BAY OF PLENTY
REGIONAL COUNCIL
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Regional Air Plan

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Regional Air Plan

April 2016

Bay of Plenty Regional Council
PO Box 364
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New Zealand

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Definition of Terms

Adjoining: where used in relation to a property, means next to and includes adjacent properties separated by a road (public or private driveway/roadway).

Aerial application: any application of agrichemicals where the agrichemicals are applied from an aircraft including but not limited to planes, drones, and helicopters.

Agrichemical: any substance, whether inorganic or organic, man-made or naturally occurring, modified or in its original state, that is used in any agriculture, horticulture or related activity, to eradicate, modify or control flora and fauna. For the purposes of this plan, this definition excludes any fertiliser or fumigant.

Airshed: an area defined by parameters such as topography, meteorology, demography and human activities where people may be exposed to an airborne contaminant.

Anthropogenic: created by or caused by humans.

Clean fill: natural materials such as clay, soil, rock and such other materials as concrete, brick or demolition products that are free of:

(a) combustible or putrescible components apart from up to 10 percent by volume untreated timber in each load

(b) hazardous substances or materials (such as municipal waste) likely to create leachate by means of biological or chemical breakdown

(c) any products or materials derived from hazardous waste treatment, stabilisation or disposal processes.

Coal burner: a solid fuel burner designed to burn coal, which has the following design features:

(a) over fuel and under fuel combustion air supplies with separate controls

(b) grate in the base of the firebox

(c) ash pan under the grate.

Commercial: any person, group or organisation in the course of their business activities and any properties or buildings used for business activities.

Commercial building: any building or part of a building, whether permanent or temporary, that is used for business purposes and includes, but is not limited to, warehouses, shopping centres, public bars, restaurants, movie theatres, and offices.

Contractor: any person or organisation who by financial agreement (contract) with the owner, occupier or manager of land, applies or causes to be applied, any agrichemical for hire or reward. This does not include the owner, occupier or manager of that land, or their employee.

Dioxins: refers to 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.

Dwelling house: any building or part of a building, whether permanent or temporary, that is or is intended to be occupied in whole or in part, as a residence; and includes any structure that is accessory to, and used wholly or principally for the purposes of, the residence.

Existing solid fuel burner: a solid fuel burner which

(a) has a building permit issued under the Local Government Act 2002, or

(b) 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, provided the building consent or permit is not declined or that the solid fuel burner is no longer the subject of the consent or permit, or

(d) has been authenticated as having a date of installation earlier than the date of notification of this regional plan.

The following will be taken as authentication under (d):

i. a valuation report or sale and purchase agreement dated prior to the date of notification of this regional plan showing the solid fuel burner as a chattel, or

ii. the original invoice of the solid fuel burner's installation, or

iii. a copy of the installers office record (certified as a true copy by a Justice of the Peace), or

iv. an authentication report from a person approved by the Regional Council stating that the solid fuel burner existed in the building in question prior to the date of notification of this regional plan, and in the case of an indoor open fire an opinion as to whether that fire is operable.

Fine particulates: particulate matter where the particle size is equal to or less than 10 micrometres in diameter (PM_{10}).

Fertiliser: any substance (whether solid or in fluid form) which is described as or held out to be for, or suitable for, sustaining or increasing the growth, productivity, or quality of plants or animals through the applications of essential nutrients to plants or soils.

Fumigant: a chemical, which at a specific temperature and pressure can exist in a gaseous state in sufficient quantities to be lethal to a pest organism and which is an approved substance under the Hazardous Substances and New Organism Act 1996.

Fumigated Volume: the volume contained within the fumigation enclosure, such as tarpaulin, container, building or ship hold.

Fumigation: the use of a fumigant for the purpose of destruction of rodents, pests, or other plant or animal organisms.

Ground-based application: any application of agrichemicals where the agrichemicals are applied from a source located on the ground.

Hand-held non-motorised application: 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.

Hand-held motorised application: 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.

Harmful concentration: means a concentration of contaminants that causes or is likely to cause injury to the health of humans or animals, or adversely affect water, soil or plants.

For the purposes of the rules in this plan a harmful concentration may include, but is not limited to the following:

(a) Human health effects that are acute effects, long-term effects, or sensitivity issues. These include allergic reactions, irritation, toxic poisoning or exposure to carcinogens.

(b) The exceedance of a threshold specified for any substance in an agrichemical as set out in the Hazardous Substances and New Organisms Act 1996.

(c) The exceedance of the ambient air quality standards for contaminants in the NESAQ.

(d) The exceedance of the health based guideline values of the Ambient Air Quality Guidelines.

(e) Exceedance of a maximum residue limit for an agrichemical on or in food or stock feed at harvest or slaughter.

(f) Damage to crops or plants where agrichemical residue has affected the growth or quality of the crop or contaminates to a level where the residues exceed safe levels for human consumption.

(g) Contamination of domestic or commercial water supplies.

(h) Adverse effects on ecosystems including waterbodies. This includes exotic and indigenous flora and fauna.

Harmful effect: a discharge of contaminants that causes or is likely to cause a nuisance, a reduction in amenity, or adverse effect on the well-being of humans. For fertiliser application it also means any discharge of fertiliser that compromises or is likely to compromise the organic status of a property.

I**ndoor open fire:** includes any small-scale fuel burning device or construction installed in or attached to any building, that is capable of burning solid fuel, but excludes:

(a) any solid fuel burner where the firebox is enclosed with a regulated supply of air to the fire, and

(b) any equipment capable of burning solid fuel with a net heat output of more than 40 kilowatts (kW).

Examples of open fires include (but are not limited to) fireplaces, open hearths, visors, 'Jetmaster' type insert fireplaces and similar devices.

Incinerator: a device used to burn waste or other matter.

Kilowatt (kW): having an energy level of 1,000 watts.

Liquid waste: means any liquid composed of less than 20% solids and does not include hazardous substances.

Low pressure boom: 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.

Mauri: the essential life force, energy or principle that tangata whenua believe exists in all things in the natural world, including people. Tangata whenua believe it is the vital essence or life force by which all things cohere in nature.

Megawatt (MW): having an energy level of 1,000,000 watts or 1,000 kilowatts.

µg/m^3: micrograms per cubic metre is a mass per volume measurement of concentration of a substance in air. A microgram is one millionth (10^{-6}) of a gram.

Multi-fuel burner: a solid fuel burner designed to burn wood and/or coal, which has the following design features:

(a) over fuel and under fuel combustion air supplies with separate controls

(b) grate in the base of the firebox

(c) ash pan under the grate.

NESAQ: The Resource Management (National Environmental Standards for Air Quality) Regulations 2004 or the National Environment Standards for Air Quality.

New fuel burning equipment: any fuel burning equipment in any commercial or industrial property that did not hold a current resource consent to discharge PM_{10} on the date of notification of this plan.

New solid fuel burner: means any solid fuel burner in any dwelling house or commercial building that was not an existing solid fuel burner according to the definition in this Plan on the date of notification of this plan.

Off-site concentration: in relation to industrial and commercial offsets means the concentration of PM_{10} (calculated as a 24 hour mean according to Schedule 1 of the NESAQ) in any part of a polluted airshed other than the site on which the discharge being offset is exercised.

Oil: 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).

Pathological waste: waste materials that are offensive to the senses or hazardous to public health including anatomical wastes such as human tissue and organs or animal tissue, organs and carcasses and materials that may be subject to contamination by highly infectious organisms.

Pellet burner: any solid fuel burning appliance 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.

$PM_{2.5}$: particulate matter that is less than 2.5 micrometres in diameter.

PM_{10}: particulate matter that is less than 10 micrometres in diameter.

Polluted airshed: an airshed that has become polluted according to the regulations of the NESAQ.

Publicly notified airshed: an airshed that has been publicly notified according to the regulations of the NESAQ.

Recreational: in relation to open burning means any open burning for the purposes of cooking or amenity (eg. hangi, umu, barbeque, braziers, pizza ovens) but excluding incinerators.

Refurbished solid fuel burner: a solid fuel burner that has been altered after purchase or installation in the dwelling house or commercial property.

RMA: Resource Management Act 1991 and its amendments.

Rotorua Urban Airshed: the area of Rotorua that is identified as a polluted airshed and as described in Schedule 2.

Sensitive area: an area where members of the public are likely to be present and may be unable to readily evacuate themselves. These areas include:

(a) Residential buildings.

(b) School buildings.

(c) Retirement housing.

(d) Correctional facilities.

(e) Public places and amenity areas where people congregate.

(f) Public roads.

Sensitive site: a site that may be adversely affected by contaminants and includes:

(a) Public water supply catchments and intakes.

(b) Water bodies and associated riparian vegetation.

(c) Incompatible crops or farming systems (e.g. organic farms, greenhouses).

(d) Wetlands, indigenous vegetation habitat areas and reserves.

Solid Fuel: a solid substance that releases useable energy when burnt and includes wood, coal and its derivatives, and manufactured fuel pellets.

Solid Fuel Burner: a small-scale solid fuel burning appliance where combustion of the solid fuel occurs within a firebox that is closed off during use and there is a regulated supply of air to the fire. It includes (but is not limited to) freestanding or built in wood burners, pellet fires, potbelly stoves, and coal ranges, water heaters or central heating units, multi-fuel (coal/wood and waste burning systems), and similar appliances. It excludes indoor open fires and small-scale domestic devices for smoking food. A small-scale solid-fuel burning appliance also excludes any portable unflued heaters fuelled by gas, alcohol or other liquid fuels, and gas hobs or gas ranges used for cooking, any fuel burning appliance installed in a boat, caravan or motor home and any equipment capable of burning solid fuel with a net heat output of more than 40 kilowatts.

Space Heater: a small-scale appliance designed for use within a building to generate warmth for human comfort. It includes (but is not limited to) indoor open fires, freestanding or built in wood burners, pellet fires, potbelly stoves and other similar appliances, including those with water heating capabilities as a secondary purpose. It includes appliances designed to heat water for space heating (e.g. via radiators). It does not include cooking fires or chip heaters where the primary purpose of the fire is to cook or heat water.

Tamper resistant: a solid fuel burner constructed in such a way that there is no ability to alter any feature of the solid fuel burner that would change its design standard or thermal efficiency standard according to the NESAQ, (particularly any mechanism that restricts oxygen flow to the burning chamber) either after its manufacture and/or after installation in any dwelling house or commercial building.

Unsealed: in relation to a road means a road that is not sealed with a permanent surface of tarmac, concrete, or asphalt. For the purposes of this plan unsealed roads do not include road works on sealed roads.

1 – Introduction

This regional plan covers the discharge of contaminants to air in the whole of the Bay of Plenty Region, including the coastal marine area. This includes all the land of the region and all the coastal water to the outer limits of the territorial seas as shown in Schedule 1.

Certain provisions apply only to the Rotorua Urban Airshed as shown in Schedule 2.

This document may be cited as the draft Regional Air Plan and is referred to as “the plan” or “this plan” throughout this document. It has been prepared by the Bay of Plenty Regional Council (Regional Council) to assist it to carry out its functions in order to achieve the purpose of the Resource Management Act 1991 (the RMA).

2 – Objectives

Objective 1

Protect the mauri of air, human health, and the environment from the adverse effects of anthropogenic contaminant discharges to air.

Objective 2

Ensure the region’s ambient air quality meets the National Environmental Standards for Air Quality and relevant air quality guidelines.

Objective 3

Manage discharges of contaminants to air according to their potential health, nuisance, and amenity effects, and their impact on the mauri of air.

3 – Policies

General discharges

Policy 1

All activities that discharge contaminants to air should apply best practice and be located, operated, and managed in such a way that avoids:

(a) the discharge of contaminants in concentrations that may contribute to or cause an exceedance of the NESAQ

(b) the discharge of contaminants onto areas outside the target area that may cause a nuisance or health effect

(c) the deposition of agrichemicals onto areas outside the target area

(d) an adverse effect on visibility, or amenity values

(e) any actual adverse effect or potential adverse effect on people's health and well-being

(f) any adverse effect on relevant air quality values identified in iwi and hapū management plans.

Policy 2

When considering the acceptability of any discharge of contaminants to air, plan users should have regard to the following matters:

(a) the proximity of dwelling houses, public land, and other areas where people reside or congregate, in relation to the proposed discharge

(b) the sensitivity of neighbouring land uses and features (including the location of any polluted or potentially polluted airsheds, sensitive areas, and sensitive sites)

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

Policy 3

The Regional Council will recognise reverse sensitivity when considering complaints, resource consent applications, and comments on territorial authority resource consent applications where new activities are proposed in areas where they may compromise, constrain or conflict in the future with existing lawfully established activities.

Policy 4

When assessing any discharge of contaminants to air the Regional Council will take into account the relevant iwi and hapū resource management plans.

Policy 5

Any application for resource consent under this Plan where the applicant does not, in the opinion of the Regional Council, provide sufficient information and/or analysis (including dispersion modelling) to enable the Regional Council to fully assess the environmental effects, should be notified.

Policy 6

When assessing nuisance discharges (odour, smoke, dust and particulates) the Regional Council will use the following approach:

(a) An experience, warranted Council Officer will make an assessment of the situation. This assessment will take into account the FIDOL factors which are:

  (i) **Frequency** of the discharge

  (ii) **Intensity** of the discharge

  (iii) **Duration** of exposure to the discharge

  (iv) **Offensiveness** of the discharge, and

  (v) **Location** of the discharge.

(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 particulate matter, monitoring of particulate matter beyond the boundary will be compared with the NESAQ for particulate matter if people may be exposed.

Policy 7

When assessing whether actual or potential harmful concentrations have occurred or will occur due to discharges of contaminants to air, the Regional Council will refer to the following:

(a) Ambient air quality standards for contaminants in the NESAQ.

(b) Health based guideline values of the Ambient Air Quality Guidelines 2002 (or its successor).

(c) Thresholds specified for any substance in the Hazardous Substances and New Organisms Act 1996.

(d) Good Practice Guides for assessment of discharges to air issued by the Ministry for the Environment.

(e) Any other relevant documents, research or data that assist with determining actual or potential effects of the discharge of contaminants to air.

Open burning

Policy 8

Any open burning that is not part of a recreational activity will be avoided except for:

(a) Burning on rural land which must be managed in such a way that minimises

  (i) production of odour and/or smoke

  (ii) adverse effects on the health and well-being on owner/occupiers of nearby properties.

(b) Animal carcasses and/or vegetative material burned in accordance with quarantine or disease control requirements.

Domestic solid fuel burners

Policy 9

Solid fuel burners installed in dwelling houses or commercial buildings must burn only solid fuel and be operated in such a way that prevents adverse effects on human health or wellbeing by avoiding:

(a) excessive discharge of fine particulates (e.g. burning wet wood, restricting oxygen flow to the fire)

(b) any discharge that is noxious or dangerous

(c) any discharge of offensive or objectionable smoke and/or odour.

Policy 10

In the Rotorua Urban Airshed the Regional Council will discourage discharges of particulates to air from new solid fuel burners except, from October 2018, discharges from pellet burners and/or solid fuel burners designed for ultra-low emissions under real-life operating conditions.

Policy 11

In the Rotorua Urban Airshed the Regional Council will discourage discharges of particulates to air from solid fuel burners in dwelling houses or commercial buildings, in particular discharges from:

(a) indoor open fires

(b) coal burners and multi-fuel burners

(c) solid fuel burners installed before September 2005

(d) solid fuel burners that have been refurbished since their installation

(e) solid fuel burners with design features that can be altered after sale or installation

(f) solid fuel burners used or designed for any use other than as a space heater.

Policy 12

The Regional Council will recognise that the adverse effect of particulate matter in the air is cumulative in that every discharge contributes to the overall concentration of fine particulates in an airshed.

Industrial and commercial discharges

Policy 13

All industrial and commercial activities must take measures to avoid, remedy, or mitigate the discharge of contaminants to air from all sources on site. These measures may include but are not limited to maintenance of yard or equipment, treatment of the discharge (for example biofilters, cyclones) or any other appropriate measure.

Policy 14

Adverse effects on human health and the environment from fumigation will be reduced by:

(a) encouraging fewer fumigations, use of lesser amount of fumigant, the use of safer fumigants or alternative methods, or use of recapture technology of fumigant gases

(b) ensuring compliance with relevant exposure levels set by the New Zealand Environmental Protection Agency in regulations to protect human health

(c) having particular regard to protecting the health of persons in sensitive areas from fumigant exposure

(d) large-scale fumigators collecting accurate and reliable monitoring data in order to better understand the levels of fumigant in the receiving environment and to provide good information for processing of consents and their compliance.

Offsets

Policy 15

Any offsets required by the NESAQ must:

(a) be provided if the annual mass emission from the proposed activity discharges any amount of PM_{10} into a polluted airshed at any time, regardless of whether the off-site concentration exceeds 2.5 $\mu g/m^3$

(b) be the same or greater amount than the amount likely to be discharged into the relevant airshed by the discharge to be expressly allowed by the proposed consent

(c) be expressed in kilograms per year and calculated using annual mass emission rates based on the maximum consented discharge rate

(d) 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

(e) permanently remove the emissions used as offsets from the polluted airshed

(f) be located within the polluted airshed or where emissions can be shown to contribute to the polluted airshed

(g) be carried out as close as practicable to where the effects of the emissions being offset may occur

(h) be above and beyond any emissions decrease that would otherwise occur or would otherwise be required by the Regional Council

(i) assume that all Total Suspended Particulate is PM_{10} unless demonstrated otherwise

(j) treat all PM_{10} as equal, having the same health effects irrespective of the source of PM_{10}

(k) be effective before any emission from the proposed activity occurs

(l) use the emission factors set out in Table 1 for each domestic burner type, where domestic sources are selected to provide reductions of emissions.

Table 1 Emission factors for domestic sources

Source	PM_{10} Emission Factor	Annual Fuel Use	PM_{10} Annual Emission	No. burners to equal 1 t/yr PM_{10}
	g/kg*	t/yr	kg/yr	
Open fires (wood)[1]	12	2.4	28	35
Pre-2005 wood burners[2]	11	1.1	12	87
Post-2005 (NESAQ compliant) burners[3]	3.7	1.0	3.7	270
Multi-fuel burners (wood)[4]	11	1.5	17	61
Multi-fuel burners (coal)[5]	19	1.1	21	48
Pellet burners[6]	1.4	1.0	1.3	742

*Wet weight

[1] J. Smithson (2008) *Inventory of Emissions to Air in Christchurch 2006* Environment Canterbury Report U07/17

[2] E. Wilton J. Smith (2006) *Real life emissions testing of pre-1994 wood burners in New Zealand* Environment Waikato Technical Report 2006/05

[3] Average of two emission factors from C. Kelly, S. Mues, W. Webley (2007) *Real life Emissions Testing of Wood burners in Tokoroa* Ministry for the Environment and J. Metcalfe (2010) *Estimation of Domestic Fire Emissions 2006* Auckland Regional Council Technical Report No. 2010/056

[4] J. Smithson (2008) *Inventory of Emissions to Air in Christchurch 2006* Environment Canterbury Report U07/17

[5] J. Smithson (2008) *Inventory of Emissions to Air in Christchurch 2006* Environment Canterbury Report U07/17

[6] C. Kelly, S. Mues, W. Webley (2007) *Real life Emissions Testing of Wood burners in Tokoroa* Ministry for the Environment

4 – Methods

Method 1 – Action plans for polluted airsheds

For any area that is either:

(a) currently not complying with the ambient air quality standards of the NESAQ, or

(b) likely to breach an ambient air concentration limit of the NESAQ

the Regional Council will prepare an action plan for the area that sets out interventions to ensure compliance with the NESAQ.

Method 2 – Implementation plan

The Regional Council will prepare an implementation plan for the following topics (as a minimum):

(a) communication and engagement (including specific methods for iwi engagement on air quality matters)

(b) compliance and enforcement

(c) air quality monitoring and research.

Each topic area will have timeframes, costs, and expected outcomes that can be included in the relevant Regional Council Long Term Plan.

Method 3 – Guidance documents

Where appropriate, the Regional Council will work with other agencies and industries to prepare guidance documents for plan users to assist with the management of specific activities of concern including:

(a) fumigant use, particularly of methyl bromide at the Port of Tauranga

(b) agrichemicals (including HiCane)

(c) open burning

(d) fine particulate discharges from industries in polluted airsheds

(e) key areas and contaminants of concern to tangata whenua.

Method 4 – Air quality management areas

Where relevant, the Regional Council will identify areas in the region where additional intervention is required to manage the effects of contaminant discharges. These areas may include:

(a) Off-site effects.

(b) Cumulative effects.

Method 5 – Location of new activities

The Bay of Plenty Regional Council will discourage reverse sensitivity associated with odours, chemicals, and particulates by actively discouraging:

(a) locating new sensitive activities near activities that discharge offensive and objectionable odours, chemical emissions or particulates

(b) locating new activities that discharge offensive and objectionable odours, chemical emissions or particulates near sensitive areas, sites or activities.

5 – Rules

General Activities

Rule 1 – General Activities – Permitted

All discharges of contaminants into air which are not subject to an express rule in this regional air plan are permitted activities subject to compliance with the following conditions:

(a) There must be no harmful concentrations of contaminants beyond the boundary of the subject property or into water.

(b) The discharge must not result in objectionable or offensive odour, smoke, dust or particulates beyond the boundary of the subject property or into water.

(c) The discharge of smoke or water vapour must not adversely affect traffic safety, aircraft safety, boat safety or visibility beyond the boundary of the subject property.

If the conditions cannot be complied with, the activity is deemed discretionary under Rule 2.

Rule 2 – General Activities – Discretionary

The discharge of contaminants into air from any activity that cannot comply with any permitted activity rule of this plan and is not otherwise a controlled, non-complying, or prohibited activity is a discretionary activity.

Rule 3 – Miscellaneous discharges – Permitted

The discharge of contaminants to air from:

(a) unsealed roads

(b) engines of aircraft that conform to the operation and maintenance requirements of the Civil Aviation Act 1990 (and its amendments)

(c) internal combustion engines (including vehicles) provided no smoke is continuously visible for ten seconds or more

is a permitted activity.

Rule 4 – Venting of geothermal gas and steam – Permitted

The discharge of geothermal gases and steam into air from anthropogenic use of geothermal fluid and energy is a permitted activity, provided the following conditions are complied with:

(a) The gas or steam must discharge vertically upwards.

(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 on any roof within 30 metres.

(c) The discharge must not result in objectionable or offensive odour or particulates beyond the boundary of the subject property.

(d) There must be no harmful concentrations of contaminants beyond the boundary of the subject property.

(e) The take or discharge of geothermal fluid is less than 1000 tonnes per day.

Rule 5 –Application of Liquid Waste – Permitted

The discharge of contaminants to air from spray irrigation, soil injection, or land soakage of liquid waste is a permitted activity provided the following conditions are complied with:

(a) The discharge must not result in objectionable or offensive odour or particulates beyond the boundary of the subject property.

(b) The discharge must not result in harmful concentrations of contaminants beyond the boundary of the subject property or into water.

Advice Note *- Discharge of liquid waste must also meet the requirements of the Regional Water and Land Plan.*

Open Burning

Rule 6 – Open Burning – Permitted

The discharge of contaminants to air from combustion in the open air is a permitted activity provided the following conditions are complied with:

(a) The fire is located on a rural zoned property or property greater than 2 hectares

OR

(b) The fire is for recreational purposes only

AND

(c) No materials either listed in Rule 9 or prohibited by the regulations of the NESAQ are burned.

(d) The discharge must not result in any harmful effects beyond the subject property.

(e) The discharge must not result in any offensive or objectionable odour, smoke, ash, or particulates beyond the subject property.

(f) The fire is located on a property outside the Rotorua Urban Airshed or any other polluted airshed.

Rule 7 – Open Burning (Urban) – Non-complying

Any discharge of contaminants to air from combustion in the open air not permitted by Rule 6 is a non-complying activity.

Rule 8 – Emergency Burning of Diseased Carcasses and Vegetation – Permitted

The discharge of contaminants to air from the emergency burning in the open of dead diseased marine mammals, dead diseased livestock, or diseased vegetation is a permitted activity provided the following conditions are complied with:

(a) Disposal must be carried out under the direction of the appropriate government department.[7]

(b) The Bay of Plenty Regional Council must be notified a minimum of one hour before burning begins.

[7] Currently the Ministry for Primary Industries (livestock and vegetation) or the Department of Conservation (marine mammals)

Rule 9 – Discharges from burning of specified material – Prohibited

The discharge of contaminants to air from the combustion of any of the following materials is a prohibited activity:

(a) treated or painted timber (except for approved fuel for pellet burners as specified in AS/NZS 4014.6:2007 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) elemental materials including but not limited to boron, halides, phosphorus, sulphur

(f) commercial food waste

(g) heavy metals including but not limited to lead, zinc, arsenic, chromium, cadmium, copper, mercury, thorium

(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, pesticide waste (excluding cardboard pesticide containers)

(m) any rubber

(n) soft furnishings and upholstery

Advice Note *- In addition to the materials in this rule, regulations of the NESAQ prohibits the discharge of contaminants to air from the burning of the following materials:*

- *bitumen on a road*
- *coated wire*
- *tyres*
- *oil*
- *waste and gas at landfills*

except where the regulation provides otherwise. Plan users should check the regulations of the NESAQ as well as the provisions of this plan when implementing.

Domestic solid fuel burners

Rule 10 – Domestic Solid Fuel Burners – Permitted

The discharge of contaminants to air from a solid fuel burner installed in any dwelling house or commercial building is a permitted activity provided:

(a) the discharge from the solid fuel burner complies with the regulations of the NESAQ and any local bylaw

(b) only solid fuel with a moisture content of less than 25% dry weight is burned

(c) the activity does not result in any discharge of contaminants into the Rotorua Urban Airshed.

Rule 11a – Discharges from solid fuel burners in the Rotorua Urban Airshed prior to October 2018 – Permitted

Prior to 1 October 2018, the discharge of contaminants to air from a solid fuel burner installed in any dwelling house or commercial building located in the Rotorua Urban Airshed is a permitted activity if:

(a) The discharge is from a new solid fuel burner that:

i. replaced an existing solid-fuel burner that was used primarily as a space heater in the house or building

ii. did not replace a pellet burner, unless the new solid fuel burner is a pellet burner

iii. did not replace an indoor open fire

iv. when tested in accordance with the regulations of the NESAQ, discharges less than or equal to 1.0 grams of particles for each kilogram of dry wood burnt and has a thermal efficiency where the ratio of useable heat energy output to energy input is not less than 65%

v. is considered tamper resistant by the Regional Council.

OR

(b) The discharge is from an existing solid fuel burner.

AND

(c) The activity meets all of (i) to (iii) below:

(i) the solid fuel burner is operated so that all reasonable steps are taken to minimise the amount of smoke discharged

(ii) the discharge does not result in objectionable or offensive particulates, smoke or odour beyond the boundary of the property

(iii) the solid fuel burner is not altered in any way that changes its design standard or thermal efficiency standard (particularly any mechanism that restricts oxygen flow to the burning chamber) either after its manufacture and/or after installation in any dwelling house or commercial building.

Rule 11b – Discharges from solid fuel burners in the Rotorua Urban Airshed after 1 October 2018 – Permitted

On and after 1 October 2018, the discharge of contaminants to air from a solid fuel burner installed in any dwelling house or commercial building located in the Rotorua Urban Airshed is a permitted activity if:

EITHER

(a) the discharge is from a new solid fuel burner that:

i. is a pellet burner, provided the pellet burner only burns the approved fuel for the device as specified in AS/NZS 4014.6:2007 or the functional equivalent, or

ii. is from a solid fuel burner that, when tested using Canterbury method 1 for testing of ultra-low emission wood burners (or an equivalent method approved by the Regional Council) discharges less than or equal to 0.5 grams of particles for each kilogram of dry wood burnt and has a thermal efficiency where the ratio of useable heat energy output to energy input is not less than 65%

OR

(b) The discharge is from an existing solid fuel burner that was installed after 1 September 2005

AND

(c) The activity meets all of (i) to (iii) below:

(i) the solid fuel burner is operated so that all reasonable steps are taken to minimise the amount of smoke discharged

(ii) the discharge does not result in objectionable or offensive particulates, smoke or odour beyond the boundary of the property

(iii) the solid fuel burner is not altered in any way that changes its design standard or thermal efficiency standard (particularly any mechanism that restricts oxygen flow to the burning chamber) either after its manufacture and/or after installation in any dwelling house or commercial building.

Advice Note *- The Regional Council will maintain a list of solid fuel burners that comply with the requirements of Rule 11a and 11b. The list may be updated without formality, and will be held at the Regional Council offices and on its website*

Rule 12 – Non-complying Activity – Discharges from certain solid fuel burners in the Rotorua Urban Airshed

Within the Rotorua Urban Airshed the discharge of contaminants to air from any indoor open fire or solid fuel burner installed in any dwelling house or commercial building that is not permitted by a rule in this regional plan, is a non-complying activity. This applies from the date of notification of this plan except in the following cases:

(a) The discharge of contaminants to air from any indoor open fire in any dwelling house or commercial building is a non-complying activity from 1 May 2015.

(b) The discharge of contaminants to air from any solid fuel burner that was installed in any dwelling house or commercial building before 1 September 2005 (including refurbished solid fuel burners) is a non-complying activity from 1 October 2018.

(c) The discharge of contaminants to air from any coal burner or multi-fuel burner that was installed after 1 September 2005 in any dwelling house or commercial building is a non-complying activity from 1 October 2018.

(d) The discharge of contaminants to air from any solid fuel burner installed before the date of notification of this plan is a non-complying activity from 1 October 2031.

Agrichemicals and Fertiliser

Rule 13 – Use of Fertiliser – Permitted

The discharge of contaminants to air from the use and application of fertiliser is a permitted activity provided the discharge does not result in any harmful concentration of fertiliser and/or no harmful effects beyond the boundary of the subject property.

Advice Note *- Application of fertiliser must also meet the requirements of the Regional Water and Land Plan.*

Rule 14 – Hand-held, non-motorised Use of Agrichemicals – Permitted

The discharge of contaminants to air from the use and application of agrichemicals by hand held, non-motorised application methods is a permitted activity provided the discharge does not result in any harmful effect beyond the boundary of the subject property or into water.

Rule 15 – Commercial Use of Agrichemicals – Permitted

The discharge of contaminants into air from the use and application of agrichemicals by methods not permitted by Rule 14 is a permitted activity provided the following conditions are complied with:

(1) – Use of Agrichemicals

All persons applying agrichemicals under this rule shall ensure that:

(a) The agrichemical is used or applied in a manner that complies with NZS 8409:2004 including but not limited to Section 5 – Use of Agrichemicals.

(b) The discharge of contaminants must not result in any harmful concentration of agrichemical or harmful effect beyond the boundary of the subject property or into water.

(c) Where the use of the agrichemical is for the prevention, eradication or management of unwanted organisms 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.

(2) – Certification

All persons applying agrichemicals for commercial purposes shall have the following qualifications:

(a) For ground-based application methods the applicator must hold a minimum of an Agrichemical Approved Handler certificate (Worksafe NZ) or equivalent certification approved by the Bay of Plenty Regional Council.

(b) For the application of agrichemicals from aircraft, the applicator must hold a minimum of a:

(i) Pilot Chemical Rating (Civil Aviation Authority)

(ii) Agrichemical Approved Handler Certificate (Worksafe NZ) or equivalent certification approved by the Bay of Plenty Regional Council.

(3) – Spray Risk Management Plan

(a) Prior to the application of agrichemicals a spray risk management plan must be prepared and implemented. The spray risk management plan must contain the following information:

(i) A plan or map identifying the location of any sensitive areas and sensitive sites within 50 metres of the land being sprayed by ground based methods or within 300 metres of the land being sprayed by aerial application.

(ii) Strategies used to avoid contamination of sensitive areas and sensitive sites.

(iii) Methods of notification and the details of any notification agreements reached with the occupier of any properties as required by Section 4 must be recorded in writing and signed by all parties.

(iv) Any specific hazard associated with the specific agrichemical to be used (e.g. bee toxicity).

(b) The spray risk management plan must be reviewed and updated annually.

(c) The spray risk management plan shall be updated following spraying activities if required to ensure it provides an accurate record of spraying activities carried out and identifies any issues encountered.

(d) The spray risk management plan must be made available to the Regional Council within 2 working days of any such request by the Regional Council or Delegate.

(4) – Notification

(a) The owner/occupier or agent must notify the occupier of any properties within 50 metres (ground-based application) and 300 metres (aerial application) of that agrichemical point of discharge, except as provided for in 3(a)(iii) and 4(b) and excluding land used for road or rail purposes as provided for in 4(f).

(b) Where agrichemicals are applied using a hand-held motorised application method or a low-pressure boom, notification is only required when the agrichemical application occurs within 10m of an adjoining property.

(c) If an agreed form of notification has not been reached according to the requirements of clause 3(a)(iii), or where clauses 4(b) and 4(f) do not apply, notification must be no earlier than 72 hours and no later than 12 hours before the agrichemical use.

(d) Notification required by clause 4(c) must include the following:

(i) the address and location of proposed application;

(ii) the date/s of proposed application;

(iii) name and type of agrichemical/s to be applied;

(iv) name and phone number of applicator.

(e) It is the responsibility of the applicator to ensure that any notification requirements have been met by the owner/occupier or agent.

(f) Where the use of agrichemicals will be carried out on public places and land used for road or rail purposes, notification to the public must be by way of a notice in a local newspaper circulating in the area, no earlier than 38 days and no later than 7 days prior to date of application. Notification must include the following information:

(i) “CAUTION – SPRAYED AREA” or similar wording

(ii) The name and type of agrichemical used

(iii) A start and end date for spray operations

(iv) Purpose of spraying

(v) Contact details of the authority responsible for the spraying.

(5) – Signage – Private land

(a) Where agrichemicals are applied to private land, signs must be displayed at every entrance to the property where the agrichemical is being applied before the time of application and should be removed by the applicator or agent when the land is safe for re-entry. The signs must clearly state the following:

(i) "CAUTION – SPRAYED AREA" or similar wording

(ii) The name and type of agrichemical used

(iii) A start and end date for spray operations

(iv) Purpose of spraying

(v) The name and phone number of the applicator

(b) During the application of agrichemicals on private land where the point of discharge is within 50m of any public road or place, signs must be prominently displayed on the boundary and must clearly state "CAUTION – SPRAYING IN PROGRESS". Where agrichemicals are applied using a hand-held motorised application method or a low-pressure boom, signs are only required when the application occurs within 10 metres of a public road or place.

(6) – Signage – Public place and other areas

(a) Where agrichemicals are applied in public places (excluding land used for road or rail purposes) signs shall be placed at all points where the public usually have entry to the area being sprayed. These signs must be displayed no later than 24 hours before the time of application and removed by the applicator when the land is safe for re-entry. The signs must clearly state the following:

(i) "CAUTION – SPRAYED AREA" or similar wording

(ii) The name and type of agrichemical used

(iii) A start and end date for spray operations

(iv) Purpose of spraying

(v) The name and phone number of the applicator

(b) Where spraying occurs on land used for roading or rail purposes, vehicles associated with the spraying shall display prominent signs front and back advising that spraying is in progress.

Industrial and commercial activities

Rule 16 – Ventilation of Liquid Storage Tanks and Tankers – Permitted

The discharge of contaminants into the air from the ventilation and displacement of liquids in storage tanks and tankers is a permitted activity provided the following conditions are complied with:

(a) the discharge must not result in objectionable or offensive odour or particulates beyond the boundary of the subject property or into water, and

(b) there must be no harmful concentrations of contaminants beyond the boundary of the subject property or into water.

Rule 17 – Use of commercial spraypainting products – Permitted

The discharge of contaminants to air from the spray application of surface coatings including those containing di-isocyanates or organic plasticisers is a permitted activity provided the following conditions are complied with:

(a) The spraying is carried out in a spray booth or room fitted with an air extraction system that discharges all contaminants and exhaust air to an emission stack.

(b) The emission stack must discharge vertically at least three metres above the ridge height of the building and not be fitted with a rain excluder or any other obstruction that decreases the exit velocity of the discharge from the stack.

(c) The discharge must be through a filtration system that removes at least 95% of particulate matter from the discharge and the filtration system must be maintained to ensure this particulate removal efficiency at all times.

(d) The discharge must not result in any harmful effects beyond the subject property.

(e) The discharge must not result in any offensive or objectionable odour, smoke, ash, or particulates beyond the subject property.

(f) The Bay of Plenty Regional Council must be notified of the location of the activity.

Rule 18 – Fumigation – Permitted

The discharge of any fumigant (except methyl bromide) to air is a permitted activity providing the following conditions are complied with:

(a) The fumigant used is approved as a fumigant under the Hazardous Substances and New Organisms Act 1996.

(b) The total amount of fumigant discharged over any one hour period must not exceed 1 kilogram.

(c) At any point beyond the boundary of the subject property, or on public land:

  (i) The discharge must not result in any noxious or dangerous levels of airborne contaminants.

  (ii) The discharge must not result in any offensive or objectionable odour.

  (iii) The discharge must no result in any objectionable deposition of particulate matter on any land or structure.

(d) The discharger must adopt the best practicable option to prevent or minimise any adverse effects of the discharge beyond the boundary of the property.

Rule 19 – Fuel Burning Equipment (outside Rotorua Airshed) – Permitted

The discharge of contaminants to air from fuel burning equipment (excluding vehicles) which generates a gross heat energy output within the combustion chamber of up to and including

(1) 500 kilowatt gross heat energy output from the combustion of liquid or solid fuels;

OR

(2) 10 megawatt gross heat energy output from the combustion of gaseous fuels

is a permitted activity provided the following conditions are complied with:

(a) The total combined gross heat output from the property must not exceed the limits in (1) and (2). 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 fuel burning equipment must not discharge any amount of particulate matter (PM_{10}) into any part of the Rotorua Urban Airshed at any time.

(c) The fuel must be burned in an enclosed combustion chamber.

(d) The exit velocity must not be less than 10 metres per second except for a fifteen minute period during start-up.

(e) 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.

(f) A written record of maintenance carried out under condition (e) must be kept and provided to the Regional Council on request.

(g) The sulphur content of any fuel burnt must be less than 1% by weight.

(h) Any discharges to air, including steam, must not adversely affect visibility on any road or in any aircraft flight path.

(i) The discharge must not result in any:

  (i) objectionable or offensive particulates, smoke or odour except for a fifteen minute period during start-up, or

  (ii) any harmful concentrations of gases beyond the boundary of the property or into water.

(j) The discharge must be an unimpeded vertical discharge from a chimney. In addition, all chimneys constructed after the date this regional air plan is notified must rise at least:

  (i) 6 metres above the ground; and

  (ii) 3 metres above the highest roofline on the roof of any building less than 20 metres from the chimney.

Rule 20 – Enclosed Incineration of Specified Materials – Discretionary

The discharge of contaminants to air from the enclosed incineration of any of the following materials is a discretionary activity:

(a) chlorinated organic chemicals including but not limited to dioxins, furans, polychlorinated biphenyls (PCB)

(b) contaminated material from contaminated sites and buildings

(c) elemental materials some of which can produce toxic gases, including but not limited to boron, halides, phosphorus and sulphur

(d) heavy metals including but not limited to lead, zinc, arsenic, chromium, cadmium, copper, mercury and thorium

(e) material associated with the recovery of metal from insulated electrical cables and wire coated with any material

(f) materials or metals used in motor vehicles

(g) mineral fibres including but not limited to asbestos

(h) paint and other surface protective coatings

(i) pathological waste excluding animal carcasses or diseased vegetation on production land

(j) pesticides, pesticide waste (excluding cardboard pesticide containers)

(k) plastic including but not limited to polyvinylchloride (PVC), polystyrene, nylon, and styrofoam

(l) tyres and other rubber

(m) treated timber or timber treatment chemicals

(n) waste oil or other waste petroleum products

Advice Note - The operation of an incinerator at a school or healthcare institution is *prohibited under the NESAQ, unless a resource consent was granted before 30 October 2006.*

Rule 21 – General activities – Discretionary

The discharge of contaminants into air from any of the following commercial or industrial activities is a discretionary activity:

(a) Abrasive blasting operations from 1 October 2017.

(b) Asphalt or bitumen manufacture or processing.

(c) Commercial breweries.

(d) Commercial distilling operations including but not limited to petroleum refining.

(e) Commercial glass making.

(f) Commercial paint manufacture.

(g) Commercial kraft and chemical pulping or reconstituted wood panel manufacture.

(h) Crematoria.

(i) Discharges from the burning of materials (including buildings and vehicles) for the purpose of firefighting research or training firefighters.

(j) Fuel burning equipment (excluding vehicles) that is not otherwise permitted by this regional plan.

(k) Fumigation using methyl bromide.

(l) Galvanising of steel.

(m) Industrial resin or glue manufacture.

(n) Intensive farming.

(o) Metal processing including (but not limited to) aluminium smelters, commercial foundries and metallurgical processing, steel galvanising and steel mills.

(p) Milk powder or milk based powder manufacture.

(q) Processing of animal products including (but not limited to) animal rendering and by-product processing plants, commercial fellmongering, woolscourers, and dag crushing plants.

(r) Processing of radioactive substances.

(s) Pyrolysis or gasification of carbonaceous material.

(t) Rubber manufacture.

(u) Synthetic fertiliser manufacture.

(v) Waste processing activities as follows:

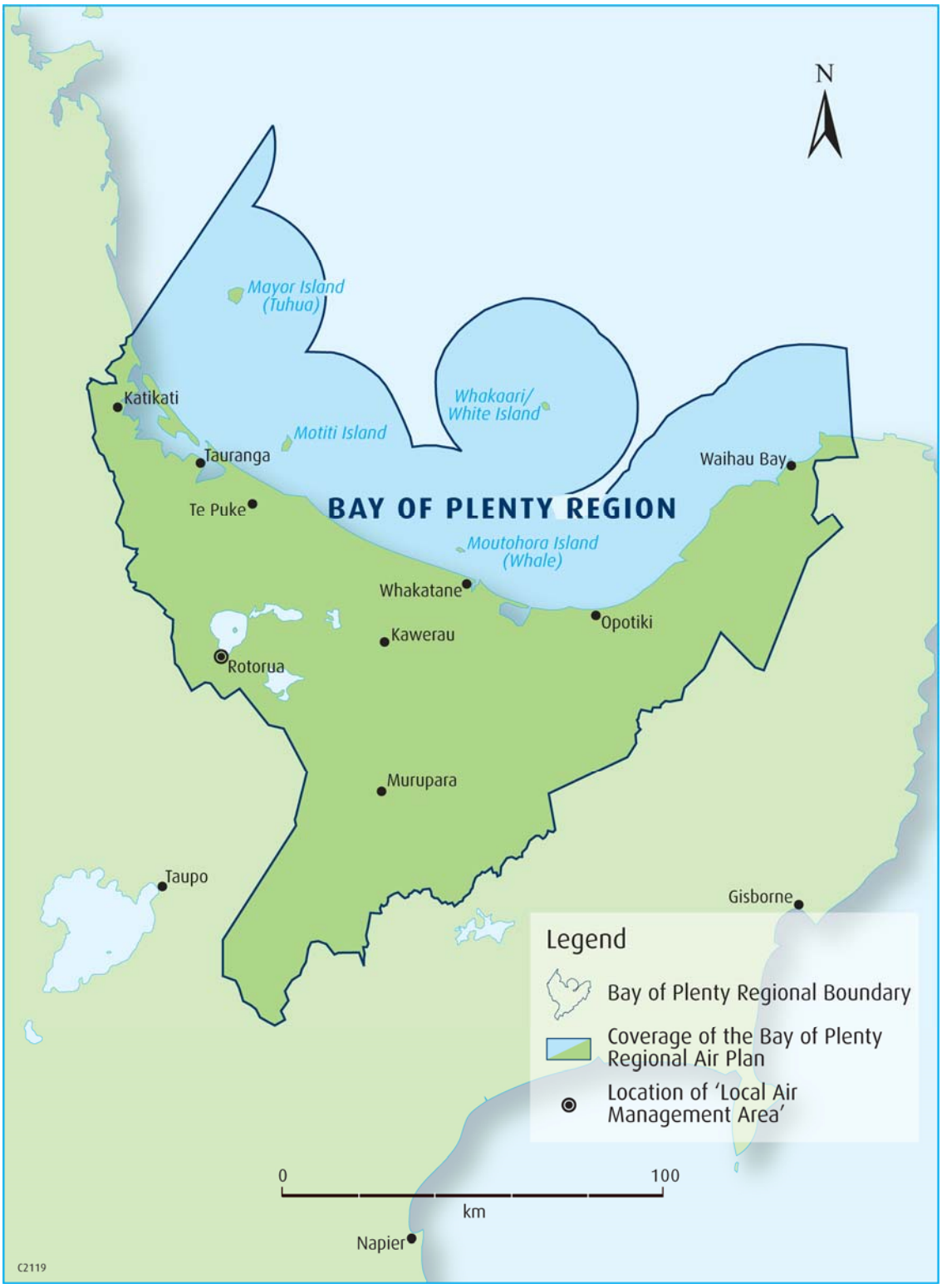
  (i) Commercial composting, treatment, or disposal of waste, municipal sewage treatment plants.

  (ii) Refuse transfer stations, recycling centres or landfills (excluding untreated wood waste and clean fill), municipal sewage treatment plants.

6 – Anticipated Environmental Results

Objective	Anticipated Environmental Results	Monitoring Indicator
Objective 1 Protect the mauri of air, human health, and the environment from the adverse effects of anthropogenic contaminant discharges to air.	Amenity values and people's health are protected from the discharge of offensive and objectionable odours, chemical emissions and particulates. Improvement in the state of the region's, air quality where its mauri has been degraded.	There is an increase in the number of residents that perceive air pollution to not be a problem in their area. Regular iwi perceptions surveys show iwi have a high degree of satisfaction that the mauri of air is protected.
Objective 2 Ensure the region's ambient air quality meets the National Environmental Standards for Air Quality and relevant air quality guidelines.	Protect human health and well-being from the adverse effects of contaminant discharges.	Air quality for the region meets the ambient standards of the national environmental standards for air quality (NESAQ). In the Rotorua Airshed the number of NESAQ compliant domestic heating appliances is increased by 30% compared with 2005 by 2020. .
Objective 3 Manage discharges of contaminants to air according to their potential health, nuisance, and amenity effects, and their impact on the mauri of air.	Protect human health and well-being and the environment from the adverse effects of contaminant discharges	There is a positive trend towards compliance with air discharge permit conditions. Fewer than 20% of air complaints concerning repeat offenders Reduced incidents of prohibited activities Overall reduction of air complaints.

Schedule 1 – Map of the Bay of Plenty Region



Schedule 2 – Map of Rotorua Urban Airshed