(i) the discharge is associated with geothermal electricity generation activities, including geothermal drilling, and

(ii) the discharge must not occur for a period of more than 3 months per wellhead or generation site, and

(iii) the discharge must not occur within 200 metres of a **sensitive area**, excluding discharges to air from pumps which may be located adjacent to *water bodies* and buildings that are defined as a **sensitive area** and are uninhabited for the duration of the discharge, and

(iv) fuel used in the generator or pump must comply with the Engine Fuel Specifications Regulations 2011, and

(v) the discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

AQ R24 Flaring of natural gas – Permitted – (tba) - E whakaaehia ana

The discharge of *contaminants* to air from the combustion of natural gas by temporary flaring is a permitted activity provided the following conditions are met:

(a) the equipment is designed specifically for flaring of natural gas

(b) the discharge must be an **unimpeded vertical discharge** from the emission stack

(c) the equipment must be maintained in accordance with the manufacturer's specifications at least once per year by a person competent in the maintenance of that equipment

(d) the discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

AQ R25 Agrichemical spraying – Controlled – Torehu matuahuwhenua - E whakahaerehia ana

The discharge of *contaminants* to air from the use of **agrichemicals** not otherwise permitted by AQ R15 is a controlled activity.

The Regional Council reserves control over the following matters:

(a) the location where spraying will take place, frequency of spraying, application method, and proximity of spraying to sensitive activities

(b) measures to manage spray drift including setting conditions to ensure the discharge is not noxious or dangerous, offensive or objectionable, beyond the boundary of the **subject property**

(c) measures to notify neighbouring properties that spraying will take place (including notification and signage)

(d) notification agreements with neighbours

(e) the preparation of and contents of a spray risk management plan

(f) duration of consent and consent condition review including the timing and purpose of the review

AQ R26 Cement storage and handling – Permitted – (tba) – E whakaaehia ana

The discharge of *contaminants* to air from the storage, **handling**, redistribution, or packaging of cement, and cement additives is a permitted activity provided the following conditions are complied with:

(a) The cement is delivered using a fully enclosed conveyance system and stored in silos.

(b) The silos must be fully enclosed and fitted with a fabric filtration system that is installed and maintained in accordance with the manufacturer's specifications.

(c) Cement additives such as fly ash and microsilica must be bagged and debagged within an enclosed structure fitted with appropriate dust control equipment that is installed and maintained in accordance with the manufacturer's specifications.

(d) There must be no accumulation of dust or **particulates** on site.

(e) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property** or into any *water body*.

AQ R27 Crematoria – Controlled – (tba) – E whakahaerehia ana

From 1 February 2020, the discharge of *contaminants* to air from crematoria facilities that were established before 27 February 2018, is a controlled, non-notified activity for which applications will be considered without the need to obtain the written approval of affected persons.

The Regional Council reserves control over the following matters:

(a) Setting conditions to control cremator operation, the number of cremations and contaminants discharged from the facility, including but not limited to any matter contained in relevant industry codes of practice.

(b) Setting conditions to require stack emissions monitoring and testing of soil samples to assess mercury accumulation.

(c) Duration of consent and consent condition review including the timing and purpose of the review

(d) Compliance monitoring.

(e) Payment of administrative charges.

Interpretation of the terms noxious or dangerous, offensive or objectionable

Several rules in the Air Quality chapter use the terms 'noxious or dangerous' or 'offensive or objectionable' as included in section 17 of the Act. These terms are not defined in the Definitions of Terms as they need to take account of case law precedents as they develop. However, some guidance is provided to give some certainty as to how the Council will interpret and implement these terms to determine whether an activity complies with permitted conditions or a resource consent condition.

In assessing whether an activity is noxious, dangerous, offensive or objectionable, the decision maker acts as representative of the community at large, weighs all competing considerations and ultimately makes a value judgement on behalf of the community as a whole. The decision maker must consider whether an "ordinary and reasonable person" would consider the action offensive and objectionable.

Noxious or dangerous

The dictionary definition of 'Noxious' means harmful, unwholesome. 'Dangerous' means involving or causing exposure to harm.

Noxious or dangerous in the context of the Air Quality chapter is an activity or discharge of *contaminants* to air that is harmful to people, property, or the *environment*. This may include, but is not limited to, the following:

(a) Human health *effects*.

(b) Contamination of potable water supplies where the concentration of **contaminant** in the water supply is at a level that exceeds the safe level for human consumption.

(c) Exceedance of a maximum residue limit for an **agrichemical** on, or in, food or stock feed at harvest or slaughter.

(d) Adverse *effects* on ecosystems including *water bodies*. This includes exotic and indigenous flora and fauna.

(e) Damage to crops or plants where *contaminants* have affected the growth or quality of the crop such that levels exceed safe levels for human consumption.

(f) A discharge of **fertiliser** or **agrichemical** spray that compromises the organic status of another property.

(g) Damage to paintwork, windows or surfaces from deposition of airborne *contaminants*.

(h) Reduced visibility that endangers the passage of any vehicle, aircraft, or *ship*.

Offensive or objectionable

The dictionary definition of 'offensive' is giving or meant to give offence, disgusting, foul-smelling, nauseous, repulsive. 'Offensive' is defined as 'open to objection, unpleasant, offensive.

To determine if a discharge is offensive or objectionable, the Regional Council will make an overall judgment that considers the FIDOL factors as follows:

Frequency – how often an individual is exposed.

Intensity – the strength or concentration.

Duration – the length of exposure.

Offensiveness/character – the hedonic tone (pleasant, neutral, unpleasant) or type.

Location – the type of land use and nature of human activities in the vicinity of the source.

When assessing discharges (odour, smoke, dust and **particulates**) the Regional Council will use the following approach:

(a) An experienced, warranted Council Officer will make an assessment of the situation taking into account the FIDOL factors.

(b) If the discharge is deemed to be offensive or objectionable by the warranted Council Officer, the discharger may be asked to take whatever action is necessary to avoid, remedy or mitigate the effects of the discharge on the *environment*.

(c) If the discharger disputes the warranted Council Officer's assessment or the problem is ongoing, then further evaluation may be required. This evaluation could include:

(i) An assessment by another experienced, warranted Council Officer.

(ii) For odour, monitoring using olfactometry or other appropriate technology.

(iii) For particulates, monitoring of particulates beyond the boundary will be compared with the National Environmental Standards for Air Quality for particulates if people may be exposed.

Definition of Terms

Aerial application means any application of **agrichemicals** where the product is applied from an aircraft including but not limited to planes, helicopters and **drones**.

Airshed (as defined by the National Environmental Standards for Air Quality) *means:*

(a) The region of a regional council excluding any area specified in a notice under paragraph (b).

(b) A part of the region of a regional council specified by the Minister for the Environment by notice in the New Zealand Gazette *to be a separate airshed.*

Ambient air means the air outside buildings and structures. This does not include indoor air ~~air in the workplace,~~ or contaminated air discharged from a source.

Anthropogenic means created by or caused by humans.

Authorised solid fuel burner means a **solid fuel burner** that is either:

(a) on the Ministry for the Environment's Authorised Wood Burner list or

(b) has been authorised under the New Zealand Domestic Solid Fuel Burner Authorisation Manual 2011 (or its amendment or replacement).

Bulk solid material means means materials consisting of, or including, fragments that could be discharged as dust or **particulates**. These materials include but are not limited to: gravel, quarried rock, **fertiliser**, coal, cement, flour, rock aggregate, grains, compost, palm kernel extract, tapioca, and woodchip.

Coal burner means a **solid fuel burner** designed to burn coal, which has one or more of the following design features:

(a) fuel combustion air supplies with separate controls

(b) grate in the base of the firebox

(c) ash pan under the grate.

Defence fire brigade means a unit of any other part of the Armed Forces established and trained under the authority of the Chief of Defence Force under the Defence Act 1990 for the prevention, suppression, and extinguishment of fires.

Dioxins means the group of chemicals known as polychlorinated dibenzodioxins and polychlorinated dibenzofurans, and other chemicals such as polychlorinated biphenyls, which are known to have dioxin-like *effects*.

Drone means an Unmanned Aerial Vehicle (UAV) or Remotely Piloted Aircraft System (RPAS).

Drone application means **aerial application** of **agrichemicals** using a **drone**.

Dwelling house means any building, whether permanent or temporary, that is occupied, or is intended to be occupied, in whole or in part, as a residence; and includes any structure or outdoor living area that is accessory to, and used wholly or principally for the purposes of, the residence; but does not include the land upon which the residence is sited.

Effective recapture in relation to fumigation, means a process that ~~eliminates methyl bromide emissions from fumigation enclosures such as buildings, shipping containers or gas proof sheets used to cover target product, by:~~

~~(a)~~ capture~~sing methyl bromide~~any fumigant ~~(not absorbed by the target product)~~from fumigation enclosures (such as buildings, shipping containers or gas proof sheets covering target product) on activated carbon or other medium so that it is not released into the atmosphere when the fumigation enclosure is ventilated ~~or any time after, or~~

~~(b) destroying the methyl bromide (not absorbed by the target product) before a fumigation enclosure is ventilated~~

such that the concentration of fumigant (not absorbed by the target product) within the fumigation enclosure at the beginning of the fumigation period is reduced by 80% prior to ventilation of the fumigation enclosure.

Emission rate when used in relation to **solid fuel burners** means the amount of particles (in grams) discharged from a **solid fuel burner** for each kilogram of dry wood burnt. The discharge must be measured in accordance with:

(a) the method specified in Australian/New Zealand Standard AS/NZS 4013:2014, Domestic solid fuel burning appliances – Method for determination of flue gas emission, or

(b) for a **woodburner** excluded from that method, another method that is functionally equivalent.

Enclosed incinerator means an incinerator with a burning chamber that is closed off during use and with a regulated supply of air to the fire.

Existing in relation to **solid fuel burners** means a **solid fuel burner** which:

(a) is in situ and has a building permit issued under the Local Government Act 2002, or

(b) is in situ and has a building consent issued under the Building Act 2004, or

(c) is the subject of a building consent or building permit application that has been accepted in writing by the Rotorua District Council on or before ~~the date of notification of this regional plan~~27 February 2018, provided the consent or permit includes the **solid fuel burner** as a part of the consent or permit and the consent or permit is not declined, or

(d) has been verified by a delegate of the Rotorua District Council or Regional Council as lawfully installed.

Forestry road as defined by the National Environmental Standards for Plantation Forestry

(a) means a road that has the width, grade, strength, and pavement surface that allows a fully laden logging truck to safely traverse it and has all-weather access; but

(b) does not include a road managed by a local authority, the Department of Conservation, or the New Zealand Transport Agency.

Forestry track as defined by the National Environmental Standards for Plantation Forestry

(a) means a track that allows the passage of forestry machinery or vehicles, but does not provide the width, grade, strength, and pavement surface to allow a fully laden logging truck to safely traverse it or lacks all-weather access; but

(b) does not include a track managed by a local authority, the Department of Conservation, or the New Zealand Transport Agency.

Free-range farming means farms where **poultry** or pigs (other than those kept as pets) are housed indoors, but have free access to the outdoors.

Fuel burning equipment often referred to as a "boiler" means a device used for the combustion of fuel within an enclosed combustion chamber in which heat is transferred from the products of combustion directly for the production of useful heat or power. For clarity this excludes vehicles, rail vehicles, *ships*, aircraft, **solid fuel burners**, diesel fuelled generators, and **enclosed incineration**.

Fully enclosed in-vessel composting means composting produced within a container (including but not limited to tanks, drums, silos, bunkers, or tunnels) where air flow and temperature are fully controlled during the composting process.

~~**Gazetted Airshed** means a part of the region of a regional council specified by the Minister for the Environment as a separate **airshed**, by notice in the *New Zealand Gazette*.~~

Ground-based application means any application of **agrichemicals** from a source located on the ground.

Hand-held motorised application means an application method of **agrichemicals** where the applicator is held, and the **agrichemicals** applied, by hand, and where some part of the application method involves motorised pumping.

Hand-held non-motorised application means an application method of **agrichemicals** where the applicator is held, and the **agrichemicals** applied, by hand, and where no part of the application method involves motorised pumping.

Handling in relation to bulk solid material means extraction, quarrying, mining, processing, screening, conveying, transferring, blasting, loading, unloading or crushing of any material.

Heritage List means the New Zealand Heritage List/Rarangi Korero.

Heritage New Zealand means Heritage New Zealand Pouhere Taonga.

Incineration *in relation to waste or other matter, means its deliberate combustion for the purpose of its thermal destruction.*

Incinerator means a device used for **incineration** where the primary purpose of the device is to deliberately combust *waste* or other matter by thermal destruction.

Industry brigade means a group of persons organised as an industry brigade in accordance with Section 69 of the Fire and Emergency New Zealand Act 2017.

Indoor open fire means an appliance or a structure inside a **dwelling house** or building that can burn **solid fuel** but cannot effectively control the rate of air supply to the combustion chamber. It includes a fireplace that has a cover or doors that cannot effectively control the rate of air supply to the combustion chamber, but excludes any **solid fuel burner** where the firebox is enclosed with a regulated supply of air to the fire.

Intensive farming means ~~agricultural production~~ **poultry** farms, piggeries, other livestock farms, and mushroom production carried out within buildings, structures, pens or yards where the stocking density limits, or prevents, dependence on natural soil ~~quality~~ on the site, and/or where food is required to be brought to the site. ~~Includes poultry farming, piggeries, mushroom production but~~ Excludes **free-range farming**, and greenhouses.

Liquid waste means any *waste* liquid composed of less than 20% solids and does not include **hazardous substances**.

Low pressure boom means any boom with the following design conditions:

(a) the liquid pressure through the boom is less than 3 bar

(b) the height of the discharge point on the boom is less than 1 metre from the ground

(c) the nozzles point down

(d) the nozzles are designed to create coarse droplets of greater than 250 microns in diameter.

Multifuel burner means a **solid fuel burner** designed to burn wood and/or coal, which has one or more of the following design features:

(a) fuel combustion air supplies with separate controls

(b) grate in the base of the firebox

(c) ash pan under the grate.

~~**Noxious or dangerous** means an activity or discharge of contaminants to air that causes, or is likely to cause, an adverse effect on property and/or the environment. This may include, but is not limited to, the following:~~

~~(a) Human health effects from acute exposure or chronic exposure. These include allergic reactions, toxic poisoning or exposure to carcinogens.~~

~~(b) Contamination of potable water supplies where the concentration of **contaminant** in the water supply is at a level that exceeds the safe level for human consumption.~~

~~(c) Exceedance of a maximum residue limit for an **agrichemical** on, or in, food or stock feed at harvest or slaughter.~~

~~(d) Adverse effects on ecosystems including water bodies. This includes exotic and indigenous flora and fauna.~~

~~(e) Damage to crops or plants where contaminants have affected the growth or quality of the crop such that levels exceed safe levels for human consumption and/or the market value of the crop is reduced.~~

~~(f) A discharge of **fertiliser** or **agrichemical** spray that compromises the organic status of another property.~~

~~(g) Damage to paintwork, windows or surfaces from deposition of airborne contaminants.~~

~~(h) Reduced visibility that endangers the passage of any vehicle, aircraft, or *ship*.~~

Offset means an emission reduction in one part of the **Rotorua Airshed** to compensate for an emission increase elsewhere in the **Rotorua Airshed**.

Oil (as defined by the National Environmental Standards for Air Quality) *means petroleum in any form other than gas including crude oil, fuel oil sludge, oil refuse, and refined oil products (for example, diesel fuel, kerosene, and motor gasoline).*

Open burning means the combustion of any material in the open air, other than in purpose built equipment designed to control the combustion process. Includes bonfires, **incinerators** and **recreational/cultural** outdoor burning but excludes, **enclosed incinerators**, **solid fuel burners**, ~~and~~ **fuel burning equipment**, flaring of natural gas, smokers, fireworks, candles, lamps, and outdoor patio gas heaters.

Particulates means particulate matter where the particle size is small enough to become airborne. Includes:

(a) **TSP** – total suspended particulate

(b) **PM_{10}** – particulate matter that is less than 10 micrometres in diameter

(c) **$PM_{2.5}$** – particulate matter that is less than 2.5 micrometres in diameter.

Pathological waste means *waste* that is offensive to the senses or hazardous to human health including anatomical wastes such as human tissue and organs, animal tissue, organs and carcasses, materials that may be subject to contamination by highly infectious organisms, and any product contaminated by radiation used in medical treatments.

Pellet burner means any **solid fuel burner** that burns manufactured pellets of compressed wood sawdust, and where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate. Excludes **woodburners, coal burners** and **multifuel burners**.

Poultry means domestic fowl kept in captivity for sale or to produce meat, eggs, or other products. Includes: chickens, ducks, geese, guinea fowl, pigeons, turkeys, peacocks, doves, pheasants, swans, and quail.

Pre-shipment application in relation to fumigation, means the non-quarantine treatment applied within 21 days prior to export, to meet the official requirements of the importing country or the existing official requirements of the exporting country. Official requirements are those which are performed or authorised by a national plant, animal, environmental, health, or stored product authority.

Public amenity area means a public area where members of the public are likely to congregate for extended periods of time. This may includ~~eing~~ (but is not limited to): backcountry huts, barbeques, changing facilities, cycleways, outdoor sports facilities, parks and reserves, playgrounds and playground equipment, public toilets, seating and picnic tables, shelters, squares, and walkways.

Quarantine application in relation to fumigation, means treatment to prevent the introduction, establishment and/or spread of quarantine pests (including diseases), or to ensure their official control, where:

(a) official control is that performed by, or authorised by, a national plant, animal or environmental protection or health authority, and

(b) quarantine pests are pests of potential importance to the areas endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.

~~**Recapture** in relation to fumigation means a process that eliminates methyl bromide emissions from fumigation enclosures such as buildings, shipping containers or gas proof sheets used to cover target product, by:~~

~~(a) capturing methyl bromide (not absorbed by the target product) on activated carbon or other medium so that it is not released into the atmosphere when the fumigation enclosure is ventilated or any time after, or~~

~~(b) destroying the methyl bromide (not absorbed by the target product) before a fumigation enclosure is ventilated.~~

Recreational/cultural in relation to **open burning** means any **open burning** for the purposes of cooking or amenity (eg. hangi, umu, barbeque, braziers, pizza ovens Guy Fawkes celebrations), or recognised cultural practices, but excluding **incinerators**.

Refurbished in relation to **solid fuel burners** means a **solid fuel burner** that has been altered after purchase or installation in the **dwelling house** or building in a way that could change its design standard.

Remove, removed or removing: in relation to **solid fuel burners** means the complete physical removal (taking out, taking away or cause to be no longer present) of a **solid fuel burner** from the **dwelling house** or building.

Replace, **replaced** or **replacing**: in relation to **solid fuel burners** means the complete physical removal (taking out, taking away or cause to be no longer present) of a **solid fuel burner** from the **dwelling house** or building and installation of a new **solid fuel burner** that complies with the requirements of this regional plan.

~~**Reverse sensitivity** means the potential for the operation of an existing lawfully established activity to be compromised, constrained or curtailed by the more recent establishment of other activities which are sensitive to the adverse environmental *effects* being generated by the pre-existing activity.~~

Rotorua Airshed means the area of Rotorua specified by the Minister for the Environment as a separate **airshed**, by notice in the *New Zealand Gazette*.

Secondary emission reduction device in relation to **solid fuel burners** means a secondary air emission treatment device that reduces the particulates from a **solid fuel burner**.

Sensitive ~~activity~~area means an activity that is particularly sensitive to adverse *effects* associated with air *contaminant* discharges either due to the vulnerability of the population or area exposed to the *contaminant*, or due to the potential for people to be exposed for prolonged periods ~~may be adversely affected by contaminants~~ and may include~~s~~:

(a) residential buildings and areas (including marae)

(b) childcare centres, schools, educational facilities

(c) hospitals, nursing homes, aged care facilities

(d) offices, consulting rooms, gymnasiums, community centres

(e) hotels, motels, caravan parks, camping areas, tourist accommodation

(f) correctional facilities

(g) **public amenity areas**

(h) manufacturing or storage of food or beverages

(i) manufacturing or storage of electronics

(j) public water supply catchments and intakes.

~~(k) water bodies, watercourses (as listed in Schedule 3) and associated riparian vegetation~~

~~(l)~~(k) incompatible crops or farming systems (e.g. organic farms, greenhouses)

~~(m) wetlands, indigenous vegetation habitat areas and reserves~~

~~(n)~~(l) household water supplies (including roofs from which a water supply is obtained).

Ship as defined by the Maritime Transport Act 1994 *means every description of boat or craft used in navigation, whether or not it has any means of propulsion; and includes—*

(a) a barge, lighter, or other like vessel;

(b) *a hovercraft or other thing deriving full or partial support in the atmosphere from the reaction of air against the surface of the water over which it operatives*

(c) *a submarine or other submersible*

Solid Fuel means a solid substance that releases useable energy when burnt and includes wood, coal and its derivatives, and manufactured fuel pellets.

Solid fuel burner means a ~~domestic~~ **solid fuel** burning appliance where combustion of the **solid fuel** occurs within a firebox, and where there may be a regulated supply of air to the fire. It includes (but is not limited to), **indoor open fires**, outdoor open fires, freestanding or built in **woodburners**, **pellet burners**, potbelly stoves, coal ranges, **coal burners**, chip heaters, water heaters or central heating units, **multifuel burners**, and similar appliances. It excludes small-scale domestic devices for smoking food, any portable unflued heaters fuelled by gas, alcohol or other liquid fuels, gas hobs or gas ranges used for cooking, any fuel burning appliance installed in a boat, caravan or motor home, and **fuel burning equipment** as defined by this regional plan.

Space heater means a domestic appliance designed for use within a building to generate warmth for human comfort. It includes **solid fuel burners** with water heating capabilities as a secondary purpose and appliances designed to heat water for space heating (eg. via radiators). It excludes cooking fires, ranges, and chip heaters where the primary purpose of the fire is to cook or heat water.

Subject property means the property where the discharge of *contaminants* to air originates.

Thermal efficiency means the ratio of useable heat energy output to energy input. The thermal efficiency must be calculated in accordance with:

(a) the method specified in Australian/New Zealand Standard AS/NZS 4012:2014, Domestic solid fuel burning appliances – Method for determination of power output and efficiency, or

(b) for a **woodburner** excluded from that method, another method that is functionally equivalent.

Treated timber means timber treated with preservatives, including boron compounds (except 2-thiocyanomethylthiobenzothiazole (TCMTB) compounds), copper chromium arsenic (CCA), or creosote, but does not include timber treated only with anti-sapstain compounds.

Transmission line support structure means a tower or pole used to support cables used for, or associated with, the overhead or underground transmission of electricity in the national grid .

Ultra-low emission burner means a woodburner that:

(a) when tested according to Canterbury Method 1 (revision 1.6 June 2015) discharges no more than 0.77 grams of **particulates** per kilogram of dry wood burnt, and
(b) is on the Regional Council's List of Approved Ultra-low Emissions Burners. This list will be available on the Regional Council's website and may be updated without further formality.

Unimpeded vertical discharge means the discharge from a vent or chimney is perpendicular to the ground and is not restricted in any way that increases the emission of particulates or restricts the dispersion of **particulates** (including smoke) away from the site.

Unsealed road means a road that is not sealed with a permanent surface of tarmac, concrete, or asphalt. For the purposes of this regional plan **unsealed roads** do not include road works on sealed roads, *forestry roads, forestry tracks*, or roads used for land development and/or earthworks.

Untreated wood means any wood material or product, including sawdust, which is not treated with copper chromium arsenic (CCA), or with any organochlorine preservative and can include timber treated only with anti-sapstain compounds.

~~**Urban property** in relation to **open burning** means any property that is less than 2 hectares and is connected to a municipal wastewater system.~~

Waste

(a) *means any thing disposed of or discarded, and*

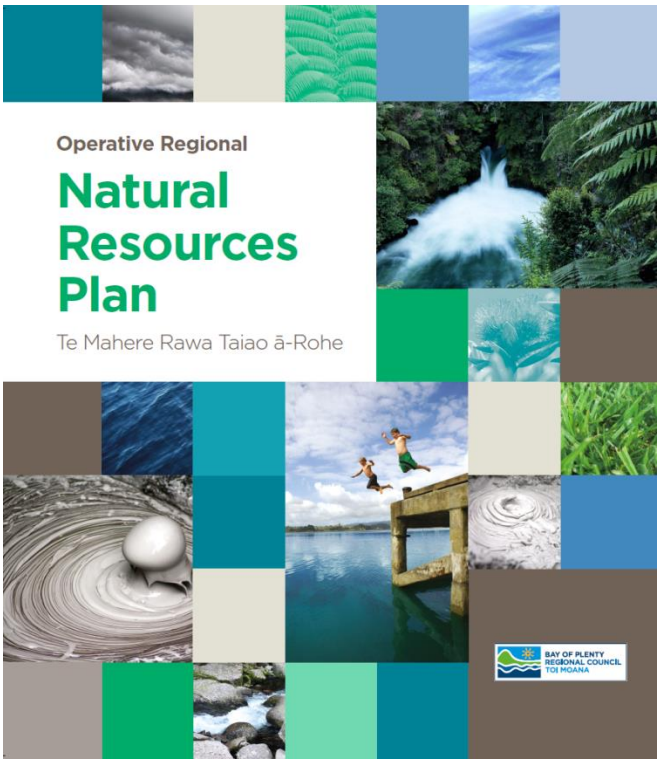
(b) *includes a type of waste that is defined by its composition or source (for example, organic waste, electronic waste, or construction and demolition waste), and*

(c) to avoid doubt, includes any component or element of diverted material, if the component or element is disposed of or discarded.

Woodburner means a type of domestic **solid fuel burner** that burns wood, where combustion of wood occurs within a firebox, and where there is a regulated supply of air to the fire. It excludes **indoor open fires**, **pellet burners**, **coal burners, multifuel burners,** and also excludes cooking fires, ranges, and chip heaters where the primary purpose of the fire is to cook or heat water.

BAY OF PLENTY REGIONAL COUNCIL TOI MOANA

Consequential changes resulting from Proposed Plan Change 13 (Air Quality) to the Operative Bay of Plenty Regional Natural Resources Plan



Version 7.4 – 4 February 2019

Consequential Changes to the Regional Natural Resources Plan

The text on this page is explanatory only and is not included as part of the Consequential Changes.

Notes:

1. Consequential changes to the Operative Bay of Plenty Regional Natural Resources Plan are shown in track changes – red underlined text for new content, and ~~red text with strikeout~~ for deleted content.
2. Explanatory text within the document that does not form part of the change is shown **[in bold blue with parentheses]**.
3. Only pages and sections that have consequential changes are included. If a page or section is not included there are no consequential changes to that page or section.
4. The consequential changes included in this document are open for comment as part of the submission process on Plan Change 13 (Air Quality) and should be read in conjunction with the Plan Change.
5. Consequential changes will have headers, footers, and page numbers of the pages that they are incorporated into. They are not shown in this document.

Bay of Plenty Regional Council
PO Box 364
Whakatane
New Zealand

Strategic Policy Publication 2008/06
ISSN 1176 4112

BAY OF PLENTY
REGIONAL NATURAL RESOURCES PLAN

Formerly the Bay of Plenty Regional Water and Land Plan

1 December 2008

Plan Change 8 (Groundwater Bores and Flooding Conditions) incorporated on 2 March 2010
Amended 28 June 2011 as required by National Policy Statement for Freshwater Management 2011
Amended 8 October 2014 as required by National Policy Statement for Freshwater Management 2014
Amended 14 September 2017 for reformatting
Plan Change 13 (Air Quality) incorporated on **[date to be inserted]**

Bay of Plenty Regional Council

[Global change – will be changed for every occurrence within the Plan once the Plan Change is made operative]

~~Operative Regional Air Plan~~ Air Quality Chapter

[Reader Guidance – Page 2]

AQ Air Quality: ~~no current content.~~ Provisions to manage the discharge of contaminants to air. This chapter relates to section 15 of the Resource Management Act 1991.

[Reader Guidance Page 4]

List of Abbreviations and Acronyms

AAQGs	Ambient Air Quality Guidelines 2002
Act/The Act	Resource Management Act 1991
AEP	Annual Exceedance Probability
CSC	Comprehensive Stormwater Consents
Regional Council	Bay of Plenty Regional Council
IFIM	Instream Flow Incremental Methodology
IMFR	Instream Minimum Flow Requirement
Kilowatt (kW)	an energy level of 1,000 watts.
LTP	Long Term Plan
MALF	Mean Annual Low Flow
Megawatt (MW)	an energy level of 1,000,000 watts or 1,000 kilowatts.
µg/m^3	micrograms per cubic metre and is a mass per volume measurement of concentration of a substance in air. A microgram is one millionth (10-6) of a gram.
NERMN	Natural Environment Regional Monitoring Network
NESAQ	Resource Management (National Environmental Standards for Air Quality) Regulations 2004 or the National Environment Standards for Air Quality and its amendments.
NZTA	New Zealand Transport Agency
OSET Plan	On-Site Effluent Treatment Regional Plan
$PM_{2.5}$	Particulate matter less than 2.5 micrometres in diameter
PM_{10}	Particulate matter that is less than 10 micrometres in diameter

RHYHABSIM	River Hydraulic Habitat simulation
The/this regional plan	Regional Natural Resources Plan
TLI	Trophic Level Index
TSP	Total suspended particulates
WMA	Wetland Management Agreement

[Reader Guidance Page 5]

Guide to Regional Rules

Activities under this regional plan are permitted, controlled, restricted discretionary, non-complying, discretionary or prohibited. A permitted activity is allowed without a resource consent if it complies with all the conditions specified in the rule. A controlled, restricted discretionary, discretionary, activity is allowed only if a resource consent is obtained for that activity. A prohibited activity will not be allowed in the region, and no resource consent will be granted in respect of that activity.

[Reader Guidance Page 8 – add to table]

Air Quality	
General Activities	AQ R1, AQ R2
Miscellaneous Discharges from Disposal of Liquid Waste, Ventilation of Storage Containers, Use of Fertiliser, Disturbance of Land, Contaminated Land Remediation	AQ R3
Vehicles and Roads	AQ R4
Venting of Geothermal Gas and Steam	AQ R5
Open burning	AQ R6, AQ R7, AQ R8, AQ R9
Burning of specific material	AQ R10
Solid fuel burners (Domestic Heating)	AQ R11, AQ R12, AQ R13, AQ R14
Agrichemical spraying	AQ R15
Spraypainting and Abrasive Blasting	AQ R16, AQ R17
Fuel Burning Equipment (Boilers)	AQ R18
Intensive Farming	AQ R19
Fumigation for Quarantine Application or Pre-Shipment Application	AQ R20
Industrial and Commercial Activities	AQ R21

Scope of Plan

Spatial Coverage

The regional plan covers all the area within the Bay of Plenty Regional Council boundary, as seen in Map 1. ~~excluding the Coastal Marine Area.~~ The air quality provisions in this regional plan apply to the Coastal Marine Area while the land and water provisions of this regional plan exclude the Coastal Marine Area. The Bay of Plenty Regional Coastal Environment Plan has defined the boundary between the Coastal Marine Area and the land/freshwater zone. This boundary often extends upstream into the mouths of rivers.

Resource Coverage

The regional plan covers the following natural and physical resources in the Bay of Plenty:

(a) Air (including air in the Coastal Marine Area)
(b) Land (including soil);
(b) Water (including rivers, streams, lakes, wetlands, modified watercourses and groundwater);
(c) Geothermal resources in the Bay of Plenty, excluding geothermal resources covered by the Rotorua Geothermal Regional Plan[1]; and
(d) Physical resources associated with the use of water resources (e.g. structures in, on, under or over the bed of a river, stream or lake).

Some areas of brackish water may be included in the resource coverage of this regional plan due to the extent of the spatial coverage.

Issue Coverage

This regional plan addresses issues relating to management of the environmental effects of the use and development of air, land, water and geothermal resources that are within the scope of the Regional Council's functions and responsibilities under the Act (refer to Table 1 for an explanation). This regional plan does not include issues that are addressed by the Regional River Gravel Management Plan, or the Rotorua Geothermal Regional Plan. Where the discharge from an on-site effluent treatment system requires a resource consent under the On-Site Effluent Treatment Regional Plan ('OSET Plan'), the activity will be assessed in accordance with the OSET Plan and the relevant provisions of this regional plan.

[1] Environment Bay of Plenty, 1999. Rotorua Geothermal Regional Plan.

[Introduction –Page 5]

Purpose of Plan

The purpose of this regional plan is to achieve the following aims (refer to Figure 1 for illustration):

(a) Promote the sustainable management of air, land, water and geothermal resources.
(b) Achieve the integrated management of air, land, water and geothermal resources.
(c) Maintain or improve environmental quality in the Bay of Plenty region.
(d) Protect existing high quality environments and resources.
(e) Protect sensitive receiving environments, including human health.
(f) Sustain the life-supporting capacity of air, soil, water and ecosystems.
(g) Maintain or enhance the ecological, Maori cultural, recreational, natural character and landscape values of air, land, water and geothermal resources.
(h) Establish appropriate environmental standards to achieve (c) to (f). This includes ensuring instream minimum flow requirements are maintained in rivers and streams.
(i) Address the adverse environmental effects of the use and development of land, water and geothermal resources, and the discharge of contaminants to air.
(j) Allow for the use and development of land, water and geothermal resources, and the discharge of contaminants to air where it is consistent with (a) to (g).
(k) Enable people and communities to provide for their social, economic and cultural wellbeing, while achieving (a) to (i).
(l) Work with communities to promote community participation and interest in the management of natural and physical resources in the Bay of Plenty region.

[Introduction Page 6]

Role of the Bay of Plenty Regional Council under the Act

The functions of regional councils are specified in section 30 of the Act. This gives the Regional Council primary responsibility to control use and development activities for the purposes of soil conservation, maintaining or enhancing water quality, maintaining and enhancing aquatic ecosystems, maintaining water quantity, ~~and~~ avoiding or mitigating natural hazards, and controlling the discharge of contaminants into or onto land, air, or water and discharges of water into water. Section 13(2)(b) of the Act gives regional councils the ability to control the disturbance, removal, damage or destruction of aquatic plants and the habitats of aquatic plants and animals in the bed of a river or lake. The Regional Council also has obligations to uphold matters specified in Part 2 (section 5 to 8) of the Act. The Act also gives regional councils other environmental management functions, such as monitoring (section 35), development of regional plans (Part 5), resource consents (Part 6), and enforcement (Part 12).

[Introduction Page 8]

Section 30 of the Act	Bay of Plenty Regional Council responsibilities	Other agencies who have responsibilities
Section 30(1)(f) – control of discharges to the environment	Objectives, policies, methods and rules in regional plans. This relates to activities specified in section 15 of the Act (discharge of contaminants to air, discharge of contaminants to water or land, and discharges of water to water). Regional council permits discharges relative to the risk on: • Soil conservation. • Maintenance and enhancement of water quality. • Maintenance of water quantity. • Maintenance and enhancement of aquatic ecosystems. • Avoidance or mitigation of natural hazards. • Maintenance and enhancement of air quality. Part 2 matters are considered when a resource consent is required.	

[Introduction Page 9 – to be inserted underneath section Management of Land and Water Resources under the Act]

Management of Air Resources under the Act

Discharges of contaminants to air are managed by Section 15 of the Act. The level of management depends on whether the discharge is from industrial or trade premises, or from other sources (Section 15(1)(c) of the Act).

Discharges to air from industrial or trade premises cannot be carried out unless expressly allowed by a national environmental standard, a rule in a regional plan, or managed by a resource consent (Section 15(2A) of the Act). This regional plan contains rules to permit discharges from industrial or trade premises or in the Coastal Marine Area subject to standard conditions to avoid, remedy or mitigate adverse effects on air.

Discharges to air from other sources are permitted provided they do not contravene a national environmental standard or a regional rule. This regional plan contains rules to permit the discharge of contaminants to air where the adverse effects are minor or acceptable and the risk of adverse effects is low. Other rules allow the Regional Council to assess the adverse effects of activities on a case by case basis through the resource consent process.

This regional plan cannot duplicate, or be in conflict with a national environmental standard unless the standard expressly allows this. This regional plan must also give effect to any national policy statement and to the Regional Policy Statement.

[Definitions of Terms – introductory text]

Terms in italic text are defined by the Act unless otherwise stated. The ~~Act~~ italicised definitions are included in this regional plan for information only, and are correct at the date of their inclusion in ~~public notification of~~ this regional plan

[Definitions of Terms – changes to definitions shown below in track changes]

Agrichemical any substance, whether organic or inorganic, manufactured or naturally occurring, modified or in its original state, that is used in any agricultural, pastoral, horticultural or related activity, to eradicate, modify or control ~~undesirable~~ flora and fauna. For the purposes of this regional plan, ~~it~~ this definition includes agricultural compounds, ~~and~~ but excludes fertiliser, vertebrate pest control products and oral nutrition compounds.

Contaminant *includes any substance (including gases, odorous compounds, liquids, solids, and micro-organisms) or energy (excluding noise) or heat, that by itself or in combination with the same, similar, or other substances, energy, or heat:*

(a) *when discharged into water, changes or is likely to change the physical, chemical, or biological condition of water; or*
(b) *when discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged.*

APPENDIX B

Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan
Hearing Committee Recommendations, Version 7.4 (Clear copy)

BAY OF PLENTY REGIONAL COUNCIL
TOI MOANA

Version 7.4
February 2019

PROPOSED

Plan Change 13 (Air Quality)
to the Regional Natural Resources Plan

HEARING RECOMMENDATIONS

Clear Copy

This version incorporates changes to Proposed Plan Change 13 recommended by the Hearing Committee in its recommendations report

Bay of Plenty Regional Council
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New Zealand

Contents

AQ Air Quality

He tapu te hā – the breath is sacred.

This chapter of the regional plan provides policies and rules to manage the discharge of *contaminants* to air from **anthropogenic** sources. **Anthropogenic** means created by or caused by humans. **Anthropogenic** discharges include odour, dust, **particulates**, smoke and spray which come from a variety of human activities. Natural sources of *contaminants* such as pollen, and gas and odour discharges from **geothermal fields** or volcanoes, are not managed by this regional plan.

Other than the adverse *effects* on ambient or local air quality, this regional plan does not address greenhouse gases or climate change. Nor does the regional plan take into account indoor air quality (for example in workplace buildings) and it does not address health and safety issues related to air quality on work sites or in private homes as these matters are covered by other legislation.

Terms in this chapter that are defined in the Definition of Terms are highlighted in bold. Terms defined in the Act, in other Acts of Parliament, or in national regulations, that have been included in the Definition of Terms for information only, are shown in italics.

Objectives

AQ O1 **Protect air from adverse effects — Te tiaki i te hau mai i ngā pānga kino**

Protection of the mauri of air and human health from adverse *effects* of **anthropogenic** *contaminant* discharges to air.

AQ O2 **Ambient air quality — Te pai o te hau**

The region's **ambient air** quality meets the National Environmental Standards for Air Quality (2004) (or its amendment or replacement).

AQ O3 **Local air quality — Te pai o te hau o te rohe**

Sustainable management of discharges of *contaminants* to air according to their adverse *effects* on human health, cultural values, amenity values and the receiving *environment*.

Policies

AQ P1 **Classification of activities — Te wehewehenga o ngā mahinga**

Manage the discharge of *contaminants* to air according to the following:

(a) Provide for the discharge of *contaminants* to air by permitting discharges from activities where the discharge can be suitably managed with general conditions to avoid, remedy or mitigate any adverse *effects* of the discharge.

(b) Classify all other discharges where (a) does not apply, as controlled, restricted discretionary, discretionary, or non-complying activities.

AQ P2 **Hazardous substances — Ngā matū mōrearea**

Seek to avoid adverse *effects* from discharges of **hazardous substances** and hazardous air pollutants to air and where avoidance is not practicable, remedy or mitigate the adverse *effects* of the discharge using the *best practicable option.*

AQ P3 **Management of discharges — Te whakahaere i ngā tukunga**

Activities that discharge *contaminants* to air must be managed, including by use of the *best practicable option*, to:

(a) safeguard the life supporting capacity of the air, protect human health, and avoid, remedy or mitigate adverse *effects* on cultural values, amenity values, and the *environment*

(b) avoid the discharge of *contaminants* at a rate or volume that may cause an exceedance or breach of the **ambient air** quality standards of the National Environmental Standards for Air Quality (or its replacement or amendment).

(c) avoid reduction in visibility where it may cause adverse *effects* on vehicle, aircraft, or *ship* safety

(d) avoid, remedy or mitigate the discharge of *contaminants* that may cause adverse *effects* on regionally significant **infrastructure**/industry

AQ P4 **Matters to consider — Ngā take hei whiriwhiri**

Have particular regard to the following matters when considering the acceptability of any discharge of *contaminants* to air:

(a) The proximity of **sensitive areas** to the discharge including the *effect* of new activities discharging *contaminants* into air near established **sensitive areas.**

(b) Areas where the discharge may cause an exceedance or breach of the **ambient air** quality standards of the National Environmental Standards for Air Quality or exceed the Health-based Guideline Values in Table 1 of the Ambient Air Quality Guidelines (or their replacements or amendments).

(c) Adverse *effects* on air quality values identified in the relevant iwi and hapū resource management plans during assessments of resource consent applications.

(d) The *effect* of the prevailing weather conditions, including rainfall, wind speed and wind direction.

(e) The *effect* of the discharge on human health, cultural values, amenity values, the *environment*, and regionally significant **infrastructure**.

(f) Cumulative *effects*.

(g) Whether a change to an activity expressly allowed by an existing resource consent will cause a net increase of **particulates** into an **airshed** in breach of the ambient air quality standard for **particulates** of the National Environmental Standards for Air Quality.

(h) The operational requirements and locational constraints relevant to the discharge and/or activity.

(i) Any other recognised air quality guidelines or standards (not listed) that are appropriate to the discharge.

(j) The FIDOL factors (frequency, intensity, duration, offensiveness, location) when determining adverse *effects* in relation to odour and dust discharges.

(k) The investment of existing **infrastructure** that mitigates adverse *effects* of discharges of *contaminants* to air.

AQ P5 **Open burning — Te tahutahu ahi**

Manage **open burning** by:

(a) avoiding the discharge of *contaminants* to air from **open burning** within 100 metres of any neighbouring **dwelling house**, except where carried out as part of a **recreational/cultural** activity, provided the burning is managed to minimise production of noxious or dangerous, offensive or objectionable discharges

(b) permitting **open burning:**

(i) provided the burning is managed to minimise production of noxious or dangerous, offensive or objectionable discharges

(ii) of animal carcasses and/or vegetative material burned in accordance with quarantine or disease control requirements

(iii) for the purposes of firefighting research or training.

AQ P6 **Solid fuel burners — Ngā pāka ahi**

Avoid significant adverse *effects* on the *environment* from the operation of **solid fuel burners** installed in **dwelling houses** or buildings by avoiding:

(a) excessive discharge of **particulates** (eg. caused by burning wet wood or restricting oxygen flow to the fire)

(b) any discharge that is noxious or dangerous, offensive or objectionable (eg. burning painted or **treated timber** or *waste*).

AQ P7 **Solid fuel burners in Rotorua Airshed — Ngā pāka ahi i te Takiwā Hau o Rotorua**

Avoid discharges of **particulates** to air from certain **solid fuel burners** in the **Rotorua Airshed**, in particular discharges from:

(a) new **solid fuel burners**, except **pellet burners**, replacement low emissions **woodburners/ultra-low emission burners,** and new **woodburners/ultra-low emission burners** where an **offset** is provided

(b) **indoor open fires**, **coal burners**, **multifuel burners**, and **woodburners** installed before September 2005

(c) **solid fuel burners** that have been **refurbished** since their installation

(d) **solid fuel burners** used or designed for use other than as a **space heater**

except where exceptional circumstances apply.

AQ P8 **Agrichemical spraying — Te tōrehu matū ahuwhenua**

Agrichemical sprayers will manage adverse *effects* on human health and the *environment* by:

(a) avoiding spray drift beyond the boundary of the **subject property** and into non target *water bodies* where reasonably practicable

(b) mitigating *effects* particularly on **sensitive areas** where avoidance of spray drift is not possible

(c) managing **agrichemical** spraying activities according to the risk of spray drift becoming noxious or dangerous, offensive or objectionable

(d) encouraging best practice to manage potential adverse *effects* on air quality.

AQ P9 **Fumigation for quarantine application or pre-shipment application — Auahina ki te paitini mō te tono taratahi, tono utanga-tōmua rānei**

Protect human health and the *environment* from adverse *effects* from use of fumigants for **quarantine application** or **pre-shipment application** by:

(a) enforcing the *best practicable option* for use of the fumigant, including via the use of **effective recapture** technology of fumigant gases, the use of safer fumigants, or alternative methods

(b) ensuring compliance with relevant exposure levels and management regime set by the New Zealand Environmental Protection Authority to protect human health

(c) having particular regard to protecting the health of persons in **sensitive areas** from fumigant exposure.

AQ P10 **Offsets in Rotorua Airshed — Ngā whakatautika i te Takiwā Hau o Rotorua**

Any **offsets** required in the **Rotorua Airshed** by Regulation 17 of the National Environmental Standards for Air Quality must:

(a) be expressed in kilograms per year and calculated using annual mass emission rates based on the maximum consented discharge rate

(b) be based on quantifiable emissions reduced from another source or sources that can be shown to have occurred, either by measurement, monitoring or other robust means

(c) permanently remove the emissions used as **offsets** from the **Rotorua Airshed**

(d) be located within the **Rotorua Airshed** or where emissions can be shown to contribute to the **Rotorua Airshed**

(e) be carried out as close as practicable to where the *effects* of the emissions being **offset** may occur

(f) be above and beyond any emissions decrease that would otherwise occur or would otherwise be required by the Regional Council

(g) assume that all **TSP** is **PM_{10}** unless demonstrated otherwise

(h) treat all **PM_{10}** as equal, having the same health *effects* irrespective of the source of **PM_{10}**

(i) be effective before any emission from the proposed activity occurs

(j) use the emission factors set out in Table AQ1 for each **solid fuel burner** type, where domestic sources are selected to provide reductions of emissions unless alternative emission factors for domestic sources have been determined based on robust evidence consisting of, but not limited to, actual measurements based on a suitable methodology.

Table AQ1 Emission factors for domestic sources

Source[1]	**PM_{10}** Emission Factor Grams per kilogram (g/kg*)	Annual Fuel Use Tonnes per year	**PM_{10}** Annual Emission Kilograms per year	Number of **solid fuel burners** to equal 1 tonne per year of **PM_{10}**
Pre-2005 **woodburners**	10	2.5	25	40
Post-2005 (NESAQ compliant) **solid fuel burners**	4.5	2.5	11	91
Multifuel burners (wood)	10	2.5	25	40
Multifuel burners (coal)	19	1.8	34.2	29
Pellet burners	1.4	1.0	1.4	714

*Wet weight

Rules

Rules in this chapter apply to the management of discharges of *contaminants* to air from sources within the Bay of Plenty Region, including the *Coastal Marine Area*.

AQ R1 **General activities – Permitted — Ngā mahinga noa – E whakaaehia ana**

Any discharge of *contaminants* into air which is not subject to any other rule in this regional plan and excluding the discharge of dust to air associated with a plantation forestry activity, is a permitted activity provided the following conditions are complied with:

(a) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property** or into any *water body*.

(b) The discharge of smoke or water vapour must not adversely affect the safety of any vehicle, aircraft, or *ship*.

Advice Note - Discharges of dust into air associated with activities within a plantation forestry activity are managed by the National Environment Standards for Plantation Forestry (2017). The plantation forestry activities are as listed in subparts 1-9 of the National Environment Standards for Plantation Forestry and do not include discharges or from roads or tracks managed by local authorities, the Department of Conservation or the New Zealand Transport Agency.

AQ R2 **General activities – Discretionary — Ngā mahinga noa – Ka whiriwhirihia**

Any discharge of *contaminants* into air that cannot comply with any permitted activity rule, and is not specifically addressed by any other rule of this Air Quality chapter, is a discretionary activity.

[1] Emission factors based on *Rotorua Domestic Heating Survey* (2005) and the Ministry for the Environment's *Home heating emission inventory and other sources evaluation* (2015).

AQ R3 Miscellaneous discharges – Permitted — Ngā tukunga matahuhua – E whakaaehia ana

The discharge of *contaminants* to air from:

(1) spray irrigation, soil injection, truck spreading, or land soakage of **liquid waste**

(2) the ventilation and displacement of liquids in storage tanks and tankers

(3) the use and application of **fertiliser** or lime

(4) the disturbance of land and soil carried out according to rules LM R1, LM R2, and LM R3 of this regional plan

(5) **contaminated land remediation** permitted by DW R24 of this regional plan

(6) roasting of coffee beans

(7) **fully enclosed in-vessel composting** producing up to 200 tonnes per year (of finished product) where emissions are captured and filtered

(8) **free range farms** of up to 100 **poultry** birds

are permitted activities provided the discharge does not cause any noxious or dangerous, offensive or objectionable *effect* beyond the boundary of the **subject property**.

Advice Note – Discharge of **liquid waste**, and the use and application of **fertiliser** or lime must also meet all other requirements of this regional plan (see DW Discharges to Water and Land and OSET On-site Effluent Treatment).

AQ R4 Roads – Permitted —Ngā huarahi – E whakaaehia ana

The discharge of *contaminants* to air from vehicle movements on **unsealed roads** is a permitted activity.

AQ R5 Venting of geothermal gas and steam – Permitted — Te tuku kapuni ngāwha me te koromamao – E whakaaehia ana

The discharge of geothermal gases and steam into air from any **bore** or soakage hole associated with the **anthropogenic** use of *geothermal water* and *geothermal energy* is a permitted activity, provided the following conditions are complied with:

(a) The gas or steam must be a **vertical discharge** from a vent unless the discharge is located at least 200 metres from a **sensitive area**.

(b) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property.**

(c) The take or discharge of *geothermal water* must be less than 1,000 tonnes per day

Advice note – This rule manages the discharge to air from *geothermal water* and/or *geothermal energy* use. The use of *geothermal water* and *geothermal energy* must comply with the rules in the GR Geothermal Resources module and the Rotorua Geothermal Regional Plan.

AQ R6 **Open burning – Permitted — Te tahutahu ahi noa – E whakaaehia ana**

Except where AQ R7 and AQ R8 apply, the discharge of *contaminants* to air from **open burning** is a permitted activity provided the fire is not located within 100 metres of any neighbouring **dwelling house**, unless written approval is obtained from the occupier/s of all such neighbouring **dwelling houses**, and the following conditions are complied with:

(a) No materials either listed in AQ R10 or prohibited by the regulations of the National Environmental Standards for Air Quality are burned.

(b) The discharge of smoke must not adversely affect the safety of any vehicle, aircraft, or *ship.*

(c) The discharge must not be noxious or dangerous, offensive, or objectionable beyond the boundary of the **subject property**.

Advice Note: This rule manages **open burning** according to the potential for adverse *effects* on air quality. **Open burning** must also be carried out according to local bylaws and the Fire and Emergency New Zealand Act 2017.

AQ R7 **Open burning for emergency disposal of diseased carcasses and vegetation – Permitted — Te tahutahu ahi noa mō te whakawātea ohotata – E whakaaehia ana**

The discharge of *contaminants* to air from the emergency **open burning** of dead diseased marine mammals, dead diseased livestock, or infected or diseased vegetation is a permitted activity provided the following conditions are complied with:

(a) Disposal must be carried out under the instruction of the responsible authority.

(b) The discharge of smoke must not adversely affect the safety of any vehicle, aircraft, or *ship*.

Advice Note: Appropriate government departments at the time of notification are the Ministry for Primary Industries (livestock and vegetation) or the Department of Conservation (marine mammals). Regional Council's Pollution Hotline (or its equivalent) should be notified before burning begins, or as soon as practicable after burning commences.

AQ R8 **Open burning for firefighter training – Permitted — Te tahutahu ahi noa mō te whakangungu tinei ahi – E whakaaehia ana**

The discharge of *contaminants* to air from the burning of materials (including buildings and vehicles) for the purpose of firefighting research or training firefighters is a permitted activity provided the following conditions are complied with:

(a) The fire must be under direct control of Fire and Emergency New Zealand, a **defence fire brigade**, or **industry brigade**..

(b) The recognised body under (a) must notify:

  (i) the Regional Council at least 24 hours before the training takes place and

  (ii) the occupier of any properties within a 100 metre radius of the training site, no earlier than 72 hours and no later than 12 hours before the training takes place.

(c) Notification under (b) must include:

  (i) intended time and location of the training activity, and

  (ii) details of any materials listed in AQ R10 that may be burned as part of the training and the potential adverse *effects* of these discharges.

(d) No burning may be carried out within the **Rotorua Airshed** between the months of April to September of any calendar year.

(e) The discharge of smoke must not adversely affect the safety of any vehicle, aircraft, or *ship*.

Advice Note: Regulation 9 of the National Environmental Standard for Air Quality prohibits the burning of coated wire except in certain cases such as when burnt as part of firefighter training.

AQ R9 **Open burning– Non-complying — Te tahutahu – Tautuku-kore**

Except where AQ R7 and AQ R8 apply, the discharge of *contaminants* to air from **open burning** within 100 metres of any neighbouring **dwelling house** is a non-complying activity unless:

(a) written approval is obtained from the occupier/s of any neighbouring **dwelling house** within 100 metres of the **open burning,** or

(b) the fire is for **recreational/cultural** purposes only

AQ R10 **Burning of specified material – Non-complying — Te tahutahu i ngā papanga kua tautuhia – Tautuku-kore**

Except as provided for in AQ R8 and AQ R21 the discharge of *contaminants* to air from the combustion of any of the following materials is a non-complying activity:

(a) **treated timber** or painted timber (except pellets used in **pellet burners**

(b) any plastics (including packaging), foam, nappies or polystyrene

(c) chlorinated organic chemicals including but not limited to **dioxins**, furans, polychlorinated biphenals (PCB)

(d) contaminated material from contaminated sites and buildings

(e) commercial food *waste*

(f) domestic *waste*, except paper and cardboard

(g) material that may contain heavy metals including but not limited to lead, zinc, arsenic, chromium, cadmium, copper, mercury, thorium (except **solid fuels** used in **fuel burning equipment**)

(h) materials or metals used in motor vehicles

(i) mineral fibres including but not limited to asbestos and insulation material

(j) paint and other surface protective coatings

(k) **pathological waste**

(l) pesticides and pesticide *waste* (excluding cardboard pesticide containers)

(m) rubber

(n) soft furnishings and upholstery.

Advice Note: In addition to the materials in this rule, National Environmental Standards for Air Quality regulations prohibit the discharge of *contaminants* to air from the burning of the following materials:

- bitumen on a road
- coated wire
- tyres
- *oil* (in the open air)
- *waste* at landfills

except where the regulations provide otherwise. For full understanding of these restrictions, check the regulations of the National Environmental Standards for Air Quality as well as the provisions of this regional plan.

AQ R11 **Solid fuel burners outside the Rotorua Airshed – Permitted — Ngā pāka ahi i waho o te Takiwā Hau o Rotorua – E whakaaehia ana**

The discharge of *contaminants* to air from a **solid fuel burner** installed in any **dwelling house** or *building* outside the boundary of the **Rotorua Airshed,** is a permitted activity provided:

(a) The discharge from the **solid fuel burner** complies with the regulations of the National Environmental Standards for Air Quality and any local bylaw

(b) The **solid fuel burner** is operated so that all reasonable steps are taken to minimise the amount of smoke discharged

(c) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**

(d) No materials either listed in AQ R10 or prohibited by the National Environmental Standards for Air Quality regulations are burned.

AQ R12 **Solid fuel burners in the Rotorua Airshed – Permitted — Ngā pāka ahi i roto i te Takiwā Hau o Rotorua – E whakaaehia ana**

The discharge of *contaminants* to air from a **solid fuel burner** installed in any **dwelling house** or building inside the boundary of the **Rotorua Airshed** is a permitted activity if:

(a) the discharge is from an **existing indoor open fire** provided the **indoor open fire** is:

  (i) located within a building which has been entered onto the **Heritage List** by **Heritage New Zealand**; or

  (ii) on *industrial or trade premises* where the **indoor open fire** is used exclusively for the smoking and cooking of food for wholesale or retail sale

OR

(b) the discharge is from a **pellet burner**, provided the **pellet burner** only burns the approved fuel for the device as specified in AS/NZS 4014.6:2007 Domestic solid fuel burning appliances – Test fuels – Wood pellets, or the functional equivalent

OR

(c) the discharge is from either:

  (i) an **existing woodburner** installed before 1 September 2005, until 31 January 2020, or

  (ii) a **coal burner or multifuel burner**, until 31 January 2020, or

  (iii) an **existing woodburner** installed after 1 September 2005, or

  (iv) an **existing** outdoor **solid fuel burner** on a business premises, until 31 January 2020

OR

(d) the discharge is from a **woodburner** or **ultra-low emission** burner that:

  (i) **replaced** an **existing woodburner**, **coal burner**, or **multifuel burner** that was used primarily as a **space heater** in the same **dwelling house** or building, and

  (ii) the **woodburner** has an **emission rate** less than or equal to 0.60, and

  (iii) has a **thermal efficiency** of no less than 65%, and

  (iv) is an **Authorised solid fuel burner**

AND

(e) the discharge from **solid fuel burners** permitted in (a) to (d) complies with the following conditions:

  (i) the **solid fuel burner** is operated so that all reasonable steps are taken to minimise the amount of smoke discharged

(ii) the discharge is not noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**

(iii) no materials either listed in AQ R10 or prohibited by the National Environmental Standards for Air Quality regulations are burned.

AQ R13 Solid fuel burners in the Rotorua Airshed – Discretionary — Ngā pāka ahi i roto i te Takiwā Hau o Rotorua – Ka whiriwhirihia

The discharge of *contaminants* to air from a **woodburner** or **ultra-low emission burner** installed in any **dwelling house** or building inside the boundary of the **Rotorua Airshed** that is not otherwise permitted by AQ R12(c) or AQ R12(d):

(a) was **offset** by replacing or removing an **existing woodburner**, **coal burner** or **multifuel** burner with an **emission rate** of 0.60 or greater, in a **dwelling house** or building within the **Rotorua Airshed**, and

(b) the **woodburner** has an **emission rate** less than or equal to 0.60, and

(c) has a **thermal efficiency** of no less than 65% and

(d) is an **Authorised solid fuel burner**

is a discretionary activity.

AQ R13A Existing outdoor solid fuel burners in the Rotorua Airshed – Discretionary — (tba) – Ka whiriwhirihia

After 1 February 2020, the discharge of *contaminants* to air from an **existing** outdoor **solid fuel burner** on a business premises inside the boundary of the **Rotorua Airshed** is a discretionary activity.

AQ R13B Solid fuel burners with secondary emission reduction devices in the Rotorua Airshed – Discretionary – (tba) – Ka whiriwhirihia

The discharge of contaminants to air from a **woodburner** installed in any **dwelling house** or building after 1 September 2005 that is fitted with a **secondary emission reduction device**, is a discretionary activity.

AQ R14 Solid fuel burners in the Rotorua Airshed – Non-complying — Ngā pāka ahi i roto i te Takiwā Hau o Rotorua – Tautuku-kore

Within the **Rotorua Airshed** the discharge of *contaminants* to air from any **solid fuel burner** that is not a permitted or discretionary activity according to a rule in this regional plan, is a non-complying activity. This applies from 27 February 2018 except in the following cases:

(a) The discharge of *contaminants* to air from any **woodburner** that was installed in any **dwelling house** or building before 1 September 2005, or from any **refurbished solid fuel burner**, is a non-complying activity from 1 February 2020.

(b) The discharge of *contaminants* to air from any **coal burner** or **multifuel burner** in any **dwelling house** or building is a non-complying activity from 1 February 2020.

AQ R15 Agrichemical spraying – Permitted — Tōrehu matūahuwhenua – E whakaaehia ana

All discharges of *contaminants* to air from the use of **agrichemicals** under any part of this rule must comply with the following conditions:

(1) General use of **agrichemicals**

(a) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**, in any non-target *water body*, or in any non-target watercourse listed in Schedule 3 of this regional plan.

(b) Where the use of the **agrichemical** is for the prevention, eradication or management of unwanted organisms or pests, the **agrichemical** must be used under the direction of the responsible authority under the Biosecurity Act 1993.

(c) Where the **agrichemical** is sprayed using **drone application**, the **drone** must not operate more than 10 metres above the target while **agrichemicals** are being distributed from the **drone**. If this condition cannot be complied with, the spray method is **aerial application**, and conditions relevant to **aerial application** must be complied with.

(d) Persons carrying out spraying of **agrichemicals**, other than the use of hand-held application methods, must be certified by an industry approved training programme, designed to encourage best practice to prevent spray drift in accordance with New Zealand Standard 8409:2004 (or its replacement or amendment).

(2) Method of application of **agrichemicals**

(a) The discharge of *contaminants* into air from **agrichemical** spraying using **hand-held non-motorised application** methods is a permitted activity provided conditions 3(a) and 4(d) are complied with.

(b) **Hand-held motorised application** methods or application methods using a **low pressure boom** is a permitted activity provided conditions 3(a), 3(d), 4(c), 4(d), are complied with.

(c) Any other application method is a permitted activity provided conditions 3(a), 3(b), 3(c), 4(a), 4(b), 4(c), 4(d), 5(a), 5(b), 5(c) and 5(d) are complied with.

(3) Signage

Where specified by condition (2), the following conditions apply:

(a) Where **agrichemicals** are sprayed on **public amenity areas** signs must be displayed at every entrance where the public usually have entry to the area where the **agrichemical** is being sprayed (except where the entrance is from private property). Where **agrichemicals** are sprayed on other areas, signs must be displayed at the main entrance to the property. Signs required by this condition must clearly state:

(i) "CAUTION – SPRAYING IN PROGRESS" or similar wording

(ii) the name and type of **agrichemical** used

(iii) a start and end date for spray operations

(iv) the name and phone number of the person carrying out the spraying

(v) that while signs are in place, it is not safe to enter.

(b) Where **agrichemicals** are sprayed within 50 metres of any **public amenity area** (**ground-based application** or **drone application** complying with condition 1(c)) or 200 metres (**aerial application** excluding **drone application** complying with condition 1(c)), signs must

be prominently displayed on the boundary of the **public amenity area** and must clearly state "caution – spraying in progress" or similar wording.

(c) Signs required by 3(a) or 3(b) should remain in place until all airborne spray has settled and the **agrichemical** has dried on its target surface. Signs must be removed within 5 days once the area is safe to re-enter.

(d) Any vehicles being used to apply **agrichemical** spray on **public amenity areas** must display prominent signs front and back that clearly state "CAUTION – SPRAYING IN PROGRESS" or similar wording.

(4) Notification

Where specified by condition (2), the following conditions apply:

(a) The owner/occupier or agent must notify the occupier of any properties within 50 metres (**ground-based application** or **drone application** complying with condition 1(c)) and 200 metres (**aerial application** excluding **drone application** complying with condition 1(c)) of where the **agrichemical** is being sprayed:

EITHER

(i) by notification, required no earlier than 72 hours, or 20 days for spraying carried out on plantation forestry or in a conservation area, and no later than 12 hours before the **agrichemical** spraying. Notification must include the following:

- the address and location of proposed application
- the date/s of proposed application
- name and type of **agrichemical** to be applied
- name and phone number of person carrying out the spraying.

OR

(ii) according to a notification agreement with the occupier. The notification agreement must:

- contain (as a minimum) method of notification and minimum time for notification prior to spraying
- be recorded in writing and signed by all parties
- be reviewed and re-signed annually.

(b) Details of notification (including but not limited to date and time of notification, parties notified, method of notification) must be recorded.

(c) Where **agrichemical** spraying is being carried out by any person other than the owner/occupier or agent responsible for notification, the person carrying out the spraying must confirm that notification requirements have been met before spraying takes place.

(d) Where **agrichemicals** are sprayed on **public amenity areas**, the owner/occupier or agent must publicly notify (according to section 2AB(1)(a) of the Act) the **agrichemical** spraying no earlier than 10 days or 20 days for spraying carried out on plantation forestry or in a conservation area, and no later than 24 hours before the **agrichemical** spraying. Notification must include the following information:

(i) The name and type of **agrichemical** used.

(ii) A start and end date for spray operations.

(iii) Contact details of the authority responsible for the spraying.

(5) Spray Risk Management Plan

Where specified by condition (2), the following conditions apply:

(a) Prior to the **agrichemical** spraying, a spray risk management plan must be prepared and implemented by the owner/occupier or agent.

(b) The spray risk management plan must contain the following information:

(i) A plan or map identifying the location of any **sensitive areas** within 50 metres of the land being sprayed by **ground based application** or **drone application** (complying with condition 1(c)), or within 200 metres of the land being sprayed by **aerial application** (excluding **drone application** complying with condition 1(c)).

(ii) Areas to be sprayed, type of **agrichemical** likely to be used during the year and the times of year that spraying is likely to occur.

(iii) Strategies used to avoid contamination of **sensitive areas**.

(iv) Strategies to mitigate any spray drift caused by particular weather conditions,

(v) Strategies to manage any specific hazard associated with the **agrichemical** to be sprayed (eg. toxicity to bees).

(c) The spray risk management plan must be reviewed and updated each year that spraying will be carried out.

(d) The spray risk management plan must be made available upon request within 20 working days of such a request being made.

Advice Note: This rule manages the air discharge component of **agrichemical** use. Users must also comply with all other rules in this regional plan (see DW Discharges to Water and Land). Other matters that should be considered when using **agrichemicals** include: certification, personal protection equipment, storage, transport, and disposal. Users (particularly large-scale) should also comply with the New Zealand Standard Management of Agrichemicals NZS 8409:2004.

AQ R16 Spraypainting – Permitted — Peita tōrehu – E whakaaehia ana

The discharge of *contaminants* to air from the spray application, of surface coatings, including those containing di-isocyanates, or spray on anti-fouling paint (excluding the application of protective coatings to **transmission line support structures**, the use of water based paints, or up to 0.5 litres per hour and 5 litres per month of solvent based paints) is a permitted activity if:

(a) The spraying is carried out, at a rate of no more than 2 litres per hour, in a spray booth, room, or enclosure fitted with an air extraction system and air filtering system to control the discharge of **particulates** and where the systems are maintained in accordance with the manufacturer's instructions

(b) All *contaminants* and exhaust air from the enclosed spraying and drying areas must discharge to an emission stack or stacks, and the discharge from the emission stack or stacks is an **unimpeded vertical discharge** from the emission stack at least 3 metres above the ridge height of the building and 3 metres above the highest ridgeline of any roof within 30 metres.

(c) Where spraypainting is carried out, on surfaces of fixed or large structures that cannot practicably be dismantled and transported to a spray booth, the discharge must be controlled using the *best practicable option* such as screening and paint technologies; and, when surface coatings containing di-isocyanates or anti-fouling paints are used:

(i) The owner/occupier/agent must notify the occupier of any property within 50 metres of the spray application site at least 24 hours prior to commencing the work.

(ii) An exclusion zone must prevent any public access within 15 metres of the spray application site.

(d) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

Advice Note: The discharge of *contaminants* to air from blasting and applying protective coatings to a **transmission line support structure** is managed by the National Environmental Standards for Electricity Transmission Activities 2009.

AQ R17 Abrasive blasting – Permitted — Te whakapahū pākaha – E whakaaehia ana

The discharge of *contaminants* to air from an abrasive blasting operation (excluding blasting of **transmission line support structures**) is a permitted activity provided the following conditions are complied with:

(a) The discharge from any abrasive blasting operation must be controlled either:

(i) through use of a sealed abrasive blasting booth where the air is extracted from the booth using a filtering system maintained according to the manufacturer's instructions

OR

(ii) where abrasive blasting is carried out on surfaces of fixed or large structures that cannot practicably be dismantled and transported to a blasting booth the discharge must be controlled using a current, best practice method such as screening, wet nozzles, or vacuum.

(b) Material used for blasting must not contain more than 5% free silica on a dry weight basis.

(c) The site and work areas must be kept clean and free of accumulations of deposited abrasive blasting material and other debris.

(d) For mobile abrasive blasting operations:

(i) the owner/occupier/agent must notify the occupier of any properties within 50 metres of the blasting site at least 24 hours prior to commencing the work

(ii) all blasting material and other debris must be removed from site once the operation is completed.

(e) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**, or discharge into any *water body*.

Advice Note: The discharge of *contaminants* to air from blasting and applying protective coatings to a **transmission line support structure** is managed by the National Environmental Standards for Electricity Transmission Activities 2009.

AQ R18 Fuel burning equipment (Boilers) – Permitted — Ngā taonga ngingiha kora (Ngā kōhua nunui) – E whakaaehia ana

(1) General discharges from **fuel burning equipment**

All discharges of *contaminants* to air from **fuel burning equipment** under any part of this rule must comply with all of the following conditions:

(a) The discharge must be an **unimpeded vertical discharge** from an emission stack.

(b) The **fuel burning equipment** and any emission control equipment must be maintained in accordance with the manufacturer's specifications at least once every year by a person competent in the maintenance of that equipment.

(c) The sulphur content of any fuel burnt must be less than 1% by weight.

(d) The discharge of smoke or water vapour must not adversely affect vehicle safety, aircraft safety, or *ship* safety.

(e) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property** or into any *water body*.

(2) Equipment installed before 27 February 2018

(a) For **fuel burning equipment** generating a gross heat energy output (within the combustion chamber) of less than 40kW (of any fuel), the discharge is a permitted activity.

(b) For **fuel burning equipment** generating a gross heat energy output within the combustion chamber:

A. between 40kW up to 500kW, from the combustion of clean *oil*, coal or **untreated wood**

OR

B. between 40kW up to 1MW from the combustion of natural or liquefied petroleum gas

the discharge is a permitted activity provided conditions (1)(a) to (1)(e) are met and any emission stacks constructed after December 2003 rise at least 6 metres above the ground and 3 metres above the highest ridgeline on the roof of any building less than 20 metres from the emission stack.

(c) For **fuel burning equipment** generating a gross heat energy output within the combustion chamber:

A. greater than 500kW up to 2MW from the combustion of clean *oil*, coal or **untreated wood**

OR

B. greater than 1MW up to 4MW from the combustion of natural or liquefied petroleum gas

the discharge is a permitted activity provided:

(i) conditions (1)(a) to (1)(e) are met and any emission stacks constructed after December 2003 rise at least 12 metres above ground level and at least 3 metres above the highest ridgeline on the roof of any building less than 20 metres from the emission stack

(ii) the emission stack is designed so that the minimum velocity of the discharge as it leaves the chimney at full load is 7 metres per second.

(d) For **fuel burning equipment** generating a gross heat energy output within the combustion chamber:

A. greater than 2MW up to 5MW from the combustion of clean *oil*, coal or **untreated wood**

OR

B. greater than 4MW up to 10MW from the combustion of natural or liquefied petroleum gas

the discharge is a permitted activity provided:

(i) conditions (1)(a) to (1)(e) are met and any emission stacks constructed after December 2003 rise at least 14.9 metres above ground level and at least 3 metres above the highest ridge line on the roof or any building within 20 metres

(ii) the emission stack is designed so that the minimum velocity of the discharge as it leaves the chimney at full load is 7 metres per second

(iii) The concentration of **particulates** shall not exceed 400 milligrams per cubic metre corrected to 0 degrees Celsius dry gas basis, 1 atmosphere pressure and 8% oxygen

(iv) The mass discharge of **particulates** shall not exceed 2.5 kilograms per hour.

(3) Equipment installed after 27 February 2018

The discharge of *contaminants* to air from **fuel burning equipment** generating a gross heat energy output within the combustion chamber of up to and including:

A. 500kW gross heat energy output from the combustion of clean *oil*, coal or **untreated wood**

OR

B. 10MW gross heat energy output from the combustion of natural or liquefied petroleum gas

is a permitted activity provided the following conditions are complied with:

(a) The total combined gross heat output from all **fuel burning equipment** installed on the property after 27 February 2018 must not exceed the limits in 3(A) and 3(B). Where more than one fuel type is used, the combined gross heat output must not exceed the lowest kilowatt or megawatt threshold of any of the fuel types used.

(b) The emission stack exit velocity must not be less than 10 metres per second except for a 15 minute period during start-up.

(c) All emission stacks must rise at least:

(i) 12 metres above the ground

AND

(ii) and 3 metres above the highest ridgeline on the roof of any building within 20 metres from the emission stack.

(d) **Fuel burning equipment** using clean *oil*, coal or **untreated wood**, must not discharge any amount of **particulates** into any part of the **Rotorua Airshed** at any time.

AQ R19 Intensive farming – Controlled — Ngā mahi ahuwhenua – E whakahaerehia ana

The discharge of *contaminants* into air from a permanent, **intensive farming** operation established prior to 1 January 2001, is a non-notified, controlled activity for which applications will be considered without the need to obtain the written approval of affected persons.

The Regional Council reserves control over the following matters:

(a) Setting conditions to control dust, odour, **particulates**, including but not limited to any matter contained in relevant industry codes of practice.

(b) Duration of consent.

(c) Compliance monitoring.

(d) Review of the conditions of the consent and the timing and purpose of the review.

(e) Payment of administrative charges.

AQ R20 Fumigation for quarantine application or pre-shipment application – Discretionary or Non-complying — Auahina ki te paitini mō te tono taratahi, tono utanga-tōmua rānei – Ka whiriwhirihia, Tautuku-kore rānei

The discharge of *contaminants* into air from fumigation for **quarantine application** or **pre-shipment application**:

(a) Using fumigants other than methyl bromide, is a discretionary activity.

(b) Using methyl bromide with **effective recapture**, is a discretionary activity.

(c) Using methyl bromide without **effective recapture,** is a non-complying activity.

AQ R21 Specific activities – Discretionary— Ngā mahinga tauwhāiti – Ka whiriwhirihia

The discharge of *contaminants* into air from any of the following activities is a discretionary activity:

(a) **Agrichemical** manufacture.

(b) Asphalt or bitumen manufacture or processing.

(c) Breweries.

(d) Cement manufacture.

(e) Chemical manufacture or mixing.

(f) Composting, except where provided for by AQ R3, where the compost is for sale or commercial use.

(g) Crematoria where a new facility with a new discharge to air is being established after 27 February 2018.

(h) Distilling operations including but not limited to petroleum refining.

(i) **Enclosed incinerators** where any of the materials listed in AQ R10 are burned.

(j) Farming activities as follows:

  (i) **free range farming** of pigs, or more than 100 **poultry** birds, where either a new farm is being established or where an existing farm is increasing the character, intensity or scale of the **effects** of the activity, after 27 February 2018

  (ii) **intensive farming** not controlled by AQ R19.

(k) Glass making.

(l) Industrial resin or glue manufacture.

(m) Kraft and chemical pulping or reconstituted wood panel manufacture.

(n) Metal processing including (but not limited to) aluminium smelters, commercial foundries and metallurgical processing, steel galvanising and steel mills.

(o) Milk powder or milk based powder manufacture.

(p) Paint manufacture.

(q) Pesticide manufacture.

(r) Pet food manufacture by the application of heat.

(s) Processing of animal products including (but not limited to) animal rendering and by-product processing plants, commercial fellmongering, woolscourers, and dag crushing plants.

(t) Processing of radioactive substances.

(u) Pulp, paper, or paper board manufacturing

(v) Pyrolysis, torrefaction, or gasification of carbonaceous material.

(w) Synthetic **fertiliser** manufacture

(x) *Waste* processing activities as follows:

  (i) municipal sewage treatment plants (excluding pump stations and associated odour beds)

  (ii) *waste* facilities including refuse transfer stations, resource recovery, recycling centres, baling stations

  (iii) landfills (excluding **untreated wood** *waste* and **cleanfill**).

Advice Note: The operation of an **incinerator** at a school or healthcare institution is prohibited under the National Environmental Standards for Air Quality, unless a resource consent was granted before 30 October 2006.

AQ R22 Handling of bulk solid materials – Discretionary – (tba) – Ka whiriwhirihia

Unless otherwise permitted by AQ R26, the discharge of *contaminants* to air from the **handling** of **bulk solid materials** where:

(a) the rate of **bulk solid material handling** exceeds 20 tonnes in any hour, and the discharge occurs less than 100 metres from any **sensitive area**, or

(b) the rate of **bulk solid material handling** exceeds 50 tonnes in any hour,

is a discretionary activity.

AQ R23 Mobile or emergency diesel generators and pumps – Permitted – (tba) – E whakaaehia ana

(a) The discharge of *contaminants* to air from the internal combustion of diesel in any mobile or emergency generator or pump_with a maximum load of 600 kilovolt-amperes is a permitted activity provided the following conditions are met:

(i) the discharge must not occur for more than 48 hours within 50 metres of a **sensitive area**, and

(ii) fuel used in the generator or pump must comply with the Engine Fuel Specifications Regulations 2011, and

(iii) the discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property.**

(b) For the internal combustion of diesel in any mobile or emergency generator or pump with a total combined output of less than 5000 kilovolt-amperes, the discharge is a permitted activity provided:

(i) the discharge is associated with geothermal electricity generation activities, including geothermal drilling, and

(ii) the discharge must not occur for a period of more than 3 months per wellhead or generation site, and

(iii) the discharge must not occur within 200 metres of a **sensitive area**, excluding discharges to air from pumps which may be located adjacent to *water bodies* and buildings that are defined as a **sensitive area** and are uninhabited for the duration of the discharge, and

(iv) fuel used in the generator or pump must comply with the Engine Fuel Specifications Regulations 2011, and

(v) the discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

AQ R24 Flaring of natural gas – Permitted – (tba) - E whakaaehia ana

The discharge of *contaminants* to air from the combustion of natural gas by temporary flaring is a permitted activity provided the following conditions are met:

(a) the equipment is designed specifically for flaring of natural gas

(b) the discharge must be an **unimpeded vertical discharge** from the emission stack

(c) the equipment must be maintained in accordance with the manufacturer's specifications at least once per year by a person competent in the maintenance of that equipment

(d) the discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property**.

AQ R25 **Agrichemical spraying – Controlled – Torehu matuahuwhenua - E whakahaerehia ana**

The discharge of *contaminants* to air from the use of **agrichemicals** not otherwise permitted by AQ R15 is a controlled activity.

The Regional Council reserves control over the following matters:

(a) the location where spraying will take place, frequency of spraying, application method, and proximity of spraying to sensitive activities

(b) measures to manage spray drift including setting conditions to ensure the discharge is not noxious or dangerous, offensive or objectionable, beyond the boundary of the **subject property**

(c) measures to notify neighbouring properties that spraying will take place (including notification and signage)

(d) notification agreements with neighbours

(e) the preparation of and contents of a spray risk management plan

(f) duration of consent and consent condition review including the timing and purpose of the review

AQ R26 **Cement storage and handling – Permitted – (tba) – E whakaaehia ana**

The discharge of *contaminants* to air from the storage, **handling**, redistribution, or packaging of cement, and cement additives is a permitted activity provided the following conditions are complied with:

(a) The cement is delivered using a fully enclosed conveyance system and stored in silos.

(b) The silos must be fully enclosed and fitted with a fabric filtration system that is installed and maintained in accordance with the manufacturer's specifications.

(c) Cement additives such as fly ash and microsilica must be bagged and debagged within an enclosed structure fitted with appropriate dust control equipment that is installed and maintained in accordance with the manufacturer's specifications.

(d) There must be no accumulation of dust or **particulates** on site.

(e) The discharge must not be noxious or dangerous, offensive or objectionable beyond the boundary of the **subject property** or into any *water body*.

AQ R27 **Crematoria – Controlled – (tba) – E whakahaerehia ana**

From 1 February 2020, the discharge of *contaminants* to air from crematoria facilities that were established before 27 February 2018, is a controlled, non-notified activity for which applications will be considered without the need to obtain the written approval of affected persons.

The Regional Council reserves control over the following matters:

(a) Setting conditions to control cremator operation, the number of cremations and contaminants discharged from the facility, including but not limited to any matter contained in relevant industry codes of practice.

(b) Setting conditions to require stack emissions monitoring and testing of soil samples to assess mercury accumulation.

(c) Duration of consent and consent condition review including the timing and purpose of the review

(d) Compliance monitoring.

(e) Payment of administrative charges.

Interpretation of the terms noxious or dangerous, offensive or objectionable

Several rules in the Air Quality chapter use the terms 'noxious or dangerous' or 'offensive or objectionable' as included in section 17 of the Act. These terms are not defined in the Definitions of Terms as they need to take account of case law precedents as they develop. However, some guidance is provided to give some certainty as to how the Council will interpret and implement these terms to determine whether an activity complies with permitted conditions or a resource consent condition.

In assessing whether an activity is noxious, dangerous, offensive or objectionable, the decision maker acts as representative of the community at large, weighs all competing considerations and ultimately makes a value judgement on behalf of the community as a whole. The decision maker must consider whether an "ordinary and reasonable person" would consider the action offensive and objectionable.

Noxious or dangerous

The dictionary definition of 'Noxious' means harmful, unwholesome. 'Dangerous' means involving or causing exposure to harm.

Noxious or dangerous in the context of the Air Quality chapter is an activity or discharge of *contaminants* to air that is harmful to people, property, or the *environment*. This may include, but is not limited to, the following:

(a) Human health *effects*.

(b) Contamination of potable water supplies where the concentration of **contaminant** in the water supply is at a level that exceeds the safe level for human consumption.

(c) Exceedance of a maximum residue limit for an **agrichemical** on, or in, food or stock feed at harvest or slaughter.

(d) Adverse *effects* on ecosystems including *water bodies*. This includes exotic and indigenous flora and fauna.

(e) Damage to crops or plants where *contaminants* have affected the growth or quality of the crop such that levels exceed safe levels for human consumption.

(f) A discharge of **fertiliser** or **agrichemical** spray that compromises the organic status of another property.

(g) Damage to paintwork, windows or surfaces from deposition of airborne *contaminants*.

(h) Reduced visibility that endangers the passage of any vehicle, aircraft, or *ship*.

Offensive or objectionable

The dictionary definition of 'offensive' is giving or meant to give offence, disgusting, foul-smelling, nauseous, repulsive. 'Offensive' is defined as 'open to objection, unpleasant, offensive.

To determine if a discharge is offensive or objectionable, the Regional Council will make an overall judgment that considers the FIDOL factors as follows:

Frequency – how often an individual is exposed.

Intensity – the strength or concentration.

Duration – the length of exposure.

Offensiveness/character – the hedonic tone (pleasant, neutral, unpleasant) or type.

Location – the type of land use and nature of human activities in the vicinity of the source.

When assessing discharges (odour, smoke, dust and **particulates**) the Regional Council will use the following approach:

(a) An experienced, warranted Council Officer will make an assessment of the situation taking into account the FIDOL factors.

(b) If the discharge is deemed to be offensive or objectionable by the warranted Council Officer, the discharger may be asked to take whatever action is necessary to avoid, remedy or mitigate the effects of the discharge on the *environment*.

(c) If the discharger disputes the warranted Council Officer's assessment or the problem is ongoing, then further evaluation may be required. This evaluation could include:

  (i) An assessment by another experienced, warranted Council Officer.

  (ii) For odour, monitoring using olfactometry or other appropriate technology.

  (iii) For particulates, monitoring of particulates beyond the boundary will be compared with the National Environmental Standards for Air Quality for particulates if people may be exposed.

Definition of Terms

Aerial application means any application of **agrichemicals** where the product is applied from an aircraft including but not limited to planes, helicopters and **drones**.

Airshed (as defined by the National Environmental Standards for Air Quality) *means:*

(a) The region of a regional council excluding any area specified in a notice under paragraph (b).

(b) A part of the region of a regional council specified by the Minister for the Environment by notice in the New Zealand Gazette *to be a separate airshed.*

Ambient air means the air outside buildings and structures. This does not include indoor air or contaminated air discharged from a source.

Anthropogenic means created by or caused by humans.

Authorised solid fuel burner means a **solid fuel burner** that is either:

(a) on the Ministry for the Environment's Authorised Wood Burner list or

(b) has been authorised under the New Zealand Domestic Solid Fuel Burner Authorisation Manual 2011 (or its amendment or replacement).

Bulk solid material means means materials consisting of, or including, fragments that could be discharged as dust or **particulates**. These materials include but are not limited to: gravel, quarried rock, **fertiliser**, coal, cement, flour, rock aggregate, grains, compost, palm kernel extract, tapioca, and woodchip.

Coal burner means a **solid fuel burner** designed to burn coal, which has one or more of the following design features:

(a) fuel combustion air supplies with separate controls

(b) grate in the base of the firebox

(c) ash pan under the grate.

Defence fire brigade means a unit of any other part of the Armed Forces established and trained under the authority of the Chief of Defence Force under the Defence Act 1990 for the prevention, suppression, and extinguishment of fires.

Dioxins means the group of chemicals known as polychlorinated dibenzodioxins and polychlorinated dibenzofurans, and other chemicals such as polychlorinated biphenyls, which are known to have dioxin-like *effects*.

Drone means an Unmanned Aerial Vehicle (UAV) or Remotely Piloted Aircraft System (RPAS).

Drone application means **aerial application** of **agrichemicals** using a **drone**.

Dwelling house means any building, whether permanent or temporary, that is occupied, or is intended to be occupied, in whole or in part, as a residence; and includes any structure or outdoor living area that is accessory to, and used wholly or principally for the purposes of, the residence; but does not include the land upon which the residence is sited.

Effective recapture in relation to fumigation, means a process that captures any fumigant from fumigation enclosures (such as buildings, shipping containers or gas proof sheets covering target product) on activated carbon or other medium so that it is not released into the atmosphere when the fumigation enclosure is ventilated such that the concentration of fumigant (not absorbed by the target product) within the fumigation enclosure at the beginning of the fumigation period is reduced by 80% prior to ventilation of the fumigation enclosure.

Emission rate when used in relation to **solid fuel burners** means the amount of particles (in grams) discharged from a **solid fuel burner** for each kilogram of dry wood burnt. The discharge must be measured in accordance with:

(a) the method specified in Australian/New Zealand Standard AS/NZS 4013:2014, Domestic solid fuel burning appliances – Method for determination of flue gas emission, or

(b) for a **woodburner** excluded from that method, another method that is functionally equivalent.

Enclosed incinerator means an incinerator with a burning chamber that is closed off during use and with a regulated supply of air to the fire.

Existing in relation to **solid fuel burners** means a **solid fuel burner** which:

(a) is in situ and has a building permit issued under the Local Government Act 2002, or

(b) is in situ and has a building consent issued under the Building Act 2004, or

(c) is the subject of a building consent or building permit application that has been accepted in writing by the Rotorua District Council on or before 27 February 2018, provided the consent or permit includes the **solid fuel burner** as a part of the consent or permit and the consent or permit is not declined, or

(d) has been verified by a delegate of the Rotorua District Council or Regional Council as lawfully installed.

Forestry road as defined by the National Environmental Standards for Plantation Forestry

(a) means a road that has the width, grade, strength, and pavement surface that allows a fully laden logging truck to safely traverse it and has all-weather access; but

(b) does not include a road managed by a local authority, the Department of Conservation, or the New Zealand Transport Agency.

Forestry track as defined by the National Environmental Standards for Plantation Forestry

(a) means a track that allows the passage of forestry machinery or vehicles, but does not provide the width, grade, strength, and pavement surface to allow a fully laden logging truck to safely traverse it or lacks all-weather access; but

(b) does not include a track managed by a local authority, the Department of Conservation, or the New Zealand Transport Agency.

Free-range farming means farms where **poultry** or pigs (other than those kept as pets) are housed indoors, but have free access to the outdoors.

Fuel burning equipment often referred to as a “boiler” means a device used for the combustion of fuel within an enclosed combustion chamber in which heat is transferred from the products of combustion directly for the production of useful heat or power. For clarity this excludes vehicles, rail vehicles, *ships*, aircraft, **solid fuel burners**, diesel fuelled generators, and **enclosed incineration**.

Fully enclosed in-vessel composting means composting produced within a container (including but not limited to tanks, drums, silos, bunkers, or tunnels) where air flow and temperature are fully controlled during the composting process.

Ground-based application means any application of **agrichemicals** from a source located on the ground.

Hand-held motorised application means an application method of **agrichemicals** where the applicator is held, and the **agrichemicals** applied, by hand, and where some part of the application method involves motorised pumping.

Hand-held non-motorised application means an application method of **agrichemicals** where the applicator is held, and the **agrichemicals** applied, by hand, and where no part of the application method involves motorised pumping.

Handling in relation to bulk solid material means extraction, quarrying, mining, processing, screening, conveying, transferring, blasting, loading, unloading or crushing of any material.

Heritage List means the New Zealand Heritage List/Rarangi Korero.

Heritage New Zealand means Heritage New Zealand Pouhere Taonga.

Incineration *in relation to waste or other matter, means its deliberate combustion for the purpose of its thermal destruction.*

Incinerator means a device used for **incineration** where the primary purpose of the device is to deliberately combust *waste* or other matter by thermal destruction.

Industry brigade means a group of persons organised as an industry brigade in accordance with Section 69 of the Fire and Emergency New Zealand Act 2017.

Indoor open fire means an appliance or a structure inside a **dwelling house** or building that can burn **solid fuel** but cannot effectively control the rate of air supply to the combustion chamber. It includes a fireplace that has a cover or doors that cannot effectively control the rate of air supply to the combustion chamber, but excludes any **solid fuel burner** where the firebox is enclosed with a regulated supply of air to the fire.

Intensive farming means **poultry** farms, piggeries, other livestock farms, and mushroom production carried out within buildings, structures, pens or yards where the stocking density limits, or prevents, dependence on natural soil on the site, and/or where food is required to be brought to the site. Excludes **free-range farming**, and greenhouses.

Liquid waste means any *waste* liquid composed of less than 20% solids and does not include **hazardous substances**.

Low pressure boom means any boom with the following design conditions:

(a) the liquid pressure through the boom is less than 3 bar

(b) the height of the discharge point on the boom is less than 1 metre from the ground

(c) the nozzles point down

(d) the nozzles are designed to create coarse droplets of greater than 250 microns in diameter.

Multifuel burner means a **solid fuel burner** designed to burn wood and/or coal, which has one or more of the following design features:

(a) fuel combustion air supplies with separate controls

(b) grate in the base of the firebox

(c) ash pan under the grate.

Offset means an emission reduction in one part of the **Rotorua Airshed** to compensate for an emission increase elsewhere in the **Rotorua Airshed**.

Oil (as defined by the National Environmental Standards for Air Quality) *means petroleum in any form other than gas including crude oil, fuel oil sludge, oil refuse, and refined oil products (for example, diesel fuel, kerosene, and motor gasoline).*

Open burning means the combustion of any material in the open air, other than in purpose built equipment designed to control the combustion process. Includes bonfires, **incinerators** and **recreational/cultural** outdoor burning but excludes, **enclosed incinerators**, **solid fuel burners**, **fuel burning equipment**, flaring of natural gas, smokers, fireworks, candles, lamps, and outdoor patio gas heaters.

Particulates means particulate matter where the particle size is small enough to become airborne. Includes:

(a) **TSP** – total suspended particulate

(b) **PM_{10}** – particulate matter that is less than 10 micrometres in diameter

(c) **$PM_{2.5}$** – particulate matter that is less than 2.5 micrometres in diameter.

Pathological waste means *waste* that is offensive to the senses or hazardous to human health including anatomical wastes such as human tissue and organs, animal tissue, organs and carcasses, materials that may be subject to contamination by highly infectious organisms, and any product contaminated by radiation used in medical treatments.

Pellet burner means any **solid fuel burner** that burns manufactured pellets of compressed wood sawdust, and where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate. Excludes **woodburners, coal burners** and **multifuel burners**.

Poultry means domestic fowl kept in captivity for sale or to produce meat, eggs, or other products. Includes: chickens, ducks, geese, guinea fowl, pigeons, turkeys, peacocks, doves, pheasants, swans, and quail.

Pre-shipment application in relation to fumigation, means the non-quarantine treatment applied within 21 days prior to export, to meet the official requirements of the importing country or the existing official requirements of the exporting country. Official requirements are those which are performed or authorised by a national plant, animal, environmental, health, or stored product authority.

Public amenity area means a public area where members of the public are likely to congregate for extended periods of time. This may include (but is not limited to): backcountry huts, barbeques, changing facilities, cycleways, outdoor sports facilities, parks and reserves, playgrounds and playground equipment, public toilets, seating and picnic tables, shelters, squares, and walkways.

Quarantine application in relation to fumigation, means treatment to prevent the introduction, establishment and/or spread of quarantine pests (including diseases), or to ensure their official control, where:

(a) official control is that performed by, or authorised by, a national plant, animal or environmental protection or health authority, and

(b) quarantine pests are pests of potential importance to the areas endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.

Recreational/cultural in relation to **open burning** means any **open burning** for the purposes of cooking or amenity (eg. hangi, umu, barbeque, braziers, pizza ovens Guy Fawkes celebrations), or recognised cultural practices, but excluding **incinerators**.

Refurbished in relation to **solid fuel burners** means a **solid fuel burner** that has been altered after purchase or installation in the **dwelling house** or building in a way that could change its design standard.

Remove, removed or removing: in relation to **solid fuel burners** means the complete physical removal (taking out, taking away or cause to be no longer present) of a **solid fuel burner** from the **dwelling house** or building.

Replace, **replaced** or **replacing**: in relation to **solid fuel burners** means the complete physical removal (taking out, taking away or cause to be no longer present) of a **solid fuel burner** from the **dwelling house** or building and installation of a new **solid fuel burner** that complies with the requirements of this regional plan.

Rotorua Airshed means the area of Rotorua specified by the Minister for the Environment as a separate **airshed**, by notice in the *New Zealand Gazette*.

Secondary emission reduction device in relation to **solid fuel burners** means a secondary air emission treatment device that reduces the particulates from a **solid fuel burner**.**Sensitive area** means an activity that is particularly sensitive to adverse *effects* associated with air *contaminant* discharges either due to the vulnerability of the population or area exposed to the *contaminant*, or due to the potential for people to be exposed for prolonged periods and may include:

(a) residential buildings and areas (including marae)

(b) childcare centres, schools, educational facilities

(c) hospitals, nursing homes, aged care facilities

(d) offices, consulting rooms, gymnasiums, community centres

(e) hotels, motels, caravan parks, camping areas, tourist accommodation

(f) correctional facilities

(g) **public amenity areas**

(h) manufacturing or storage of food or beverages

(i) manufacturing or storage of electronics

(j) public water supply catchments and intakes.

(k) incompatible crops or farming systems (e.g. organic farms, greenhouses)

(l) household water supplies (including roofs from which a water supply is obtained).

Ship as defined by the Maritime Transport Act 1994 *means every description of boat or craft used in navigation, whether or not it has any means of propulsion; and includes—*

(a) a barge, lighter, or other like vessel;

(b) a hovercraft or other thing deriving full or partial support in the atmosphere from the reaction of air against the surface of the water over which it operatives

(c) a submarine or other submersible

Solid Fuel means a solid substance that releases useable energy when burnt and includes wood, coal and its derivatives, and manufactured fuel pellets.

Solid fuel burner means a **solid fuel** burning appliance where combustion of the **solid fuel** occurs within a firebox, and where there may be a regulated supply of air to the fire. It includes (but is not limited to), **indoor open fires**, outdoor open fires, freestanding or built in **woodburners**, **pellet burners**, potbelly stoves, coal ranges, **coal burners**, chip heaters, water heaters or central heating units, **multifuel burners**, and similar appliances. It excludes small-scale domestic devices for smoking food, any portable unflued heaters fuelled by gas, alcohol or other liquid fuels, gas hobs or gas ranges used for cooking, any fuel burning appliance installed in a boat, caravan or motor home, and **fuel burning equipment** as defined by this regional plan.

Space heater means a domestic appliance designed for use within a building to generate warmth for human comfort. It includes **solid fuel burners** with water heating capabilities as a secondary purpose and appliances designed to heat water for space heating (eg. via radiators). It excludes cooking fires, ranges, and chip heaters where the primary purpose of the fire is to cook or heat water.

Subject property means the property where the discharge of *contaminants* to air originates.

Thermal efficiency means the ratio of useable heat energy output to energy input. The thermal efficiency must be calculated in accordance with:

(a) the method specified in Australian/New Zealand Standard AS/NZS 4012:2014, Domestic solid fuel burning appliances – Method for determination of power output and efficiency, or

(b) for a **woodburner** excluded from that method, another method that is functionally equivalent.

Treated timber means timber treated with preservatives, including boron compounds (except 2-thiocyanomethylthiobenzothiazole (TCMTB) compounds), copper chromium arsenic (CCA), or creosote, but does not include timber treated only with anti-sapstain compounds.

Transmission line support structure means a tower or pole used to support cables used for, or associated with, the overhead or underground transmission of electricity in the national grid .

Ultra-low emission burner means a woodburner that:

(a) when tested according to Canterbury Method 1 (revision 1.6 June 2015) discharges no more than 0.77 grams of **particulates** per kilogram of dry wood burnt, and
(b) is on the Regional Council's List of Approved Ultra-low Emissions Burners. This list will be available on the Regional Council's website and may be updated without further formality.

Unimpeded vertical discharge means the discharge from a vent or chimney is perpendicular to the ground and is not restricted in any way that increases the emission of particulates or restricts the dispersion of **particulates** (including smoke) away from the site.

Unsealed road means a road that is not sealed with a permanent surface of tarmac, concrete, or asphalt. For the purposes of this regional plan **unsealed roads** do not include road works on sealed roads, *forestry roads, forestry tracks*, or roads used for land development and/or earthworks.

Untreated wood means any wood material or product, including sawdust, which is not treated with copper chromium arsenic (CCA), or with any organochlorine preservative and can include timber treated only with anti-sapstain compounds.

Waste

(a) means any thing disposed of or discarded, and

(b) includes a type of waste that is defined by its composition or source (for example, organic waste, electronic waste, or construction and demolition waste), and

(c) to avoid doubt, includes any component or element of diverted material, if the component or element is disposed of or discarded.

Woodburner means a type of domestic **solid fuel burner** that burns wood, where combustion of wood occurs within a firebox, and where there is a regulated supply of air to the fire. It excludes **indoor open fires**, **pellet burners**, **coal burners, multifuel burners,** and also excludes cooking fires, ranges, and chip heaters where the primary purpose of the fire is to cook or heat water.

APPENDIX C

Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan
Section 32AA Report

Proposed Change 13 (Air Quality) to the Bay of Plenty Regional Natural Resources Plan

Section 32AA evaluation of changes

4 February 2019

Bay of Plenty Regional Council
5 Quay Street
PO Box 364
Whakatāne 3158
NEW ZEALAND

Prepared by Karen Parcell (Senior Policy Analyst)

1 Introduction

Section 32AA of the Resource Management Act 1991 (the RMA) requires a further evaluation to be undertaken in accordance with s32(1)-(4) if any amendment has been made to the proposal (in this case the Proposed Plan Change 13 (Air Quality) "PC-13") since the original s32 evaluation report was completed.

This Section 32AA Evaluation Report should be read in conjunction with the Section 32 Evaluation Report dated 27 February 2018, the Section 42A Report dated October 2018, and the recommendations of the Hearing Panel report dated January 2019.

This report evaluates the provisions of Version 8.0 of PC-13 in accordance with the requirements of section 32AA.

The further evaluation must be published in an evaluation report that is made available for public inspection at the same time as the decision on the proposal is publicly notified, or be referred to in the decision in sufficient detail to demonstrate that the further evaluation has been undertaken in accordance with section 32 RMA.

1.1 Scale and significance

The further evaluation is only required to address changes that have been made to the proposal since the original assessment was done. These changes are the changes between the original proposal (version 4.0) and the amended proposal (version 8.0)

Section 32AA requires that the evaluation is undertaken in a level of detail that corresponds to the scale and significance of the changes.

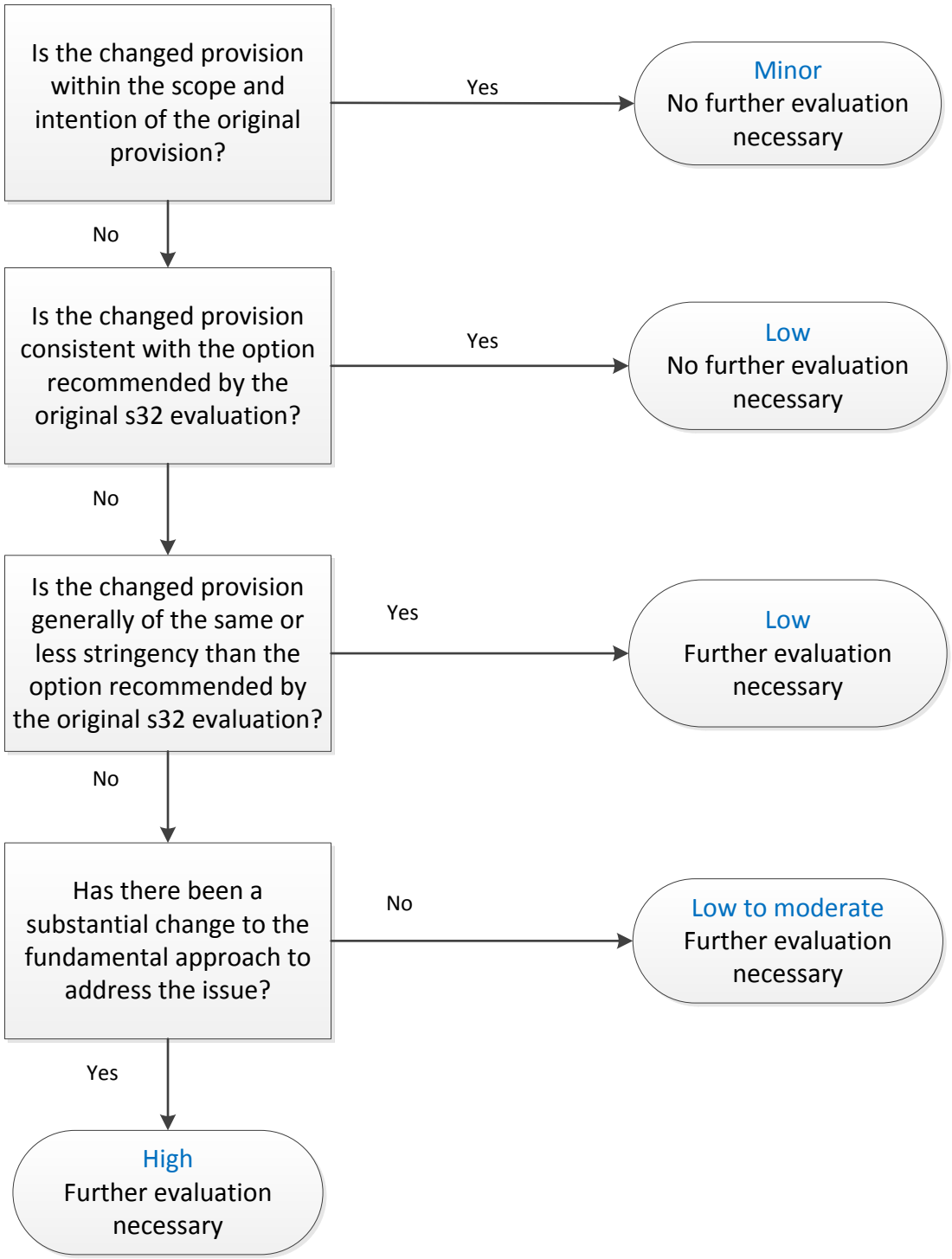
The scale and significance of the *changes* should not be confused with the scale and significance of the *topic*, as assessed and determined in the original section 32 evaluation. While a topic may have been assessed as low, moderate or high in the section 32 evaluation, the change made to the provision through the Hearings process may only be assessed as being of low significance, even if there has been considerable debate and new information introduced by way of submissions and evidence.

1.2 Assessment of scale and significance of changes

To determine the scale and significance of changes, each amended provision was compared with the proposed provision using a set of criteria to determine the scale and significance of the change. These criteria and the level of scale and significance, are summarised in Figure 1. Based on the criteria, the evaluation of each amended provision in Section 2 is carried out at the appropriate level as determined by this assessment.

Policy AQ P6 and AQ R19 have no changes, therefore are not assessed in this report.

Figure 1 – Assessment of scale and significance of change



2 Evaluation of minor changes

There are ten provisions where the change is to wording or terms that do not change the intent or scope of the proposed provision. The original section 32 evaluation is appropriate for these provisions.

These changes are considered to be minor changes for which no further evaluation under section 32AA is considered necessary and are summarised in Table 1.

Table 1 – summary of provisions with minor changes

Provision	**Change to proposed provision**
AQ P1	Wording amended to assist clarity
AQ P9	Change from **sensitive activity** to **sensitive area**
AQ R2	The proposed rule listed all different types of activities. This has been simplified
AQ R8	Wording amended to ensure consistency with Fire and Emergency New Zealand Act
AQ R11	Abbreviation of NESAQ is written in full
AQ R14	Wording amended to improve clarity of rule
AQ R17	Wording changed to be consistent with similar condition in AQ R16
AQ R18	Wording amended to assist clarity

3 Evaluation of low-scale changes within original options

A number of provisions have been changed in such a way that the intent and scope has changed, but where the provision is still within the proposed option as recommended in the original section 32 evaluation.

As the section 32 evaluation was carried out at a topic level rather than as an evaluation of each provision on its own the evaluation does not need to be amended and the original section 32 evaluation remains appropriate.

The provisions with a low-scale but not significant change, requiring no further evaluation are summarised in Table 2.

Table 2 – summary of provisions with a low-scale change

Provision	**Change to proposed provision**
AQ O1	Requirement to "enhance air quality where degraded" removed
AQ O2	Requirement to meet the AAQGs has been removed
AQ O3	Requirement to consider adverse effects on the receiving environment added
AQ P2	Hazardous air pollutants have been included alongside hazardous substances Wording amended to improve clarity and assist interpretation and implementation
AQ P3	Amended so that the policy only applies to discharges that may cause a breach of ambient limit, rather than smaller scale discharges that may "contribute to" a breach Policy broadened to include management of discharges that may cause adverse effects on regional significant industry
AQ P4	Scope broadened to include particular regard to a number of other matters
AQ P8	Clause added to encourage best practice Wording amended to improve clarity and assist interpretation and implementation
AQ P10	Amended to include updated calculations and allow alternative emission factors to calculate offsets
AQ R5	Changes to conditions to manage odour
AQ R7	Scope expanded to include infected vegetation Wording amended to improve clarity and assist interpretation and implementation
AQ R10	Amendment made to materials list to ensure consistency with AQ R18
AQ R20	Change made from requiring "recapture" to requiring "effective recapture"

4 Evaluation of low-scale changes requiring additional evaluation

A number of provisions of the proposed plan change have been changed through the Hearings process and are no longer consistent with the proposed option recommended by the original section 32 evaluation. Some further evaluation is required.

The Hearing Panel's duty is to examine whether the provisions of the amended proposal are the most appropriate way to achieve the objectives by identifying other reasonably practicable options and assessing the efficiency and effectiveness of provisions.

The reasonably practicable options assessed in this evaluation only include the provision in the original proposal (version 4.0), and the amended provision in version 8.0. No further options are considered as the amended provision has been determined through the public consultation process and any options outside these would deprive submitters of the opportunity to respond to alternatives.

As the scale of these changes is considered to be low, the further evaluation is brief and provisions are assessed at a topic level where appropriate.

4.1 Vehicles and roads

The amended AQ R4 has removed the management of internal combustion engines from the Plan Change. The proposed rule was not realistically achievable with Regional Council powers, skills and resources, providing limited ability to enforce non-compliance with this rule. The amended rule is therefore more effective.

4.2 Rotorua burners

The amended policies and rules for Rotorua burners are more appropriate than the proposed version for the following reasons:

- Amended policy AQ P7 now applies to any solid fuel burner, not only those within dwelling houses and buildings. This is more consistent with AQ R14 which classifies any solid fuel burner that is not permitted by other rules as non-complying, not just those installed within dwelling houses and buildings. Consistency between policies and rules (particularly for non-complying activities) increases effectiveness.
- Amended policy AQ P7 now provides for exceptional circumstances. Previously this policy was to avoid discharges of particulates to air from certain solid fuel burners listed in the policy, which implied that use of these burners would be prohibited. This was not the intention and the amendment to allow for exceptional circumstances resolves this, improving effectiveness.
- The amended polices and rules provide for ultra-low emission burners, ensuring that modern technology is encouraged, improving the effectiveness of the rules particularly in meeting AQ O2.
- Amended AQ R12(a) now only provides for existing indoor open fires as permitted activities, ensuring new indoor open fires are not introduced into the Rotorua Airshed, increasing the effectiveness of the plan.

- Amended rule AQ R12(d) and AQ R13 only permit Authorised solid fuel burners, which ensure burners have been checked through an independent process to ensure they meet the design criteria, improving effectiveness.
- AQ R12(c)(iv) and AQ R13a provide a rule framework for a specific outdoor fire on business premises in Rotorua. This reduces effectiveness as the plan has allowed for a limited type of burners as permitted and relies upon all other burners to be phased out. Efficiency is also reduced as there is an increased environmental and social cost of allowing continued use of this burner in a polluted airshed. However, the activity is only permitted until 2020, after which time it becomes discretionary. The earliest date to determine whether AQ O2 is achieved for PM_{10} in Rotorua is 2020, therefore, on balance, the amended proposal is still appropriate.
- AQ R13b provides an additional discretionary activity allowing a more lenient process for modern burners fitted with secondary emission reduction devices. This may improve effectiveness if homeowners choose to install these devices, further decreasing emissions. Efficiency is improved as the more lenient consenting process as a discretionary activity reduces costs for both applicant and Council.

4.3 Agrichemical spraying

The amended rule AQ R15 for agrichemical spraying is more appropriate than the proposed version for the following reasons.

- A number of minor amendments improve clarity and assist interpretation and implementation of the rule which increases effectiveness.
- The amended rule includes a condition requiring approved training for persons using certain spray methods. This raised awareness of spray drift potential and methods to minimise spray drift, increasing the effectiveness of the rule.
- Minor amendments have been made to the signage and notification requirements of the rule that increase its effectiveness at meeting the objectives, enables sprayers to comply with the rule with fewer costs, while still achieving environmental and social benefits.

An additional rule AQ R25 has been included in the amended proposal to allow for agrichemical spraying as a controlled activity, where the conditions of the permitted rule cannot be met. Under the proposed rules, any agrichemical spraying that could not comply with the permitted activity was discretionary by default.

The amended provisions provide for a controlled activity where a consent must be granted but Council retain the ability to set conditions. This reduces costs for both Council and applicant while still ensuring environmental and social benefits though the consent process and conditions.

4.4 General interaction between permitted and discretionary activities

The effectiveness of the plan change relies on the interaction between the general permitted activity rule (AQ R1), specific permitted activity rules and the discretionary activity rule list (AQ R21).

Some additional rules have been which increases the complexity of the plan change. However this increased complexity is minor in this instance.

A number of amendments to rules AQ R1, AQ R3, AQ R21 and the inclusion of three new rules (AQ R23, AQ R24, AQ R26) have improved the appropriateness of the plan change in the following ways:

- The amended proposal includes three new specific permitted activity rules (AQ R23, AQ R24, AQ R26). These rules manage diesel generators and pumps, flaring of natural gas, and cement storage and handling. The more specific and tailored the rule, the more effective the plan as it minimises ambiguity and assists implementation. Efficiency is improved as including appropriate permitted activities reduces resource consent costs, without reducing benefits.
- Condition (c) has been removed from AQ R1, improving efficiency. This is because the proposed condition broadly excluded any industrial or trade premises from the permitted activity, requiring consent even for a *de minimus* activity. This would have increased costs with no significant increase in benefits and the amendment remedies this.
- The amended proposal also includes three permitted activities added to the list in AQ R3. This makes the amended proposal more effective as listing specific activities adds clarity that aids interpretation and implementation. The amended rule is more efficient as including appropriate permitted activities reduces resource consent costs, without reducing benefits.
- The amended discretionary activity rule AQ R21 includes clarification for levels of free range farming and composting which improves effectiveness by limiting consents to those activities that may cause adverse effects.

5 Low to moderate scale changes requiring further evaluation

Provisions for open burning and crematoria have been amended through the Hearings process and are no longer consistent with the proposed option recommended by the original section 32 evaluation. Some further evaluation is required.

The amended provision is a more stringent option than the option recommended in the original section 32 evaluation. For this reason, the scale and significance is assessed as low to moderate.

The Hearing Panel's duty is to examine whether the provisions of the amended proposal are the most appropriate way to achieve the objectives by identifying other reasonably practicable options and assessing the efficiency and effectiveness of provisions.

The reasonably practicable options assessed in this evaluation only include the provision in the original proposal (version 4.0), and the amended provision in version 8.0. No further options are considered as the amended provision has been determined through the public consultation process and any options outside these would deprive submitters of the opportunity to respond to alternatives.

The further evaluation is assessed at a topic level.

5.1 Open burning

Provisions to manage open burning, AQ P5, AQ R6, and AQ R9, have been amended through the Hearings process and are no longer consistent with the proposed option as recommended by the original section 32 evaluation.

The scope of the proposed provisions was to manage open burning in urban areas. The amended provisions now include any burning carried out within 100 metres of a neighbouring dwelling house. This has broadened the scope and intent of the provisions into rural areas. This change was in response to a community issue identified by submitters.

This is a more stringent option than the recommended option in the original section 32 evaluation. The scope of these changes is low to moderate and a further assessment is required.

The amended provisions now include all properties within the region where open burning may be carried out, in particular for agricultural and horticultural activities where open burning is carried out as part of land management practice.

This further evaluation does not consider urban properties as these were considered by the original evaluation.

Assessment of Effectiveness

The amended provisions have increased the effectiveness in the following ways:

- The objectives of the plan change are better met by using an effects based approach that targets all open burning likely to cause an adverse effect.
- The provisions are within Council's roles set out in section 30, to control discharges of contaminants to air.
- The provisions are easier to implement, monitor and enforce when using distance to assess compliance, rather than a definition of urban property.
- The amendment targets all open burning that could cause an adverse effect, as raised through submissions, not only burning in one particular type of area.
- Provides for written approval from those potentially affected.

Assessment of Efficiency

Efficiency measures whether the provisions achieve the objectives at the lowest cost with the highest benefit when assessed across the four well-beings, economic, environmental, social and cultural.

The benefits of the amended provisions are:

- Reduced adverse effects from open burning on residents in nearby houses and an improvement in health and amenity values. This benefit now applies region wide, not only in urban areas.
- Provides for neighbours to give written approval leading to more lenient process for dischargers.
- Urban properties that did not fit the proposed definition are now covered by these amended provisions.
- Reduced complaints from the public and reduction in Council resources required to respond.

The costs of the amended provisions are:

- Short term increase in complaints following introduction of rules, requiring additional Council resources.
- Those with burn sites within 100 metres of neighbouring houses will need to find an alternative site. As this may involve a reduction in area of production

land it increases cost to the landowner. This is mitigated by providing for a permitted activity if written approval is obtained from neighbours.

- Some landowners may need to apply for resource consents.
- Perceived impact on personal property rights for those that regard open burning as a right.
- Potential for an increase in fly-tipping and waste to landfill.

Risk of acting or not acting

The further assessment must also assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

Complaints to Council regarding open burning provides evidence that this activity causes health effects and nuisance in all areas, not only urban areas. These effects are unacceptable to the wider community.

Assessment of appropriateness

The overall effectiveness of the amended provisions has increased as they are more effects based. The rules are also fairer as they apply in all areas of the region where open burning is carried out, instead of only in urban areas that fit the definition.

The costs of the activity have potentially increased for landowners that use open burning regularly, within 100 metres of neighbouring houses. The benefits, particularly improved health and amenity for those in neighbouring houses, outweigh the costs.

The amended provisions AQ P5, AQ R6, and AQ R9 are more appropriate than the provisions as proposed.

5.2 Spraypainting

Rule AQ R16 has been changed to include the spray application of all surface coatings, not only those that contain di-isocyanates or spray on anti-fouling paint. There is an exclusion for water based paints and use of solvent based paints (0.5 litres per hour and 5 litres per month) to allow low-scale spraypainting without onerous conditions.

This has broadened the scope of the rule to affect anyone carrying out spraypainting (of a particular paint/ above a particular rate) therefore further assessment is necessary.

The rule also includes an additional conditions to manage the discharges from spraying of large, fixed structures that cannot be spraying in a spray booth.

Assessment of Effectiveness

The amended provision has increased the effectiveness in the following ways:

- The amendment responds to submitter concerns that it is not practicable to contain all items that may need to be sprayed, but that the discharges can be effectively managed with conditions that ensure the objectives will still be met.
- The rule is more effects based, targeting all spraying likely to cause adverse effects. This improves the ability to meet the objectives.

- The provisions are within Council's roles set out in section 30, to control discharges of contaminants to air.
- The rule addresses submitter's concerns that adverse effects also occur from forced air drying of spray paint, not only the spraypainting itself. Drying areas are now covered by conditions of the rule.

Assessment of Efficiency

Efficiency measures whether the provisions achieve the objectives at the lowest cost with the highest benefit when assessed across the four well-beings, economic, environmental, social and cultural.

The benefits of the amended provisions are:

- Improved health and quality of life for nearby residents/occupiers of any spraypainting activity not previously covered under the current rules.
- Reduced complaints from the public and reduction in Council resources required to respond.

The costs of the amended provisions are:

- Applicants' cost for resource consents required for existing activities that no longer comply with the permitted activity rule.
- Costs for mitigating existing discharges to ensure compliance with the permitted activity rule or cost for applying for a resource consent.

Risk of acting or not acting

The further assessment must also assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

The adverse effects of volatile organic compounds from spraypainting on human health and well-being is well established.

Assessment of appropriateness

The overall effectiveness of the amended provisions has increased as they are more effects based. The rules are also fairer as they apply to all spray painting with solvent based paints over a particular scale.

The costs of the activity have potentially increased for those without booths or appropriate extraction equipment that carry out spraypainting not excluded from the rule. However, the benefits in improved health and amenity values outweigh these costs.

5.3 Crematoria

Rule AQ R21(f) has been amended to only require consent for new crematoria facilities, while existing facilities are covered by a new controlled, non-notified activity rule AQ R27.

The scope of the proposed provisions was to require consents for new crematoria, while management of existing facilities remained unchanged. The amended provisions now include rule AQ R27 requiring consents for existing crematoria. This is a more stringent option than the proposed provision and requires further evaluation.

Previously it was unclear whether crematoria required resource consent, leading to inconsistent interpretation where some crematoria have consent, and others do not.

Assessment of Effectiveness

The amended provisions have increased the effectiveness in the following ways:

- The amendment responds to a community concern raised through the submission process that the previous rules were not clear and not applied consistently.
- The provisions are now more effects based, requiring all crematoria to apply for resource consent to allow for assessment of adverse effects through the consent process. This improves the ability to meet the objectives through specific consent conditions relevant to each situation.
- The provisions are within Council's roles set out in section 30, to control discharges of contaminants to air.
- The rules are clear cut, requiring all crematoria to apply for consent, making them easier to interpret and implement.
- All crematoria, whether existing or new, require a resource consent. This is a more balanced approach, managing all discharges from similar sources under the same air quality management regime.

Assessment of Efficiency

Efficiency measures whether the provisions achieve the objectives at the lowest cost with the highest benefit when assessed across the four well-beings, economic, environmental, social and cultural.

The benefits of the amended provisions are:

- Reduced adverse effects from mercury discharges and general discharges from crematoria.
- Controlled activity for existing facilities increases the costs for those existing facilities that do not currently hold a consent, but a reduced cost compared with discretionary activities. It also provides some certainty for applicant and allowing for management of adverse effects.
- Phase-in date of controlled activity allows for preparation of consent applicantions.

The costs of the amended provisions are:

- Increased cost for existing crematoria applying for consents for existing activities.
- Increased cost for Council to process and monitor consents.
- Some risk of increased costs depending on the nature of consent conditions.

Risk of acting or not acting

The further assessment must also assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

The adverse effects of mercury on human health is well established, and crematoria are known to discharge mercury (from amalgam fillings). There is also evidence from past consent processes that crematoria can create community concern including impact on visual amenity.

Assessment of appropriateness

The overall effectiveness of the amended provisions has increased as it is fairer and more effects based, requiring resource consent for all crematoria, regardless of when they were established. This allows for better management of adverse effects to meet the objectives.

The costs and uncertainty have increased for existing crematoria, who will now need to apply for a resource consent. This is mitigated through providing a phase-in period to allow for preparation. A controlled activity gives certainty to consent applicants that they will be granted a consent.

The amended provisions are more appropriate than the provisions as proposed.

5.4 Intensive farming

Rules AQ R21(j) and AQ R19 manages discharges to air from farming activities, including intensive farming. The rules themselves have not changed, however the definition of intensive farming now include “other livestock”. This makes the rule more stringent as it has broadened the scope from poultry or pig farms to any livestock, which includes the beef, dairy, and sheep.

Currently there are no known intensive beef, dairy or sheep farms in the region However, if they were to be established, any intensive farm, regardless of type of livestock, is likely to be a source of odour. These types of activities are best assessed using the resource consent process.

Assessment of Effectiveness

The amended provision has increased in effectiveness in the following ways:

- The amendment is in response to a concern that some types of intensive farms were treated differently to others. The provision is now more effects based, applying to all intensive farms which have the potential to cause odour issues. All intensive farms must apply for resource consent to allow for assessment of adverse effects through the consent process. This improves the ability to meet the objectives through specific consent conditions relevant to each situation.
- The provisions are within Council’s roles set out in section 30, to control discharges of contaminants to air.

Assessment of Efficiency

Efficiency measures whether the provisions achieve the objectives at the lowest cost with the highest benefit when assessed across the four well-beings, economic, environmental, social and cultural.

The benefits of the amended provisions are:

- Reduced adverse effects from odour discharges from all types of intensive farms.

The costs of the amended provisions are:

- Increased costs and uncertainty for intensive farms applying for consents.
- Increased cost for Council to process and monitor consents.

Risk of acting or not acting

The further assessment must also assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

It is well established that intensive farms have a higher potential for offensive and objectionable odour.

Assessment of appropriateness

The overall effectiveness of the amended rule and definition has increased as it treats all intensive farms equally and is more effects based, requiring resource consent for all types of intensive farms. This allows for better management of adverse effects to meet the objectives.

The costs and uncertainty have increased for intensive farms who will now need to apply for a resource consent, regardless of livestock type. This is balanced by reduced adverse effects on the community.

The amended provisions are more appropriate than the provisions as proposed.

5.5 Handling of bulk solid materials

A new rule has been included in the amended proposal to classify the handling of bulk solid materials such as fertiliser, cement, or grains as a discretionary activity when over certain thresholds.

This activity was considered in the original section 32 assessment as part of the Topic 6 – Mount Maunganui, and as part of Topic 7 General activities and listed discretionary activities. The assessment was broad, consistent with the general nature of the original rules. However, as this rule is now highly specific, additional assessment is appropriate.

Assessment of Effectiveness

The amended rule AQ R22 has been designed to manage large scale handling of bulk solid material – specifically the unloading of bulk solid materials (such as palm kernel extract) from ships at the Port of Tauranga, its transfer to storage sheds in the Mount Maunganui area, and further distribution. This includes a facility at De Havilland Way which is on the same legal property as several residential homes in Aerodrome Road.

This activity has previously been managed by Rule 17 (of the Operative Regional Air Plan). The current rule manages adverse effects beyond the boundary. As the complainants in the above case are within the same legal boundary as the alleged offender, enforcing any rule that relies on effects “beyond the boundary” has been problematic. This has resulted in years of complaints and ongoing issues in the area, while Council is left with little ability to resolve any of the issue.

There have been other occasions where this issue has casued adverse effects. For example, a similar issue is present at the Port of Tauranga (the Port). The Port is a large site with several different activities taking place within its legal boundary. Under the current rules it is difficult to take enforcement action when an adverse effect is not occurring beyond the boundary.

The proposed general permitted activity rule AQ R1 also uses the boundary as part of its conditions. This is standard practice for air quality management and in most cases will work effectively and efficiently. However, it is not an appropriate rule to use in this case. The adverse effects of this activity will continue and this will not achieve the objectives.

The amended rule AQ R22 is therefore more effective at achieving the objectives than either the current plan and the amended general activity rules of the proposed plan. It is more effective to target activities that have known adverse effects with a specific rule to ensure they are managed appropriately. A discretionary activity improves the ability to meet the objectives through specific consent conditions relevant to each situation.

This is a fair approach, targeting only large-scale bulk handling known to cause adverse effects. Smaller scale bulk handling, such as fertiliser at distribution centres, may still be carried out without consent.

The provisions are within Council's section 30 role to control discharges of contaminants to air.

Assessment of Efficiency

Efficiency measures whether the provisions achieve the objectives at the lowest cost with the highest benefit when assessed across the four well-beings, economic, environmental, social and cultural.

The benefits of the amended provisions are:

- Improved health and quality of life for nearby residents/occupiers
- Improved ability to run business, and reduced impact on property
- Reduced complaints from the public and reduction in Council resources required to respond.

The costs of the amended provisions are:

- Applicants' cost for resource consent could be substantial – particularly if the consent application is publicly notified.
- Cost of meeting conditions to mitigate adverse effects.

Risk of acting or not acting

The further assessment must also assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

The adverse effects of bulk handling of palm kernel extract (and other similar materials) has been well demonstrated by submitters during the Hearings process. There has been an adverse effect on health and on the ability for residents to run their businesses.

The Council has installed a PM_{10} monitor at Aerodrome Road to establish the level of particulates for this specific case. The monitor has been in place for only a few months therefore a long term trend is not yet available.

One verified exceedance of the ambient air quality standard for PM10 was recorded at this site on 5 January 2019. At the time of writing the exact source has not yet been determined. However, based on a Council Officer's observations of the area during the event, the principal source is believed to be palm kernel extract unloaded at the Port of Tauranga then delivered and transferred to and from the storage facility at De Havilland Drive.

It is well established that large-scale handling of bulk solid materials has a high potential to cause adverse effects if not managed properly.

Assessment of appropriateness

The overall effectiveness of the amended rule has increased as it is more effects based, requiring resource consent for large scale bulk handling of materials known to cause adverse effects if not managed properly. The rule does not contain a "beyond the boundary" assessment of adverse effects, a key reason why the previous rule was not effective.

The costs for operators to handle bulk material will increase as they must now apply for resource consent, and potentially carry out mitigation as required by consent conditions. However, the benefits, particularly the improvement to human health, outweigh this cost.

The amended provisions are more appropriate than the provisions as proposed.