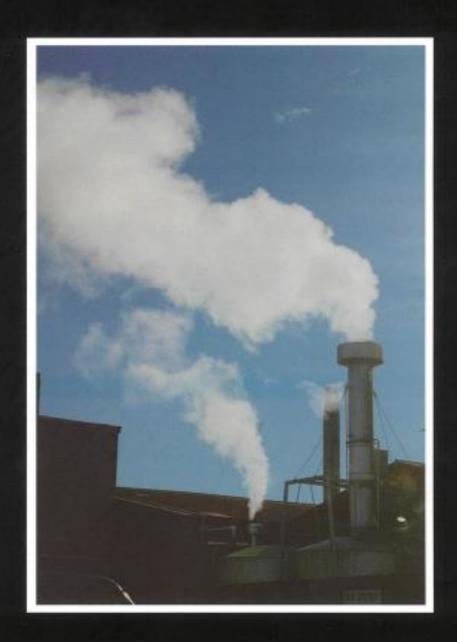


REGIONAL AIR QUALITY PLAN





Regional Air Quality Plan

Approved 11 December 2001

The Common Seal of the West Coast Regional Council was affixed in the presence of:



CHAIRMAN

T Day
CHIEF EXECUTIVE OFFICER

The Minister of Conservation approved the Regional Air Quality Plan with respect to the coastal marine area, in accordance with the First Schedule of the Resource Management Act 1991, on this 2 day of Quality 2002.

MINISTER OF CONSERVATION

Operative 31 July 2002

Plan Change 1 (NPS for Greenhouse Gas Emissions from Industrial Process Heat 2023)

Date Regional Air Quality Plan operative: 10 December 2024

Regional Air Quality Plan: West Coast Regional Council, as at 10 December 2024.

CHAIRMAN'S FOREWORD

I am pleased to present to you the Regional Air Quality Plan for the West Coast.

The West Coast region covers 10% of New Zealand, and has 1% of its population. As would be expected in these circumstances, there are few areas in the region where discharges to air from activities are the cause of adverse effects. Currently there is little monitoring data available on the air quality in the West Coast region. The Regional Council will address these issues through the Regional Monitoring Strategy, and through the implementation of this Regional Air Quality Plan.

This Plan has been developed under the Resource Management Act 1991, which has as it overriding purpose the sustainable management of natural and physical resources. The Plan establishes a policy framework for promoting the sustainable management of the Region's air resource.

The aim of the Regional Air Quality Plan is to establish a long-term strategy for efficiently managing the West Coast's air resource, including the maintenance of high standards of air quality, and improvement where air quality is degraded.

On behalf of the Council, I would like to thank all of those who participated in the submission and hearing process. You contributions have assisted us greatly in developing this Plan to manage discharges to air.

I look forward to continue to work with you toward a sustainable future.

John Clayton CHAIRMAN

Glocay &_

HOW TO USE THE REGIONAL AIR QUALITY PLAN

This Regional Air Quality Plan considers the use, development and protection of the air resource of the West Coast and issues associated with that use, development and protection. It provides objectives, policies, rules and other methods of implementation in order to address those issues. The rules of the Plan determine the status of any particular activity and determine whether a consent is required before that activity can be carried out.

Activities that are specified as permitted activities are able to be carried out without obtaining a resource consent. A resource consent is required for any activity which this Regional Air Quality Plan specifies as being a:

- a) Discretionary activity; or
- b) Controlled activity.

In some cases, the Plan specifies certain activities as being prohibited activities. These are activities which may not occur within the West Coast, and are activities for which no resource consent will be issued.

When considering an activity that involves a discharge to air, the following chapters of the Plan should be looked at to determine whether a resource consent is required before undertaking that activity:

Would the proposed activity result in	
any of the following?	

or heating appliances

gases

substances, refrigerants, greenhouse

discretionary and prohibited activities

See the following chapter of the Regional Air Quality Plan:

Discharges of odour Chapter 6 Odour

Production, discharge or spreading of Chapter 7 Dust dust

Smoke, ash, gases etc from burning of Chapter 8 Products of Combustion wastes, incineration, operation of boilers

Emission of ozone depleting Chapter 9 Global Issues

List of all permitted, controlled, Chapter 10 Regional Rules

Note: Spray drift from agrichemical use is not considered a significant issue that affects air quality in the West Coast region, and as such is not addressed in this Plan. It is considered that the adverse effects of this activity relate to impacts on land and water as the ultimate receiving environments, rather than air quality. Thus agrichemical use is dealt with in the Regional Plan for Discharges to Land.

TABLE OF CONTENTS

CHA	AIRMAN'S FOREWORD	5
СНА	APTER 1. INTRODUCTION	5
1.1	INTRODUCTION	5
1.2	PURPOSE OF THIS REGIONAL PLAN	
1.3	SCOPE OF THE PLAN	
1.4	THE APPROACH TO AIR QUALITY MANAGEMENT UNDER THE CLEAN ACT	4IR
1.5	THE APPROACH TO AIR QUALITY MANAGEMENT UNDER THE RESOUR	CF
1.5	MANAGEMENT ACT	
1.6	DISCHARGES OF CONTAMINANTS TO AIR	
1.7	CONSULTATION WITH TANGATA WHENUA	
СНА	APTER 2. STATUTORY FRAMEWORK	11
2.1	RESOURCE MANAGEMENT FRAMEWORK	
2.2	RELATIONSHIP TO OTHER RESOURCE MANAGEMENT DOCUMENTS	
	RESPONSIBILITIES	
	CENTRAL GOVERNMENT.	
	WEST COAST REGIONAL COUNCIL	
	TERRITORIAL AUTHORITY	
	OTHER LEGISLATION	
	APTER 3 MANAGEMENT APPROACH	
3.1	INTRODUCTION	
3.1	METHODS OF IMPLEMENTATION	
3.3	NATIONAL AMBIENT AIR QUALITY GUIDELINES	
3.4	BEST PRACTICABLE OPTION	18 10
3.4	THE CONTROL OF DISCHARGES FROM INDUSTRIAL OR TRADE PREMIS	
3.3	THE CONTROL OF DISCHARGES FROM INDUSTRIAL OR TRADE PREMIS	
СНА	APTER 4 POUTINI NGAI TAHU PERSPECTIVE	21
4.1	BACKGROUND	
4.2	THE RESOURCE MANAGEMENT ACT	
4.3	AIR QUALITY MANAGEMENT PRIORITY FOR POUTINI NGAI TAHU	
	CONSULTATION	
	APTER 5 INFORMATION ON AIR QUALITY	
	BACKGROUND	
	ISSUE	
5.2	OBJECTIVE	
	POLICIES	
	METHODS	
5.6	ANTICIPATED ENVIRONMENTAL RESULTS	
	APTER 6 ODOUR BACKGROUND	
6.1 6.2	ISSUE	
6.3	OBJECTIVES	
	POLICIES	
	METHODS	
J.J	17111 111 VVV	

6.6	ANTICIPATED ENVIRONMENTAL RESULTS	34
СНА	APTER 7 DUST	35
7.1	BACKGROUND	35
7.2	ISSUE	36
7.3	OBJECTIVE	36
7.4	POLICIES	36
7.5	METHODS	38
7.6	ANTICIPATED ENVIRONMENTAL RESULTS	39
СНА	APTER 8 PRODUCTS OF COMBUSTION	41
8.1	BACKGROUND	
8.2	ISSUE	42
8.3	OBJECTIVE	
8.4	POLICIES	43
8.5	METHODS	
8.6	ANTICIPATED ENVIRONMENTAL RESULTS	46
СНА	APTER 9 GLOBAL ISSUES	47
9.1	BACKGROUND	47
9.2	ISSUE	48
9.3	OBJECTIVE	48
9.4	POLICIES	49
9.5	METHODS	50
9.6	ANTICIPATED ENVIRONMENTAL RESULTS	.52
СНА	APTER 10 REGIONAL RULES	.53
10.1	REGIONAL RULES	53
	NOXIOUS, DANGEROUS, OFFENSIVE AND OBJECTIONABLE EFFECTS	
	RULES TABLE	
10.4	PERMITTED ACTIVITIES	.57
RUL	E 1 PIG FARM EFFLUENT	57
	E 2 DISCHARGES TO AIR FROM PRODUCTION LAND	
	E 3 STOCKPILING, CONVEYING AND HANDLING	
	E 4 ROAD AND RAILWAY CONSTRUCTION AND MAINTENANCE	
RUL	E 5 EARTHWORKS, QUARRYING, MINING AND CLEANFILL OPERATIONS	61
RUL	E 6 ABRASIVE BLASTING, OTHER THAN USING A MOVEABLE SOURCE	62
RUL	E 7 OPERATION OF MOVEABLE AGGREGATE CRUSHING AND SCREENIN	IG
PLA]	NTS	63
RUL	E 8 COMBUSTION OF ORGANIC WASTE	64
RUL	E 9 DISCHARGES FROM SMALL-SCALE FUEL BURNING EQUIPMENT	66
RUL	E 10 DISCHARGE OF WATER VAPOUR	68
RUL	E 11 DISCHARGES OF HEAT AND X-RAYS	69
RUL	E 12 DISCHARGES INTO AIR FOR THE PURPOSE OF VENTILATION	70
RUL	E 13 MISCELLANEOUS PERMITTED ACTIVITIES	71
10.5	CONTROLLED ACTIVITIES	73
	E 14 DISCHARGES FROM FUEL BURNING EQUIPMENT	
	E 15 ABRASIVE BLASTING	
10.6	DISCRETIONARY ACTIVITIES	76
RUL	E 16 GENERAL DISCRETIONARY ACTIVITIES	76

10.7 PROHIBITED ACTIVITIES	78
RULE 17 COMBUSTION OF SPECIFIED MATERIALS	78
CHAPTER 11 RESOURCE CONSENT PROCEDURES	80
11.1 MAKING AN APPLICATION	
11.2 NOTIFICATION OF RESOURCE CONSENT	80
11.3 THE RESOURCE CONSENT PROCESS	80
11.4 JOINT HEARINGS	81
CHAPTER 12 INFORMATION REQUIREMENTS	83
12.1 INFORMATION TO BE SUBMITTED WITH A RESOURCE CONSENT	
APPLICATION	83
12.2 CIRCUMSTANCES IN WHICH THE POWERS IN SECTION 92 MAY BE	USED
	84
CHAPTER 13 CROSS BOUNDARY ISSUES	85
CHAPTER 14 FINANCIAL CONTRIBUTIONS	87
14.1 BACKGROUND	87
14.2 CIRCUMSTANCES, PURPOSE, AND LEVEL OF CONTRIBUTION	
14.3 FINANCIAL CONTRIBUTION ASSESSMENT CRITERIA	88
CHAPTER 15 MONITORING AND REVIEW	90
15.1 MONITORING	
15.2 REVIEW	
CHAPTER 16 REFERENCES	92
CHAPTER 17 APPENDICES	94
APPENDIX 1: GLOSSARY	94
APPENDIX 2: STATUTORY ACKNOWLEDGEMENT AREAS	101

CHAPTER 1. INTRODUCTION

1.1 INTRODUCTION

Under the Resource Management Act 1991, the West Coast Regional Council is given the function of managing air quality within the Region. This responsibility is one of several related functions of the Regional Council, as part of its overall role of providing for the integrated management of the region's natural and physical resources under that Act (referred to in this document as "the RMA").

The preparation of this Plan will assist the Council to:

- Assist in the achievement of the Region's goals for the sustainable management of natural and physical resources;
- Implement the Council's functions under the RMA;
- Achieve the objectives and implement the policies relating to the discharge of contaminants to air, as outlined in the Regional Policy Statement for the West Coast.

A Regional Air Quality Plan is regarded as the best method for establishing a long-term strategy for efficiently managing the West Coast's air resource, including the maintenance of high air quality, and improvement of standards where air quality is degraded.

The control of the discharge of contaminants to air is a function of the Regional Council.

1.2 PURPOSE OF THIS REGIONAL PLAN

The Plan provides a management framework for addressing adverse effects from discharges of contaminants to air. In particular, the purpose of this Regional Plan is:

- To establish a policy framework for promoting the sustainable management of the Region's air quality;
- To remove unnecessary controls on activities that are unlikely to have significant adverse effects on the environment, and to regulate activities that may have significant adverse effects but would otherwise be unrestricted; and
- To provide both the community and those persons discharging contaminants into the air with greater certainty about how those discharges will be managed.

This Plan
highlights the
directions the
Regional
Council will
take on how
discharges of
contaminants to
air should be
managed

1.3 SCOPE OF THE PLAN

This Plan covers discharges of contaminants to air for the West Coast region. This includes discharges to air in the coastal marine area as well as land-based discharges. Thus, the Plan covers the area from the eastern boundary of the region at the Southern Alps out to the 12 nautical mile limit of the territorial sea, and from Kahurangi Point in the north to Awarua Point in the south.

The Regional Policy Statement (RPS) provides an overview and sets the framework for integrated management of the natural and physical resources of the region. The objectives, policies, methods and regional rules outlined in this Air Quality Plan set out in more detail the direction of the RPS. Issues relating to discharges of contaminants to air for the West Coast region, together with objectives, policies and methods, are covered in Chapters 5-9 of this Plan as follows:

- 1. Information on Air Quality
- 2. Odour
- 3. Dust
- 4. Products of Combustion
- 5. Global Issues

As this Plan deals only with discharges of contaminants to air, integration with other Regional Plans is required. For example, activities that may require discharge to air permits, such as stockpiling of materials where dust may result, or waste disposal activities, may also require other resource consents and may be covered in other Regional Plans.

This Plan deals only with discharges of contaminants where air is the receiving environment. Activities such as use of agrichemicals and fertilizers are dealt with in the Regional Plan For Discharges To Land, as land is the ultimate receiving environment, and adverse effects associated with these activities relate to impacts on that environment.

1.4 THE APPROACH TO AIR QUALITY MANAGEMENT UNDER THE CLEAN AIR ACT

The Clean Air Act 1972 regulated emissions of air pollution from industrial and trade processes. Licenses were issued on a case-by-case basis by regional air pollution officers employed by the Department of Health. For each license granted, the Department of Health officers determined the "best practicable means" (BPM) of pollution control.

The objective of this approach was to minimise individual emissions at source by applying the best available and economically feasible control technology. However, under this regime there were a number of shortcomings, including the inability to consider cross-media impacts, little opportunity for public input, no consideration of future use and there was no consideration of the interaction of sources.

1.5 THE APPROACH TO AIR QUALITY MANAGEMENT UNDER THE RESOURCE MANAGEMENT ACT

The Clean Air Act was repealed in 1991 by the passage of the RMA. The responsibility for regulating air emissions was reassigned from central and territorial local government to regional councils. Under the RMA, councils are equipped with three different tools to create and implement these strategies – the ability to set policies, establish rules in plans, and issue resource consents.

The overriding purpose of the RMA is the sustainable management of natural and physical resources. In the RMA, sustainable management is defined as:

...managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables 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 to meet the needs of future generations;
- 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)

The Plan thus establishes a policy framework for promoting the sustainable management of the Region's air resource.

The RMA allows for regional plans to be produced for the management of these natural and physical resources, including the control of discharges of contaminants to air.

The RMA defines a contaminant (in relation to discharges to air) to include:

Any substance (including gases, liquids, solids, and microorganisms) or energy (excluding noise), or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat...when discharged into air...changes or is likely to change the physical, chemical or biological condition of the air... into which it is discharged. By definition, a contaminant has the capacity to change the environment into which it is discharged. This change could be physical, chemical or biological. For example, a contaminant such as an ozone depleting substance causes a breakdown of the ozone layer.

Adverse effects of the discharge to air of such contaminants include an increase in skin cancer and genetic abnormalities in flora and fauna. It is potential adverse effects of this nature that the Regional Council seeks to avoid, remedy or mitigate through the preparation and implementation of this Plan.

1.6 DISCHARGES OF CONTAMINANTS TO AIR

There are two circumstances in which the RMA controls discharges to air:

- No person may discharge any contaminant into air from any industrial or trade premises unless the discharge is expressly allowed by a rule in a regional plan and any proposed regional plan, a resource consent, or regulations: *Section* 15(1)(c).
- No person may discharge any contaminants into air from any place, or any other sources whether moveable or not, if the discharge contravenes a rule in a regional plan, or a proposed regional plan, unless the discharge is expressly allowed by a resource consent or by section 20 (certain existing lawful activities allowed): Section 15(2).

In the absence of a Regional Plan, any discharges to air from industrial or trade premises, no matter how minor, would require resource consents, while possibly significant discharges from other sources would not.

The intent of this Plan is to allow minor discharges into air from industrial or trade premises which are unlikely to have significant adverse effects, and to regulate other discharges which may have significant adverse effects, but which otherwise could be carried out without any Regional Council control.

This Plan therefore adopts a permissive approach to discharges with minor effects from industrial and trade premises and helps to bring air quality management in line with the effects-based approach of the RMA.

1.7 CONSULTATION WITH TANGATA WHENUA

Part II of the RMA provides that regional councils take into account the principles of the Treaty of Waitangi, and provide for the relationship of Māori and their culture and traditions with their ancestral lands, waters, waahi tapu, and other taonga as a matter of national importance.

The RMA also requires the regional councils to have regard to kaitiakitanga (defined as stewardship or guardianship). This can encompass a range of Māori resource management strategies. Through consultation, Poutini Ngai Tahu have been provided with opportunities for input into the development of this Regional Plan.

An important part of the Plan preparation process is consultation with Tangata Whenua.

See Chapter 4

CHAPTER 2. STATUTORY FRAMEWORK

2.1 RESOURCE MANAGEMENT FRAMEWORK

This Regional Plan fits within a framework of national, regional and local resource management plans and other documents as shown below¹.

resource management act 1991

NATIONAL ENVIRONMENTAL STANDARDS

NATIONAL POLICY STATEMENTS
(Including New Zealand Coastal Policy statement)
national environmental standards
water conservation orders

REGIONAL POLICY STATEMENT

Sets the direction for the future management of the West Coast's natural and physical resources

REGIONAL PLANS

Regional Coastal Plan
Regional Plan for Discharges to Land
Regional Air Quality Plan
Regional Land and Riverbed Management Plan

District Plans

Buller District Plan Grey District Plan Westland District Plan

Resource Consents and Other Methods of Implementation

_

¹ Adapted from Otago Regional Council Regional Plan on Waste 1994

The Regional Policy Statement may not be inconsistent with any national policy statements, national environmental standards, or water conservation orders. Regional Plans and District Plans must not be inconsistent with the Regional Policy Statement. District Plans must not be inconsistent with Regional Plans.

At the regional level the Regional Policy Statement provides an overview and the means of achieving integrated sustainable management of the region's natural and physical resources. It is a statement of intent as to how regional resource management issues can be addressed, and while it has statutory power it only describes, rather than prescribes, methods which could be used to attain the stated objectives.

This plan cannot be inconsistent with the Regional Policy Statement or with documents prepared at the national level.

2.2 RELATIONSHIP TO OTHER RESOURCE MANAGEMENT DOCUMENTS

2.2.1 REGIONAL POLICY STATEMENT

The Regional Policy Statement (RPS) for the West Coast Region has been prepared by the Regional Council under the RMA, in order to provide an overview of the resource management issues, objectives and policies for the Region. The objectives, policies and methods in the RPS set the framework for the integrated management of natural and physical resources in the Region.

Relevant objectives and policies in the RPS are primarily contained in the Chapter dealing with air quality. The objectives, policies, methods and regional rules outlined in this Plan set out in more detail the direction of the West Coast RPS, particularly by way of rules.

Regard must be had to the relevant objectives and policies in the RPS as well as the provisions of this Plan when resource consent is applied for to discharge contaminants into the air.

2.2.2 NEW ZEALAND COASTAL POLICY STATEMENT

The New Zealand Coastal Policy Statement (NZCPS) has relevance to this Regional Plan because this Plan covers discharges to air in the coastal marine area as well as on land. The aspects of this Regional Plan relating to the coastal marine area cannot be inconsistent with the provisions and policies of the NZCPS.

The RPS sets the direction for the future management of the West Coast's natural and physical resources.

2.3 RESPONSIBILITIES

Following is an outline of the statutory roles of Central Government, the Regional Council and territorial authorities in air quality management.

2.3.1 CENTRAL GOVERNMENT

2.3.1.1 Ministry for the Environment

The Ministry for the Environment is the lead agency for air quality policy at Central Government level. The Ministry provides information on national air quality issues and monitors compliance with national policies and any accords to which New Zealand is a signatory. It is expected that the Ministry will take a proactive role in preparing environmental standards and guidelines, promoting clean air practices, and public education (Southland Regional Council, 1995).

Two Ministry publications of relevance to this Plan are the *Ambient Air Quality Guidelines* (1994 and updates) and *Odour Management Under the Resource Management Act* (1995 and updates). The Ministry for the Environment has developed a core set of national air quality indicators, as part of its Environmental Performance Indicators programme.

2.3.1.2 Ministry of Health

Under the Health Act 1956, the Ministry of Health designated officers have a role to provide public health regulatory services. Designated officers who are employed by Crown Health Enterprises are directed by the Director General of Health to discharge the Ministry of Health's regulatory services. These include the monitoring of air quality and its impact on public health (Southland Regional Council, 1995).

2.3.1.3 Ministry of Conservation

The Minister of Conservation has a role in conjunction with the Regional Council in controlling activities in the coastal marine area, including the discharges of contaminants into air. The coastal marine area forms part of the area covered by this Regional Plan. Thus, the Minister of Conservation is required to approve the part of this Regional Plan that relates to discharges in the coastal marine area.

2.3.2 WEST COAST REGIONAL COUNCIL

Section 30 of the RMA gives regional councils the following responsibilities in order to give effect to the purposes of the RMA with respect to the discharge of contaminants to air:

- The establishment, implementation and review of objectives, policies and methods to achieve the integrated management of the natural and physical resources of the region; and
- The control of the discharge of contaminants into air.

The Ministry for the Environment is the lead agency for air quality policy at Central Government Level.

The Ministry of Health has a role in monitoring air quality and its impact on human health.

The Regional Council has primary responsibility for managing the air resource through the preparation of this Regional Plan.

Regional Councils, therefore, have primary responsibility for managing air pollution through the control of the discharge of contaminants. Preparation of an Air Quality Plan is not mandatory but will provide a framework to maintain and where appropriate enhance the air quality of the region.

This Regional Plan controls discharges to air in the whole of the West Coast region, including the coastal marine area. This area therefore includes from the landward boundary of the Alps out to the territorial limit (12 nautical mile limit).

Territorial authorities also have roles under other legislation. These are briefly discussed.

2.3.3 TERRITORIAL AUTHORITY

The three territorial authorities in the West Coast Region have a role, within their districts, to provide for the health and wellbeing of their population; promote the sustainable management of their resources; and ensure that any public health nuisance effects relating to the discharge of contaminants to air are avoided, remedied or mitigated. The District Councils have responsibilities under various legislation relevant to air quality management, including the Health Act 1956 and the Dangerous Goods Act 1974. Territorial authorities also act as Rural Fire Authorities in their districts.

Territorial
authorities have
a role in
providing for
the health and
wellbeing of the
population

2.4 OTHER LEGISLATION

There is other legislation that deals with the discharge of contaminants to air. The RMA, the RPS and this Plan do not replace but complement this other legislation. These include:

There is other legislation that deals with air quality

Health Act 1956

Section 23 of the Health Act allows every territorial local authority to make bylaws for the protection of public health. This Act is administered by the Ministry of Health and implemented by territorial authorities and the health provider (Crown Public Health).

• Ozone Layer Protection Act 1996

This Act provides for the phasing out of all but essential uses of controlled ozone depleting substances, and for the restriction of other ozone depleting substances. Administration and implementation of this Act is carried out by the Ministry for the Environment.

• Local Government Act 1974

Gives territorial authorities the power to make such bylaws as they see fit to conserve public health, wellbeing, safety and convenience (among other things). Administration of this Act is carried out by the Department of Internal Affairs. Implementation of this Act is carried out by territorial and regional local authorities.

• Building Act 1991

The Building Code, which is enforced through the Building Act 1991 sets out the functional requirement and performance standards which must be met by buildings for the provisions of ventilation and the collection and/or removal of contaminated air. Administration of this Act is carried out by the Department of Internal Affairs. Implementation of this Act is carried out by territorial authorities.

Hazardous Substances and New Organisms Act 1996

(HSNO) which is administered by the Environmental Risk Management Authority, territorial territorial authorities, Department of Labour, Ministry of Commerce, Land Transport Safety Authority, Ministry of Health and others. The purpose of the HSNO Act is to protect the environment and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms. Once the Act becomes operative for hazardous substances it will repeal the Explosives Act 1957, the Dangerous Goods Act 1974, the Toxic Substances Act 1979, and the Pesticides Act 1979. Those clauses relevant to new organisms and the establishment and functioning of the Environmental Risk Management Authority are operative. Until the necessary supporting regulations have been promulgated, the hazardous substances part of HSNO will not commence. There is no set data for when this will happen.

• Health and Safety in Employment Act 1992

All employers must comply with this Act in terms of the working environment provided for employees. This may include provisions for clean air. Administration and enforcement of this Act is carried out by the Department of Labour.

Forest and Rural Fires Act 1977

Controls fires in forests and rural areas subject to conditions which may require giving notice to neighbours of a controlled burn. Administration and enforcement of this Act is carried out by the Rural Division of the New Zealand Fire Service, territorial authorities, Department of Conservation, Ministry of Defence, and some forestry companies.

• Historic Places Act 1993

Any consent authority receiving an application for a resource consent must notify the Historic Places Trust if the application affects any place or area on the Register (Section 93(1)(c)). Implementation of this Act is carried out by the Historic Places Trust.

CHAPTER 3 MANAGEMENT APPROACH

3.1 INTRODUCTION

As stated, this Regional Air Quality Plan covers discharges to air across the whole of the region, from the landward boundary of the Southern Alps, out to and including the coastal marine area. This consistent approach to the management of the air resource as a whole has been adopted because air is a free medium and moves across these management boundaries. This is recognised in the policies and rules, which (unless otherwise stated) apply to discharges to air that occur both in the coastal marine area and on land.

This approach is supported by the fact that there are very few point source discharges to air in the coastal marine area of the West Coast. Applying different management approaches to such discharges would not necessarily result in more efficient or effective outcomes, due to the potential for adverse effects of discharges to cross planning boundaries. This approach allows for consistency in the management of air quality for the whole region and recognises that all significant adverse effects on air quality should be avoided, remedied or mitigated, no matter what the location of the source.

3.2 METHODS OF IMPLEMENTATION

In the RPS the Regional Council provided a description of the methods which could be used to implement objectives and policies. Included in this discussion were:

- Promotion;
- Service Delivery;
- Monitoring;
- Regulation;
- Economic Instruments.

Promotion includes education and provision of information, and advocacy in terms of making representations and submissions to other management agencies through such things as lobbying and voluntary agreements. Service delivery covers the provisions of goods and services, and the collection and distribution of information. Monitoring involves the gathering of environmental data to assist the Council in making resource management decisions and to ensure performance specifications are met.

Regulation is the legal means used to control the effects of activities, and in the context of this Plan is primarily by rules. Part of this more formal means of control is the enforcement of rules and resource consent conditions, and prosecution for breaches of these. Economic instruments are financial incentives or mechanisms for encouraging resource users to modify their behaviour, and includes rates relief, bonds and tradeable permits.

It is possible to combine one or more approaches to achieve the most appropriate outcome. As an example, relevant industry codes of practice may be produced which outline operational systems to be used and appropriate mitigation procedures. By recognising industry codes of practice in conditions on resource consents, promotion and regulation can be combined to enable a more efficient and effective management process.

3.3 NATIONAL AMBIENT AIR QUALITY GUIDELINES

Ambient air quality is the general quality of air that surrounds us. The ambient air quality in a region reflects the cumulative effects of all activities - industrial, commercial, domestic, and natural activities on the air in the region.

The Ministry for the Environment has produced the *Ambient Air Quality Guidelines* (1994). These national ambient air quality guidelines have been developed for the protection of the health and wellbeing of the general population.

However, the focus of the RMA has a broader base, requiring that such things as cultural values and ecosystems also be protected from the adverse effects of air pollution. Therefore, it is possible that air quality at the level of the guidelines may not meet the requirement of the RMA to promote the sustainable management of natural and physical resources (Northland Regional Council, 1995).

These national guidelines have been used as a guide for management of ambient air quality in this Plan (see Chapter 5.0). Further monitoring based on these guidelines will enable region-specific guidelines to be developed.

3.4 BEST PRACTICABLE OPTION

The Best Practicable Option (BPO) is specified in the RMA as one of the mechanisms available to the Regional Council for the management of point-source discharges to air.

The RMA (Section 2) defines the BPO as:

... "in relation to a discharge of a contaminant or an emission of noise, means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to –

- a) The nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and
- b) The financial implications, and the effects on the environment, of that option when compared with other options; and
- c) The current state of technical knowledge and the likelihood that the option can be successfully applied."

However, the BPO approach may only be adopted when the consent authority is satisfied that this is the *most efficient and effective* means of preventing or minimising any actual or potential adverse effect on the environment. This involves having regard to alternatives, including setting minimum standards on discharges, and consideration of the nature of the discharge and the receiving environment.

The usual means of avoiding adverse effects from discharges is to impose standards for the discharge. Conditions imposing standards are considered efficient and effective because they are certain and enforceable. The BPO is generally used as an alternative to setting discharge standards. It is most likely to be used where it is difficult, if not impossible, to set standards, or standards are not relevant or applicable. The BPO approach is flexible in that it allows for advances in technology and technical expertise and applies on a case-by-case basis.

However, this approach is far from certain, and the Regional Council would need to be satisfied that the option is efficient and effective from not only the applicant's point of view but also from the Council's and the community's perspective.

Consideration may be given to the use of the BPO in the resource consent process. This will be determined on a case-by-case basis. Where the BPO is adopted, it may include a cost to applicants for engaging suitably qualified technical experts on Council's behalf in assessing the resource consent application, in accordance with Section 36 of the RMA.

Until monitoring data demonstrates that the effects are minor, a precautionary approach will be used in combination with any BPO adopted. The precautionary approach involves recognising that there may be a need for caution in managing adverse effects where there may be scientific or technical uncertainty about those effects. This may include shorter duration consents and specific requirements for review and monitoring of consents.

3.5 THE CONTROL OF DISCHARGES FROM INDUSTRIAL OR TRADE PREMISES

Section 15(1) requires the inclusion of a number of rules in this Plan to manage the effects of activities on industrial or trade premises. A number of the rules in this Plan do not make a distinction between discharges from industrial or trade premises, and other sources, but rather take an effects-based approach by permitting discharges with minor effects, no matter what the source.

In other words, the effects of an activity are likely to be the same whether the activity takes place on industrial or trade premises, or anywhere else. Effects may also depend on the sensitivity of the receiving environment

However, in conjunction with this, and to reflect the requirements of the Act, discharges from industrial or trade premises that are not specifically provided for by the rules in this Plan are considered as discretionary activities requiring resource consent.

CHAPTER 4 POUTINI NGAI TAHU PERSPECTIVE

4.1 BACKGROUND

Poutini Ngai Tahu values in relation to the air are based on the tribal ethic of protection, to ensure that people respect and work within the requirements of the natural environment in which they live.

These values are dynamic and able to adapt to changing circumstances.

Respecting the natural environment requires a knowledge of both the spiritual and physical elements of the atmosphere.

Reasonable use of resources and the effects of such use was allowed provided the correct rituals were performed to ensure that the dynamic balance between the spiritual and physical was maintained.

Activities that impinged on the air, such as the use of fire, were carefully evaluated and conducted in the appropriate manner.

4.2 THE RESOURCE MANAGEMENT ACT

In the management of the air resource, the RMA requires all persons exercising functions under the Act to:

...recognise and provide for the following matters of national importance:

- (e) the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga. (Section 6(e);
- ...have particular regard to: (a) Kaitiakitanga. (Section 7(a);
- ...take into account the principles of the Treaty of Waitangi (Te Tiriti O Waitangi). (Section 8).

All these are to be construed and applied together, in achieving the purpose of the Act. Thus the Regional Council, in its planning and consents roles, must have full regard to them, as they are a means to achieving the overriding purpose of the Act contained in section 5. They may in some cases need to be weighed against other matters listed in sections 6 and 7.

The Regional Council recognises that, in carrying out its functions under the RMA, it has a statutory responsibility to protect the rangatiratanga of Poutini Ngai Tahu. In this context, the Regional Council also recognises that the Treaty of Waitangi (Te Tiriti O Waitangi) affords Poutini Ngai Tahu a status distinct from other interest groups or members of the public. The Regional Council recognises its obligation to consult with Poutini Ngai Tahu, and this is provided for in both the development and implementation of this plan.

The Regional Council is committed to meeting these obligations under the RMA.

4.3 AIR QUALITY MANAGEMENT PRIORITY FOR POUTINI NGAI TAHU

The ethic of kaitiakitanga is a priority consideration for Poutini Ngai Tahu. It is simply expressed as maintaining an air quality that is not injurious to the health of the present generation and passing it on to future generations. This includes the responsibility of maintaining and enhancing the mauri or life-force of the atua Tawhirimatea – the spiritual guardian of the atmosphere.

In Māori times decisions on human activities and their effects on air quality were evaluated by tohunga.

Today decisions on the effects of discharge of contaminants to air are evaluated by Runanga. The consultation process must ensure that Papatipu Runanga are provided with the opportunity to comment on a case-by-case basis, as effects on both the physical and spiritual elements of the natural world will differ in each situation.

4.4 CONSULTATION

Through consultation, Poutini Ngai Tahu will retain an active relationship with the Regional Council and resource users. Consultation occurs in both resource consent and planning processes. Papatipu Runanga are provided with schedules of all non-notified resource consent applications and full copies of all notified applications received by Council and are given the opportunity to comment. Together with representation on the Council committees, this enables tangata whenua to have an early and active input into resource management.

The Ngai Tahu Act 1996 states that within the Tai Poutini (West Coast) Te Runaka O Kati Waewae and Te Runanga O Te Koeti Turanga (Te Runanga O Makaawhio) are the two papatipu marae-based runanga which have manawhenua over Tai Poutini from Piopiotahi (Milford Sound) in the south, to Kahurangi in the north and into the middle of the Southern Alps.

Council recognises that there are other Poutini Ngai Tahu people and groups who have interests in Tai Poutini, who are not affiliated to the two papatipu runanga. The Ngai Tahu Act does not preclude Council from dialogue with these people.

Poutini Ngai Tahu may initiate consultation at any time through the Regional Council.

CHAPTER 5 INFORMATION ON AIR QUALITY

5.1 BACKGROUND

In order for the Regional Council to make more informed decisions and promote the sustainable management of the air resource on the West Coast, an improved knowledge and understanding of the effects of discharges into air is required. Monitoring and data gathering is necessary for two reasons:

- To provide information on existing air quality, and to indicate trends in air quality over time and from place to place; and
- To assess the effects of particular discharges of contaminants to air

In 1994-5, the Regional Council put in place monitoring procedures for sulphur dioxide and particulate levels in Greymouth and Reefton. This monitoring was limited in terms of indicators of ambient air quality (with only two pollutants being monitored) and overall air quality in the Region.

One of the monitoring studies found that the World Health Organisation averages were exceeded 11 times in Reefton and 3 times in Greymouth during the 1995 winter season. The average levels in Reefton were found to be comparable to those in Christchurch. The study concluded that the fact that the high averages persisted into the spring season warranted further investigation (ESR Environmental, 1995).

These results indicate a need for further monitoring. Ongoing information needs to be obtained on the existing air quality and trends over time and from place to place, and on the effects of particular discharges of contaminants into air.

5.2 ISSUE

5.2.1 Inadequate information on air quality

5.3 OBJECTIVE

5.3.1 The gathering of data and adoption and effective utilisation of ambient air quality guidelines in the West Coast region.

5.4 POLICIES

5.4.1 To adopt the following ambient guidelines for the West Coast region:

Indicator: Particulates (PM 10)		Averaging Time: 24 hour annual
Sulphur Dioxide	500 micrograms/m3 350 micrograms/m3 125 micrograms/m3 50 micrograms/m3	10 <u>minute</u> 1 hour 24 hour annual
Carbon Monoxide	30 milligrams/m3 10 milligrams/m3	1 hour 8 hour
Ozone	150 micrograms/m3 100 micrograms/m3	1 hour 8 hour
Nitrogen Dioxide	300 micrograms/m3 100 micrograms/m3	1 hour 24 hour
Lead	0.5 - 1.0 micrograms/m3	3 month

Explanation

This Policy adopts the national guidelines for those ambient air pollutants that are relevant to the region, from the Ministry for the Environment's Ambient Air Quality Guidelines (July 1994). The national guidelines are part of the objective to provide for sustainable management of natural and physical resources.

These national guidelines will be used to compare the results from the air quality monitoring programme described in Policy 5.4.2. They will thus be used to build up a picture of ambient air quality in the region, and to identify areas where problems may be occurring.

5.4.2 To develop and implement an air quality monitoring programme.

Methods 5.5.1, 5.5.2, 5.5.3

Explanation

This policy complements the adoption of the ambient air quality guidelines in Policy 5.4.1 by undertaking monitoring for chosen indicators and obtaining specific information about the quality of air in the Region.

Knowledge of the ambient air quality is necessary in order to determine what areas, if any, are experiencing degradation, and what measures, if any, are required to protect or upgrade ambient air quality.

5.4.3 To develop ambient air quality guidelines specific to the West Coast Region for the protection of human and environmental health and amenity value, based on the monitoring information described in Policy 5.4.2.

Methods 5.5.1, 5.5.3, 5.5.5

Explanation

This policy recognises the need to gather more information on ambient air quality, for use in the development of guidelines which are appropriate for the Region. In developing guidelines the Regional Council recognises that most issues relating to air quality involve more localised effects, given the dispersed nature of the Region in terms of population and geographical area. The overall air quality of the Region may therefore be cleaner than the levels suggested in the Ministry for the Environment Ambient Air Quality Guidelines 1995. This policy gives the flexibility for more stringent standards to be set on the basis of monitoring information.

The Regional Council also recognises that the national ambient air quality guidelines provide only for the protection of human health, and that appropriate guidelines will need to be prepared to protect the health of plants and animals or to meet community aspirations.

5.5 METHODS

5.5.1

The Council will coordinate with public health services and other relevant agencies on the development and preparation of guidelines for ambient air quality, and the sharing and collection of air quality monitoring information.

Policies 5.4.2, 5.4.3

5.5.2

The Council will monitor the ambient air quality in the West Coast Region, in areas most likely to be affected by activities that cause air pollution. *Policy* 5.4.2

5.5.3

The Council will promote the community's understanding of air quality through:

Policies 5.4.2, 5.4.3

- The distribution of educational material on the ambient air quality Guidelines and why they are important for the management of the air resource in the Region;
- The reporting of monitoring information via annual State of the Environment reports.

5.5.4

The Council will ensure that the provisions of this Plan complement provisions in other regional plans and the Regional Monitoring Strategy.

5.5.5

The Council will maintain an Air Quality Complaints Register, which will be reviewed annually.

Policy 5.4.3

PRINCIPAL REASONS

Method 5.5.1 allows for the development of guidelines for ambient air quality which meet the needs of a number of different agencies with a different focus in terms of the adverse effects they are intending to control. This also provides an opportunity to share costs and information to avoid duplication in terms of monitoring effort.

Method 5.5.2 provides for the implementation of a monitoring programme for air quality in the Region and recognises the need for this to be in areas which are most likely to be affected by air pollution activities. This is important so appropriate management decisions can be made about the control of these activities if it is shown that they have significant adverse effects. The Regional Monitoring Strategy describes in detail key areas where monitoring is required, and prioritises monitoring issues for action Regional Monitoring Programmes define monitoring locations and provide protocols, methodology, schedules, and timelines.

Method 5.5.3 recognises the importance of informing people of the West Coast Region about the purpose of ambient air quality guidelines, the state of the air resource and air quality issues. The provision of monitoring information provides a further means of avoiding or mitigating adverse effects of discharges to air, by increasing awareness and understanding of the nature of these effects and aiding implementation of any management controls.

5.6 ANTICIPATED ENVIRONMENTAL RESULTS

5.6.1

Ambient air quality is maintained within regional guidelines.

5.6.2

Better understanding of the region's air resource to assist with managing air quality.

5.6.3

Increased promotion of information on air quality and effects of air discharges in the West Coast Region, especially in areas where air quality is degraded.

CHAPTER 6 ODOUR

6.1 BACKGROUND

Odour is not a discharge in itself, it is an effect which is derived from the gaseous components of some discharges. It is a generic term that relates to the effect that a contaminant has on olfactory nerves (our sense of smell). Examples of odour issues for the West Coast region include pig farms and fish and stock offal. Good planning, design, process control and general site management are considered important in the management of odour.

Odours can be considered contaminants as all odours are due to the presence of chemicals or mixtures of chemicals in the air and when an odour is perceived, the chemical composition of the air has been altered (Southland Regional Council, 1995).

Adverse effects that odour can cause include short-term physiological/psychological responses (for example, nausea or vomiting), or the longer term psychological response of annoyance and anger. A serious odour nuisance can disrupt normal daily activities such as eating and sleeping. A sustained level of emotional stress may induce or exacerbate other adverse health effects within individuals. (Cudmore. R; Office of the Parliamentary Commissioner for the Environment).

Odour can also adversely affect amenity values associated with waahi tapu, mahinga kai, nohoanga sites, statutory acknowledgement areas, marae and kaitiakitanga activities which are important to iwi. Adverse effects may include detracting from the experience of being in an area and undertaking an activity relating to rekindling customary practices.

Although technology exists for detecting and measuring odours, this technology can be very expensive and time consuming. Furthermore, the human nose is generally accepted as being the best instrument for measuring odours, particularly at low levels. Each person has an individual response to smell, and the pleasantness or otherwise of an odour is often related to its association with a particular activity and the visibility of that activity.

Assessment of the offensiveness or otherwise of odour is difficult because people's reaction and sensitivity to smells vary according to a range of factors. Some odours are regarded as offensive by some people but not others, whilst some odours are universally regarded as unpleasant. The perception of nuisance caused by odour depends on five factors:

- Frequency of the odour;
- Intensity of the odour;
- Duration of the odour:
- Offensiveness of the odour; and
- Location of the odour.

These five factors (FIDOL) are the basis for assessment of odour under common law. Although assessment of odour can be a subjective measurement and there are a number of problems associated with classifying odours, it is reasonable to incorporate offensiveness in any regulatory framework.

This is supported by the Parliamentary Commissioner for the Environment who noted in a report to Parliament that she considered that regional plans should contain provisions applying to the management of "emissions of objectionable odour or fumes". Her conclusion was based on the fact that odour control and management facilities are not well developed for all industries and on the effects that being subjected to odours has on people and communities (Taranaki Regional Council, 1995).

Measures are included in this Regional Air Quality Plan to assess and control 'offensive or objectionable' odours. The terms "offensive" and "objectionable" are considered by the Courts, including the High Court and the Environment Court in decisions under the RMA, to set objective standards.

If it is considered that an odour condition of a rule or a resource consent has been contravened, then the Court will determine whether the odour complained of is offensive or objectionable. It will do so having regard to whatever evidence is available and make its own determination, on the facts, as seen through the eyes and smelt through the noses of witnesses.

While the Regional Council has primary responsibility for discharges of odour under the RMA, the territorial authorities have a complementary role in odour management, in terms of controlling the actual or potential effects of land use (section 9). This means that consent applicant discussions and integration with District Councils is required, as territorial authorities manage land use activities that can cause odour. For example, District Plans may include buffer zones, incentives or rules to avoid significant adverse effects occurring from potentially incompatible land uses being located in close proximity to each other. This includes reverse sensitivity effects, for example, where odour-sensitive land uses may seek to establish near existing odour-producing activities.

Refer also to Sections 2.3.3 and 2.4 of the Plan, which explain territorial authorities' functions under other legislation for dealing with public health nuisance odours.

6.2 ISSUE

6.2.1 Adverse effects on human health and areas of cultural or amenity value from odour.

6.3 OBJECTIVES

6.3.1 The protection of human health and areas of cultural and amenity value from the adverse effects of odour discharges.

6.4 POLICIES

- 6.4.1 To avoid or mitigate any adverse effects on amenity values or human health arising from the discharge of offensive or objectionable odour, through consideration of the following:
- Good management practices (including the use of codes of practice) and process technology, to minimise odorous contaminants;
- Appropriate control technologies to reduce the emission of odorous contaminants;
- Buffer zones and site planning mechanisms.

Explanation

Odour discharges have the potential to adversely impact upon human health and also cultural or amenity values of an area. This policy recognises that it is not always practicable or necessary to avoid all detectable odours, but instead concentrates on avoiding or mitigating odours which are" offensive" or "objectionable" and therefore have the greatest potential to result in adverse effects.

The policy provides guidance on how these odours can be managed to avoid or mitigate adverse effects. For example, odour control technologies available include technologies that involve gas collection and control, adsorption, biofiltration, incineration, and odour modification. These mechanisms will be considered where appropriate, on a case-by case basis in the resource consent process.

- 6.4.2 The Regional Council will have regard to the following factors in the management of odour:
- Frequency of the odour:
- Intensity of the odour;
- Duration of the odour;
- Offensiveness of the odour;
- · Location of the odour.

Methods 6.5.1 - 6.5.4

Methods 6.5.2, 6.5.4

Explanation

These five factors (FIDOL) are the basis for assessment of odour under common law. Assessment of the offensiveness or otherwise of odour is difficult because people's reaction and sensitivity to smells vary according to a range of factors. This policy provides guidance in terms of approaches to assessing discharges of odour.

6.4.3 To achieve consistent odour management between the Regional Council and territorial authorities of the Region.

Methods 6.5.1, 6.5.2, 6.5.4

Explanation

This policy recognises that territorial authorities have a duty to consider odour effects as part of their function for managing the effects of land use, and that it is therefore important to have a consistent approach for odour management between the territorial authorities and the Regional Council.

6.5 METHODS

SEE REGIONAL RULES - CHAPTER 10.0

Rule 1
Pig farm effluent
Rule 2
Discharges to air from production land
Rule 13
Miscellaneous permitted activities
Rule 16
General discretionary activities

6.5.1

The Council will liaise with territorial authorities in the Region about ways of reducing the effects of odours.

Policies 6.4.1, 6.4.3

6.5.2

The Council will, where appropriate, advocate buffer zones around odorous, and potentially odorous, activities.

Policies 6.4.1 - 6.4.3

6.5.3

The Council will encourage the formation and adoption of industry Codes of Practice which pertain to the reduction, control or mitigation of odour effects.

Policy 6.4.1

6.5.4

The Council will prepare guidelines on appropriate means of preventing or minimising the adverse effects of odour.

Policies 6.4.1 - 6.4.3

6.5.5

For resource consent applications to discharge contaminants into air, the Council will consider applying the best practicable option for preventing or minimising any actual or likely adverse effects on the environment.

6.5.6

The Council will ensure that the principles of the Treaty of Waitangi are taken into account in any decisions.

6.5.7

The Council will utilise the enforcement provisions under the RMA where necessary, for breaches of resource consent conditions or unauthorised discharges.

6.5.8

The Council will ensure that the provisions of this Plan complement provisions in other regional plans.

PRINCIPAL REASONS

Method 6.5.1 recognises that the key means to achieving consistent odour management is through consistency of planning documents. Methods 6.5.2 - 6.5.4 identify specific mechanisms by which odours can be controlled such as buffer zones, and recognises the usefulness of the development of industry Codes of Practice to control odours. Buffer zones can be effectively used to avoid adverse effects of new, potentially odour-producing activities on existing adjacent land uses. Buffer zones can also be used to avoid 'reverse sensitivity' effects, where odour-sensitive land uses may seek to establish near existing odour-producing activities.

Method 6.5.4 allows for the Regional Council to prepare educational material to assist resource users in the prevention or minimisation of the adverse effects of odour. The provision of information and advice provides a means of avoiding or mitigating adverse effects, by increasing awareness and understanding of the nature of these effects and the availability of options to prevent or minimise them.

6.6 ANTICIPATED ENVIRONMENTAL RESULTS

6.6.1

No significant adverse effects from odour discharges on human health, amenity values, and values of Papatipu Runanga of Ngai Tahu.

6.6.2

A reduction in the incidence of verified complaints about objectionable or offensive odours.

6.6.3

Improved integration with territorial authorities' consent and complaints processes to control odour discharges from land uses.

6.6.4

Greater promotion of technology and good practices amongst industry to minimise offensive or objectionable odour discharges.

CHAPTER 7 DUST

7.1 BACKGROUND

Dust can enter the air incidentally, through wind action, or directly through an activity itself, such as by operating machinery or equipment on unsealed areas or farmland. Effects include unwanted deposition of dust in property, reduced visibility, and health impairment from inhaling dust. Adverse health effects include aggravation of respiratory problems such as emphysema and bronchitis, asthma, and irritation of the eyes, nose, throat and lungs.

The sources of dust in the Region include land clearance, the manufacturing of fertiliser, roadworks, coal handling facilities and stockpiles, and quarrying.

One particular source of dust which has the potential to cause significant adverse effects is abrasive blasting using dry sand. The concerns relate to irritation to eyes and airways, soiling of property, loss of amenities, inconvenience, visual pollution and adverse human effects, such as those from leaded paint dusts. Alternatives to dry sand are available, such as low or zero free-silica rock grits and garnet sand, that have superior durability to silica sand and produce less dust.

Management of dust is often divided into two types:

- **Deposited dust** is dust that, because of its diameter and density, falls from the air. It consists of particles that are generally larger than 20 µm (microns) in size. The effects of deposited dust are largely of nuisance type, and damage and discolouration of property can occur.
- Suspended dust is dust that stays suspended in the atmosphere for significant periods. It consists of particles mostly smaller than 20 µm. These fine particles that fall within the respirable range can cause adverse health effects.

The air quality indicator in the AAQG (and adopted in this Plan) for suspended particulate is measured as the portion of the particulate that is smaller than 10 μm in diameter. This is known as PM10. This is a measure of particles that is associated with adverse effects on human health, namely those able to penetrate the upper respiratory tract.

For claims of offensive or objectionable effects, the following approach will be taken:

- (a) An assessment of the situation will be made by one or more authorised Council officers taking into account the factors in Policy 7.4.3, the sensitivity of the receiving environment, and any relevant Codes of Practice for air discharges;
- (b) If the discharge is deemed to be offensive or objectionable by the Council officer, the discharger will be asked to take whatever action is necessary to avoid, remedy or mitigate the effects of the discharge.

7.2 ISSUE

7.2.1. Adverse effects on human health, property, structures and ecosystems from the discharge of dust into air.

7.3 OBJECTIVE

7.3.1. The protection of human health, property, structures and ecosystems from the adverse effects of discharges of dust to air.

7.4 POLICIES

7.4.1 Adverse effects of the deposition of dust will be avoided, remedied, or mitigated by ensuring that any discharge of dust does not occur at a volume, rate or in a manner that could cause an offensive or objectionable effect, including the significant restriction of visibility or the soiling of property.

Methods 7.5.1, 7.5.2, 7.5.4

Explanation

The aim of this policy is to avoid, remedy or mitigate adverse effects arising from the discharge of dust, including significant effects on visibility and the soiling of property. The presence of deposited dust can result in a loss of amenities, inconvenience, and disruption to outdoor activities.

7.4.2 Adverse effects of suspended dust will be avoided, remedied, or mitigated by ensuring that any discharge of dust does not occur at a volume, rate or in a manner that could cause an offensive or objectionable effect, including the impairment of human health.

Methods 7.5.1, 7.5.2, 7.5.4, 7.5.5

Explanation

This policy addresses the need to avoid problems associated with the discharge of suspended dust. The adverse effects of suspended dust may include acute and chronic effects on human health.

The indicator adopted in this Plan for management of suspended particulate measures the portion of particulate matter smaller than 10 microns in diameter, known as PM10. PM10 has the potential to cause significant adverse health effects. Management of levels of PM10 and other dust contaminants in discharges to air is assessed on a case by case basis, according to the scale and risk of actual or potential adverse effects.

7.4.3 In assessing offensive or objectionable effects from discharges of dust, the Regional Council will take into account the following factors:

Methods 7.5.1, 7.5.2, 7.5.5

- Frequency of dust discharges;
- Intensity of dust discharges;
- Duration of dust discharges;
- Offensiveness of the odour;
- Extent of dust discharges (suspended and deposited);
- Location of dust discharges.

Explanation

This policy provides guidance on the factors that will be taken into account when considering whether a dust discharge is offensive or objectionable. For example, the effects of the same discharge to air of dust may be different, depending on the location of the discharge and the sensitivity of the receiving environment. This policy provides for these factors to be considered, in relation to the management of adverse effects from dust.

7.4.4. To avoid, remedy or mitigate the adverse effects of the discharge of dust and materials on air and water quality and the seabed of the coastal environment, including during the transfer of materials from ship to shore or vice versa.

Methods 7.5.1, 7.5.2, 7.5.4

Explanation

This policy relates specifically to dust emissions in the coastal environment and the potential for adverse effects from activities such as the loading and unloading of cargo. These dusts may give rise to nuisance effects in the vicinity of such operations, or they may ultimately affect the health and vitality of aquatic life in nearby waters. By requiring the avoidance, remediation or mitigation of these adverse effects, this policy also makes provision for the protection of the public's enjoyment of the coast.

7.5 METHODS

SEE REGIONAL RULES - CHAPTER 10.0

Rule 3

Stockpiling, conveying and handling

Rule 4

Road and railway construction and maintenance

Rule 5

Earthworks, quarrying, mining and cleanfill operations

Rule 6

Abrasive blasting, other than using a moveable source

Rule 7

Operation of moveable aggregate crushing and screening plants

Rule 13

Miscellaneous permitted activities

Rule 15

Abrasive blasting

Rule 16

General discretionary activities

7.5.1

The Council will apply Policies 8.4.1- 8.4.4 through the regional rules of this Plan and when making decisions on consent applications for the discharge of contaminants into air, to regulate the discharge of dust into air.

Policies 7.4.1 - 7.4.4

7.5.2

The Council will provide information and advice about techniques and practices to avoid or mitigate the discharge of dust into air.

Policies 7.4.1 - 7.4.4

7.5.3

The Council will ensure that the provisions of this Plan complement provisions in other regional plans.

Policies 7.4.1, 7.4.2, 7.4.4

7.5.4

The Council will utilise the enforcement provisions under the RMA where necessary, for breaches of resource consent conditions or unauthorised discharges.

7.5.5

For resource consent applications to discharge contaminants into air, the Council will consider applying the best practicable option for preventing or minimising any actual or likely adverse effects on the environment.

Policy 7.4.2

7.5.6

The Council will ensure that the principles of the Treaty of Waitangi are taken into account in any decisions.

PRINCIPAL REASONS

Method 7.5.1 established a consistent approach to the management of discharges of dust. Many of the rules in Chapter 10 include conditions for dust management. The principal reasons for adopting these rules can be found beneath each rule.

Method 7.5.2 recognises that the provision of information on how to achieve the policies in this Plan is important. The provision of information and advice provides a means of avoiding or mitigating adverse effects, by increasing awareness and understanding of the nature of these effects and the availability of options to prevent or minimise them.

The methods incorporating promotion, education and information provision will aid implementation of the rules in this Plan through this increased understanding of the effects of discharges to air.

7.6 ANTICIPATED ENVIRONMENTAL RESULTS

7.6.1

No significant adverse effects from dust discharges on the health of humans, animals and plants, property, amenity/cultural values and the values of Papatipu Runanga of Ngai Tahu.

7.6.2

A reduction in the generation of offensive or objectionable dust, including dust discharges within the coastal marine area.

7.6.3

Increased promotion of good practices to reduce adverse effects of dust discharges.

CHAPTER 8 PRODUCTS OF COMBUSTION

8.1 BACKGROUND

Burning material or waste can give rise to smoke, odour, incompletely burnt particulate matter, carbon, organic and other chemicals being discharged into air. These are collectively referred to as the products of combustion.

As with dust, products of combustion can contain both particulate that will fall out (deposited) and finer matter that will remain suspended. These products of combustion, therefore, pose both nuisance and health effect potential.

The products of combustion arise from activities such as backyard fires, vegetation clearance, coal-fired boilers and other industrial sources, and domestic heating.

The adverse effects associated with discharges to air of products of combustion include the deposition of particulate matter, the creation of odour problems, a reduction in visibility, the emission of gases which are offensive, and adverse effects on human health.

Outside domestic fires are a very convenient method of waste "disposal" but have the potential to generate frequent nuisance complaints from neighbours. Burning green vegetation, plastic or rubber can generate thick smoke because of its high moisture content and low temperature combustion. Burning of some materials such as plastics may release toxic contaminants. In built-up areas, rubbish fires can result in frequent complaints.

There are no rules in this Plan controlling discharges from inside domestic fires or outside domestic fires, for reasons explained under Policy 8.4.3 and Rule 9. The Ministry of Health has issued a directive that where there are no rules in a regional plan, or where no resource consent has been granted, or Section 20 of the RMA does not apply, outside domestic fires should be controlled by territorial authorities under the Health Act 1956.

Outside domestic fire, when carried out in a manner, or with such frequency as to be injurious to health or offensive, is subject to provisions in the Health Act 1956. Sections 29-35 of this Act relate to nuisances and are particularly relevant. These provisions enable District Councils to take enforcement action where appropriate to abate the nuisance.

Co-ordination between the Regional Council, district councils and public health agencies is important to achieve integrated management of discharges of contaminants to air from inside domestic fires and outside domestic fires.

Residents of the West Coast use substantial amounts of coal and wood for home heating because these fuels are cheap and easily obtained in the Region. Observations on calm winter days indicate that West Coast towns have substantial smoke problems at or near ground level, attributable to smoke from household chimneys. Monitoring of air quality in Greymouth and Reefton in 1994 indicated that in calm weather air quality was affected by smoke and sulphur dioxide pollution from wood and coal fires.

The problem manifests itself visually by way of particulate deposits on property, smell of coal and wood smoke, and reduced visibility. The monitoring indicated that pollution on some days was at levels where adverse effects on people's health could be expected (Kingston Morrison, 1994). This may be a contributing factor in the Region's high incidence of hospitalisation due to respiratory disease. Research needs to be done on the possible health effects of air pollution in the Region. Further air quality monitoring will be carried out by the Regional Council.

Vegetation clearance by fire is subject to the Forest and Rural Fires Act 1977, which is designed to protect land and property from accidental fires and deliberate burnoffs. It does not control the discharge of contaminants to air. Measures for controlling the adverse effects associated with these discharges are made through provisions in this Plan.

Pollution from discharges from ships is not an issue of significance in the West Coast coastal marine area. Discharges from ships as part of their normal operation are controlled by the Resource Management (Marine Pollution) Regulations 1998 and cannot be dealt with by this Plan.

Likewise, motor vehicles, while a major cause of air pollution in cities, are unlikely to add significantly to pollution levels on the West Coast due to its low and scattered population. Central government initiatives to limit emissions from motor vehicles, such as the introduction of emission standards, will be supported.

8.2 ISSUE

8.2.1 Adverse effects on human health and the environment from the products of combustion.

8.3 OBJECTIVE

8.3.1 The protection of human health and the environment from the adverse effects of discharges of products of combustion.

8.4 POLICIES

8.4.1 To minimise or reduce where practicable the discharge of products of combustion to air at their source.

Methods 8.5.1, 8.5.2, 8.5.4, 8.5.8, 8.5.9

Explanation

This policy enables the reduction of adverse effects by requiring the reduction, where practicable, of emissions. Most discharges to air from products of combustion are 'wastes', in that they are unwanted by-products of a process. It is now commonly accepted that priority should be given to minimising wastes at their source.

8.4.2 To avoid, and where this is not possible, to remedy or mitigate any offensive or objectionable effect, including any adverse effects on human health, significant reduction of visibility or significant soiling of property, from the products of combustion.

Methods 8.5.1, 8.5.3, 8.5.5, 8.5.6, 8.5.9, 8.5.10

Explanation

This policy addresses the need to avoid offensive or objectionable effects associated with burning waste and other material. It is structured this way to reflect the fact that after discharges of these contaminants into air have occurred, significant adverse effects may be difficult or impossible to remedy or mitigate, and therefore avoidance at source is appropriate. However, since avoiding all discharges of contaminants is impracticable, the adverse effects from those discharges that cannot be avoided will need to be remedied or mitigated.

8.4.3 To promote, or where appropriate and practicable, require measures to avoid, remedy or mitigate the adverse effects of discharges to air from outside domestic fires and inside domestic fires.

Methods 8.5.2, 8.5.3

Explanation

This policy recognises that because of the number of individual sources of discharge and their low individual effect, region-wide control of all sources through regulation is not appropriate, and other non-regulatory means are more appropriate in achieving the objective. However the policy also provides for the consideration of other methods that require adverse effects to be avoided, remedied or mitigated, if significant sources of contamination or cumulative effects arise. The gathering of monitoring information will be an important part of any such action.

8.5 METHODS

SEE REGIONAL RULES - CHAPTER 10.0

Rule 8

Combustion of organic waste

Rule 9

Discharges from small-scale fuel burning equipment

Rule 13

Miscellaneous permitted activities

Rule 14

Miscellaneous permitted activities

Rule 16

General discretionary activities

Rule 17

Combustion of specified materials

8.5.1

The Council will apply Policies 8.4.1 and 8.4.2 through the regional rules of this Plan and when making decisions on consent applications for the discharge of contaminants into air.

Policies 8.4.1, 8.4.2

8.5.2

The Council will promote the use and correct operation of cleaner burning solid fuel heaters in place of less efficient forms of heating. Appropriate types of fuel for domestic heating purposes will also be promoted.

Policies 8.4.1, 8.4.3

8.5.3

In conjunction with Crown Public Health and other agencies, the Council may carry out research to determine whether there is any link between lung disease and the incidence of winter urban air pollution.

Policies 8.4.2, 8.4.3

8.5.4

The Council will educate and promote alternatives to burning of domestic rubbish, such as composting.

Policy 8.4.1

8.5.5

The Council will promote adherence to guidelines and codes of practice such as the New Zealand Code of Practice for land clearance.

Policy 8.4.2

8.5.6

The Council will liaise with the rural fire authority regarding the need to take environmental matters into consideration when granting fire permits.

Policy 8.4.2

8.5.7

The Council will ensure the provisions of this Plan complement appropriate provisions in other regional plans.

8.5.8

The Council will support any national guidelines or initiatives to limit emissions from motor vehicle exhausts.

Policy 8.4.1

8.5.9

For resource consent applications to discharge contaminants into air, the Council will consider applying the best practicable option for preventing or minimising any actual or likely adverse effects on the environment.

Policies 8.4.1, 8.4.2

8.5.10

The Council will utilise the enforcement provisions under the RMA where appropriate and necessary, for breaches of resource consent conditions.

Policy 8.4.2

8.5.11

The Council will ensure that the principles of the Treaty of Waitangi are taken into account in any decisions.

8.5.12

The Council will liaise with territorial authorities and other relevant agencies when it receives complaints about discharges from inside domestic fires and outside domestic fires.

PRINCIPAL REASONS

Method 8.5.1 establishes a consistent approach to the management of discharges of products of combustion that require resource consent under this Plan. Many of the rules in Chapter 10 include conditions for management of the adverse effects of products of combustion. The principal reasons for adopting these rules can be found beneath each rule.

Non-regulatory methods are adopted in the Plan to encourage a reduction in products of combustion from domestic heating. The approach taken to this issue reflects the provisions of the RMA. Education and promotion is preferred, rather than a 'do-nothing' option, which would fail to address the identified issue and objective.

Method 8.5.2, providing for information dissemination about potential effects and promotion of alternatives and good practice, is the most equitable and efficient option for dealing with discharges from domestic fires. In the absence of monitoring information, a region-wide approach which would impose additional costs on domestic resource users is not supported.

Chapter 5.0 provides for the gathering of information to assess the nature of this issue. Method 8.5.3 also provides for this type of investigation. When further monitoring is undertaken, other measures in addition to promotion and education may be adopted where necessary.

The Council considers that, in many cases, reduction in discharges to air from products of combustion can be promoted by the use of non-regulatory methods. These include information dissemination about good management practices and alternatives to burning, and promotion of appropriate Codes of Practice.

Method 8.5.6 provides for the minimisation of duplication, in allowing for the consideration of environmental matters when fire permits are issued by rural fire authorities. Adverse effects on the environment may thus be considered through this mechanism, where a discharge to air permit is not required.

The RMA adopts a permissive approach to discharges from mobile sources such as motor vehicle emissions. This is supported in the Plan, given that the likely adverse effects of such emissions on the Coast are relatively minor. The promotion of a national approach in Method 8.5.8 recognises that the issue is not specific to this region and therefore more effective management through a coordinated approach is supported.

8.6 ANTICIPATED ENVIRONMENTAL RESULTS

8.6.1

No significant adverse effects from discharges of products of combustion on the health of people, animals and plants, property, amenity/cultural values, and values of Papatipu Runanga Ngai Tahu.

8.6.2

Increased promotion amongst the community of methods for preventing or minimising cumulative adverse effects arising from discharges from domestic fires and home heating appliances.

8.6.3

Increased promotion amongst industries in the region, of cleaner production practices for air discharges.

CHAPTER 9 GLOBAL ISSUES

9.1 BACKGROUND

Air pollution effects of global significance include

- Depletion of the ozone layer;
- Climate change through emission of greenhouse gases; and
- Acid rain.

In New Zealand only depletion of the ozone layer and climate change are global issues which may impact on the West Coast region and, therefore, are the only two covered in this discussion.

9.1.1 THE DISCHARGE OF OZONE DEPLETING SUBSTANCES TO AIR

The ozone layer in the atmosphere helps to protect life forms from the harmful effects of excessive ultra violet radiation. The emission of ozone depleting substances, commonly found in older model refrigerators, air conditioners, aerosols and fire extinguishers, cause the ozone layer to be broken down. This is likely to lead to an increase in biologically damaging ultra violet radiation and skin cancers, as well as adversely affecting the plankton component of the food chain.

New Zealand is a signatory to international conventions which aim to eliminate the use and emissions of ozone depleting substances, principally chlorofluorocarbons (CFCs) but also other substances such as halons used for fire extinguishers, carbon tetrachloride used for dry cleaning, and hydrochlorofluorocarbons (HCFC's) and methyl bromide. The Ozone Layer Protection Act 1996 is a means for implementing those conventions, by providing for restrictions on substances and goods, including the phasing out of imports into New Zealand of ozone depleting substances, except where they are necessary for health and safety.

Alternative substances to those that cause ozone depletion are available, but these are more expensive. This is likely to lead to increased recycling of CFCs from decommissioned refrigerators and air conditioning systems, especially from industrial or commercial users. Air conditioned cars and household refrigerators by comparison contain insignificant quantities of CFC.

9.1.2 THE DISCHARGE OF GREENHOUSE GASES INTO AIR

The principal greenhouse gases are water vapour, carbon dioxide, methane, nitrous oxide, ozone and chlorofluorocarbons. Over the past thirty years it has been evident that humans have increased the quantity of carbon dioxide and other "greenhouse gases" in the atmosphere. The gases emitted from motor vehicles contribute to the greenhouse effect. New Zealand is one of the few developed countries that does not yet have emission standards for motor vehicles.

The emission of these gases affects the earth by changing the atmospheric chemistry in ways that either allow more of the sun's radiation to reach the surface of the earth, or increase the ability of the atmosphere to retain heat, trapping heat in the earth's atmosphere.

The adverse effects associated with this "greenhouse effect" include a rise in sea level and the associated risk of coastal erosion and inundation in low lying areas. A precautionary approach should be adopted towards development in the coastal environment. Such downstream effects are covered in the Regional Coastal Plan.

In ratifying the UN Framework Convention on Climate Change, New Zealand accepted a commitment to enhance greenhouse gas sinks, as well as reduce greenhouse gas emissions, and to promote other greenhouse gas reductions.

9.2 ISSUE

- 9.2.1 The adverse effects on the environment from the discharge of ozone depleting substances into air.
- 9.2.2 The adverse effects of the emission of greenhouse gases on climate change.

9.3 OBJECTIVE

9.3.1 The reduction and minimisation of adverse effects from discharges of contaminants to air of global significance, such as ozone depleting substances or greenhouse gases.

9.4 POLICIES

9.4.1 To promote the reduction of discharges of ozone depleting substances.

Methods 9.5.1 – 9.5.7

Explanation

New Zealand has ratified an international agreement to reduce emission of ozone depleting substances. This policy reflects that it is desirable to minimise them wherever possible.

9.4.2 To promote the reduction of emissions of greenhouse gases.

Methods 9.5.8 – 9.5.12

Explanation

As it is widely accepted that greenhouse gases are detrimental to the environment, it is desirable to reduce their emission wherever possible. This would include promotion to help reduce greenhouse gas emissions from motor vehicles and combustion of fossil fuels. This policy aligns with the Government's commitment to stabilise net carbon dioxide emissions at 1990 levels by the year 2000.

- 9.4.3 Cumulative effects. Before granting a resource consent for the discharge of greenhouse gases to air from heat devices on a site, the regional council must:
- (a) consider the total discharges of greenhouse gases from all heat devices on the site that the application relates to; and
- (b) recognise that, cumulatively, all discharges of greenhouse gases resulting from the production of industrial process heat, regardless of volume, contribute to climate change, and any reduction in greenhouse gas emissions contributes to mitigating climate change.

Terms used in this policy and defined in the Resource Management (National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat) Regulations 2023 have the meaning in those regulations.

- 9.4.4 Updating emissions plans. When considering an emissions plan as part of an application for a resource consent for a restricted discretionary activity relating to discharges to air of greenhouse gases from heat devices, the consent authority must consider:
- (a) the timing and content of updates of the emissions plan to be made by the holder of the consent; and
- (b) how those updates will reflect changes in technology and best practices.

Terms used in this policy and defined in the Resource Management (National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat) Regulations 2023 have the meaning in those regulations.

9.5 METHODS

9.5.1 Policy 9.4.1 The Council will advocate that New Zealand and overseas sources of information on ozone layer thickness and UVB radiation levels make their information publicly available. 9.5.2 The Council will promote the recovery, reuse and recycling of ozone Policy 9.4.1 depleting substances and encourage the use of alternative technologies where appropriate 9.5.3 The Council will liaise with the Ministry of Commerce and the Policy 9.4.1 Ministry for the Environment to ensure consistency with central government initiatives. 9.5.4 The Council will promote and advocate the establishment of a West Policy 9.4.1 Coast collection facility of ozone-depleting refrigerants in conjunction with territorial authorities, industry and the Ministry for the Environment. 9.5.5 Policy 9.4.1 The Council will support any national and international initiatives to limit emissions of ozone depleting substances. 9.5.6 The Council will encourage those who fit, service, repair or Policy 9.4.1 decommission refrigeration plants to develop and follow industry codes of practice such as the Automotive Air Conditioning Code of Practice (Motor Trade Association) in order to reduce emissions of ozone-depleting refrigerants. 9.5.7 The Council will consider rates relief or other economic instruments to Policy 9.4.1 encourage collection of ozone depleting substances. 9.5.8 The Council will promote voluntary initiatives with industry which Policy 9.4.2 reduce the production of greenhouse gases and encourage energy efficiency measures. 9.5.9 The Council will produce and distribute educational material on the Policy 9.4.2 need to reduce greenhouse gases, including information on energy efficiency and conservation.

9.5.10

The Council will advocate that central government investigate vehicle emissions, the use of alternatives fuels, and the retention of public transport subsidies. National guidelines or initiatives to limit emissions from motor vehicle exhausts will be supported.

Policy 9.4.2

9.5.11

The Council will promote waste management practices that reduce greenhouse gas emissions, in particular the collection and utilisation of landfill gases.

Policy 9.4.2

9.5.12

The Council will complement the provisions of this Plan with the provisions in other regional plans, for example the Regional Plan for Discharges to Land for landfill gas provisions, and the Regional Coastal Plan for provisions for building in the coastal zone.

Policy 9.4.2

PRINCIPAL REASONS

These issues of air pollution that have global significance are assessed on a national rather than regional basis. A consistent approach to management of emissions is required and, therefore, a nationally coordinated approach is supported in this Plan.

Regulation at a regional level is therefore not considered appropriate as a method of implementing the policies relating to global issues. Central government has already comprehensively addressed ozone depletion through the Ozone Layer Protection Act 1996 and Regulations.

Given this, the Regional Council has chosen to implement education and promotion programmes aimed at increasing awareness of the concerns over use of ozone depleting substances, and alternatives to their use. The Regional Council may also consider the use of economic instruments, such as the use of rates relief to encourage the collection of ozone depleting substances.

As with the control of ozone depleting substances, central government is also mainly responsible for giving the direction on the control of the emission of greenhouse gases.

The methods incorporated into this Plan for implementing policies on greenhouse emissions are primarily those that the Regional Council would implement to give effect to central government policy on vehicle emissions and greenhouse gases.

9.6 ANTICIPATED ENVIRONMENTAL RESULTS

9.6.1

Increased promotion of recovery, reuse and recycling of ozone depleting substances.

9.6.2

Increased education amongst the community about the need to reduce greenhouse gases and be energy efficient.

CHAPTER 10 REGIONAL RULES

This section sets out the regulatory approach that the Regional Council intends to take in terms of achieving the objectives and policies outlined in Chapters 5 - 9. A full description of the Resource Consent Process is provided in Chapter 11.

10.1 REGIONAL RULES

Each rule specifies activities which are permitted, controlled, discretionary or prohibited. The rules are followed by explanations which set out why particular activities require the level of control specified.

- If the activity is **permitted**, then it can take place without a resource consent from the Regional Council, provided any conditions specified in the rule are met.
- If the activity is **controlled**, then it cannot take place without a resource consent. The activity will have to comply with any standards and terms set out in the rule. While the Council cannot refuse consent, it can impose conditions on the matters over which it has, through the rule, reserved control.
- If the activity is discretionary, then it requires a resource consent.
 The activity will also have to comply with any standards and terms
 set out in the rule, and the Regional Council has discretion to grant
 or refuse the consent.
- If the activity is expressly **prohibited** by a rule in this Plan, it cannot take place, and no resource consent may be granted authorising it.

Refer to Appendix 1 for the legal definitions of permitted, controlled, discretionary, non-complying and prohibited activities.

The resource consents required by the rules in this Plan are:

- **Air discharge permits** for discharges to air on the landward side of the Coastal Marine Area; or
- Coastal permits for discharges to air in the Coastal Marine Area.

Regional rules have the force of regulations made under the RMA. The enforcement provisions of the RMA may therefore be applied if rules are breached. If no rule provides for the activity you wish to undertake:

• The discharge is a discretionary activity (Rule 16) if it occurs from any industrial or trade premises; or

 The discharge is permitted if it occurs from any non-industrial or non- trade premises (but note that the general duty of Section 17 of the RMA to avoid, remedy or mitigate any adverse effects still applies).

The rules contained in this Plan do not replace other legislation or regulations relating to discharges to air. Individuals or organisations responsible for discharges to air should ensure their compliance with all other relevant legislation. Similarly, the rules in this Plan do not replace any code of practice which has been adopted to manage activities with the potential to release contaminants into air by various industries. However, in the event of any contradiction with any codes of practice, the rules in the Plan prevail.

The rules contained in this Plan only relate to discharges to air. They do not cover other aspects of an operation, such as the discharge of waste water to a water body or the discharge of contaminants to land. The rules in this Plan do not preclude the need to apply for any other relevant resource consents. For example, as well as requiring a resource consent to discharge to air, a factory farm may also require a resource consent from the Regional Council to discharge treated effluent to water and may also require resource consents for land use from the relevant territorial authority.

Under Section 139 of the RMA, a person who proposes or is carrying out a permitted activity can apply to the consent authority for a certificate of compliance to show that the proposal or activity complies with the Plan in relation to the location. An administrative charge will apply when a certificate of compliance is issued.

It is important to note that there may be provisions in other regional plans which apply to a particular activity, and they should therefore be referred to before commencing a permitted activity under this plan.

10.2 NOXIOUS, DANGEROUS, OFFENSIVE AND OBJECTIONABLE EFFECTS

Several permitted activity rules in this Plan use the terms "noxious", "dangerous", "offensive", and "objectionable". These terms are also included in Section 17 of the Resource Management Act 1991. They are not, however, defined in the Act and this means that their common English dictionary meaning applies.

The terms are not defined in the Glossary to this Plan because of the need to take account of case law precedent as it develops. The Plan cannot override interpretations decided by the judiciary.

The following notes are intended to provide some guidance for interpreting these terms:

Noxious, dangerous – The Concise Oxford Dictionary defines "noxious" as "harmful, unwholesome". "Dangerous" is defined as "involving or causing exposure to harm."

Offensive, objectionable – "Offensive" is defined as "...giving or meant or likely to give offence....disgusting, foul smelling, nauseous, repulsive...". "Objectionable" is defined as "open to objection, unpleasant, offensive."

Case law has established that what may be offensive or objectionable under the Resource Management Act 1991 cannot be defined or prescribed except in the most general of terms. Each investigation of a complaint concerning offensive or objectionable discharges will depend upon the specific circumstances.

For claims of offensive or objectionable effects, the following approach will be taken:

- a. An assessment of the situation will be made by one or more authorised Council officers with, for example, current accreditation in recognised Odour Sensitivity Assessment procedures, taking into account factors such as the FIDOL factors and sensitivity of the receiving environment, and relevant Codes of Practice for air discharges;
- b. If the discharge is deemed to be offensive or objectionable by the Council officer, the discharger will be asked to take whatever action is necessary to avoid, remedy or mitigate the effects of the discharge;
- c. If the Council officer's assessment is disputed or the problem is ongoing, a number of approaches may be taken, including one or more of the following:
 - Asking the discharger to keep a complaints register;
 - Asking persons affected to keep a diary of details of offensive or objectionable effects;
 - Promoting consultation between the discharger and the affected community;
 - Undertaking further investigation using other Council staff or independent consultants;
- d. If the discharge continues to be offensive or objectionable and the permitted activity rule is not complied with, then a resource consent is required, and formal enforcement action may also be taken.

10.3 RULES TABLE

PERMITTED	CONTROLLED	DISCRETIONARY	PROHIBITED
RULE 1	RULE 14	RULE 16	RULE 17
Pig Farm Effluent	Discharges from	General Discretionary	Combustion of
	Fuel Burning	Activities	Specified
	Equipment		Materials
RULE 2	RULE 15		
Discharges to Air from	Abrasive Blasting		
Production Land	Tiorasive Blasting		
RULE 3			
Stockpiling, Conveying			
and Handling			
RULE 4			
Road and Railway			
construction and			
maintenance			
RULE 5			
Earthworks, Quarrying,			
Mining and Cleanfill			
Operations			
RULE 6			
Abrasive Blasting, other			
than using a Moveable			
Source			
RULE 7			
Operation of Moveable			
Aggregate Crushing			
and Screening Plants RULE 8			
Combustion of Organic			
Waste Value of Organic			
RULE 9			
Discharges from Small-			
Scale Fuel Burning			
Equipment			
RULE 10			
Discharge of Water Vapour			
RULE 11			
Discharges of Heat and			
X- Rays			
RULĚ 12			
Discharges into Air for			
the Purpose of Ventilation			
RULE 13			
Miscellaneous			
Permitted Activities			
1 chilitica Activities			

10.4 PERMITTED ACTIVITIES

RULE 1 PIG FARM EFFLUENT

The discharge of any contaminant into air arising from management and application of pig farm effluent where the effluent arises from the use of land as production land or intensive farming on the property is a **permitted activity** provided that the following conditions are met:

- a) no pig farm effluent is discharged within:
- □ 2,000 metres of a residential zone in an urban area;
- □ 1,000 metres of an urban area, a rural residential area, a marae, public hall, church, or school;
- □ 500 metres of a rural residence (other than that occupied by the discharger);
- □ 20 metres of a public road; and
- b) any discharge is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property.

Advisory Notes:

- 1. This Rule applies only to discharges to air. There are additional requirements in the Regional Plan for Discharges to Land, and therefore this Plan should be consulted.
- 2. This Rule includes discharges to air from anaerobic and aerobic pond processes or spray irrigation processes.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: The buffer zone distances described above are designed to minimise the potential for odour from piggery effluent beyond the boundary of the subject property, through the management of effluent in relation to potentially sensitive areas. Consent will not be required where these can be met.

These distances are derived from the Code of Practice – Pig Farming (New Zealand Pork Industry Board, 1993) and recognise that adverse effects on amenity from odour will vary depending on the receiving environment, for example, a residential area will be more sensitive to such odour than a rural area.

The Rule applies to discharges of pig effluent which is collected or otherwise managed and disposed of as a point source discharge. The Rule does not apply to effluent discharges from individual animals direct to land.

RULE 2 DISCHARGES TO AIR FROM PRODUCTION LAND

Unless covered by another Rule in this Plan, the discharge of any contaminant into air arising from:

- 1. the disposal of solid contaminants into or onto land from the use of land as production land where the waste is generated on the same property; or
- 2. other on-farm processes, such as, but not limited to, silage production; or
- 3. the application of organic fertilisers such as fish wastes to land;

is a **permitted activity** provided that the following conditions are met:

- a) any discharge of odour is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property; and
- b) there is no discharge of dust beyond the boundary of the subject property.

Advisory Notes:

This rule does not cover the burning of domestic and on-farm wastes. It should also be noted that there may be additional requirements in the Regional Plan for Discharges to Land for activities covered by this Rule.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: The adverse effects of any discharges to air associated with solid waste management on production land, where that waste is generated only on that property, are only minor. This includes discharges to air from on-farm offal pits and farm tips. Conditions are included in this rule to control odour and dust problems from these activities.

The Rule also permits discharges to air from both the application of organic fertilisers such as fish wastes to land, provided that the adverse effects of such practices, including the potential for offensive or objectionable odour beyond the boundary, are avoided. There are additional controls on these activities in the Regional Plan for Discharges to Land, to manage the adverse effects of these practices on soil and water. The adverse effects on air quality of these activities will be minor provided that the conditions are met.

The terms "offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air from production land is having a more than minor adverse environmental effect.

RULE 3 STOCKPILING, CONVEYING AND HANDLING

Unless covered by another rule in this Plan, the discharge of any contaminant into air arising from the stockpiling, conveying and handling of gravel, sand, soil, rock, coal, sawdust or wood chips, is a **permitted activity** provided that the following conditions are met:

- a) there is no discharge of dust beyond the boundary of the subject property, and
- b) any discharge of odour is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property.

Advisory Notes:

This rule applies to discharges from the handling of materials to and from stockpiles and spoil dumps, including for example, sorting, loading, unloading, storage, hauling, and transportation on the site.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: This Rule permits discharges to air from the depositing, moving and handling of specified materials (gravel, coal, rock, soil and sand), provided that adverse effects such as dust and odour are avoided beyond the boundary of the site where the material is handled, conveyed or stockpiled. The Rule does not apply to discharges to air while these materials are being transported between sites, for example, by road or rail transportation. The rule also does not apply to air discharges from crushing of the listed materials.

The effect of this Rule is to permit discharges from stockpiles and related activities on industrial and trade premises, which would otherwise require consent, where the adverse effects are able to be controlled within the site boundary. Discharges that cannot meet the conditions require a resource consent, which allows consideration of the effects on a case-by-case basis.

This rule includes discharges from stockpiles and specified related activities of any scale at industrial or trade premises, production land and residential properties. Discharges from stockpiles of gravel during road and railway network construction and maintenance are excluded from this Rule as these activities are temporary and highly mobile in nature (refer to Rule 4). Any discharges to land or water from stockpiling are not covered by this Rule. These may require separate discharge consents. The terms "offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air from stockpiling or associated conveying or handling activities is having a more than minor adverse environmental effect.

RULE 4 ROAD AND RAILWAY CONSTRUCTION AND MAINTENANCE

The discharge of any contaminant into air arising from road and railway network construction and maintenance is a **permitted activity**, provided that the following condition is met:

 a) any discharge of smoke, odour or dust is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (see Rule 16).

See Rule 16

Explanation: Discharges to air from road and railway network construction and maintenance activities such as stockpiling, spoil dumps and earthworks are mobile and generally temporary in nature, and therefore have minor effects provided condition a) is complied with. For the purposes of this Rule, railway network construction and maintenance refers to activities such as work on railway tracks, signals, crossings, bridges and poles. The Rule does not apply to earthworks on industrial and trade premises for other rail transport services such as coal handling facilities.

"Road construction and maintenance" means the activity of construction and maintenance itself, and does not include discharges from industrial or trade premises, for example those that manufacture or supply roading materials. This Rule also does not apply to non-point source discharges of dust from traffic use of unsealed roads other than on industrial or trade premises. Discharges from traffic use of unsealed roads outside industrial and trade premises are not covered by this Plan.

The terms "offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air from road or railway construction or maintenance is having a more than minor adverse environmental effect.

RULE 5 EARTHWORKS, QUARRYING, MINING AND CLEANFILL OPERATIONS

Unless covered by another Rule in this Plan, the discharge of any contaminant into air arising from earthworks, quarrying operations, mining, or cleanfill operations is a **permitted activity** provided that the following conditions are met:

- a) any discharge of smoke, dust, gas or odour is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property; or
- b) in the case of public amenity areas, any discharge of smoke, dust, gas or odour is not offensive or objectionable beyond the boundary or beyond 50 metres of the discharge, whichever is the lesser.

If an activity is unable to meet the conditions of this Rule, then it is a discretionary activity (See Rule 16).

See Rule 16

Explanation: This Rule permits discharges to air from specific activities which are carried out in the region, provided that adverse effects are avoided. Where discharges to air from earthworks, quarrying, mining and cleanfill operations can be controlled within the site boundary, consent is not required. If these conditions cannot be met, resource consent will be required in accordance with Rule 16. Site-specific controls on the adverse effects will be placed on the activity through resource consent conditions.

The effect of this Rule is to permit minor discharges from activities that would otherwise require consent, where the adverse effects are able to be controlled.

Condition b) recognises that on public amenity areas, air discharges from activities covered by this rule are unlikely to affect adjoining landowners or visitors who are some distance from the activity site. Any adverse effects of air discharges would occur within the area around the activity site. Therefore, the condition specifies distances from the activity site within which adverse effects should be controlled. Condition b) applies to mining within mining licence areas in public amenity areas.

The terms "offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air from earthworks, quarrying, mining or cleanfill operations are having a more than minor adverse environmental effect.

See Section 10.2

For the purposes of Rule 5, mining includes prospecting, exploration and gravel extraction, but does not include aggregate crushing or screening.

RULE 6 ABRASIVE BLASTING, OTHER THAN USING A MOVEABLE SOURCE

The discharge of any contaminants into air from abrasive blasting, other than from the use of a moveable source, is a **permitted activity** provided that the following conditions are met:

- a) the discharge does not result in any noxious or dangerous levels of airborne contaminants beyond the boundary of the subject property;
- b) when using wet abrasive blasting techniques, there is no discharge of water spray beyond the boundary of the subject property;
- c) there is no discharge of dust beyond the boundary of the subject property; and
- d) sand or and other material used for abrasive blasting contains not more than 5% free silica on a dry weight basis.

Advisory Note:

This Rule does not address the effects of discharges to water or onto land from abrasive blasting. There may be additional requirements in other Regional Plans for these discharges.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: The dust from abrasive blasting contains materials from the surface being blasted and from the abrasive being used in the process. The contaminants in such discharges can create significant adverse effects on human health, amenity values and flora and fauna. This rule seeks to ensure that the discharge of these materials into air is strictly controlled on a site used for abrasive blasting.

Conditions are included which control noxious or dangerous effects and ensure that the activity does not cause dust or spray drift nuisance to adjoining properties, for example with the use of blasting booths. Where there may be adverse effects beyond the boundary, resource consent will be required, enabling management of these off-site effects. Condition (c) refers to both suspended and deposited dust.

Abrasive blasting regulations control the free silica content of sand used in abrasive blasting, with the local Medical Officer of Health able to approve sand with a high free silica content. However, these controls relate to the health and safety of employees, and not to the adverse effects on the environment in general. Free silica can have significant adverse effects on the health of humans and animals. For this reason an upper limit of 5% free silica has been set in this Rule to require operators to use low silica or silica free blasting methods if they wish to comply with the permitted activity rule.

RULE 7 OPERATION OF MOVEABLE AGGREGATE CRUSHING AND SCREENING PLANTS

The discharge of any contaminant into air associated with the operation of a moveable aggregate crushing and screening plant is a **permitted activity** provided the following conditions are met:

- a) any discharge of dust or water spray is not offensive or objectionable beyond the boundary of the subject property; or
- b) in the case of public amenity areas, any discharge of dust or water spray is not offensive or objectionable beyond the boundary or beyond 50 metres of the discharge, whichever is the lesser.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: This rule provides for the use of moveable aggregate crushing and screening plants. The effects of discharges from moveable plants are temporary and small scale compared to permanent crushing and screening plants, which are generally larger scale operations and can have frequent effects of greater intensity over longer periods of time. To prevent the creation of nuisance to adjacent properties, moveable plants are required to operate without causing dust or spray nuisance to adjacent property owners or occupiers. Where these adverse effects cannot be contained, resource consent is required, and additional conditions may be imposed.

Condition b) recognises that on public amenity areas, air discharges from activities covered by this rule are unlikely to affect adjoining landowners or visitors who are some distance from the activity site. Any adverse effects of air discharges would occur within the area around the activity site. Therefore, the condition specifies distances from the activity site within which adverse effects should be controlled.

The terms "offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air from moveable aggregate crushing or screening plants is having a more than minor adverse environmental effect.

RULE 8 COMBUSTION OF ORGANIC WASTE

Unless covered by another rule in this Plan, the discharge of any contaminants into air arising from the combustion of:

- 1. Organic waste from industrial or trade premises, using fuel burning equipment; or
- 2. Organic waste from any other place or any other source (excluding inside domestic fires and outside domestic fires);

is a **permitted activity** provided that the following conditions are met:

- a) the waste to be burned has originated on the property on which the burning will occur;
- b) the waste to be burned does not contain any offal (except offal generated on production land);
- c) any discharge of smoke is not offensive or objectionable beyond the boundary of the subject property, does not adversely affect traffic safety by reducing visibility, and does not reduce the visibility on any public amenity areas;
- d) any deposition of particulate matter on any land or structure is not offensive or objectionable beyond the boundary of the subject property; and
- e) any discharge of odour is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property.

Advisory Notes:

Section 2 of this Rule covers discharges to air from land clearance of production and forested land using burn-offs. Additional provisions relating to the actual clearance of land may be contained in other regional and district plans.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: This rule provides for the discharge of the products of combustion of organic waste in particular circumstances from industrial or trade premises and other sources. Where systems can meet the conditions, they will generate few adverse effects on the environment. The Rule includes sources of combustion such as incinerators that burn organic waste, or clearance of production land by burn offs.

The Rule does not apply to discharges from burning of organic waste in inside domestic fires or outside domestic fires. These activities are not covered by any rules in this Plan. Refer to Chapter 8 of this Plan for an explanation of territorial authorities' responsibilities under the Health Act 1956 for managing nuisance discharges from outside domestic fires.

See Rule 17

This rule includes conditions addressing any occasional problems associated with odour and smoke drift that may arise and cause a nuisance to neighbours. Consent is required where these cannot be met.

The terms "offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air from combustion of organic waste is having a more than minor adverse environmental effect.

RULE 9 DISCHARGES FROM SMALL-SCALE FUEL BURNING EQUIPMENT

The discharge of any contaminants into air from any industrial or trade premises or any other source (excluding any inside domestic fire or outside domestic fire), from fuel burning equipment used in accordance with the following specified fuels and rates of heat release at the point of discharge:

- 1. Natural or liquefied petroleum gas at a rate not exceeding 5MW; or
- 2. Coal, oil (excluding waste oil) or untreated wood at a rate not exceeding 40kW;

is a **permitted activity** provided that the following conditions are met: a) the discharge is from a chimney;

- a chimney discharging any products of combustion from fuel burning equipment is designed so that the discharge is vertically upwards and unimpeded by cowls or any other fixtures on the top of the stack, except that coning may be used to increase the discharge velocity;
- c) any discharge of smoke is not offensive or objectionable beyond the boundary of the subject property, does not adversely affect traffic safety by reducing visibility, and does not reduce the visibility on any public amenity area or any place, area or feature of special significance to Poutini Ngai Tahu;
- d) any deposition of particulate matter on any land or structure is not objectionable beyond the boundary of the subject property; and
- e) any discharge of odour is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: This rule provides for minor discharges of smoke and other products of combustion from small-scale fuel burning equipment. The rate of 40 kW reflects the levels that were permitted as having minor effects under the provisions (now repealed) of the Clean Air Act. The rate of 5MW allows for a higher heat release rate where cleaner-burning fuels with lower levels of contaminants are used. The heat release rate can be determined by the manufacturers specifications for the burner, the volume of fuel used, or it can be calculated at the point of discharge.

The effect of this Rule is to permit these minor discharges that would otherwise require consent under the RMA, where the adverse effects are able to be controlled.

Most systems of this scale generate few adverse effects on the environment apart from occasional problems associated with odour and smoke drift which may cause a nuisance to neighbours. This rule includes conditions addressing these problems.

The Rule does not apply to the use of fires or fuel burning appliances in dwelling houses for domestic heating. presumption under the RMA is that such discharges from domestic sources are permitted. It is unnecessary for discharges from smallscale burners used on industrial and trade premises with a similar level of minor effects to discharges from domestic burners to be managed differently in the region.

The terms "offensive or objectionable" are from Section 17 of the See Section 10.2 Resource Management Act 1991, and provide criteria to assess whether a discharge to air from small scale fuel burning equipment is having a more than minor adverse environmental effect.

RULE 10 DISCHARGE OF WATER VAPOUR

The discharge of water vapour, including steam, into air is a **permitted activity** provided that the following conditions are met:

- a) any plume does not adversely affect traffic safety by reducing visibility, and does not reduce the visibility on any public amenity areas:
- b) any discharge of odour is not noxious, dangerous, offensive or objectionable beyond the boundary of the subject property.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: This rule provides for the discharge of water vapour. This activity is unlikely to have any adverse effects provided any plume or water vapour does not cause a traffic hazard, and does not produce an offensive or objectionable odour.

The terms "offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air of water vapour is having a more than minor adverse environmental effect.

See Section 10.2

RULE 11 DISCHARGES OF HEAT AND X-RAYS

Any discharge into air of:

- 1. heat into air, including air from heat exchangers and air used for the purpose of cooling plant and equipment; or
- 2. x-rays from a radioactive source;

is a permitted activity.

Explanation: The discharge of heat into the air is covered in the definition of a "contaminant" under the RMA. This rule provides for such discharges to be permitted, as heat disperses rapidly in the air. These discharges of heat, without any products of combustion, will have little or no effect on ambient air quality.

Energy is also defined as a "contaminant" under the RMA. However, this rule does not apply to the release of electromagnetic fields associated with electricity transmission lines, or the release of electromagnetic radiation from radio and television transmitters, microwave dishes, cell phone towers, and other sources. Electromagnetic radiation and fields are not considered to be a contaminant under Section 2 of the RMA (MFE, MOH, 2000). Therefore, these discharges are not covered by this Plan. As such sources are found throughout the country, the effects of discharges of energy from such appliances and equipment are more appropriately addressed at a national level. The siting of individual premises is provided for through district plan rules and district land use planning consents.

This rule also provides for the release of X-rays. X-rays are released in a range of industrial processes used for testing the integrity of pipes, welding and structures. The control of radiation is administered by the National Radiation Laboratory. Permitting these activities avoids the duplication of current legislative requirements and controls relating to radiation.

RULE 12 DISCHARGES INTO AIR FOR THE PURPOSE OF VENTILATION

The discharge of any contaminant into air for the purpose of ventilation from:

- 1. any industrial or trade premises, any medical premises or any educational institution; or
- 2. tanks used for the storage of liquids, including petrol and diesel oil storage tanks on any industrial or trade premises; or
- 3. the venting of gas pipelines, pumps, compressors, tanks or associated equipment when refilling, servicing or repairing, on industrial or trade premises:

is a **permitted activity** provided that the following conditions are met:

- a) the discharge does not result in any noxious or dangerous levels of airborne contaminants beyond the property boundary of the subject property;
- b) there is no visible discharge owing to the presence of dust, fumes or water vapour; and
- c) any discharge of odour is not offensive or objectionable beyond the boundary of the subject property.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: The purpose of this rule is to provide for the discharge of contaminants into air associated with ventilation from specified premises. Most ventilation generates negligible or minor adverse effects on the environment, provided certain environmental conditions can be met. These conditions are concerned with addressing the potential effects of the discharge beyond the boundary. On-site effects are generally managed under other legislation, such as the Health and Safety in Employment Act 1992.

The terms "noxious, dangerous, offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air from ventilation is having a more than minor adverse environmental effect.

See Section 10.2

RULE 13 MISCELLANEOUS PERMITTED ACTIVITIES

Unless covered by another rule in this Plan, the discharge of any contaminant into air from any of the following industrial or trade premises or processes:

- 1. premises engaged in the retail and wholesale distribution of automotive fuels, oils, liquefied gases and gases;
- 2. premises engaged in the retail and wholesale distribution of fuels used for industrial processing and/or home heating
- 3. premises associated with funeral parlours, chapels, crematoria, or stonemasons:
- 4. premises associated with the manufacture of household, industrial, electrical and garden equipment and appliances, but excluding the manufacture of concrete products, rubber goods and processes involving the galvanising of steel;
- 5. premises used for the storage, blending and distribution of animal feeds and gardening materials (excluding fertilisers);
- 6. premises used for the printing and manufacture of packaging materials, or printing of paper;
- 7. premises used solely for animal slaughtering;
- 8. premises used for powder coating and spray painting;
- 9. premises used for the manufacture of furnishings, clothing and carpets, but excluding rubber underlay;
- 10. premises used for the sale, servicing, or repairs to motor vehicles, trailers, boats or like equipment, including body and engine repairs, panel beating and fibre-glassing;
- 11. premises associated with the manufacture, restoration or finishing of items made from wood, including cabinet making, furniture making and wood crafts;
- 12. premises associated with the operation of dry cleaning, dying, laundering and cleaning facilities;
- 13. premises used for the manufacture of beverages, including soft drinks, extraction of fruit juices, fermentation of wine, distillation of spirits, and alcoholic beverages;
- 14. premises used for the processing of food, including baking, cooking, frying, freezing and canning, but excluding rendering;
- 15. premises used for the storage of foods in refrigerated units;
- 16. processes for timber treatment and drying;
- 17. building and construction activities on industrial or trade premises;

is a **permitted activity** provided that the following conditions are met:

- a) the discharge does not result in any noxious or dangerous levels of airborne contaminants beyond the boundary of the subject property;
- b) in the case of public amenity areas, the discharge does not result in any noxious or dangerous levels of airborne contaminants beyond the boundary of the public amenity area or beyond 50 metres of the discharge, whichever is the lesser;

- c) the opacity of any discharge of smoke when measured at the point of entry to the atmosphere does not exceed 20% except that a discharge in excess of this is permitted for a period of not more that two minutes continuously or for an aggregate of four minutes in any 60 minute period;
- d) there is no visible discharge of any contaminant beyond the boundary of the subject property, other than smoke from fuel burning equipment or water vapour;
- e) any discharge of odour is not offensive or objectionable beyond the boundary of the subject property;
- f) any discharge of dust is not offensive or objectionable beyond the boundary of the subject property;
- g) in the case of public amenity areas, the discharge of dust is not offensive or objectionable beyond the boundary of the public amenity area or beyond 50 metres of the discharge, whichever is the lesser.

If an activity is unable to meet the conditions of this Rule, then it is a **discretionary activity** (See Rule 16).

See Rule 16

Explanation: Unless covered by another Rule in this Plan, discharges to air from activities carried out on these premises do not require a resource consent, provided that they meet this set of stated conditions. These conditions relate to opacity of smoke, visibility of contaminants, odour, and dust. The discharger is also required to control adverse effects that may occur beyond the boundary of the property. If the conditions controlling adverse effects, including off-site effects, can be met by the discharger, then it is unnecessary to require consent.

Where the conditions are not being met, consent may be required for the discharge in accordance with Rule 16. Enforcement provisions are also available to the Council under the Act. There may also be other issues associated with these activities, which are addressed by different agencies through other legislation. This Rule does not preclude the need to comply with any other such requirements.

See Rule 16

Conditions b) and g) recognise that on public amenity areas, air discharges from industrial and trade processes covered by this rule are unlikely to affect adjoining landowners or visitors who are some distance from the activity site. Any adverse effects of air discharges would occur within the area around the activity site. Therefore, the conditions specify distances from the activity site within which adverse effects should be controlled.

The terms "noxious, dangerous, offensive or objectionable" are from Section 17 of the Resource Management Act 1991, and provide criteria to assess whether a discharge to air from the activities listed is having a more than minor adverse environmental effect.

See Section 10.2

10.5 CONTROLLED ACTIVITIES

RULE 14 DISCHARGES FROM FUEL BURNING EQUIPMENT

The discharge of any contaminants into air from any industrial or trade premises or any other source, from fuel burning equipment used for the purpose of generating heat or electricity in accordance with the following specified fuels and rates of heat release:

- 1. natural or liquefied petroleum gas at a rate exceeding 40 kW, and not exceeding 50 MW; or
- 2. untreated wood, coal or oil at a rate exceeding 40 kW, and not exceeding 10 MW;

where the rate specified under these individual classes apply to the cumulative generated heat or electricity provided by the specified fuel within the same premises, is a **controlled activity**.

The Regional Council has reserved control over the following matters:

- a) Chimney height and design;
- b) Emission rate and type of contaminants
- c) Opacity of the discharge
- d) Use and maintenance of the fuel burning equipment;
- e) Duration of the resource consent;
- f) Monitoring and reporting requirements
- g) Review conditions of the resource consent.

Applying for a Resource Consent

An application for a resource consent under Rule 14 shall be made on the prescribed form, and shall include the matters set out in Chapter 11 of this Plan.

See Chapter 11

Explanation: This rule establishes a controlled activity rule for the burning of natural or liquefied petroleum gas, coal or oil, or untreated wood, where the rate of energy release is greater than 40 kW, but not more than 50 MW for gas, and 10MW for coal, oil and untreated wood. These limits recognise that certain types of fuels release different levels and types of contaminants, beyond which there may be more than minor adverse effects on the environment. The heat release rate can be determined by the manufacturers specifications for the burner, the volume of fuel used, or it can be calculated at the point of discharge.

The combustion of treated wood is specifically excluded from this rule as the use of this material as a fuel may generate significant adverse effects on the environment.

The matters which Council reserves its control over enables the Regional Council to assess the effects of the activity on a case by case basis, and attach conditions which are appropriate to the nature and scale of effects from the discharge. Conditions can include, for example, a minimum efflux velocity from chimney exits, based on an acceptable technical standard for promoting the adequate atmospheric dispersal of contaminants, and that the discharge from a chimney is unimpeded.

The discharge of smoke from a chimney is an indication of incomplete combustion, can affect the visual amenity of adjoining properties, and can result in the fall-out of particulate matter. To address this issue, conditions can be added specifying an upper limit to the opacity of discharges of combustion products into air. For example, an opacity of 20% at the point of discharge corresponds to the accepted definition of "light smoke", and is approximately equivalent to Ringelmann Shade No 1. The Ringelmann method of measuring opacity has qualified as a New Zealand Standard (NZS 5201 M-75).

The parameters involved with determining appropriate mitigation of effects can be diverse and complex. The most appropriate method of addressing this issue is to address all the variables through the controlled activity consent process. A consent must be granted, while the scope of the Council's control is limited to only addressing matters that are listed in the Rule.

RULE 15 ABRASIVE BLASTING

The discharge of any contaminant into air arising from abrasive blasting on industrial or trade premises or public amenity areas, using a moveable source and dry abrasive blasting techniques is a **controlled activity**.

The Regional Council has reserved control over the following matters:

- a) Notification of the location and duration of the activity;
- b) The provisions adopted to avoid any adverse effects on human health and the environment;
- c) The type of blasting material to be used;
- d) Management and storage of unused and waste blasting material;
- e) Disposal of used blasting material and debris;
- f) Screening requirements when blasting in the open air;
- g) Duration of the resource consent;
- h) Review conditions of the resource consent

Applying for a Resource Consent

An application for a resource consent under Rule 15 shall be made on the prescribed form, and shall include the matters set out in Chapter 11 of this Plan.

Subject to Section 94(5) of the Resource Management Act 1991, applications for resource consents under Rule 15 may be considered without notification or the need to obtain the written approval of any person.

Advisory Note:

Nothing in this Rule precludes persons from applying for a single permit to cover multiple locations.

Explanation: Dry abrasive blasting using a moveable source is a controlled activity owing to the difficulty of containing dust and blasting agent from these operations. Compared to sandblasting in permanent facilities, mobile sandblasting operations present an increased risk of operations occurring in sensitive environments and decreased opportunities for control.

This approach provides certainty for the applicant while allowing the Regional Council to assess the activity on a case-by-case basis and to formulate appropriate conditions to control the adverse effects on individual sites. Resource consent for mobile dry abrasive blasting can be issued on a region-wide basis to enable activities to be carried out at a range of known premises and locations or unspecified sites, subject to observance of conditions. Conditions can be attached to minimise adverse effects from a range of locations and in different circumstances.

See Chapter 11

10.6 DISCRETIONARY ACTIVITIES

RULE 16 GENERAL DISCRETIONARY ACTIVITIES

Any discharge of contaminants into air from:

- 1. any industrial or trade premises that is not specifically provided for by any rule within this Plan; or
- 2 any source (whether moveable or not), which does not comply with any condition of a permitted activity rule or any of the standards and terms of a controlled activity rule within this Plan, but which is not prohibited;

is a discretionary activity.

Applying for a Resource Consent

An application for a resource consent under Rule 16 shall be made on the prescribed form, and shall include the matters set out in Chapter 11 of this Plan.

See Chapter 11

Advisory Note:

Discharges of contaminants into air from commercial, industrial or trade premises which are not specifically provided for by any rule within this Plan, and are therefore discretionary activities requiring a resource consent include, but are not restricted to, discharges associated with the following:

- Landfills:
- Composting operations on industrial or trade premises;
- Septage or sludge management processes;
- Municipal sewage treatment processes;
- Combustion of treated wood in a purpose-built incinerator;
- Hazardous and medical waste incinerators;
- Manufacture of concrete products;
- Manufacture of rubber goods;
- Galvanising of steel;
- Manufacture of milk powder;
- Manufacture of fertiliser;
- Gravel crushing facilities;
- Rendering plants;
- Tanneries and skin or hide processing plants;
- Asphalt plants;
- Fumigation processes.

Explanation: Section 15(1)(c) of the RMA contains a presumption that, unless a regulation or a rule in a plan provides to the contrary, all discharges to air from industrial or trade premises require a resource consent. Part 1 of this rule applies to discharges from industrial or trade premises that do not come within the scope of the preceding rules.

Hence, discharge activities from industrial or trade premises that fall outside the scope of the permitted and controlled activity rules (i.e. are not mentioned or do not comply with the conditions or standards and terms within the rule) and that are not prohibited by Rule 17, will be considered under part 1 of this rule.

Discharges from non-industrial or trade premises (part 2 of the Rule) that are not covered by Rule 1-Rule 15, and are not prohibited by Rule 17, are permitted activities. If the discharge activity is mentioned by Rule 1 to Rule 15, but does not comply with conditions, or standards and terms in those rules, then they are discretionary (unless prohibited by Rule 17).

By classifying these discharges as discretionary, the Regional Council retains the ability to grant or decline a consent in accordance with the principles, objectives and policies that are contained in the Act and in the Plan. This approach allows for flexibility in managing discharges from industrial or trade premises, or discharges that cannot meet the permitted activity conditions, while retaining sufficient certainty for resource users.

10.7 PROHIBITED ACTIVITIES

RULE 17 COMBUSTION OF SPECIFIED MATERIALS

The discharge of any contaminant into air arising from the combustion of any of the following materials in the open (excluding outside domestic fires):

- Material associated with the recovery of metals from cables;
- Motor vehicles and vehicle parts;
- Combustion of any animal waste (excluding any animal waste generated on production land);
- Rubber:
- Waste oil and other waste petroleum products;
- Treated wood;
- Polyvinylchloride (PVC) plastic and plastics containing halogenated material;
- Chemical waste
- Contaminated material from a contaminated site;
- Materials containing mineral fibres including but not limited to asbestos;
- Paint, paint residues, and other surface coatings;
- Materials containing heavy metals;
- Pathological waste (excluding animal carcasses on production land);
- Sludge from industrial and trade processes;
- · Agrichemicals;
- Any material within a landfill;
- Nuclear material or waste;

except where waste material is being burned in accordance with quarantine requirements or waste oil is being burned in accordance with a Marine Oil Spill Strategy, is a **prohibited activity** for which no consent will be granted.

Advisory Note:

This Rule applies to open burning and burning in an incineration device other than in a purpose-built incinerator designed for the product(s) being burned and constructed by a registered manufacturer.

Explanation: Discharges from the combustion of wastes derived from animals, except on production land or a factory farm, have been prohibited owing to the high moisture content and potential for the generation of excessive smoke and objectionable odours.

The materials listed have been prohibited from open burning owing to their potential to result in noxious or dangerous levels of contaminants, for example, carcinogens and dioxins. These substances have potentially significant adverse toxic effects when discharged directly into the air, as they can accumulate in the food chain once the particles settle onto water, soil and vegetation, creating a risk to human health and the environment.

Open burning of these materials, and organic waste on industrial and trade premises, or anywhere else, does not allow the combustion process to be controlled sufficiently to avoid, remedy or mitigate adverse effects of the discharge to air on the receiving environment, and so no standards can be set. There are more appropriate means available for managing these materials.

The Rule applies to burning of the materials specified in the open or in home-made incinerators, other than in a purpose-built incinerator designed for the product(s) being burned and constructed by a registered manufacturer.

The Rule does not apply to discharges from open burning of organic waste in outside domestic fires. This activity is not covered by any rules in this Plan. Refer to Chapter 8 of this Plan for an explanation of territorial authorities responsibilities under the Health Act 1956 for managing nuisance discharges from outside domestic fires.

CHAPTER 11 RESOURCE CONSENT PROCEDURES

11.1 MAKING AN APPLICATION

Resource consents under this Plan are required for controlled, and discretionary activities. Application forms are available from the Greymouth office. Enquiries and correspondence can be directed to the Consent Section, West Coast Regional Council,

P O Box 66, Greymouth, or by phoning the Regional Council on 03-7680466.

11.2 NOTIFICATION OF RESOURCE CONSENT

Resource consent applications can be processed with or without public notification.

An application for a resource consent for a **controlled activity** in this Plan may not need to be notified if written approval has been obtained from every person who, in the opinion of the Council, may be adversely affected by the granting of the resource consent. Additionally, written approval of affected persons may not need to be obtained, or an application notified for a controlled activity if the Plan expressly allows Council to consider this. However, if the Regional Council considers that special circumstances exist in relation to any application for a controlled activity, the application may be publicly notified. Special circumstances will be assessed on a case-by-case basis.

An application for a resource consent for a **discretionary activity** in this Plan may also not need to be notified if written approval has been obtained from every person who, in the opinion of the Council, may be adversely affected by the granting of the resource consent. In addition, the Council will need to be satisfied that the adverse effects on the environment of the activity for which the consent is sought will be minor.

11.3 THE RESOURCE CONSENT PROCESS

The resource consent process differs depending on whether the application is notified or non-notified.

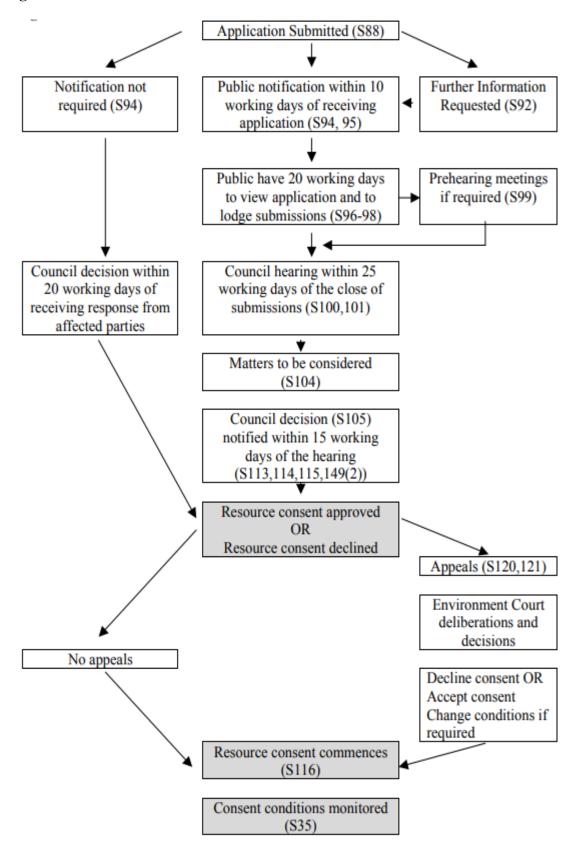
For notified resource consents, once an application has been lodged the consent authority has 10 working days to publicly notify the application and must allow 20 working days to receive submissions. The consent authority must then hold a hearing within 25 working days after submissions have closed, with at least 10 working days notice given of the time and place of the hearing. The consent authority then has 15 working days to make and notify a decision.

For non-notified resource consents the consent authority has 20 working days to make and notify a decision.

11.4 **JOINT HEARINGS**

A number of proposed developments include activities which may require consents from both the Regional Council and the relevant district council. In these circumstances, joint hearings are usually held, in which all consent application are heard together, thus avoiding unnecessary duplication of effort and delay for the application and any other interested parties.

Figure 1.0: The Resource Consent Process



CHAPTER 12 INFORMATION REQUIREMENTS

12.1 INFORMATION TO BE SUBMITTED WITH A RESOURCE CONSENT APPLICATION

Without limiting the relevant provisions of the RMA, all applicants for a resource consent to carry out an activity under the provisions of this Plan shall submit the following information with the resource consent application:

- 1. A description of the activity for which consent is sought, and its location, including plans of the site and all discharge points;
- 2. The nature of the discharge (contaminants, hazardous properties, etc), including:
 - a) The materials used in any process causing or contributing to the proposed discharge, including the quantities of materials used and, where applicable, their chemical properties; and
 - b) The volumetric flow rate, frequency, duration and timing of the proposed discharge, including any variations over time;
 - c) The constituents of the proposed discharge, and the concentrations of the major contaminants in the discharge, including any variations over time;
- 3. Any other resource consents required from territorial authorities or the Regional Council;
- 4. Names and addresses of property owners or occupiers likely to be directly affected by the proposed discharge;
- 5. A description of the consultation that has been undertaken in relation to the application, including the results of any consultation, the response of those consulted with, and the applicants response to those comments;
- 6. An assessment of any actual or potential effects that the activity may have on the environment, and the ways in which any adverse effects may be mitigated. This assessment is in such detail as corresponds with the scale and significance of the actual or potential effects that the activity may have on the environment, and is prepared in accordance with the Fourth Schedule of the RMA. In particular, the assessment of environmental effects shall focus on:
 - a) any adverse effects on:
 - Human health;
 - Amenity values;

- Resources or values of significance to the tangata whenua
- Soil, plants, animals, and ecosystems;
- Surface waterand groundwater;
- The coastal environment.
- b) the existing air quality, and any other sources of contaminants in the area;
- c) any cumulative effects which may arise over time or in combination with other effects
- d) any effects of low probability but high potential impact;
- e) any proposed measure to avoid, remedy or mitigate adverse effects;
- f) the proposed monitoring provisions; and
- g) any additional information that may be required in relation to applications for specific types of discharges. Council staff may be able to assist with the scope and contents of any additional information that may be required.

Advisory Note:

If the application is for a resource consent for a controlled activity, then the assessment of environmental effects need only address those matters over which the Regional Council has retained control (specified in the relevant rule).

12.2 CIRCUMSTANCES IN WHICH THE POWERS IN SECTION 92 MAY BE USED

The powers under Section 92 of the RMA may be used if insufficient information is provided on any matter set out in Section 11.1 above. As stated in Brooker and Friend (1991):

"A consent authority may require further information and explanations, may require an applicant to consider alternatives, and may commission reports before the hearing of an application for a resource consent. Such information may only be sought if it is necessary to enable the consent authority better understand the nature of the activity proposed, the effect it will have on the environment, or the way adverse effects may be mitigated. Pending receipt of further information, it may postpone the notification, or if there is no hearing the determination, of an application. The information is to be made available for public inspection, and any reports commissioned are to be supplied to the applicant at least 15 working days before the hearing."

CHAPTER 13 CROSS BOUNDARY ISSUES

The West Coast Region is comprised of three district councils:

- o Buller District Council;
- o Grey District Council;
- Westland District Council.

The Regional Council is bounded by a number of Regional Councils and Unitary Authorities:

- Southland Regional Council;
- o Canterbury Regional Council;
- o Otago Regional Council;
- o Tasman District Council.

Under Section 67 of the RMA, this Plan must state how the Regional Council intends to deal with issues which cross local authority boundaries, and issues between territorial authorities and the Regional Council. The following is a discussion of the processes the Regional Council will adopt to deal with these issues.

The Regional Council will use the following to deal with cross-boundary issues:

- Have regard to the policy statements and plans of territorial authorities and neighbouring regional councils and the extent to which this Plan needs to be consistent with those documents;
- Liaise with the Ministry for the Environment over air quality issues which are best dealt with or coordinated at the national level;
- Liaise with the Canterbury Regional Council, the Otago Regional Council, the Southland Regional Council and the Tasman District Council on matters of air management that are relevant to more than one region;
- Liaise with the Buller District Council, Grey District Council and Westland District Council on cross-boundary issues affecting air quality management;
- Liaise with the three district councils, the Department of Conservation, and relevant forestry companies regarding their functions and responsibilities under the Forest and Rural Fires Act 1977;
- Liaise with Health Authorities regarding public health issues that arise in carrying out the Regional Council's functions under the RMA;
- Consider the transfer of functions which would be more efficiently effectively and appropriately carried out by other agencies;

- Participate in central government initiatives in the formulation of a strategic approach to managing the greenhouse effect, and in the development of guidelines for local government, and advocate and pursue efficient and effective mechanisms for greenhouse gas discharge reduction at the national level, including consideration of a national policy statement on the greenhouse effect;
- Coordinate information to be submitted with applications for resource consents which raise cross-boundary issues;
- Make submissions in respect of documents prepared by other authorities;
- o Participate, either jointly or separately, in investigations on cross-boundary issues requiring policy response;
- o Conduct joint hearings, where applicable;
- Promote and facilitate pre-hearing meetings between parties, including Poutini Ngai Tahu in order to clarify, mediate, or facilitate the resolution of any matter or issue relating to applications for resource consents which raise cross-boundary issues.

CHAPTER 14 FINANCIAL CONTRIBUTIONS

14.1 BACKGROUND

When the Regional Council grants a resource consent, it may impose a condition requiring that a financial contribution be made for the purposes specified in the Act (Section 108).

A financial contribution is defined in Section 108(9) of the RMA to mean:

- a) Money; or
- b) Land, including an esplanade reserve or esplanade strip (other than in relation to a subdivision consent) but excluding Māori land within the meaning of the Māori Land Act 1993 unless that Act provides otherwise; or
- c) A combination of money and land.

For the Regional Council to be able to require a financial contribution part of a resource consent, this Plan must specify the *purpose* of the contribution, and how the *level* of the contribution is to be determined.

Financial contributions may be for various purposes specified in the Plan including the purposes of ensuring positive effects on the environment to offset any adverse effects (environmental compensation).

In deciding on any financial contribution, the Council will take into account that requiring a contribution may not be appropriate in every case, even when there are adverse effects.

Every resource consent application needs to be considered as to the nature and extent of any contribution that may be required. The Council does not intend that environmental effects should be "mitigated" or fully compensated in every case.

The "maximum amounts" indicated in this chapter are intended as an upper limit. The actual amount of particular contributions will vary depending upon the circumstances and the application of the criteria outlined above.

A financial contribution may be used as a form of environmental compensation

14.2 CIRCUMSTANCES, PURPOSE, AND LEVEL OF CONTRIBUTION

□ Protection, maintenance, restoration or enhancement of public amenity

<u>Circumstances</u>: Where the discharge for which consent is granted is likely to cause or contribute to adverse effects on public amenity.

<u>Purpose</u>: To mitigate or offset such effects by protecting, maintaining restoring or enhancing public amenities including the maintenance or provision of alternative sites that serve the same general purpose.

<u>Maximum amount</u>: The full cost of providing enhancement of public amenities to a reasonably equivalent level or standard to those which will be lost.

□ Protection, maintenance, or restoration of heritage values and of places, areas or features of significance to tangata whenua

<u>Circumstances</u>: Where the discharge for which consent is granted will adversely affect places, areas, buildings or features of special historical, archaeological, architectural, scientific, ecological or intrinsic value (including trees or areas of vegetation with such values) and places, areas or features of significance to tangata whenua.

<u>Purpose</u>: To avoid, remedy, mitigate or offset such effects by protecting, maintaining, or restoring the place, area, building, or feature, and/or to offset such effects by contributing to protection, maintenance or restoration of some alternative place, area, building, or feature elsewhere in the same general locality.

<u>Maximum amount</u>: The full actual cost of avoiding, mitigating or reasonably compensating for such effects.

14.3 FINANCIAL CONTRIBUTION ASSESSMENT CRITERIA

In deciding whether or not to impose financial contributions, the types of contribution and their value, the Council will have particular regard to the following matters:

- a) The extent to which any adverse effects deriving from the activity can and should be mitigated by way of works carried out on or near the site; or
- b) The extent to which a financial contribution may offset or provide compensation to the community or environment for adverse

- effects caused or contributed to by the activity and not otherwise avoided, remedied or mitigated by the consent holder.
- c) The extent to which a contribution is required to achieve objectives and policies of this plan.
- d) In deciding the actual value of the financial contribution required, the Council will have particular regard to:
 - (i) The significance of the effects attributable to the activity
 - (ii) Where such effects are contributed to by other activities, the extent to which those effects can be reasonably attributed to the activity for which consent is granted
 - (iii) The extent to which any positive effects of the activity offset any adverse effects.
- e) Financial contributions should relate to the effects of the activity for which consent is granted and be reasonably proportionate to the significance of any adverse effects.
- f) The costs of establishing and conducting the activity.

CHAPTER 15 MONITORING AND REVIEW

15.1 MONITORING

Under Section 35 of the RMA the Regional Council is required to monitor:

- The state of the environment to enable the Regional Council to effectively carry out its functions under the RMA;
- The suitability and effectiveness of this Plan; and
- Compliance with resource consents;

and to take appropriate action where this is shown to be necessary.

In addition, the RMA requires the Council to include in any Regional Plan, the procedures that will be used to monitor the effectiveness of the Plan in achieving the stated objectives and environmental results.

The following will be monitored to measure the effectiveness of this Plan:

- The frequency and types of releases of brochures, mail drops, press releases and other promotional material used to implement the policies in the Plan;
- The results of liaising with territorial authorities and interested groups in terms of output and actions from these meetings;
- Ambient air quality;
- The advocacy and encouragement measures the Regional Council undertakes:
- The effectiveness of alternative systems and management practices for the discharge of contaminants to air;
- The occasions when enforcement procedures are used and any outcomes:
- The number of unauthorised discharges of contaminants to air.

In addition, specific monitoring (including compliance and state of the environment monitoring) is addressed in the Regional Monitoring Strategy. Through this Strategy, monitoring objectives are prioritised for action. Self- monitoring (where monitoring is carried out by the consent holder and the results audited by the Regional Council) may also be considered.

15.2 REVIEW

The Regional Council will review the Regional Air Quality Plan no later than 10 years after the Plan becomes operative (Section 79 of the RMA). Having completed the review, the Regional Council will change or replace the Plan in accordance with the requirements set out in the First Schedule of the RMA.

As changes occur to the environment, to law or to relevancy, it may prove necessary to make amendments to this Plan in order to respond to new issues and conditions. This can be done either in part or by introducing a change to the document, or in full by way of a total review.

Any person may apply for a change to a regional plan, or the Council itself may initiate a change to this Plan. Situations which may give rise to the Council initiating a change to this Plan include:

- Changes to the law;
- The results of monitoring the environment, including results from air quality monitoring programmes
- The results of monitoring the effectiveness of this plan;
- Advances in technology or techniques;
- Greater knowledge of the effects of discharges to air.

In addition, as the Council prepares other regional plans, matters will likely arise which will result in the need to amend some of the provisions of this Plan. Where assessment indicates that alterations are required to the document this will be achieved by introducing a formal change, and adopting the consultative procedures set out in the First Schedule of the RMA.

The Regional Council will review the Regional Air Quality Plan later than 10 years after the Plan becomes operative

As the Regional Council prepares other Regional Plans matters will likely arise which will result in the need to amend some of the provisions of this Plan.

CHAPTER 16 REFERENCES

Canterbury Regional Council, December 1993

Let's Clear the Air: Issues and Options for Air Quality Management in Canterbury and Background Information.

Canterbury Regional Council, 1997

Take a Deep Breath: A Discussion Document about the Improvement of Christchurch Air Quality

ESR Environmental, September 1995

Measurement of Smoke and Sulphur Dioxide in Westland, May-August 1995

Hawkes Bay Regional Councill November 1996

Proposed Regional Air Plan.

Kingston Morrison, September 1994

West Coast Regional Council Ambient Air Monitoring Programme-Greymouth 1994

Lincoln Environmental, January 1997

Guidelines For Community Odour Assessment - Draft Report No 2706/1

Ministry for the Environment, July 1994

Ambient Air Quality Guidelines.

Ministry for the Environment /Gavin Fisher/Andrew MacMillan, July 1996 Draft Core Set of National Air Quality Indicators

Ministry for the Environment, October 1997

Environmental Performance Indicators: Proposals for Air, Fresh Water and Land.

Ministry for the Environment, June 1993

Information for the Guidance of Local Authorities in Addressing Climate Change.

Ministry for the Environment, June 1995

Odour Management under the RMA.

Ministry for the Environment, 1997

Responding to Climate Change: A Discussion of Options for New Zealand.

Ministry for the Environment, 1997

The State of New Zealand's Environment: 1997

Ministry for the Environment, Ministry of Health, December 2000 National guidelines for managing the effects of radiofrequency transmitters.

New Zealand Pork Industry Board, 1993 Code of Practice – Pig Farming

NIWA/ESR/Ministry for the Environment, March 1995 Draft National Ambient Air Quality Monitoring Network for New Zealand.

Northland Regional Council, July 1995 Proposed Regional Air Quality Plan for Northland.

Occupational Safety and Health Service and Department of Labour, November 1994 Workplace Exposure Standards

Occupational Safety and Health Service, Public Health Commission and Department of Labour, June 1995

Guidelines for the Management of Lead-Based Paint.

Otago Regional Council, February 1998 Regional Plan: Air.

Southland Regional Council, April 1995 Proposed Regional Air Quality Plan for Southland.

Taranaki Regional Council, April 1997 Regional Air Quality Plan for Taranaki.

Taranaki Regional Council, July 1995 Explanation and Section 32 Analysis for Proposed Regional Air Quality Plan for Taranaki.

Wellington Regional Council, June 1994

Draft Regional Air Quality Management Plan for the Wellington Region.

Wellington Regional Council, November 1994
Draft Rules for the Draft Regional Air Quality Management Plan for the Wellington Region.

Wellington Regional Council, June 1995
Proposed Regional Air Quality Management Plan for the Wellington Region.

CHAPTER 17 APPENDICES

APPENDIX 1: GLOSSARY

The definitions in *italics* are from section 2 of the RMA.

Abrasive blasting

means the cleaning, smoothing, roughening, cutting or removal of part of the surface of any article by the use, as an abrasive, of a jet of sand, metal, shot or grit or other material propelled by a blast of compressed air or steam or water or by a wheel;

Ambient air

means air in the lower atmosphere which is outside buildings or structures and does not in any way refer to indoor air nor to air in the workplace;

Amenity values

means those natural or physical qualities and characteristics area that contribute to people's appreciation of its pleasantness aesthetic coherence, and cultural and recreational attributes;

Asphalt plant

means a plant used for the blending or coating of road chip with any material based on tar or bitumen or asphalt and intended for road surfacing application;

Chimney

means any structure designed for venting the airborne products of combustion upwards and above the ceiling height of the topmost floor of the building to which it is attached;

Coastal Marine Area

means the foreshore, seabed, and coastal water, and the air space above the water-

- a). of which the seaward boundary is the outer limit of the territorial sea;
- b). of which the landward boundary is the line of mean high water springs, except that where the line crosses a river, the landward boundary at that point is whichever is the lesser of
 - i. one kilometre upstream from the mouth of the river: or
 - ii. the point upstream that is calculated by multiplying the width of the river mouth by 5;

Contaminant

includes any substance (including gases, liquids, solids, and micro-organisms) or energy (excluding noise) or heat, that either 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 into or onto 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;

Controlled activity

means an activity which -

- a) is provided for, as a controlled activity, by a rule in a plan or proposed plan; and
- b) complies with standards and terms specified in a plan or proposed plan for such activities; and
- c) is assessed according to matters the consent has reserved control over in the plan or proposed plan; and
- d) is allowed only if a resource consent is obtained in respect of that activity;

Conveying and Handling

For the purposes of Rule 3, conveying and handling includes sorting, loading, unloading, storage, hauling and transportation on site. It does not include transportation of the specified materials between sites, for example, by road or rail transportation. The term "site" refers to the legally defined property within which the subject activity occurs;

Discharge

includes emit, deposit, and allow to escape;

Discretionary activity

means an activity -

- a) which is provided for, as a discretionary activity, by a rule in a plan or proposed plan; and
- b) which is allowed only if a resource consent is obtained in respect of that activity; and
- c) which may have standards and terms specified in a plan or proposed plan; and
- d) in respect of which the consent authority may restrict the exercise of its discretion to the matters specified in a plan or proposed plan for that activity;

Dispersion

means the way in which a contaminant spreads from its emission source through the atmosphere and becomes diluted in concentration:

Domestic Property

means abrasive blasting using materials to which no water has been added;

Dust

means all solid particulate matter that is suspended in air, or has settled after being airborne. By way of example, 'dust' may be derived from sand, cement, fertiliser, coal, soil, paint, or ash;

Dwellinghouse

means any building, whether permanent or temporary, that is occupied, in whole or 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:

Earthworks

for the purpose of this Plan, means any modification of the land by movement or removal of soil, rock or earth material, and includes excavation, drilling, tunnelling, trenching, mole-ploughing, bulk sampling, infilling, recontouring, land rehabilitation or restoration, dumping of rock, soil or sand, and construction of any track, embankment or drainage channel.

For the purposes of Rule 5, earthworks also include explosive blasting;

Effect

includes-

- a) any positive or adverse effect; and
- b) any temporary or permanent effect; and
- c) any past, present, or future effect; and
- d) any cumulative effect which arises over time or in combination with other effects- regardless of the scale, intensity, duration, or frequency of the effect, and also includes-
- e) any potential effect of high probability; and
- f) any potential effect of low probability which has a high potential impact;

Effluent

means effluent from livestock which is collected or otherwise managed and disposed of as a point source discharge. The term does not include effluent discharges from individual animals direct to land;

Efflux

means the velocity of the gases leaving the chimney, pipe or other exhaust;

Environment

includes:

- ecosystems and their constituent parts, including people and communities;
- all natural and physical resources;
- amenity values;
- the social, economic, aesthetic, and cultural conditions which affect the matters above;

Fertiliser

means any substance which is in a state suitable for application to land or plants for the purpose of increasing the growth or productivity of plants. For the purpose of this Plan, this includes organic materials (such as blood and bone), lime, whey, and other inorganic soil conditioners, but does not include any pig effluent as addressed in Rule 1;

Fuel burning equipment

means any enclosed fireplace, stove, incinerator, boiler, furnace, gas turbine, or internal or external combustion engine, that includes a chimney or exhaust structure;

Greenhouse gas

means a gas in the earth's lower atmosphere that contributes to the global "greenhouse" effect. This is a natural effect that traps heat in the atmosphere near the earth' surface;

Hapu

means sub-tribe;

Horticulture

means the growing of vegetables, fruit, flowers, plants in nurseries, grapes, other orchard trees, ornamental trees, and plantation forestry trees for commercial purposes;

Incineration

In relation to waste or other matter, means its deliberate comb for the purpose of its thermal destruction;

Incinerator

A purpose-built appliance designed and constructed by a registered manufacturer, which reduces material to ash and gases through combustion. For the purposes of this Plan, an incinerator does not include a home-made appliance;

Industrial or trade premises

means-

- a) any premises used for any industrial or trade purposes; or
- b) any premises used for the storage, transfer, treatment, or disposal of waste materials for other waste management purposes, or used for composting organic materials; or
- c) any other premises from which a contaminant is discharged in connection with any industrial or trade process- but does not include any production land;

Industrial or trade process

includes every part of a process from the receipt of raw material to the dispatch or use in another process or disposal of any product of waste material, and any intervening storage of the raw material, partly processed matter, or product;

Iwi

means tribe, people;

Kaitiakitanga

means the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship;

Land

includes land covered by water and the air space above the land;

Mining

means to explore for, take, win, or extract, a mineral existing in its natural state in land, or a chemical substance from that mineral, for the purpose of obtaining the mineral or chemical substance. For the purposes of Rule 5, mining also includes prospecting, exploration and gravel extraction, but does not include aggregate crushing or screening.

Non-complying activity

means an activity which-

- a) Is provided for, as a non-complying activity, by a rule in a Plan or Proposed Plan; or
- b) Contravenes a rule in a plan or proposed plan- and is allowed only if a resource consent is obtained in respect of the activity;

Organic Waste

means waste material of animal, plant or microbiological origin, and includes green waste and paper waste. For the purposes of Rule 8, organic waste excludes combustion of fuels, including coal, coke, petroleum gas and oil;

Production land

means

- any land and auxiliary buildings used for the production (but not processing) of primary products (including agricultural, pastoral, horticultural, and forestry products);
- does not includes land or auxiliary buildings used or associated with prospecting, exploration, or mining for minerals- and "production" has a corresponding meaning;

Prohibited activity

means any activity which a plan expressly prohibits and described as an activity for no resource consent is granted; and includes any activity prohibited by Section 105(2)(b) of the Historic Places Act 1993;

Public amenity area

means those areas to which the public have right of access under any statute, regulation, law or bylaw;

Public health

means a state of complete physical, mental and social wellbeing, arising from the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society;

Region

means the West Coast Region, and the Regional Council means the West Coast Regional Council;

Resource consent

means any of the following:

- a) a consent to do something that otherwise would contravene section 9 or section 13 (in the RMA called a "land use consent");
- b) a consent to do something that otherwise would contravene section 11 (in the RMA called a "subdivision consent");
- c) a consent to do something in a coastal marine area that otherwise would contravene any of sections 12,13 and 15 (in the RMA called "coastal permit");
- d) a consent to do something (other than in the coastal marine area) that otherwise would contravene section 14 (in the RMA called a "water permit");
- e) a consent to do something (other than in a coastal marine area) that otherwise would contravene section 15 (in the RMA called a "discharge permit");

Smoke

means any product of combustion, complete or incomplete, other than water vapour, which is, or could be, visible in daylight or artificial light;

Structure

means any building, equipment, device, or other facility made by people and which is fixed to land, and includes any raft;

Subject property

means the legally defined property within which the subject activity occurs;

Tangata whenua

in relation to a particular area, means the iwi, or hapu, that hold mana whenua over the area:

Taonga

means treasure, property: taonga are prized and protected as sacred possessions of the tribe. The term carries a deep spiritual meaning and taonga may be things that cannot be seen or touched:

Treated wood

means wood, timber, shavings or any wood offcuts subjected to any copper-chrome-arsenate or boron treatment;

Ventilation

includes both natural ventilation, vapour displacement, and artificial ventilation (including air conditioning units extraction vents, mechanical fans, hoods and ducts);

Waahi tapu

means sacred site. These are defined locally by the hapu and iwi, which are kaitiaki for the waahi tapu;

Water means water in all its physical forms whether flowing or

not and whether over or under the ground. It includes fresh water, coastal water, and geothermal water, but does not include water in any form in any pipe, tank or cistern;

Water body means fresh water or geothermal water in a river, lake,

stream, pond, wetland, or aquifer, or any part thereof, that

is not located within the coastal marine area;

Wet abrasive blasting means abrasive blasting using materials to which water

has been added;

Whanau means an extended family including the nuclear family,

and aunties, uncles and cousins.

APPENDIX 2: STATUTORY ACKNOWLEDGEMENT AREAS

Note: This section is attached for public information purposes only, in accordance with Section 220(2) of the Ngai Tahu Claims Settlement Act 1998. This information is neither part of the Plan, nor subject to the provisions of the First Schedule of the Resource Management Act 1991.

In the Ngai Tahu Claims Settlement Act 1998, the Crown acknowledged statements by Te Rununga o Ngai Tahu of the particular cultural, spiritual, historic and traditional association of Ngai Tahu with areas described in that Act. The statements, which are called "statutory acknowledgements relate are known as statutory areas.

The Regional Council must include in the regional plan information recording all statutory acknowledgements affecting statutory areas covered wholly or partly by that regional plan. Six statutory areas in the West Coast region are covered by this Plan. The Ngai Tahu associations with these six areas, taken from the Ngai Tahu Claims Settlement Act, are reproduced below.

The significance of statutory acknowledgements is:

- 1. The Regional Council must forward to Te Runanga o Ngai Tahu a summary of every application for a resource consent for activities within, adjacent to or impacting directly on a statutory area, before the application is notified and before the regional council makes a decision to dispense with notification [refer section 207 Ngai Tahu Claims Settlement Act and to the Ngai Tahu Claims Settlement (Resource Management Consent Notification) Regulations 1999].
- 2. The Regional Council must have regard to statutory acknowledgements in deciding, under section 93 of the Resource Management Act, whether Te Runanga o Ngai Tahu is likely to be directly affected by an application for a resource consent for activities within, adjacent to, or impacting directly on a statutory area.
- 3. The Regional Council must have regard to the statutory acknowledgements in deciding whether Te Runanga o Ngai Tahu is a person who may be adversely affected by the granting of a resource consent for an activity within, adjacent to, or impacting directly on the statutory area and whose written approval must be given before the application for a resource consent for that activity can be dealt with on a non-notified basis.
- 4. Te Runanga o Ngai Tahu, and any member of the Ngai Tahu Whanui may cite the statutory acknowledgement as evidence of the association of Ngai Tahu with the statutory area in submissions to and at any hearing held by the regional council on a resource consent application, a policy statement or a plan.

Further information on the statutory acknowledgements for the six statutory areas can be found in Schedules 25, 31, 33, 38, 56, and 62 of the Ngai Tahu Claims Settlement Act 1998. Maps showing the location of the Statutory Acknowledgement areas are held at Regional Council offices.

The associations for the six statutory areas within the West Coast region covered by this Plan, as set out in the Ngai Tahu Claims Settlement Act, are:

Ngai Tahu Association with Kotuku-Whakaoho (Lake Brunner/Moana)

The name Kotuku-Whakaoho relates to a husband and wife called Kotuku and Mawhera. Both were killed at this site which led to one (Kotuku) having their name applied to the lake and the other (Mawhera) lending their name to the Grey River.

As with most lakes, there is also a tradition of a taniwha connected with Kotuku-Whakaoho. The story tells how two taniwha were killed by a chief because they had killed his father and sister. On their deaths, the taniwha became islands which now lie in the lake.

For Ngai Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngai Tahu as an iwi.

Kotuku-Whakaoho holds an important place in Ngai Tahu history as the site of the tribe's battle with Ngati Wairaki. Victory in this battle saw Ngai Tahu gain manawhenua in the area.

Besides being a famous battle ground, Kotuku-Whakaoho was important as the site of a permanent settlement, acting as a focal point for food-gathering parties. The principal food taken from the lake was tuna (eel). Water fowl and forest fowl were also important mahinga kai in this area.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the lake, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngai Tahu today.

The importance of the area to Ngai Tahu was recognised by the Crown in the setting aside of a reserve at the lake for Ihaia, Tainui and Waipapara.

The mauri of Kotuku-Whakaoho represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the lake.

Ngai Tahu Association with the Taramakau River

"Manawhenua (tribal authority over the area) was gained through Ngai Tahu's defeat of Ngati Wairaki, Tumatakokiri and Ngai Toa. For Ngai Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngai Tahu as an iwi. The Taramakau River was and still is a significant indigenous fishery and source of manu (birds). The river remains a source of rich and abundant harvests. The area is noted particularly for its tuna (eel) and inaka (whitebait) fisheries.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the river, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngai Tahu today.

There was a pa at the mouth of the river, and kainga nohoanga (temporary settlements) were established along the length of the river which were related to the taking of mahinga kai and, in particular, the retrieval of pounamu. The river itself was, therefore, a significant part of the pounamu trail, via which the taonga was transported from its source to be traded up and down the country.

The tupuna had an intimate knowledge of navigation, river routes, safe harbours and landing places, and the locations of food and other resources on the river. The river was an integral part of a network of trails which were used in order to ensure the safest journey, and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whanau and hapu and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the river.

The mauri of Taramakau represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the river."

Ngai Tahu Association with Lake Kaniere

Kaniere is noted in Ngai Tahu tradition as a lake occupied by the Ngati Wairaki explorer, Raureka. According to tradition, Raureka was the first to cross Ka Tiritiri o te Moana (the Southern Alps) from her village at Arahura. Apparently, she left the village after an argument with her Ngati Wairaki whanaunga (relatives). Raureka was accompanied by her slave as she wandered up to Kaniere and eventually came across a pass which took her to the Rakaia Valley and eventually the Canterbury Plains.

This route came to be later known as Noti Raureka (Brownings Pass). On the east coast, Raureka fell in with a number of Ngai Tahu in the Temuka region who were felling timber with adzes. Raureka showed them her pounamu (greenstone) adze and proceeded to fell the ti tree. The Ngai Tahu agreed that her pounamu was a better stone for an adze. Raureka eventually led a Ngai Tahu party across the Alps to show them the source of pounamu.

For Ngai Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngai Tahu as an iwi.

Kaniere was also an important mahinga kai used by parties crossing between the coasts. Tuna (eels) and weka were the main foods taken in this area. The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the lake, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngai Tahu today.

Because of its importance as a mahinga kai, the Crown set aside a reserve at the lake for Ngai Tahu last century.

The mauri of Kaniere represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the lake.

Ngai Tahu Association with the Makaawhio (Jacobs River)

According to legend, the Makaawhio River is associated with the Patupaiarehe (flute playing fairies) and Maeroero (ogres of the forest). It is said that Tikitiki o Rehua was slain in the Makaawhio River by the Maeroero. The name `Tikitiki o Rehua' is now attached to the ridge of hills (sometimes called Jacobs Ridge) on the north bank of the Makaawhio River.

For Ngai Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngai Tahu as an iwi.

Manawhenua (tribal authority over the area) was gained through Ngai Tahu's defeat of Ngati Wairaki and Tumatakokiri. That manawhenua was cemented by the establishment of kainga nohoanga (permanent settlements) at the mouth and on both banks of the river because of the plentiful supply of mahinga kai from the river and its estuary and surrounds. A northern settlement strategically sited on Tahekeakai (Jacobs Bluff) acted as a sentry lookout that warned of approaching visitors.

As a result of this pattern of occupation, there are a number of urupa and wahi tapu along the river. Urupa are the resting places of Ngai Tahu tupuna and, as such, are the focus for whanau traditions. Urupa and wahi tapu are places holding the memories, traditions, victories and defeats of Ngai Tahu tupuna, and are frequently protected by secret locations.

The Makaawhio was and still is the source of a range of mahinga kai. Rocks at the mouth of the river still provide an abundance of kaimoana (seafood). The estuary of the river itself still provides an abundance of kaiawa (freshwater fisheries), including tuna (eels), patiki (flounders) and inaka (whitebait) and remains a significant kohanga (nursery) for a variety of fish species.

The area is still a significant manu (bird) breeding area, once yielding a rich harvest. The flora of the area provided not only food, but also the raw materials for raranga (weaving), rongoa (medicines) and the building of waka (canoes) and whare (houses).

In addition to its bounty of mahinga kai resources, the Makaawhio is a source of the mineral kyanite (Aotea).

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka, places for gathering kai and other taonga, ways in which to use the resources of the river, the relationship of people with the river and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngai Tahu today.

Because of the kainga nohoanga, reserves were set aside on the river for Ngai Tahu at the time of the 1860 Arahura Deed of Sale. One of these was an urupa, where notable Ngai Tahu tupuna Te Koeti Turanga and Wi Katau Te Naihi are buried, among others.

The mauri of the Makaawhio represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the river.

Ngai Tahu Association with Lake Paringa

Manawhenua (tribal authority over the area) was gained by Ngai Tahu's defeat of Ngati Wairaki, Tumatakokiri and Ngati Toa. For Ngai Tahu, histories such as this reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped Ngati Tahu as iwi.

Seasonal kainga nohoanga (settlements) were established for the taking of mahinga kai. Paringa was and still is a noted tuna (eel) fishery, significant spawning ground and kohanga (nursery) for a variety of fish species and significant breeding area for manu (birds), including ducks, kukupa (kereru/wood pigeon) and weka (now extinct in this area). The lake was therefore a source of rich and abundant harvests. The area also provided plants utilised in raranga (weaving) and other practices.

The tupuna had considerable knowledge of whakapapa, traditional trails and tauranga waka (landing places), places for gathering kai and other taonga, ways in which to use the resources of the lake, the relationship of people with the lake and their dependence on it, and tikanga for the proper and sustainable utilisation of resources. All of these values remain important to Ngai Tahu today. Because of the kainga nohoanga, a reserve was set aside for Ngai Tahu in this area at the time of the 1860 Arahura Deed of Sale.

The lake also is a wahi tapu. Wahi tapu are places holding the memories, traditions, victories and defeats of Ngai Tahu tupuna, and are frequently protected by secret locations.

The mauri of Lake Paringa represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the lake.

Ngai Tahu Association with Tititea (Mt Aspiring)

As with all principal maunga (mountains), Tititea is imbued with the spiritual elements of Raki and Papa, in tradition and practice regarded as an important link to the primeval parents. Tititea is a prominent and majestic peak, clearly visible from a number of vantage points in the south, and its role in Ngai Tahu's creation stories gives rise to its tapu status. From the heights above Te Ana-au (Lake Te Anau), it is a particularly impressive sight when the sun is setting.

The most common Ngai Tahu name for the mountain known to Pakeha as Mount Aspiring is Tititea, referring to the mountain's white peak. It is not unusual, however, for places and physical features to have more than one name, reflecting the traditions of the successive iwi who peopled the land. Other names for the mountain include `Makahi Ta Rakiwhanoa'(referring to a wedge belonging to Tu Te Rakiwhanoa) and `otapahu', which may refer to a type of dogskin cloak.

The Bonar Glacier is known as Hukairoroa Ta Parekiore (which refers to the long, hard glacial ice and crevasses formed by Parekiore). Parekiore was a giant who used to stalk up and down the South and North Islands taking titi (muttonbirds) northwards and returning with kumara. The lakes represent his footprints and the frozen splashes from his footsteps in the south were transformed into glaciers.

For Ngai Tahu, traditions such as this represent the links between the cosmological world of the gods and present generations, these histories reinforce tribal identity and solidarity, and continuity between generations, and document the events which shaped the environment of Te Wai Pounamu and Ngai Tahu as an iwi.

The area was part of a network of trails which were used in order to ensure the safest journey and incorporated locations along the way that were identified for activities including camping overnight and gathering kai. Knowledge of these trails continues to be held by whanau and hapu and is regarded as a taonga. The traditional mobile lifestyle of the people led to their dependence on the resources of the land.

The mauri of Tititea represents the essence that binds the physical and spiritual elements of all things together, generating and upholding all life. All elements of the natural environment possess a life force, and all forms of life are related. Mauri is a critical element of the spiritual relationship of Ngai Tahu Whanui with the area.