SECOND GENERATION DISTRICT PLAN

Public Health and Safety Decision of Hearings Panel

Proposed Second Generation Dunedin City District Plan (2GP)

7 November 2018

User guide to the decision reports and the marked-up decisions version of the 2GP

The decisions of the 2GP Hearings Panel are presented in 29 decision reports (one report per hearing topic).

The reports include the Panel's decisions and reasons and incorporate the requirements under s32AA.

At the end of each report a table has been included summarising all the decisions on provisions (Plan text) in that decision report.

Marked-up version of the Notified 2GP (2015)

The decisions include a marked-up version of the notified 2GP, which shows the amendments made to the notified plan in ~~strike-through~~ and underline. Each amendment has a submission point reference(s) or a reference to 'cl.16' if the amendment has been made in accordance with Schedule 1, clause 16(2) of the Resource Management Act. Schedule 1, clause 16(2), allows minor and inconsequential amendments to be made to the Plan.

Amendments to the Schedules below are not marked up as in other sections of the plan as they are drawn from a different source. Any changes to Schedules are detailed in the decision report for the relevant section.

Some very minor clause 16 changes such as typographical errors or missing punctuation have not been marked up with underline or strikethrough. More significant cl. 16 changes (such as where provisions have been moved) are explained using footnotes, and in some cases are also discussed in the decision.

Hearing codes and submission point references

As part of the requirement of the DCC to summarise all original submissions, all submission points were given a submission point reference, these references started with 'OS'. Further submissions were also summarised and given a submission point that started with 'FS'.

The submission points are made up of two numbers the first is the submitter number, which is followed by a full stop, the second part is the submission point number for that submitter.

For example, OS360.01 is submitter 360 and their first submission point.

The 2GP Hearings Panel has used these same submission point references to show which submission points different amendments were attributed to. However, to enable these changes to be linked to different decision reports, the reference code was changed to start with a decision report code, e.g. Her 308.244.

A list of hearing codes can be found on the following page.

It should be noted that in some cases where several submitters sought a similar change, the submission point reference may not include all of these submission points but rather include only one or say, for instance, "PO 908.3 and others".

Master summary table of all decisions

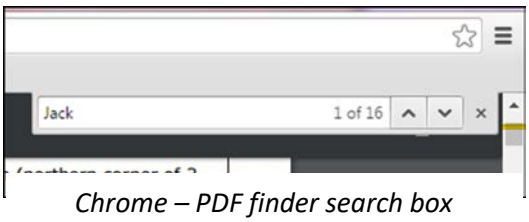
In addition to the summary table at the end of each decision report there is a master summary table that lists all decisions on provisions (Plan text), across all hearing topics, including details of the section(s) of the decision report in which that decision is discussed, and the relevant section(s) of the s42A reports. The s42A report sections will be helpful for appellants needing to identify which other parties have submitted on that provision, as notices of the appeal must be served on every person who made a submission on the provision or matter to which the appeal relates. The master summary table of decisions can be found on the decisions webpage of the 2GP website (2gp.dunedin.govt.nz).

List of hearing codes

Hearing topic	Code
Commercial Advertising (cross plan hearing topic)	CP
Commercial and Mixed Use Zones	CMU
Community Correction Facilities (cross plan hearing topic)	CP
Defence Facilities and Emergency Services (cross plan hearing topic)	CP
Designations	Des
Earthworks	EW
Heritage	Her
Industrial Zones	Ind
Major Facilities (without Port and Mercy Hospital)	MF
Manawhenua	MW
Mercy Hospital	Mer
Natural Environment	NatEnv
Natural Hazards	NatHaz
Natural Hazard Mitigation	HazMit
Network Utilities	NU
Plan Overview and Structure	PO
Port Zone	Port
Public Amenities	PA
Public Health and Safety (PHS)	PHS
Quarries and Mining Activities (cross plan hearing topic)	CP
Recreation Zone	Rec
Residential Zones	Res
Rural Zones	RU
Rural Residential Zones	RR
Scheduled Trees	ST
Service Stations (cross plan hearing topic)	CP
Temporary Activities	TA
Transportation	Trans
Urban Land Supply	ULS

How to search the document for a submitter number or name

1. If you want to search for particular submitter name, submission point or Plan provision in any of the reports (decision report, marked-up version of the Plan, or s42A report) the easiest way to do this is to use the 'Find' function.
2. When you have the document open, press the keys CTRL and F (Windows) or CMND and F (Mac) to bring up the 'PDF Finder'.



Chrome – PDF finder search box

Chrome – PDF finder search box

3. Once the PDF search box appears (in the top left or right corner of your browser) type in the submission number or submitter name and press enter on your keyboard.
4. The PDF finder will search for all instances of this term. Depending on the size of the document and your internet connection it may take a minute or so.
5. Press on the up or down arrows (Chrome) or 'next' (Internet Explorer) in the search box to view the different instances of the term until you find the one you are looking for.
6. An 'advanced search' function is available under the Edit tab in some PDF viewers, this allows you to search 'whole words' only to look for exact strings of letters or numbers

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1.0 Introduction

1. This document details the decisions of the proposed Dunedin City District Plan Hearings Panel/Te Paepae Kaiwawao Motuhake O Te 2GP with regard to the submissions and evidence considered at the Public Health and Safety Hearing, held on 25th, 26th and 27th January and 8th February 2017 at the 2GP Hearings Centre.

1.1 Scope of Decision

2. This Decision Report addresses the 197 original and 142 further submission points addressed in the Public Health and Safety s42A Report, except.

    - *the Oil Companies* submission point OS634.47 and *Liquigas Limited* (FS2327.15) and *Waste Management (NZ) Limited* (FS2444.27) in support, related to a new definition for infrastructure, which we address in the Plan Overview Decision Report
    - *Saddle Views Estate Limited* submission point OS458.38 which sought the retention of Policy 9.2.2.6 and submission point OS458.39, which sought retention of Rule 9.6.3.1 (Assessment rules for mining), which we address in the Cross Plan: Mining Decision Report
    - *New Zealand Fire Service Commission* submission points OS945.10 and OS945.23, which sought a new strategic direction policy and a new policy in the commercial mixed use zones to provide for emergency services, which we address in the Cross Plan: Emergency Service Decision Report

3. In addition, it also addresses the following points:

    - *Fonterra Limited* submission points OS807.27, OS807.28 and OS807.32 which were heard at the Rural hearing
    - *Fonterra Limited* submission point OS807.37 which was heard at the Rural Residential Hearing.

1.1.1 Section 42A Report

4. The Public Health and Safety Topic s42A Report deals primarily with Plan provisions included in the Public Health and Safety (Section 9) of the 2GP. The Public Health and Safety section of the 2GP contains provisions which link to most other parts of the 2GP particularly the management and major facilities zones. It covers matters affecting the health and safety of people and communities, including noise, light spill, storage and use of hazardous substances and threats to the city's water supply and wastewater systems.

1.1.2 Structure of Report

5. This decision report is structured by topic. The report does not necessarily discuss every individual submitter or submission point; instead it discusses the matters raised in submissions and records our decisions and reasons on the provisions relevant to each topic. Appendix 3 at the end of the report summarises our decision on each provision where there was a request for an amendment. The table in Appendix 3 includes provisions changed as a consequence to other decisions.

6. Schedule 1 of the RMA outlines key aspects of the process that must be used to prepare and make decisions on a plan change (including the submission and hearing process)

7. Clause 16(2) of that schedule allows a local authority to make an amendment where the alteration "is of minor effect", and to correct any minor errors, without needing to go through the submission and hearing process.

8. This Decision includes some minor amendments and corrections that were identified by the DCC Reporting Officers and/or by us through the deliberations process. These amendments are referenced in this report as being attributed to "cl.16". These amendments are summarised in Section 5.0.

1.2 Section 32AA Evaluation

9. Section 32 of the Resource Management Act 1991 (RMA) establishes the framework for assessing proposed objectives, policies and rules. Section 32AA of the RMA requires a further evaluation to be released with decisions, outlining the costs and benefits of any amendments made after the proposed Plan was notified.

10. The evaluation must examine the extent to which each objective is the most appropriate way to achieve the purpose of the RMA and whether, having had regard to their efficiency and effectiveness, the policies and rules proposed are the most appropriate for achieving the objectives. The benefits and costs of the policies and rules, and the risk of acting or not acting must also be considered.

11. A section 32AA evaluation has been undertaken for all amendments to the notified plan. The evaluation is incorporated within the decision reasons in section 3.0 of this decision.

1.3 Statutory Considerations

12. The matters that must be considered when deciding on submissions on a district plan review are set out in Part 2 (sections 5-8, purpose and principles) and sections 31, 32 and 72-75 of the RMA. District plans must achieve the purpose of the RMA and must assist the council to carry out its functions under the RMA.

13. The s42A Report provided a broad overview of the statutory considerations relevant to this topic. These include:

- Section 75(3) of the RMA, which requires us to ensure the 2GP gives effect to any National Policy Statement (NPS) or National Environmental Standard (NES) that affects a natural or physical resource that the Plan manages. We note that there are no NPS directly relevant to this particular topic. The following NES is relevant:
  - The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 applies to any piece of land on which an activity or industry described in the Hazardous Activities and Industries List (HAIL) is being undertaken, has been undertaken, or is more likely than not to have been undertaken.
  - Refer to sub-section 3.11.1 below for the assessment and decisions on the *Oil Companies* (OS634.58) relief who sought an appropriate policy framework in the Public Health and Safety section of the 2GP to apply for applications requiring consent under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NESCS).
- Section 74(2)(a) of the RMA, which requires us to have regard to the proposed Otago Regional Policy Statement (pRPS) and section 75(3)(c) of the RMA, which requires us to ensure the 2GP gives effect to the operative Otago Regional Policy Statement (oRPS). We note that the proposed RPS was notified on 23 May 2015, and decisions released on 1 October 2016. At the time of making these decisions on 2GP submissions some of the proposed RPS decisions are still subject to appeal, and therefore it is not operative

- Section 74(2)(b)(i), which requires us to have specific regard to any other key strategies prepared under the Local Government Act. The s42A Report highlighted the Dunedin Spatial Plan 2012 as needing to be considered as this DCC strategic document sets the strategic directions for Dunedin's growth and development for the next 30 plus years.

14. These statutory requirements have provided the foundation for our consideration of submissions. We note:

- where submissions have been received seeking an amendment of a provision and that provision has not been amended, we accept the advice in the original s42A Report that the provision as notified complies with the relevant statutory considerations
- where a submitter has sought an amendment in order to better meet the statutory considerations, we have discussed and responded to these concerns in the decision reasons
- in some cases, while not specifically raised, we have made amendments to the Plan as the evidence indicated this would more appropriately achieve these statutory considerations, in these cases we have explained this in our decision reasons
- where we have amended the Plan in response to submissions and no parties have raised concerns about the provisions in terms of any statutory considerations, and we have not discussed statutory considerations in our decision, this should be understood to mean that the amendment does not materially affect the Plan's achievement of these statutory considerations.

1.3.1 Resource Legislation Amendment Bill

15. The Resource Legislation Amendment Act 2017 received royal assent on 18 April 2017. Section 12(3) of this Act removed the explicit function of both regional and local councils under sections 30(1)(d)(v) and section 31(1)(b)(ii) of the RMA to control the adverse effects of the storage, use, disposal or transportation of hazardous substances under the RMA.

16. The Ministry for the Environment's Factsheet 2 titled 'Revised functions for Resource Management Act 1991 decision-makers' provides a relevant explanation of the key changes, on pages 5 and 6 states:

> *"Sections 30 and 31 of the RMA have been amended to remove the control of hazardous substances as an explicit function of councils. This means councils no longer have an explicit obligation to regulate hazardous substances in RMA plans, policy statements or resource consents. Consequential changes have also been made to the HSNO Act and the HSW Act in light of this change.*
>
> *The intent of this change is to remove the perception that councils must always place controls on hazardous substances under the RMA, and to ensure councils only place additional controls on hazardous substances if they are necessary to control effects under the RMA that are not covered by the HSNO or HSW Acts.*
>
> *In most cases HSNO and Worksafe controls will be adequate to avoid, remedy or mitigate adverse environmental effects (including potential effects) of hazardous substances.*
>
> *Councils still have a broad function of achieving integrated management, and may use this function to place extra controls on hazardous substance use under the RMA, if existing HSNO or Worksafe controls are not adequate to address the environmental effects of hazardous substances in any particular case (including managing the risk of potential effects on the local environment). Any proposed additional controls through an RMA plan or policy statement must be justified through a section 32 evaluation. Any additional controls through resource*

consent decisions must be justified under section 104. These assessments should consider the impact of existing HSNO and Worksafe controls on the management of environment effects.

This change comes into effect on 19 April 2017. Councils are not required to make immediate changes to their plans, but should implement this amendment when they review their plans and policy statements, and when they consider private plan changes and resource consent applications."

17. Pursuant to clause 13 of Schedule 12 to the RMA, the 2GP must be determined as if the amendments made by the Amendment Act had not been enacted because the 2GP was publicly notified prior to the Amendment Act coming into effect and the 2GP has not proceeded to the stage at which no further appeal is possible. This clause was inserted by section 122 of the Resource Legislation Amendment Act 2017.

1.3.2 Worksafe New Zealand, Environmental Protection Authority and HSNO

18. This section is included for background information on the legislative changes to how hazardous substances are managed outside of the RMA. This has relevance to provide context on how some of our decisions have been arrived at.

19. The management of hazardous substances has changed since the hazardous substances provisions of the 2GP were notified. Below is information derived from the Worksafe NZ website which summaries this change.

20. The rules around managing hazardous substances that affect human health and safety in the workplace have been transferred from HSNO to the Hazardous Substances Regulations under HSWA. The rules and duties to mitigate risks posed by hazardous substances now sit under:

- HSNO for non-work, public health and environmental risks; and specific requirements on importers and manufacturers of hazardous substances.
- HSWA (including the Hazardous Substances Regulations) for work risks.

21. There are also two new types of subordinate legislation:

- Safe work instruments are developed by WorkSafe for approval by the Minister for Workplace Relations and Safety. They have a number of uses, including defining detailed or technical matters that may change frequently.
- EPA notices - most of the hazardous substance rules the EPA remains responsible for are set in EPA Notices rather than by regulation. These particularly reflect the rules for importers and manufacturers of hazardous substances as well as non-workplace use, environmental controls and hazardous substances disposal controls.

22. Therefore, both the Health and Safety at Work Act (HSWA), including the Hazardous Substances Regulations (in workplaces) and Hazardous Substances and New Organisms Act (HSNO), for non-work, public health and environmental risks and specific requirements on importers and manufacturers of hazardous substances, play a role in the management of hazardous substances.

23. The new Health and Safety at Work (Hazardous Substances) Regulations 2017 (the Regulations) bring together the requirements for the management of hazardous

substances in workplaces into a single place. These new Regulations sit under the Health and Safety at Work Act (HSWA).

24. HSNO is largely implemented by the Environmental Protection Authority (EPA). The EPA's Hazardous Substances (Hazardous Property Controls) Notice 2017 manages hazardous substances for places that are not workplaces

25. The EPA will continue to have responsibility for approving and classifying hazardous substances; while WorkSafe NZ will administer and enforce workplace requirements provided in the Regulations.

26. WorkSafe New Zealand also provides guidance information on these regulations including:
    - a dedicated hazardous substances regulations website, which includes access to WorkSafe electronic updates
    - a hazardous substances toolbox which includes a 5 step process that must be followed when using and storing hazardous substances.

2.0 Hearing appearances and evidence presented

27. Submitters who appeared at the hearing, and the topics under which their evidence is discussed, are shown below in Table 1. All evidence can be found on the 2GP Hearing Schedule webpage under the relevant Hearing Topic https://2gp.dunedin.govt.nz/2gp/hearings-schedule/index.html

Table 1: Submitters and their key points

Submitter (Submitter Number)	Represented by/ experts called	Nature of evidence	Topics under which evidence is discussed
Air New Zealand (OS1046)	Mr Aiden Cameron legal counsel, Russell McVeagh	Legal submissions	Acoustic Insulation (sub-section 3.5)
Aurora Energy Ltd (OS457) *(FS2375.14)*	Ms Bridget Irving legal counsel, Gallaway Cook Allan	Legal submissions	Policy 9.2.2.11 and Hazardous Substances Quantity Limits and Storage Requirements rule (sub-section 3.2.4)
	Ms Joanne Dowd, Network Policy Manager with Delta Utility Services Limited	Planning evidence pre-circulated (not expert as employee)	
	Dr Stephen Chiles acoustic expert, Chiles Ltd	Evidence pre-circulated	Noise (sub-section 3.6)
	Mr Nicholas Wyatt, Power Systems Engineer, Delta Utility Services Limited	Operations Engineer	
Raymond and Evelyn Beardsmore (OS429)	Themselves	Verbal submission	Noise (sub-section 3.6)
			Request to amend definition of Notional Boundary (sub-section 3.7.2)

Submitter (Submitter Number)	Represented by/ experts called	Nature of evidence	Topics under which evidence is discussed
Bindon Holdings Ltd (OS916 and FS2471) And *East Parry Investments Limited* (OS922 and FS2472)	Mr John Hardie legal counsel	Legal submissions	Acoustic Insulation (Rule 9.3.1) and NZTA requests (sub-section 3.5.3)
			Requests by Liquigas and the Oil companies for new hazard facility areas (sub-section 3.3)
Fonterra Limited (OS807 and FS2317)	Daniel Minhinnick legal counsel, Russell McVeagh	Legal submissions	Hazardous substances (sub-section 3.2) Fonterra proposed Mosgiel Noise Control Area (sub-section 3.4) Acoustic Insulation (sub-section 3.5) Noise (sub-section 3.6) Other Noise Requests (sub-section 3.7)
	Mr Tim Eketone Operations Manager, Fonterra Mosgiel Distribution Centre	Evidence pre-circulated	
	Mr Dean Chrystal planner, Director of Planz Consultants Limited	Evidence pre-circulated	
	Mr Rob Hay acoustic expert, Marshall Day Acoustics Limited	Evidence pre-circulated	
Horticulture New Zealand (OS1090 and FS2452)	Ms Lynette Wharfe planner, The AgriBusiness Group	Evidence pre-circulated	Hazardous substances (sub-section 3.2) New suggested objectives and policies (sub-section 3.11) Noise (sub-section 3.6)
David Johnston (OS245) Appearing for: *Mervyn & Jill Clearwater* (OS812)	Mr Johnston	Tabled statement Attached: Letter from East Taieri School	Noise (sub-section 3.6)

Submitter (Submitter Number)	Represented by/ experts called	Nature of evidence	Topics under which evidence is discussed
David & Jacinta Grey (OS830)			
KiwiRail Holdings Ltd (OS322 and FS2162)	A Cameron legal counsel, Russell McVeagh	Legal submissions	Acoustic Insulation (sub-section 3.5) Noise (sub-section 3.6) Assessment Rules (sub-section 3.12)
	Dr Stephen Chiles acoustic expert, Chiles Ltd	Evidence pre-circulated	
	Ms Rebecca Beals KiwiRail RMA Team Leader, KiwiRail	Evidence pre-circulated	
Liquigas Limited (OS906 and FS2327)	Ms Anneke Theelen legal counsel, Minter Ellison Rudd Watts	Legal submissions	Liquigas Limited request for a new hazardous facility overlay (sub-section 3.3.1) Hazardous substances (sub-section 3.2) Objective 9.2.2 (people's health and safety) and associated policies (sub-section 3.9.5)
	Mr Albert De Geest Chief Executive Officer, Liquigas Limited	Tabled evidence	
	Ms Claire Hunter planner, Mitchell Daysh Limited	Evidence pre-circulated	
	Mr Steven Tuck, resource management consultant, Mitchell Partnerships	Pre-circulated evidence at Recreation hearing	
	Mr Damian Phyllis, Worley Parson, safety and risk engineer,	Pre-circulated evidence	

Submitter (Submitter Number)	Represented by/ experts called	Nature of evidence	Topics under which evidence is discussed
LPG Association of New Zealand *(OS85)*	Mr Thaddeus Ryan legal counsel, Buddle Findlay	Legal submissions Supplementary legal submissions addressing questions raised at hearing	Hazardous substances (sub-section 3.2)
	Mr Peter Gilbert Executive Director, LPG Association	Tabled statement	
	Ms Claire Hunter planner, Mitchell Daysh Limited	Pre-circulated evidence Appendices B-F	
Jane Mcleod (FS2169)	Ms Mcleod	Tabled statement	Fonterra proposed Mosgiel Noise Control Area (sub-section 3.4)
New Zealand Defence Force (OS583)	Mr Rob Owen NZDF Director Environmental Services, Defence Property Group	Pre-circulated evidence	Noise (sub-section 3.6)
New Zealand Fire Service Commission (OS945 and FS2323)	Ms Fiona Blight planner, Beca Limited	Pre-circulated evidence	Hazardous substances (sub-section 3.2) Light Spill and assessment rules (sub-section 3.8.2) Rule 9.3.3 Fire Fighting (sub-section 3.10.3)
New Zealand Transport Agency	Dr Stephen Chiles acoustic expert, Chiles Ltd	Evidence pre-circulated	Acoustic Insulation (Rule 9.3.1) and NZTA requests (sub-section 3.5.3)

Submitter (Submitter Number)	Represented by/ experts called	Nature of evidence	Topics under which evidence is discussed
NZTA (OS881 and FS2308)			
Oceana Gold (New Zealand) Limited (FS2439.45 and (OS1088)	Ms Jackie St John, legal counsel, Oceana Gold	Legal Submissions	Submissions requesting reliance on HSNO instead of 2GP provisions (sub-section 3.2.3) Noise (sub-section 3.6) Light Spill (sub-section 3.8)
The Oil Companies (OS634 and FS2487)	Ms Georgina McPherson planner, Burton Consultants	Pre-circulated evidence	Hazardous substances (sub-section 3.2) The Oil Companies request for a new hazardous facility overlay (sub-section 3.3.2) Light Spill (sub-section 3.8) Request for Soil Contamination policies (sub-section 3.11.1)
	Mr Gregory Akehurst, economist, Director of Market Economics Ltd	Pre-circulated evidence	
	Ms Jennifer Polich Expert Risk Management, Principal Engineer at Sherpa Consulting Pty Limited	Pre-circulated evidence	
	Mr Andrew Arthur Sherriff Terminal Manager at the Z Energy 2015 Limited bulk fuel Terminal (203 Fryatt St, Dunedin)	Pre-circulated evidence	
Port Otago Ltd (OS737 & FS2378)	Mr Len Anderson, Len Anderson Barrister	Legal submissions	Submissions requesting reliance on HSNO instead of 2GP provisions (sub-section 3.2.3)
Ravensdown Limited	Mr Mark Christensen, Counsel for Ravensdown	Legal submissions	Hazardous substances (sub-section 3.2)

Submitter (Submitter Number)	Represented by/ experts called	Nature of evidence	Topics under which evidence is discussed
(OS893 and FS2481)	Limited, Natural Resources Law Limited		Request to amend noise assessment rules (sub-section 3.7.4) Policy 2.2.5.2 (on-site stormwater and wastewater management) (sub-section 3.9.2)
	Mr Murray Mackenzie Chief Technical Manager, Ravensdown Limited	Pre-circulated evidence with 4 attachments	
	Mr Chris A Hansen Expert Planner, Chris Hansen Consultants Ltd	Pre-circulated evidence	
	Mr Jon Farren, Marshall Day Consultants	Pre-circulated evidence attached to Chris A Hansen evidence	
Rockgas Ltd *(OS897)*	Mr Owen Graham	Tabled statement	Submissions requesting reliance on HSNO instead of 2GP provisions (sub-section 3.2.3)
RJS Thomas *(OS366)*	Himself	Tabled statement	Rule 9.3.5 Light Spill and assessment rules (sub-section 3.8.2)
Transpower New Zealand Ltd *(OS806)*	Ms Ainsley McLeod Expert Planner, Technical Director – Planning, Beca	Tabled statement	Policy 9.2.2.11 and Hazardous Substances Quantity Limits and Storage Requirements rule (sub-section 3.2.4) Rule 9.3.2 Electrical Interference (sub-section 3.10.2)
University of Otago	Mr Murray Brass, Resource Planner/Policy Advisor, Property	Pre-circulated evidence	Hazardous substances (sub-section 3.2)

Submitter (Submitter Number)	Represented by/ experts called	Nature of evidence	Topics under which evidence is discussed
(OS308 and FS2142)	Services Division, University of Otago		Acoustic Insulation (sub-section 3.5) Noise (sub-section 3.6) Infrastructure definition, objectives and policies (sub-section 3.9) Policy 9.2.2.8 (Fence height performance standard) (sub-section 3.10.1) Assessment Rules (sub-section 3.12)
Robert Francis Wyber (OS394)	Himself	Tabled statement	Noise (sub-section 3.6)

28. Appearances for the Dunedin City Council were:

- Mr Paul Freeland, Senior Planner (Senior Planning Assistance to the Hearing)
- Mr Peter Rawson, Reporting Officer
- Mr Malcolm Hunt, Principal Acoustic Engineer, Malcolm Hunt Associates

29. The following appeared at the hearing via "Skype"

- Mr Keith Gibson, Beca Limited, Technical Lighting Advice
- Dr Mike Gray, Systems Manager, Chemsafety

30. Evidence provided by Mr Rawson included:

- Section 42 report organised primarily under topic heading where responded to each submission point
- Opening Statement
- Revised Recommendations in response to evidence
- Impact Assessment Overview of Risks from proposed Spectator Events and Education Zone
- From the Quality Planning website "Managing Hazardous Substances 2013"
- UK Health and Safety Executive: "Land Use Planning Advice around large scale petrol storage sites"
- Hazardous Industry Planning Advisory Paper No 4 NSW Government Planning (2011) 'Risk Criteria for Land Use Safety Planning
- Mr Alexander Envirocom report "Donahys Aerosol Project 69 Bradshaw St South Dunedin".

31. Mr Rawson also provided post-adjournment evidence in the form of a memorandum dated March 2018 and titled hazardous substances, sensitive activities and sensitive environments.

32. Other DCC evidence:

- Mr Malcolm Hunt:
    i. Noise and Vibration Review of Submissions and Recommendations (May 2016)
    ii. Comments on 3 additional 2GP noise submissions (October 2016)
- Mr Keith Gibson, Technical Lighting Advice (August 2016)
- Dr Mike Gray, "Review of Submissions Received to the Hazardous Substance Provisions of the Dunedin 2GP" (November 2016).

33. Planning assistance to the Hearing was provided by:

- Mr Paul Freeland, (Senior Planner)

3.0 Key topics discussed at the hearing or covered in tabled evidence

3.1 Context

34. The importance of the health and safety of people and communities is acknowledged within the purpose of the Resource Management Act 1991 and is a worldwide concern acknowledged through institutions such as the World Health Organisation. Throughout Dunedin, land use and development activities have the potential to affect the health and safety of people, including effects resulting from excessive noise, light spill, the storage and use of hazardous substances, and threats to the City's water, wastewater, and stormwater systems.

35. In response to these issues, the 2GP controls the way that activities must operate. These controls include restricting the amount of noise and light spill that activities can generate; requiring appropriate acoustic insulation in identified areas; setting appropriate limits on the amount of hazardous substances allowed; setting requirements in relation to connecting or providing water supply for firefighting or potable water, stormwater, and wastewater public infrastructure; controlling the emission of electrical interference; requiring forestry and tree planting to be setback from boundaries; setting controls on fencing to ensure that that passive surveillance is provided for; and requiring earthworks to take into account the potential effects on groundwater.

36. Performance standards within the Public Health and Safety section of the 2GP relate to Acoustic Insulation (Rule 9.3.1), Electrical Interference (Rule 9.3.2), Fire Fighting (Rule 9.3.3), Hazardous Substances Quantity Limits and Storage Requirements (Rule 9.3.4), Light Spill (Rule 9.3.5), Noise (Rule 9.3.6) and Service Connections (Rule 9.3.7). This section of the 2GP links to most other parts of the 2GP particularly management and major facilities zones.

37. The three major topics addressed at the Public Health and Safety Hearing, were hazardous substances (including Hazard Facility areas requested by *Liquigas Limited* and *the Oil Companies*), noise (including the Mosgiel Noise Control Area requested by Fonterra) and Light Spill. These topics will be addressed first, followed by matters regarding minor changes to wording or the measurement of defined terms.

3.2 Hazardous substances

3.2.1 Overview

38. The Public Health and Safety section of the 2GP manages hazardous substances through the Hazardous Substances Quantity Limits and Storage Requirements (Rule 9.3.4), and Appendix A6 Hazardous Substances Quantity Limits.

39. In summary, these include quantity limits and storage requirements for seven different groupings of zones, as specified in Appendix A6.1 to A6.7, and require the storage and use of hazardous substances to be set back 12m from National Grid transmission lines, support structures and substations (with some exceptions).

40. A total of 36 submission points were received on these provisions, with 19 original submission points and 17 further submissions points.

41. Since the hearing took place, legislative amendments have changed the requirements surrounding the management of hazardous substances. These legislative changes

include the Resource Legislation Amendment Bill (April 2017) and the transfer of the Hazardous Substances and New Organisms (HSNO) Act requirements into a new Health and Safety at Work (HSW) Act. Sub-section 1.3.1 and 1.3.2 above provides additional detail on these changes.

42. For clarity, we have structured sub-sections 3.2.2 to 3.2.6 of this report below by:

- providing an overview of the Management of Hazardous Substances in other New Zealand District Plans (sub-section 3.2.2)
- making an assessment and decisions on those submissions which have:
  - requested reliance on HSNO instead of managing hazardous substances under the 2GP (sub-section 3.2.3)
  - requested amendments to Policy 9.2.2.1 and the Hazardous Substances Quantity Limits and Storage Requirements rule (sub-section 3.2.4)
  - requested amendments to the definition of Hazardous Sub-Facility (sub-section 3.2.5)
  - requested amendments to Section 9.1 Introduction to the Public Health and Safety section of the 2GP (sub-section 3.2.6).

43. The requests by *Liquigas Limited* and the *Oil Companies* for new hazard facility areas are addressed in sub-section 3.3.

3.2.2 Management of Hazardous Substances in other NZ District Plans

44. We were provided with evidence, in the s42A Report and from witnesses during the hearing, on how the issues of reverse sensitivity and risks associated with hazardous substances and bulk fuel facilities have recently been examined in the New Zealand planning system. In particular, these matters have been addressed during the Plan review processes of the Auckland Unitary Plan, the Christchurch Replacement District Plan, the City of Napier District Plan and the Hamilton City District Plan.

45. We have here summarised the approaches followed in these district plans to provide context to the discussion in later sections of this decision report:

3.2.2.1 Auckland Unitary Plan

46. The partly operative Auckland Unitary Plan deals with the management of bulk fuel facilities, as follows:

- identifies hazardous facilities and infrastructure located at the Wiri Oil Terminal, Wiri LPG Depot and the high pressure Refinery to Auckland petroleum pipeline
- provides a framework to manage the risk of adverse effects on activities located in proximity to existing hazardous facilities and infrastructure, which may include vapour cloud explosions, large fires or the release of toxic gas which could cause blast overpressure, fragments, heat radiation or poisoning
- restricts sensitive activities or incompatible land uses or manages the encroachment of other land uses in proximity of existing hazardous facilities and infrastructure, to ensure that the operation and potential expansion of the facilities and infrastructure is not compromised through:
  - an Inner Emergency Management area applies to the area closest to the facility, requiring the preparation of emergency management plans, and building design considerations within this area; and
  - a Wider Emergency Management Area applies to an area around the inner emergency management area, requiring the preparation

of emergency management plans to ensure that activities operating within proximity of the hazardous facilities and infrastructure are aware of the risks and are suitably prepared.

47. It deals with the management of hazardous substances generally, as follows:
    - rules to manage the use, storage and disposal of hazardous substances on land and in the coastal marine area that can present a specific risk to human or ecological health and property
    - rules designed to apply in addition to the requirements of the Hazardous Substances and New Organisms Act 1996 legislation, considered necessary in accordance with section 142 of the Hazardous Substances and New Organisms Act 1996
    - rules to address primarily the potential adverse effects and risks from the use of land for the use, storage, or disposal of hazardous substances, influenced by the nature of the hazardous substance, its quantity, what parts of the environment may be affected by an adverse event, the likelihood of an event, and the degree of effect.

48. There are several activity statuses depending on the zone, and quantities and type of hazardous substances.

3.2.2.2 Christchurch Replacement District Plan

49. The Christchurch Replacement District Plan is now operative and Chapter 4 deals with the management of hazardous substances, as summarised below:

    - manages the residual risks associated with the storage, use, or disposal of hazardous substances, including the minimisation of reverse sensitivity effects, and avoidance of sensitive activities being located within a defined Risk Management Area at located in Woolston
    - provides for the storage, use, or disposal of hazardous substances as a permitted activity throughout the district, subject to provisions in other chapters, except for two non-complying activities:
        1. new storage or use of hazardous substances with explosive or flammable properties within close proximity to National Grid transmission lines and some electricity distribution lines; and
        2. sensitive activities located within the defined Risk Management Area.

3.2.2.3 City of Napier District Plan

50. The operative City of Napier District Plan, in Chapter 63 and provisions from plan change 10, relies on the HSNO Act for the management of hazardous substances, to avoid any duplication of regulation.

51. Under these provisions the storage, handling, or use of hazardous substances is permitted provided that it complies with the relevant conditions in the Hazardous Substances Condition Table. Conditions relate to hazardous substances being stored and handled on impervious surfaces and preventing hazardous substances from being washed or spilled into natural ground or entering any piped storm water systems or storm water ground soakage during a 1% AEP rain event.

52. Exceptions to the above permitted activities are Arsenic (As) within the Ahuriri Estuary Zone (prohibited activity) and Major Hazardous Facilities (discretionary activities).

3.2.2.4 Hamilton City District Plan

53. The operative Hamilton City District Plan, in Chapter 25.4 provides a different activity status depending on the zone, quantities and type of hazardous substances, which include permitted, controlled, discretionary and non-complying activities.

54. In addition, the Hazardous Facilities Screening Procedure (HFSP) in Appendix 12 is used to determine the activity status of new hazardous facilities and existing hazardous facilities, which have lost their existing use rights, in accordance with an activity status table.

3.2.3 Submissions requesting reliance on HSNO instead of 2GP provisions

3.2.3.1 Submissions

55. *Fonterra Limited* (OS807.49), supported by *New Zealand Fire Service* Commission (FS2323.30), *Oceana Gold (New Zealand) Limited* (FS2439.45) and *Horticulture New Zealand* (FS2452.27), opposed the setting of hazardous substances quantity limits and storage requirements in the 2GP, and instead requested reliance entirely upon HSNO requirements. The main reasons were that this would be consistent with several second generation district plans, and this was also the direction from the Independent Hearing Panel for the Christchurch Replacement Plan (which is discussed further below). *Fonterra Limited* (OS807.52) also sought the deletion of Appendix 6.2 Hazardous Substances Quantity Limits for the Commercial Mixed Use, Industrial, Stadium, Moana Pool, Edgar Centre and Taieri Aerodrome Zones, for similar reasons.

56. *LPG Association of NZ Inc* (OS85.1, OS85.2, OS85.3 and OS85.4) and *Rockgas Limited* (OS897.1 and OS897.2) also opposed the setting of hazardous substances quantity limits and storage requirements for LPG and instead requested reliance upon HSNO requirements. However, in OS85.4 *LPG* Association *of NZ Inc* acknowledged where there are issues such as reverse sensitivity, and where sensitive areas have been identified by Council, additional controls in the 2GP may then be warranted*. Liquigas Limited* (FS2327.2) and *the Oil Companies* (FS2487.18 and FS2487.23) supported the *LPG Association of NZ Inc* (OS85.1) for similar reasons.

57. The main submission point by these submitters is encapsulated in the submission of *LPG Association of NZ Inc.* as follows:

> *"The guidance provided on the Quality Planning website, endorsed by the Ministry for the Environment, Local Government NZ, NZ Planning Institute and the Resource Management Law Association, is quite clear in the recommendations around district plans not including HSNO requirements unless very specific issues are present at a site. The interim findings from the Hearings Panel for the current Christchurch City district plan clearly support this view. The Hastings district plan has adopted this approach. There is a proposed change to wording in the RMA by the Ministry for the Environment which purpose is to: "The explicit function for councils to control hazardous substances and the ability for councils to control new organisms (GMOs) through the RMA will be removed. This is considered to be best managed under the Hazardous Substances and New Organisms Act 1996 and by the Environmental Protection Authority. The removal of the explicit function for councils to control hazardous substances will not limit councils' abilities to use land use controls to avoid hazardous substances events where appropriate under the RMA, but it will remove the perceived need for RMA controls in all circumstances. The functions for regional councils and territorial authorities, in combination with part 2 of the RMA, will still allow enough scope for councils to control hazardous substances where appropriate. This will be confirmed in updated guidance on hazardous substances management*"

58. *Horticulture New Zealand* (OS1090.24) requested removing the hazardous substances quantity limits requirements (Appendix A6) from the 2GP unless it was otherwise required for matters not addressed through HSNO controls. *Horticulture New Zealand* (OS1090.40) also sought either the removal of the hazardous substance quantity limits for the recreation, rural, rural residential and Dunedin Botanic Garden zones or its replacement with provisions consistent with the Christchurch City Plan or with provisions to clearly exclude rural activities where they comply with HSNO requirements (Appendix A6.4). The *University of Otago* (FS2142.17) and *Ravensdown Limited* (FS2481.25) supported this submission.

59. Some of these submitters drew our attention to what they considered to be a clear directive from the Christchurch Hearings Panel (also relying on the expert evidence they had heard from Peter Dawson, Principal Scientist and Mark St Clair, Planner, for the Crown through the Canterbury Earthquake Recovery Authority ("CERA")), that it did not support the use of threshold limits in the Replacement Plan. CERA was a submitter to the Christchurch Replacement District Plan.

60. In summary, the approach in the Christchurch Replacement District Plan (Chapter 4 Hazardous Substances and Contaminated Land) is that the use, storage or disposal of any hazardous substance (unless otherwise specified in this plan) is a permitted activity (Rule 4.1.4.1.1 Permitted activities). Although, within Rule 4.1.4.1.5 Non-complying activities, any new storage or use of hazardous substances with explosive or flammable properties within 5m, 10m and 12m of the centre line of a; 33kV electricity distribution line, 66kV electricity distribution line (or National Grid transmission line) and a 110kV or 220kV National Grid transmission line, respectively are non-complying activities (subject to a number of exclusions). In addition, any sensitive activity located within a Risk Management Area is also a non-complying activity with this rule ceasing to have effect by 31 March 2019. An advice note also states that:

> *"The Risk Management Areas are shown on Planning Map 47A. The geographic extent of these areas may be subject to a future plan change to have effect by 31st March 2019 and any such plan change would need to be based on the findings of a Quantitative Risk Assessment."*

61. *Mercy Dunedin Hospital Limited* (OS241.50) sought retention of the Hazardous Substances Quantity Limits and Storage Requirements (Rule 9.3.4) all related provisions because the use of such substances is integral to the efficient operation of hospitals.

62. *Liquigas Limited* (OS906.13) also sought retention of the Hazardous Substances Quantity Limits and Storage Requirements and *Liquigas Limited* (OS906.14) sought the retention of Appendix A6.2 and considered the provisions appropriately provides for the storage and use of hazardous substances in the industrial zones. This submission was supported, in part, by the *NZ Fire Service Commission* (*NZFS*) (FS2323.32) and *the Oil Companies* (FS2487.55). *NZFS* considered that the 2GP should only be concerned with rules concerning the location of larger quantities of hazardous substances, and that the detailed controls in other locations should be addressed through HSNO. *The Oil Companies* requested inclusion of a specific provision to recognise the requirements of service stations.

63. *Port Otago Limited* (OS737.7) sought to remove Appendix A6 -Hazardous substance quantity limits - Rule A6.5.6, which applies in the Port Zone and which is linked to the Hazardous Substances rule (Rule 9.3.4). Rule A6.5.6 states:

> *6. The permitted quantity thresholds apply per hazardous sub-facility. Each hazardous sub-facility must be separated from any other hazardous sub-facility on the same site and meet the following locational requirements:*

a. *if located external to a building, the gazetted[1] or regulated controls[1] for "high intensity land use" and "low intensity land use" apply, and the location is such that the "controlled zone" or tabled separation distances of each facility do not overlap; or*
b. *if permitted to be located inside a building by the gazetted[1] or regulated controls[1], or referenced standards pursuant to HSNO, then each hazardous sub-facility must be located in a separate fire cell.*

64. The reasons *Port Otago Limited* gave for deletion of sub-clause (6) were:

> *"The hazardous substance provisions were recently amended through Plan Change 13 to the Operative District Plan. Sub-clause (6) appears to be a new requirement for separation or separate fire cells where there are multiple sub-facilities on a site.*
>
> *This clause seeks to only adopt other legislative requirements (i.e. Hazardous Substances Regulations 2001). Adoption and repetition in a manner such as this is unnecessary and could lead to compliance issues with both HSNO and the RMA, which increases compliance costs unnecessarily.*
>
> *Where HSNO triggers test certificates, such as stationary containers or location, then Port Otago is happy to provide these documents to the Council to demonstrate compliance with HSNO."*

65. The *New Zealand Fire Service Commission* (FS2323.29) supported this submission and agreed that duplication of HSNO requirements with storage requirements in district plan provisions should be avoided.

66. *Ravensdown Limited* (OS893.40 and OS893.49) questioned the hazardous substance quantities, which they considered to be arbitrary and restrictively low for large-scale industrial activities located in an Industrial Zone (Appendix A6.2). This submitter also opposed the use of the quantities list to determine an activity status, because it is arbitrary and restrictively low for large scale industrial activities located in an Industrial Zone. *Ravensdown Limited* (OS893.48 and OS893.53) also sought the retention of the permitted activity status for the storage and use of hazardous substances in the industrial zones (Rule 19.3.4.16), and the retention of the exemption of the storage and use of certain fertilisers in a rural zone from the hazardous substances quantity limits (Appendix A6: Rule 6.4.2.c.3).

3.2.3.2 Section 42A Report

67. The Reporting Officer provided a general overview on the Hazardous Substances and New Organisms (HSNO) Act and associated regulations and the reliance on HSNO for LPG. His evidence referred to, and relied upon the expert evidence of Mr Mike Gray (hazardous substances expert), advisor to DCC on this matter (s42A Report, Section 5.7.1, pp. 175–177 and Section 5.7.2 pp. 184–185).

68. Mr Gray's expert evidence was that the 2GP should contain additional controls over and above the HSNO requirements, noting in particular:

- not all substances that are hazardous are classed as 'hazardous substances' under HSNO – this includes coal and asbestos;
- HSNO only requires secondary containment for liquids, and even then only requires containment of the substance being stored, with no specific allowance for firefighting water runoff. This could be a major concern

during firefighting or in situations where runoff infiltrates a sensitive wetland or an unconfined aquifer;

- adverse effects concerning sulphur are not fully controlled under HSNO, for example, sulphur dust explosion is not managed at all under HSNO;
- HSNO does not control the toxic smoke and fumes from chemical fires (including from sulphur);
- hazardous substances of a toxic or corrosive classification (and not class 1, 2, 3, 4 or 5) do not currently require a Location Test Certificate for storage or use; and
- Cyanide storage does not always provide adequate protection under HSNO (for example during flood or earthquake).

69. Mr Gray did not support the submissions to remove the threshold quantities for LPG and related gases, because HSNO controls do not provide adequate protection to sensitive areas or allow for safe management of these substances in all environments, particularly for larger quantities. However, he said that consideration might be given to permitting minor changes to the quantity limits if deemed appropriate following a risk assessment.

70. The Reporting Officer accepted there may be some duplication with the HSNO regulations, but considered that the overall approach of managing hazardous substances in the 2GP, is necessary to ensure that people, property and the environment are protected from the adverse effects of hazardous substances. In particular the 2GP controls will ensure hazardous facilities are not located near sensitive activities, and will restrict sensitive activities from locating near hazardous facilities. His evidence was that the 2GP's approach is consistent with the guidance provided by the Quality Planning website in its document titled 'Plan Topics – Managing Hazardous Substances 2013' and with the Auckland Unitary Plan and the Hamilton City Council – Partly Operative District Plan (s42A Report, Section 5.7.1, pp. 175-177).

71. The Reporting Officer also provided a summary of the advice from DCC's Resource Consents team's experiences from dealing with processing a resource application (LUC-2015-572) and gave this as an example of why it was considered reliance entirely on HSNO is not appropriate.

72. That resource consent related to a factory at 64 Bradshaw Street, Dunedin, where the applicant wanted to set up a large scale storage and manufacture operation of odourless LPG (50 tonnes) and aerosols (500,000 litres). This site is zoned Industrial and is located close to a densely populated residential area, which includes pensioner housing, schools and a sports field (Bathgate Park).

73. The Reporting Officer stated that:

> *"Whilst the original proposal complied fully with HSNO, the Council land use assessment was that the risk from these quantities of hazardous substances to the surrounding area was unacceptable. The New Zealand Fire Service fully concurred with Council's assessment and after a number of meetings and discussions a resource consent was issued for 24.5 tonnes of LPG and 75,000 litres of aerosol storage. A full risk assessment was carried out and safety measures such as gas detection sensors and spray cage facilities were incorporated into the conditions of consent"* (s42A Report, Section 5.7.1, pp. 176-177).

74. The Reporting Officer also noted that *Liquigas Limited* (OS906.13 and OS906.14) had supported the Hazardous Substances Quantity Limits and Storage Requirements (Rule 9.3.4), and it has also supported Appendix A6.2 as appropriately providing for the storage and use of hazardous substances in the Industrial zones (s42A Report, Section 5.7.1, p. 173 and Section 5.7.2 p. 185).

75. The Reporting Officer disagreed with *Port Otago Limited's* (OS737.7) request to remove Rule A6.5.6, which applies in the Port Zone. He considered that Rule 6.5.6 will not lead to undue compliance issues or costs because the provision will allow for more than one hazardous sub-facility to be located on the site as long as the locational requirements within the rule, and the quantity limits within Rule 6.5, are met. He therefore recommended no change to this provision (s42A Report, Section 5.7.6, pp. 191-192).

76. In response to *Ravensdown Limited* (OS893.40 and OS893.49) the Reporting Officer deferred to the expertise of Mr Gray who advised that HSNO requirements are the minimum requirements and there are a number of situations where this minimum level of control would be inadequate in to address the risk from the storage and use of hazardous substances. The advice also does not support exempting large scale industries from the requirements of HSNO. Therefore, the Reporting Officer recommended that OS893.40 and OS893.49 be rejected (Statement of Evidence, pp. 9-11), (s42A Report, Section 5.7.1, p. 174).

3.2.3.3 Evidence presented at hearing

3.2.3.3.1 LPG Association of New Zealand evidence

77. The *LPG Association of New Zealand* (OS85) called Ms Claire Hunter (planning consultant), Mr Peter Gilbert (executive director), and Mr Thaddeus Ryan (legal counsel).

78. In Ms Hunter's planning evidence she described that the 2GP's threshold limits for LPG of 200kg in residential zones, and a limit of 450kg for LPG in industrial and commercial zones, result in an unnecessary and inefficient double up of regulation between HSNO and the 2GP for the management of LPG (Statement of Evidence, pp. 16-17). Ms Hunter also stated in her evidence:

> *"It is my view that there need to be sound resource management reasons for setting such limits and they need to be adequately justified in terms of section 32 of the RMA. In my opinion, requiring consent for quantities of LPG that are similar to the thresholds set under HSNO and HSWA is unlikely to better enable the management of hazard risk associated with the use and storage of LPG. It is not clear to me what is missing from the other legislation that might result in concern for the Council, particularly in relation to LPG, to the extent that it sees a need to include threshold limits in the 2GP.*
>
> *In my view, a more efficient approach to managing the potential effects of hazardous substances and associated public health and safety risk would be through general zoning and overlay controls where appropriate. In my opinion, the Council has not provided sufficient evidence to support the proposed threshold limits particularly to justify the additional costs associated with imposing duplicated controls on the handling, storage and use of LPG.*
>
> *On this basis, I recommend amendments to the proposed provisions of Chapter 9 of the 2GP that would remove the threshold limits, both for LPG and other hazardous substances. That would be subject to:*
>
> *(a) rules in other chapters controlling the primary land uses associated with the hazardous substances (as with a factory in a residential zone); and*

(b) the specific restriction on substances with explosive or flammable properties within 12 metres of national grid infrastructure set out in proposed Rule 9.3.4.2.

If there are any other instances in which limits on the use or storage of certain hazardous substances are specifically necessary, to protect a particularly sensitive area or an area that is particularly susceptible to natural hazards, then they could be added to the provisions I have proposed."

79. Ms Hunter's evidence also included extensive references to Dr Peter Dawson's and Mr Mark St Clair's evidence presented to the Hearings Panel on the Christchurch Replacement District Plan; the Quality Planning Guidance: Plan Topics – Managing Hazardous Substances; and to the final decision of the Hearings Panel on the Christchurch Replacement District Plan.

80. Ms Hunter's evidence contained her recommended amendments to the hazardous substances provisions of the 2GP, including deletion of the hazardous substances quantity limits and storage requirements in Rule 9.3.4.1 and Appendix A6 (Statement of Evidence, Appendix F, p. 26). She also recommended deletion of the exemptions for the storage and use of hazardous substances within 12m of the National Grid (Rule 9.3.4.2), and replacing this with the words 'except the storage and use of hazardous substances which do not trigger a requirement to obtain a test certificate under HSNO', as the exception to this rule.

81. Ms Hunter's evidence also commented as follows, in her Appendix F:

"Any additional rules specifically justified as necessary, that provide for particular restrictions on the storage or use of specific types of hazardous substances in or adjacent to areas of land that are particularly sensitive or particularly subject to natural hazards, should be inserted here. They would be assessed as restricted discretionary activities, and would be subject to the exemptions listed below."

82. In response to questions from the Panel, Ms Hunter clarified that in her opinion no added value was provided by the resource consent process followed for 64 Bradshaw Street, Dunedin, because HSNO requirements were appropriate in the management of any hazard risk associated with the use and storage of LPG. She was also of the opinion that any hazardous substances rules (if considered necessary) should not duplicate regional plan rules, including restrictions on discharges to air and water.

83. Mr Ryan's legal evidence for the *LPG Association of NZ Inc* was that the 2GP's approach for the management of hazardous substances is not warranted. He considered that, given the broad scope of HSNO, it continues a blanket thresholds-based approach which is not justified by previous consents, does not reflect best practice and has not been adequately justified. He considered there had been no rigorous evaluation of whether the provisions are 'necessary' and that they add an unnecessary additional layer of regulatory control.

84. Mr Gilbert's evidence includes an overview of the role of the LPG Association, and the nature of its submission, and a comparison of the HSNO regulations concerning LPG with the 2GP limits approach for the management of hazardous substances.

85. His main points are outlined below.

- the 2GP approach of having small quantity limits, such as a 200kg limit for LPG in residential zones, will affect some small businesses in Dunedin including motels, fish and chip shops and laundrettes. The 450kg limit in other zones will affect about 50 users, for example, larger motels and

retail outlets, and manufacturing companies that use boilers and breweries

- the resource consent example used by the Reporting Officer in his s42A Report (at 64 Bradshaw Street) under HSNO would require a spray cage for LPG storage greater than 12,000 litres (approx. 6 tonnes), and detention devices for un-odorised LPG. Also, the conditions of consent replicated HSNO requirements, which he considered were unnecessary. He failed to see the benefits of requiring LPG users (or other hazardous substances users) to go through the time, effort and cost of a resource consent process in addition to the HSNO requirements
- the blanket quantity limit approach for LPG (particularly at the lower trigger limits of 200kg and 450kg) would create additional costs to users with no corresponding safety benefits
- Napier, Hastings, South Taranaki, Kapiti Coast and Christchurch territorial authorities have all adopted a similar approach of not having any city wide quantity limits for hazardous substances, but they have instead taken an approach (as outlined in Ms Hunter's evidence) of only imposing limits where appropriate for specific and fully justified circumstances.

86. In response to questions from the Panel, the experts called by the *LPG Association of New Zealand* said they considered the Christchurch approach is best practice. Noting that LPG is already tightly controlled under HSNO, their view was that any additional controls in the 2GP should only be applied where 'necessary'.

3.2.3.3.2 *Rockgas Limited evidence*

87. *Rockgas Limited* (OS897.1) called Mr Owen Graham, (Land and Property Advisor). who raised similar matters to the LPG Association of New Zealand clarifying that any storage of LPG over 100kg under HSNO requires an independent Location Test Certificate (LTC) to be issued, which needs to be renewed every year.

88. Mr Graham stated in his evidence that he considered it to be unnecessary to require blanket control of LPG under the 2GP. He said the DCC, "*should only* require *resource consent applications where there are sensitive matters that must be addressed such as proximity to school or childcare facilities, special areas of natural environment, or requirements such as earth removal triggering other matters for consideration*."

89. Mr Graham also stated that if the DCC remains of a view that quality limits should remain (which he does not support), the limits need to be significantly increased.

90. When questioned, Mr Graham confirmed that he has applied for resource consent under the hazardous substances provisions of the operative District Plan, and as part of the information provided he usually attaches the HSNO certification, which he considers is an unnecessary duplication of process.

3.2.3.3.3 *Fonterra Limited evidence*

91. *Fonterra Limited* (OS807) called Mr Dean Chrystal (planning consultant) who stated that (Statement of Evidence, p. 5):

> "*while I consider it has become unnecessary for local authorities to continue to control the overall use and storage of hazardous substances through limiting quantities due to the duplication with HSNO, I do not consider that this is particularly an issue for Fonterra in terms of its Mosgiel site*."

3.2.3.3.4 *Ravensdown Limited evidence*

92. *Ravensdown Limited* (OS893) called Mr Chris A Hansen (planning consultant), Mr Murray Mackenzie (Chief Technical Manager), Mr Mark Christensen (legal counsel) and Mr Jon Farren (acoustic consultant). Mr Hansen in his evidence raised similar issues to those raised in the evidence of Ms Hunter called by the *LPG Association of New Zealand*. He agreed with the approach followed in the Christchurch Replacement Plan and the evidence of Dr Dawson and Mr St Clair as part of the Christchurch Replacement Plan hearings, and considered that there is an unnecessary duplication between HSNO and the 2GP provisions.

93. Mr Hansen noted that s.142 of the HSNO Act allows for additional controls to be provided for in plans under the RMA, although he considered that the key test is whether such requirements are considered 'necessary'. He questioned whether the Section 32 Evaluation required by the RMA that accompanies the 2GP demonstrates this necessity and properly assesses the benefits and costs of adopting this approach. He considered that the Christchurch Decision now provides clear guidance to determine whether the additional controls are necessary.

94. Mr Hansen's evidence posed the following questions as appropriate to determine whether additional controls are required in the 2GP to manage hazardous substances (Statement of Evidence, p. 18, para 74):

> *"are the additional controls indispensable, requisite and must be included in order for the effects of the storage and use of hazardous substances to be managed to levels required to meet the objectives of the plan? Or, alternatively, are there gaps in the HSNO regulations that mean a clear resource management issue cannot be appropriately addressed, and additional controls are needed?"*

95. Mr Hansen observed that this 'necessity' test has not been effectively applied in the DCC commissioned ChemSafety Report, the Section 42A Report responses to the submissions on these matters, or the Section 32 Evaluation Report notified with the 2GP.

96. Mr Mackenzie described in his evidence the tools for the management of hazardous substances at the Ravensbourne site in Dunedin. These include a Health and Safety Plan, Risk Management framework including hazard identification and management and Standard Operating Procedures (SOP's) by area, and the Code of Practice for Prevention of Sulphur Fires and Explosions. Appendix 1-4 of Mr Mackenzie's evidence provided examples of how actual hazardous substances are dealt with under the HSNO framework and a (partial) Standard Operating Procedure associated with site sulphur handling.

97. He said that regular audits are undertaken to monitor compliance, including internal audits by site personnel, internal audits by the company Internal Auditor, and external audit of compliance with the ACC Partnership Programme.

98. Mr Mackenzie also stated, that (Statement of Evidence, pp. 3-4, para 11–12):

> *"At the Ravensbourne plant, a range of hazardous substances are stored and used. ……. All of these substances are stored and used in accordance with HSNO requirements. Based on Table A6.2 in Schedule A6 of the 2GP Plan, I can confirm that a resource consent would be needed for all hazardous substances that are stored and used at the plant.*
>
> *I cannot find any discussion in any of the documents I have read about how the specific levels of the various categories of substances in Table A6.2 were identified or calculated. I do not see any identified link between the amounts listed in that Table and effects on either the environment, or public or worker safety and health. In my view, the limits in the Table appear not to be based on a risk assessment or scientific basis."*

99. Mr Mackenzie said the Chemsafety report implies that there is a risk of a sulphur dust explosion in fertiliser manufacturing facilities with sulphur stores, which he considers is misleading. He described that the sulphur used in Ravensdown's fertiliser manufacturing facilities is formed sulphur that is not explosive. He said it is in any event treated differently under the New Zealand and international regulations, which means formed sulphur used in fertiliser manufacture is not a "Dangerous Good", which is recognised in its classification under HSNO.

100. Mr Mackenzie also questioned the Chemsafety report's concerns about the potential for dust explosions with sulphur, which he said is not supported by any research. He contended that many materials seen as non-hazardous have been involved in major dust explosions, which include sugar, flour, milk powder, starch and grains, in general. Finally, Mr Mackenzie considered that there is nothing in either the nature of the Ravensbourne activity or the surrounding area, which means that additional controls in the 2GP are necessary.

101. Mr Christensen outlined in his submissions the relationship of HSNO with the RMA and clarified that more stringent requirements for the management of hazardous substances can only be imposed where 'necessary'. On that basis she considered 2GP controls in the Industrial Zone, additional to HSNO, are not necessary. He states: (Statement of Evidence, p. 4, para 14):

> *"The s42A report is unconvincing and unclear about what additional environmental or risk management benefit would arise from a resource consenting regime required for the use or storage of hazardous substances above the specified volumes, particularly when that is irrespective of the circumstances of the site and the surrounding environment."*

102. He said there is nothing in the operative or proposed RPS, which requires district plans to have additional controls over and above HSNO. He also contended that the Christchurch approach for the management of hazardous substance should be preferred, because it has been through a robust and persuasive process, which determined that additional controls to HSNO in Christchurch City are unnecessary.

103. In response to questions from the Panel, the experts called by *Ravensdown* Limited (OS893) clarified that the HSNO requirements for Ravensdown are comprehensive, and not a minimum level of control; Ravensdown is not a major hazard facility; and that they considered the Christchurch approach to managing hazardous substances is appropriate in Dunedin.

3.2.3.3.5 *Horticulture New Zealand evidence*

104. Horticulture *New Zealand* (OS1090) called Ms Lynette Wharfe (planning consultant) who provided evidence for *Horticulture New Zealand* in both the Auckland and Christchurch district plan process for the management of hazardous substances.

105. Ms Wharfe considered in her evidence that the Christchurch outcome is more appropriate as it has included a level of enquiry that did not occur through the Auckland process. This included the involvement of the Crown and the EPA for the first time and a rigorous cross-examination process.

106. Ms Wharfe said that she had also been involved in the Hastings District Plan process, which was referred to in the Christchurch decision, and she stated that (Statement of Evidence, p. 8, para 8.13):

> *"The Hastings Plan specifically seeks to avoid unnecessary duplication between HSNO and the Plan by providing for the storage, handling and use of hazardous substances as permitted activities except for specific provisions within the Heretaunga Plains Unconfined Aquifer which was identified as a*

sensitive area. It also has provisions for Major Hazardous Facilities which are specifically listed facilities that require a resource consent."

107. Her view was that the Section 32 Evaluation Report did not consider whether more stringent requirements than HSNO are necessary, and also noted changes to the management of hazardous substances by the Resource Legislation Amendment Bill, which would amend the provisions of the RMA to remove obligations on both regional councils and territorial authorities in relation to hazardous substances. She also described that the intent of the Government in developing this amendment is to rely on HSNO for the management of hazardous substances.

108. In response to questions, Ms Wharfe said the Christchurch approach was best and that it was a robust and comprehensive process with a good outcome. The involvement of the Crown was key to this process and their evidence was compelling and well received by the Panel.

3.2.3.3.6 *University of Otago evidence*

109. *University of Otago* (FS2142.17) called Mr Murray Brass, who outlined in his planning evidence further reasons for support of *Horticulture New Zealand* (OS1090.24) (Statement of Evidence, pp. 5-6, para 34-35):

> *"34. In effect, the s42A report takes the approach that because there are some circumstances where land use controls are appropriate in addition to HSNO controls, therefore the District Plan should default to controlling the full range of identified hazardous substances. From that full range of hazardous substances, specific exceptions may yet be allowed in response to specific submissions.*
>
> *35. My understanding of the Horticulture New Zealand submission, and certainly the intent of the University's further submission, was to apply a reverse approach – given that HSNO controls already apply as a default, to only have additional controls in the District Plan where these are specifically warranted. The s42A report, in my reading of it, has not addressed this option."*

110. Mr Brass raised the example of table salt (sodium chloride), which is a hazardous substance under HSNO. The 2GP has limits ranging from 5kg in residential zones to 1000kg in the Campus Zone, with restricted discretionary status for any exceedance of those limits. He considered that the storage of 5kg of salt in a personal home would not have any adverse effects on neighbouring properties or the wider environment and therefore control under the 2GP is unnecessary.

111. Mr Brass supported the concerns of other submitters that the 2GP should be revised to only impose land use controls in the 2GP where this is necessary to address environmental effects beyond what is covered by HSNO.

3.2.3.3.7 *Port Otago Limited evidence*

112. *Port Otago Limited's* (OS737.7) legal submissions were presented by Mr Len Anderson, who contended that there is little or no justification for controls under the RMA, as HSNO effectively manages all effects that hazardous substances could have. He noted that HSNO has comprehensive requirements for setbacks from boundaries or from sensitive uses such as residential activity, emergency response and storage tank design.

113. Mr Anderson stated that Ms Mary O'Callahan (an experienced planner who represents the submitter in other matters under the 2GP) had advised him that she is not aware

of any application for a hazardous substances facility in the industrial or port environment which has been declined, and her view was that in general resource consent conditions simply rely on compliance with HSNO regulations.

3.2.3.4 Revised recommendations from Reporting Officer

114. The Reporting Officer, in providing his revised recommendations, acknowledged what he considered was robust evidence provided by the *LPG Association of New Zealand* and other submitters with regard to the relationship of HSNO and the RMA for the management of hazardous substances.

115. He noted that the submitters' evidence supported an approach similar to that followed in the Christchurch Replacement Plan where hazardous substances are mainly managed outside the 2GP through HSNO, except where additional controls under the 2GP are deemed 'necessary'. The Reporting Officer also recognised the importance of the evidence from Mr Peter Dawson and Mr Mark St Clair for the Crown who appeared at the Christchurch Replacement Plan hearings, as well as the Quality Planning Guidance titled Plan Topics Managing Hazardous Substances 2013.

116. The Reporting Officer accepted that the Section 32 Evaluation report did not provide an adequate analysis to justify the potential situations where additional controls for hazardous substances under the RMA (in addition to HSNO) may be 'necessary'. He noted that the Section 32 work had been done prior to the decisions of the Christchurch Replacement Plan and so that decision had not been available for guidance in developing the 2GP provisions.

117. The Reporting Officer then reproduced in his revised recommendations the potential situations where he considered additional controls under the RMA may be necessary, as outlined in the Quality Planning Guidance. He also described some situations where additional controls under the RMA (via the 2GP) may be necessary for the management of hazardous substances, drawing on the 2GP definition of 'sensitive activities', the natural hazard provisions of the 2GP, and what he considered to be sensitive natural environments.

118. He stated:

> *"I also consider that 'sensitive natural environments' should include the coastal marine area, underground aquifers, rivers and streams, wetlands and ASCV's."* (Revised Recommendations, p.3)

119. In conclusion, the Reporting Officer said:

> *"I consider that if the Panel is of a mind to follow the approach more in line with Christchurch than Auckland or Hamilton, then further (substantial) work is required to draft up provisions to facilitate this. Extensive analysis (and expert advice) would be required to assess the type and location of hazardous substances, and its associated effect on the potential situations where additional controls under the 2GP may be 'necessary'.*
>
> *Approaches to consider whether 'necessary' include:*
>
> - *Whether setbacks from sensitive activities or sensitive environments are required*
> - *The quantity and type of hazardous substances which should be permitted (if any) within the identified 'sensitive areas'. Similar standards as in the notified 2GP could be considered as a starting point for assessment of this*

- *Differing approaches depending on the type (characteristics) of the hazardous substance and the type of sensitive area*

I do not consider that the recommended changes by Claire Hunter are sufficient as they do not fully address the range of sensitive activities, natural hazards, or sensitive natural environments in Dunedin and the potential effects of hazardous substances on these." (Revised Recommendations, p.3)

3.2.3.5 Post-adjournment evidence

120. We requested that the Reporting Officer undertake additional research on the type and distribution of sensitive activities, sensitive natural environments and natural hazards in the 2GP, and the sensitive natural environments managed by the Otago Regional Council.

121. The results of that further work are encapsulated in a memorandum dated March 2018 titled "Hazardous substances, sensitive activities and sensitive environments".

122. In that memorandum the Reporting Officer considered that additional controls for hazardous substances under the RMA (in additional to Health and Safety at Work (HSW) Act and HSNO requirements) are 'necessary' in all zones with the exception of industrial zones, where there are no natural hazard overlays or sensitive natural environments, and the Port Zone.

123. He also mapped the location of the industrial zoned land, natural hazard overlays or sensitive natural environments and determined that high class soils and ASCV's are not located on industrial zoned land. In addition, the only area which contains aquifers, groundwater protection zones or groundwater zones under the Otago Regional Plan: Water and is industrial zoned is in Mosgiel, and this land is also subject to a flood hazard.

124. He therefore recommended that industrial zoned land where the 2GP hazardous substances provisions should apply are those which contain a natural hazard overlay in the 2GP. Conversely, he recommended that industrial zoned land where the 2GP hazardous substances provisions should not apply, and instead there should be reliance solely on HSW and HSNO requirements, are those which do not contain a natural hazard overlay in the 2GP. Maps showing the location of these industrial zoned areas are contained in Appendix 1 of this memorandum.

3.2.3.6 Decision and reason

125. We accept in part the submissions from *Fonterra Limited* (OS807.49), *New Zealand Fire Service Commission* (FS2323.30), *Mercy Dunedin Hospital Limited* (OS241.50), *Oceana Gold (New Zealand) Limited* (FS2439.45), *Horticulture New Zealand* (OS1090.24, OS1090.40, FS2452.27), *Fonterra Limited* (OS807.52), *LPG Association of NZ Inc* (OS85.1, OS85.2, OS85.3 and OS85.4), *Ravensdown Limited* (OS893.40, OS893.48, OS893.49 and OS893.53), *Rockgas Limited* (OS897.1 and OS897.2), *Liquigas Limited* (OS906.13 and OS906.14) and *Port Otago Limited* (OS737.7), to the extent that we have made a decision to rely on Hazardous Substances and New Organisms Act (HSNO) and Health and Safety at Work Act (HSW) regulations and notices for the management of hazardous substances in locations where sensitive activities cannot establish without consideration of the effects of hazardous substances, and that are not subject to natural hazards.

126. On hearing the evidence we consider there is a need for some control of hazardous substances in the 2GP, and we were not convinced that other legislation can be relied upon totally to deliver the appropriate outcomes under the RMA for all areas of the

City. Therefore, while we can see the benefit in avoiding duplication of control, we were reluctant to remove all control from the 2GP.

127. We have therefore decided on an approach which we feel is consistent with the decision made in the Christchurch Replacement Plan for hazardous substances. We agree with submitters and expert evidence from the submitters, to the extent that the Health and Safety at Work Act (HSW) regulations and notices should adequately manage the potential adverse effects of hazardous substances in those parts of the industrial and port zones, which are not subject to hazard overlay zones.

128. We note that since the Public Health and Safety Hearing in late January and early February 2017, there have been significant legislative changes in how hazardous substances are managed with the new HSW, Hazardous Substances Regulations, and the Hazardous Substances Properties Control Notices coming into force on 1 December 2017, as well as the Resource Legislation Amendment Bill receiving royal assent on 18 April 2017.

129. For clarity, we note that we are retaining the 2GP approach to managing hazardous substances for all zones where sensitive activities can establish as a permitted activity, and all areas which are subject to a natural hazard overlay zone. In making this decision we agree with the Reporting Officer's post-adjournment evidence (refer above).

130. More specifically, we support retention of the 2GP provisions for the storage and use of hazardous substances:

- for residential activities in all zones, and all activities in the residential zones, Smith Street and York Place (SSYP), and Schools zones
- in commercial and mixed use zones (except Smith Street and York Place (SSYP)), Stadium, Moana Pool, Edgar Centre and Taieri Aerodrome zones
- in Invermay and Hercus, Dunedin Public Hospital, Campus, and Otago Museum zones
- in recreation, rural, rural residential, and Dunedin Botanic Garden zones
- in Dunedin International Airport Zone
- in Ashburn Clinic, Mercy Hospital, and Wakari Hospital zones
- in industrial zones in a natural hazard overlay (within a hazard 2 and 3 (flood), hazard 2 (land instability), hazard 3 (alluvial fan) or hazard 3 (coastal) overlay zone)

131. Therefore, we have decided to make the following amendments:

- amend clause b of the table within Rule 9.3.4.1 Hazardous Substances Quantity Limits and Storage Requirements by removing reference to industrial zones from requiring compliance with Appendix A6.2
- amend clause e of the table within Rule 9.3.4.1 Hazardous Substances Quantity Limits and Storage Requirements by removing reference to the Port Zone from requiring compliance with Appendix A6.5 and also deleting Appendix A6.5 - Port Zone
- deleting the reference to the Hazardous Substances Quantity Limits and Storage Requirements in the Port Zone (Rule 30.3.4.6 and Rule 30.6.2)
- amend clause e of the table within Rule 9.3.4.1 Hazardous Substances Quantity Limits and Storage Requirements by adding reference to 'Industrial zones within a hazard 2 and 3 (flood), hazard 2 (land instability), hazard 3 (alluvial fan) or hazard 3 (coastal) overlay zone' requiring compliance with Appendix A6.2

132. Amendments are shown in Appendix 1 and attributed to submission point reference PHS85.1.

133. We consider that this is necessary because of:

- uncertainty as to how the Health and Safety at Work (HSW) Act, Hazardous Substances Regulations, and the Hazardous Substances Properties Control Notices which came into force on 1 December 2017 will work with regards to sensitive activities, including working from home in residential areas

- the impact of different natural hazards on the use or storage of different types of hazardous substances.

3.2.4 Policy 9.2.2.11 and Hazardous Substances Quantity Limits and Storage Requirements rule

3.2.4.1 Overview

134. Policy 9.2.2.11 states:

> "*Require hazardous substances to be stored and used in a way that avoids risk of adverse effects on the health and safety of people on the site or surrounding sites or, if avoidance is not possible, ensures any adverse effects would be insignificant.*"

135. The Hazardous Substances Quantity Limits and Storage Requirements (Rule 9.3.4) states:

> ***"9.3.4 Hazardous Substances Quantity Limits and Storage Requirements***
>
> *1. The storage and use of hazardous substances must comply with the quantity limits and storage requirements specified in Appendix A6, as follows:*

Zones and activities		Appendix
a.	*Residential activities in all zones, and all activities in the residential zones, Smith Street and York Place (SSYP), and Schools zones*	*A6.1*
b.	*Commercial mixed use zones (except Smith Street and York Place (SSYP)), industrial, Stadium, Moana Pool, Edgar Centre and Taieri Aerodrome zones*	*A6.2*
c.	*Invermay and Hercus, Dunedin Public Hospital, Campus, and Otago Museum zones*	*A6.3*
d.	*Recreation, rural, rural residential, and Dunedin Botanic Garden zones*	*A6.4*
e.	*Port Zone*	*A6.5*
f.	*Dunedin International Airport Zone*	*A6.6*

g.	*Ashburn Clinic, Mercy Hospital, and Wakari Hospital zones*	*A6.7*

2. The storage and use of hazardous substances must be set back 12m from national grid transmission lines, support structures and substations, except:
   a. the storage and use of hazardous substances which comply with the residential zones hazardous substances quantity limits in Appendix A6.1;
   b. the storage and use of transformer cooling oils in electricity transformers;
   c. fuel in motor vehicles, boats and small engines;
   d. gas and oil pipelines;
   e. trade waste sewers; and
   f. waste treatment and disposal facilities.
3. The storage and use of hazardous substances that contravenes this standard is a restricted discretionary activity, except:
   a. contravention of Rule 9.3.4.2 is a non-complying activity."

136. For the sake of brevity Note, 9.3A, Other requirements outside of the District Plan, has not been reproduced.

137. Appendices A6.1 to A6.7 outline the substances and permitted quantity limits for 7 different zones and activities for each of the following 9 classes of hazardous substance:
   a. Class 1 – Explosives
   b. Class 2 - Gases and aerosols
   c. Class 3 - Flammable liquids
   d. Class 4 - Flammable solids
   e. Class 5 - Oxidising substances
   f. Class 6 - Toxic substances
   g. Class 7 - Radioactive materials
   h. Class 8 – Corrosives
   i. Class 9 – Ecotoxics

138. Relevant assessment rules are Rule 9.4.3.10 Assessment of Restricted Discretionary Activities (Performance Standard Contraventions) - Hazardous substances quantity limits and storage requirements.

3.2.4.2 Submissions

139. *New Zealand Fire Service Commission* (OS945.25) sought to exclude hazardous substances stored at fire stations or on fire appliances from complying with Appendix A6 because it considered they are adequately covered by HSNO regulations.

140. *Horticulture New Zealand* (OS1090.23) sought amendments to Policy 9.2.2.11 to reference achieving HSNO requirements and also sought, in OS1090.24, an exception to the Hazardous Substances Quantity Limits and Storage Requirements (Rule 9.3.4) to provide for the application of agrichemicals and fertilisers under National Grid transmission lines.

141. *The Oil Companies* (OS634.17) and *Federated Farmers of New Zealand* (OS919.18) sought to amend Policy 9.2.2.11 to manage the residual risk of hazardous substances to 'acceptable levels'. *The Oil Companies* (OS634.17) was supported by *Horticulture NZ* (FS2452.25), *Fonterra Limited* (FS2317.5), *Liquigas Limited* (FS2327.21) and *Ravensdown Limited* (FS2481.6).

142. *The Oil Companies* (OS634.6) also sought to amend the definition of 'Storage and Use of Hazardous Substances' to specifically exclude activities involving the small-scale use and storage of hazardous substances, which was supported by *Horticulture NZ* (FS2452.21) and *Fonterra Limited* (FS2317.3) and supported in part by *New Zealand Fire Service Commission* (FS2323.5).

143. More specifically *the Oil Companies* (OS634.6) sought the following exclusions to the definition of 'Storage and Use of Hazardous Substances':

> *a. storage of substances in or on vehicles being used in transit on public roads;*
> *b. installations where the combined transformer oil capacity of the electricity transformers is less than 1,000l;*
> *c. fuel in mobile plant, motor vehicles, boats and small engines;*
> *d. gas and oil pipelines and associated equipment;*
> *e. retail outlets selling domestic scale usage of hazardous substances, such as supermarkets, trade suppliers, and pharmacies*
> *f. the accessory use and storage of hazardous substances in minimal domestic scale quantities;*
> *g. fire-fighting substances, and substances required for emergency response purposes on emergency service vehicles and at emergency service facilities*
> *h. activities involving substances of HSNO sub-classes 1.4, 1.5, 1.6, 6.1D, 6.1E, 6.3, 6.4, 9.1D and 9.2D unless other hazard classification applies;*
> *i. the temporary storage, handling and distribution of national or international cargo containers;*
> *j. waste treatment and disposal facilities (not within High Flood Hazard areas and Flood Management Areas), and waste in process in the Council's trade waste sewers, municipal liquid waste treatment and disposal facilities (not within High Flood Hazard areas and Flood Management Areas) which may contain hazardous substance residues;*
> *k. vehicles applying agrichemicals and fertilisers for their intended purpose* (Submission, pp.13-14).

144. *The Oil Companies* (OS634.18) also sought to amend Appendix A6 to exempt the underground storage of petrol and diesel at service stations and truck stops from the hazardous substances quantity limits and storage requirements in all parts of the district because they are adequately covered by HSNO. *McKeown Group Limite*d (OS895.14) had a similar request for similar reasons.

145. *The Oil Companies* (OS634.19) also sought to amend the hazardous substances setback from national grid transmission lines, support structures and substations performance standard (Rule 9.3.4.2) so that it applies only to hazardous substances with explosive or flammable properties. This is because it was *the Oil Companies'* understanding from discussions with *Transpower's* planning advisor in relation to the National Grid that the concern is about the risk of a fire and explosion event from hazardous substances affecting the lines. In contrast, *Transpower New Zealand Limited* (OS806.44) sought that this rule is retained.

146. *Oceana Gold (New Zealand) Limited* (OS1088.27) sought retention of Policy 9.2.2.11.

147. *Liquigas Limited* (OS906.11) sought amendment of Policy 9.2.2.11 to appropriately manage residual risk including from sensitive activities located near hazardous substances stores. *Ravensdown Limited* (OS893.16) and *Oceania Gold (NZ) Limited* (OS1088.27) also sought the retention of Policy 9.2.2.11.

148. *Aurora Energy Limited* (OS457.54) sought retention of the exemption for the storage and use of transformer cooling oils in electricity transformers from the 12m National Grid setback performance standard (Rule 9.3.4.2(b)) because they considered it was appropriate.

149. *Timothy Morris* (OS951.61) and *the RG and SM Morris Family Trust* (OS1054.61) sought the removal of restrictions on the storage of gunpowder, black powder and smokeless ammunition reloading powder in the rural zones (Rule 9.3.4, Rule 16.6.4, and Table A6.4.1).

150. The *University of Otago* (OS308.218 and OS308.435) sought changes to the quantity limits for flammable liquids in the Campus and other zones (Table A6.3.3) to better reflect risk and regulatory requirements and considered that "the Gazette Notice referred to has provisions which are incomplete or out of date, and the labelling system referred to does not necessarily reflect levels of risk." The *University of Otago* (OS308.361) also sought a consequential amendment to the performance standards linkage to the 'storage and use of hazardous substances' activity status in the Campus Zone (Rule 34.3.4.30) so that it is consistent with decisions on submissions OS308.218 and OS308.435.

151. *Federated Farmers of New Zealand* (OS919.114) supported the Assessment of performance standard contraventions - Hazardous substances quantity limits and storage requirements (Rule 9.4.3.10); as long as the hazardous substances quantity limits for the Rural area (Appendix A6.4) are reasonable and do not significantly go beyond HSNO requirements. In addition (OS919.143) they supported the equivalent Rural Zones assessment of performance standard contraventions – hazardous substances quantity limits and storage requirements (Rule 16.9.4.7), because it considers the effects on health and safety and the risk from natural hazards.

3.2.4.3 Section 42A Report

152. The Reporting Officer considered that it is valid and not overly onerous to include strong wording within Policy 9.2.2.11 because of the potential serious consequences on the health and safety of people (including serious injury or death) if hazardous substances are not stored appropriately. He agreed in part that this policy could be worded better to reflect the potential level of risk and to also reflect how risk policies are worded in the Natural Hazards section of the 2GP. He did not consider that 'appropriately managed' or 'managed to acceptable levels' provides sufficient direction or guidance. He also did not support referencing HSNO in this policy. He recommended that the reference to 'would be insignificant' be replaced with 'no more than low' in Policy 9.2.2.11 (s42A Report, Section 5.4.14, pp. 74-78).

153. With regard to the *New Zealand Fire Service Commission* (OS945.25) submission, the Reporting Officer noted that Mr Gray had advised that (s42A Report, Section 5.7.1, pp. 173-174):

> *"It would be useful for the Fire Service to document the specific substances (and/or substance classes) and maximum quantities that they wish to have exempt. A risk assessment could then be undertaken, and if acceptable to Council the exemption could then be written."*

154. In response to *the Oil Companies'* (OS634.6) submission the Reporting Officer noted that the exclusions sought by the submitter include some (but not) all of the matters listed as exclusions under the setback requirements of the 'Hazardous Substances Quantity Limits and Storage Requirements' performance standard (Rule 9.3.4.2). He also considered that it would be more efficient and effective to amend the Hazardous Substances Quantity Limits and Storage Requirements performance standard (Rule 9.3.4) instead of amending the definition of 'Storage and Use of Hazardous Substances.' He also noted that this would be more consistent with the approach followed in the Christchurch Replacement Plan (s42A Report, Section 5.7.1, pp. 169-172).

155. The Reporting Officer also noted that the relief requested in OS634.6 is addressed in pages 16 and 17 of the Chemsafety expert evidence where Mr Gray clarified that they are less concerned with the exclusions in a-d and j, although they have concerns in regard to the exclusions in e, f, g, h, i and k (refer above).

156. In relation to *the Oil Companies* (OS634.19), *Horticulture New Zealand* (OS1090.24), and *Aurora Energy Limited's* (OS457.54) submissions, the Reporting Officer also referred to the expert evidence from Mr Gray of Chemsafety who considered that *the Oil Companies'* submission was reasonable provided that it included combustible hazardous substances and class 4 and 5 substances, and provided that Transpower was consulted with and were satisfied *(*s42A Report, Section 5.7.1, pp. 178-179*)*.

157. Mr Gray did not support the storage of agrichemicals or fertiliser within 12m of National Grid transmission lines, support structures and substations because of the possible effect of smoke and firefighting activities on the Grid, in particular, the possibility of electrical arcing, in the case of a building fire involving ionic fertiliser. The ionic (conductive) dust from poorly contained fertiliser may also adversely impact the effectiveness of insulators within the National Grid infrastructure.

158. Mr Gray said he would be less concerned with the application of agrichemicals and fertiliser to crops and fields under National Grid lines provided they did not involve machinery or vehicles that might result in the potential for electrical arcing.

159. The Reporting Officer contacted Ms Ainsley McLeod (planning consultant) who represented *Transpower* with regard to OS634.19 and OS1090.24. Ms McLeod responded via email on 7 November 2016 to confirm that *Transpower* was not opposed to these exceptions subject to decisions on other *Transpower* submissions, including the Setback from National Grid (sensitive activities, buildings and structures) rule (Rule 5.6.1.1).

160. As a consequence, the Reporting Officer recommended that OS634.19 be accepted and OS1090.24, OS457.54 and OS634.6 be accepted in part by amending clause 2 and 3 of the Hazardous Substances Quantity Limits and Storage Requirements rule (Rule 9.3.4) and including additional exceptions to this rule.

161. The Reporting Officer also relied on the evidence of Mr Gray to assess *the Oil Companies* (OS634.18) and *McKeown Group Limited* (OS895.14) submissions (Section 42A Report, Section 5.7.2, pp. 183-185). Mr Gray said that the experience from the Christchurch earthquake was that underground tanks are reasonably resilient to major leakage under adverse situations and the HSNO requirements mean fuel tanks are relatively resilient to soil contamination. He recommended a review, including a thorough feasibility and risk assessment to identify appropriate quantity limits and acceptable permitted areas for the underground storage of petrol and diesel, but did not recommend the removal of quantity limits entirely from the 2GP.

162. The Reporting Officer undertook a review of the approaches followed in other district plans and noted a varied approach on how this matter is managed. He recommended that the DCC:

> *"Undertake a review of the appropriate hazardous substances quantity storage limits for HSNO sub-class 3.1 liquid petroleum fuels in underground storage tanks which takes into account the characteristics of the zone, any hazards and the different sub-classes of the fuel. Once this review is completed, prepare a memo which outlines a recommended approach to be circulated to relevant parties for comment before providing a final recommendation and details of any feedback received to the Panel for their consideration."* (s42A Report, Section 5.7.2, p.185)

163. The Reporting Officer in relation to *Timothy Morris* (OS951.61) and the *RG and SM Morris Family Trust* (OS1054.61)*,* clarified that the quantity limits for gunpowder and black powder (excluding forestry and timber treatment) in the rural zones (in table A6.4.1 Class 1 – explosives) is 15kg and because the submission does not outline why an unlimited amount is necessary, he recommended that these submissions be rejected (s42A Report, Section 5.7.1, p. 177*)*.

164. The Reporting Officer outlined in regard to the *University of Otago* (OS308.218, OS308.361 and OS308.435) that Rule A6.3.3 was taken from the Note to Plan Users in clause 17.5.4 of the operative District Plan and was inserted by Plan Change 13 – Hazardous Substances (Operative 2 September 2013). Furthermore, he said his understanding is that the New Zealand Gazette Notice No. 35 is not incomplete or out of date, and the labelling does reflect levels of risk. He also noted that the submitter had not provided any examples of how these provisions are incomplete or out of date, and recommended that these submissions be rejected *(*s42A Report, Section 5.7.4, pp. 186-188*)*.

165. In regard to *Federated Farmers of New Zealand* (OS919.114 and OS919.143) the Reporting Officer supported the retention of the assessment rules for hazardous substances quantity limits and storage requirements (s42A Report, Section 5.8.1, p. 196).

3.2.4.4 Evidence presented at hearing

3.2.4.4.1 New Zealand Fire Service Commission evidence

166. The *New Zealand Fire Service Commission* (OS945.25) called Ms Fiona Blight (consultant planner). In her evidence, Ms Blight clarified that the hazardous substances that are typically stored at fire stations are compressed air (classed as non-hazardous gas), oxidising gas (medical oxygen cylinders), and foam, all used as part of firefighting, other emergency responses and for firefighting training purposes. She also said that it appears from her review of Appendix A6 that the storage of compressed air and oxidising gas (medical oxygen) is a permitted activity in all zones.

167. However, she stated that in relation to fire fighting foam (Statement of Evidence, p. 9, para 6.17):

> *"Foam used for firefighting is classed 9.1D. In Appendix A6 for all Class 9 – Ecotoxics Tables, under which class 9.1D is found, the quantity stored in an underground tank is governed by the base class thresholds. Zero quantity of storage is permitted elsewhere, including storage by the NZ Fire Service, and therefore requires resource consent. The storage of this foam in the quantities used by the NZ Fire Service was notified in the Auckland Unitary Plan as a permitted activity."*

168. She said that to obtain resource consent for the storage of firefighting foam, where it cannot rely on existing use rights, would significantly compromise the New Zealand Fire Service's ability to efficiently and effectively respond to emergencies, and is an unnecessary administrative burden.

169. She recommended an exclusion to the Hazardous Substances Quantity Limits and Storage Requirements (Rule 9.3.4) as follows (Statement of Evidence, p. 8):

> *"storage at fire stations and on emergency response appliances of hazardous substances including compressed air, oxidising gas (medical oxygen), and foam used for firefighting"*

170. She clarified under questioning from us that foam on fire appliances and within fire stations are locked with appropriate signage, and fire appliances and local fire stations only have small quantities and have to get replacements from the central fire station.

171. Mr Gray responded to this by saying in an e-mailed response that his concern was the placement of the word 'including' did not restrict the hazardous substances proposed just to those used for firefighting purposes. Mr Gray therefore recommended alternative wording so that the exception only applies to hazardous substances used for firefighting purposes.

3.2.4.4.2 Horticulture New Zealand evidence

172. *Horticulture New Zealand* (OS1090.24) called Ms Lynette Wharfe (planner). In her planning evidence she clarified that *Horticulture New Zealand* seeks to recognise in Policy 9.2.2.11 the role of both the 2GP and HSNO, while avoiding duplication. She suggested alternative wording (Statement of Evidence, pp. 11-12):

> *"Require hazardous substances to be stored and used in a way <u>that is consistent with HSNO requirements and</u> that ensures risk of adverse effects on the health and safety of people on the site or surrounding sites is avoided, or if avoidance is not practicable, is no more than low."*

173. Ms Wharfe also clarified that horticulture growers use hazardous substances such as agrichemicals, fertilisers and fuel at variable rates depending on the day, week and time in the season where the range of substances used may be extensive but never at the same time. They also tend to purchase substances in small quantities near the time when they are needed (Statement of Evidence, pp. 4-6).

174. In addition, Ms Wharfe said she supports the exception to the 12m setback from the National Grid for applying agrichemicals and fertilisers for their intended purpose, but that this should not be restricted to 'vehicles' so this exception would apply to all applications of agrichemicals and fertilisers (for example those undertaken via backpack) (Statement of Evidence, pp. 12-15).

3.2.4.4.3 Oceana Gold (NZ) Limited evidence

175. *Oceana Gold (NZ) Limited* (OS1088.27) called Ms St John, legal counsel, who supported the Reporting Officer's recommended amendment to Policy 9.2.2.11 (Statement of Evidence, p. 3).

3.2.4.4.4 The Oil Companies evidence

176. *The Oil Companies* (OS634) called Ms Georgina McPherson (consultant planner), Mr Gregory Akehurst (economics expert), and Ms Jennifer Polich (expert risk management consultant). Mr Akehurst did not give evidence specifically with regard to *the Oil Companies'* submission points OS634.6, OS634.18 and OS634.19.

177. Ms McPherson, in regard to *the Oil Companies'* (OS634.17) submission point to amend Policy 9.2.2.11, did not support the Reporting Officer's recommended amendment, which she considered was ambiguous and unlikely to be achievable for *the Oil Companies'* Dunedin fuel depots. She said the recommended wording of this policy will require the same management of risk within a major hazard facility as outside on surrounding sites, which is contrary to WorkSafe NZ requirements. She gave an example of 'off stream inspection works', which are considered as 'high risk' under WorkSafe NZ regulations but which are necessary parts of the maintenance and inspection work required and sanctioned by WorkSafe NZ, and would not be able to meet the 'low risk' test. Therefore, as a minimum she recommended removal of the

reference to health and safety of people on the 'site or surrounding sites' from Policy 9.2.2.11 (Statement of Evidence, pp. 3 & 17).

178. Ms McPherson, in relation to *the Oil Companies'* submission point OS634.6 recommended exceptions to Rule 9.3.4 e-i as follows (Statement of Evidence, pp. 22-25):

> *"e. retail outlets selling domestic scale usage of hazardous substances, such as supermarkets, trade suppliers, and pharmacies.*
>
> *f. the accessory use and storage of hazardous substances in minimal domestic scale quantities;*
>
> *g. fire-fighting substances, and substances required for emergency response purposes on emergency service vehicles and at emergency service facilities*
>
> *h. activities involving substances of HSNO sub-classes 1.4, 1.5, 1.6, 6.1D, 6.1E, 6.3, 6.4, 9.1D and 9.2D unless other hazard classification applies;*
>
> *i. the temporary storage, handling and distribution of national or international cargo containers;"*

179. Ms McPherson clarified that the exceptions sought were based on those identified in the Hazardous Facilities Screening Procedure (HFSP) and have been refined through various district plan processes (e.g. the Auckland Unitary Plan and Christchurch Replacement Plan), which have been through a robust assessment process and where various hazardous substances experts have agreed there is no need to control such activities for land use reasons.

180. Also, Ms McPherson clarified that the exceptions under e, f and g of the HFSP identified that the scale of these activities is deemed to be insignificant. In addition, in regard to g she stated (Statement of Evidence, paragraph 6.29):

> *"I do not agree with the interpretation in the Chemsafety Report that this includes bulk storage diesel and petrol tanks or consider that to be the intent of the clause. However, I consider that could be easily addressed by amending the wording along the following lines, or as suggested by the NZ Fire Service:*
>
> *g. fire-fighting substances, <u>oxidising gas and compressed air</u> ~~and substances~~ required for emergency response purposes on emergency service vehicles and at emergency service facilities"*

181. In regard to the exception sought in h, she clarified that experts agreed at caucusing for the Christchurch Replacement District Plan that there was no need to control these activities for land use reasons, because they represent chronic rather than acute hazards, and it is not appropriate that they are used in a land-use planning context. She also disagreed with the Chemsafety report that this exception would include bulk oil storage depots because petroleum substances have more than one hazardous property and would be caught by the Hazardous Substances Quantity Limits and Storage Requirements applying to those properties that are not exempt, e.g. 3.1A in the case of petrol.

182. In response to the exception sought in i she described that cargo containers are typically only ever in transit at ports for no more than a few days and the makeup and mix of cargo is likely to vary considerably on a seasonal or day-to-day basis and there

would be significant cost and operational implications for port operations if the hazardous substances provisions were to apply. She also outlined that existing regulation including through the International Maritime Dangerous Goods Rules and site specific HSNO requirements apply and she considered that it is inappropriate to apply hazardous substances provisions to a temporary activity" (Statement of Evidence, para 6.31).

183. Ms McPherson, in regard to *the Oil Companies'* submission point OS634.18, said that while she is not opposed to a review of the appropriate hazardous substances quantity storage limits for HSNO sub-class 3.1 liquid petroleum fuels in underground tanks, she is not persuaded that it is necessary. Ms McPherson also described that the HFSP since the 1990's recognises that it may be appropriate to exempt some activities from the HFSP where control is provided elsewhere, or because well-established codes of practice or suitable regulations are already in place. An example in her evidence was:

> *"The retail sale of liquid fuel, up to a storage of 100,000 litres of petrol in underground storage tanks and up to 50,000 litres of diesel, provided that the "Code of Practice for the Design, Installation and Operation of Underground Petroleum Systems" published by the Department of Labour – OSH, is adhered to"* (Statement of Evidence, pp. 18-21).

184. Ms McPherson also noted that in the Auckland Unitary Plan and the Hamilton City District Plan, both provide a specific controlled activity category for the storage of up to 100,000 litres of petrol, 50,000 litres of diesel and 6 tonnes of LPG at retail sites with an exemption from consideration under the remaining hazardous substances provisions. She noted that the operative District Plan provides a controlled activity status for the storage of HSNO sub-class 3.1A-D liquid petroleum fuels in below ground tanks with no quantity threshold limit applied, and there is no justification in the s42A Report or s32 Report for a different approach in the operative District Plan compared with the 2GP.

185. Furthermore, in terms of risks, she was unclear what benefit would be added by requiring a resource consent to be obtained for underground storage of petrol or diesel at a service station or truck stop activity that is not already achieved by compliance with the HSNO Act and relevant regulations, standards, and codes of practice.

186. Ms McPherson also questioned the necessity of controlling LPG storage at service stations below 1250kg. She recommended the following exception to each of Appendices A6.1 – A6.7 (Statement of Evidence, p. 21):

> *"Except the following are exempt from the hazardous substances quantity limits:*
>
> *a. The storage of HSNO sub-classes 3.1.A-D liquid petroleum fuels in belowground tanks at sites associated with the retail sale of fuel provided the following codes of practice are adhered to:*
>
> *i. Below Ground Stationary Container Systems for Petroleum - Design and Installation HSNOCOP 44, Environmental Protection Agency, May 2012;*
>
> *and*
>
> *ii. Below Ground Stationary Container Systems for Petroleum – Operation HSNOCOP 45, Environmental Protection Agency May 2012.*
>
> *b. The storage of HSNO sub-class 2.1.1A LPG at sites associated with the retail sale of fuel up to an aggregate of 1250kg of LPG*

stored in bottle swap facilities provided AS/NZ 1596:2014 The Storage and Handling of LP Gas is adhered to."

187. Finally, Ms McPherson confirmed that the Reporting Officer's recommendation to accept submission point OS634.19 has given effect to this submission (Statement of Evidence, p. 44).

188. Ms Polich, in regard to the *Oil Companies'* submission (OS634.18) said that there are no site specific risk factors (eg geological conditions) that compromise the mechanical integrity of underground storage tanks, and there are no significant offsite safety risks from underground fuel storages. She also outlined major HSNOCOP guidance documents 44 and 45 for service stations that define design and operational safeguards and supported the exemption of underground fuel storages at service stations from the hazardous substances provisions of the 2GP.

189. She described above ground diesel only fuel as having a low offsite safety risk (due to very low ignition probabilities), however she acknowledged that aboveground petrol (or other flammables) storages are higher risk but she did not support quantity threshold exemptions for these fuel types (Statement of Evidence, p. 15).

190. Ms Polich also supported an exemption for small quantities of bottled LPG and a small storage tank based on the existing HFSP, although she considered that some additional risk assessment work to confirm the relevant threshold quantities would be required (Statement of Evidence, p. 15).

3.2.4.4.5 Aurora Energy Limited evidence

191. *Aurora Energy Limited (*OS457.54) called Ms Bridget Irving (legal counsel), Ms Joanne Dowd (Network Policy Manager), Dr Stephen Chiles (acoustic expert), and Mr Nicholas Wyatt (Power Systems Engineer).

192. Ms Dowd clarified that the recommendation by the Reporting Officer in his s42A Report, which states "*installations where the combined transformer oil capacity of the electricity transformers is less than 1,000 litres*" is different from the notified version, which does not have a maximum volume of transformer oil and would prevent installation of standard transformers as part of the network renewal programme. Ms Dowd therefore sought that if there was to be a limit specified then the maximum volume of transformer oil should be 1,500 litres (Statement of Evidence, pp. 4-6).

193. Ms Dowd also gave examples from other councils in New Zealand, which have larger volumes of transformer oil capacity, Wellington City 1,300 to 1,700 litres, Waitaki 3000 litres, Tauranga City 1,500 litres and Southland District the same as the notified version of the 2GP (no limit) (Statement of Evidence, pp. 4-6).

194. Ms Dowd was also concerned with the reference to 'combined' in regard to transformer oil capacity of the electricity transformers, because it is unclear whether that refers to multiple units in proximity to one another and if so, how proximate they need to be in order to be 'combined'. Therefore, Ms Dowd recommended that Rule 9.3.4.3(b) is amended as follows: (Statement of Evidence, pp. 4-6).

> *"Electricity transformers with a transformer oil capacity of no more than 1500 litres".*

195. Mr Wyatt said that transformers are filled with oil to both cool and electrically insulate the transformer and the oil volumes vary from 60 to 310 litres for overhead pole mounted distribution transformers and 200 to 1060 litres for ground mounted distribution transformers.

196. In addition there are large facilities, for example the Otago Daily Times substation, which has two 750kVA transformers that individually are under the 1000 litres limit but combined exceed this (Statement of Evidence, pp. 5-6).

3.2.4.4.6 University of Otago evidence

197. The *University of Otago* (OS308) called Mr Murray Brass (planner) who provided further comment on submission point OS308.218 (Statement of Evidence, pp. 6-7). Mr Brass gave an example of an error in the 2GP whereupon Gazette Notice (dated 26 March 2004) shows Methanol as 6.1D, whereas the Environmental Protection Authority's current website shows it as 6.1.C for oral, dermal and inhalation exposure routes. Mr Brass did not give any specific evidence in support of OS308.361 or OS308.435.

3.2.4.4.7 Liquigas Limited evidence

198. *Liquigas Limited* (OS906) called Ms Claire Hunter (planning consultant) who requested amendments to Policy 9.2.2.11, linked to the request for a proposed Hazard Facility Overlay (discussed in sub-section 3.3.1 below).

199. Ms Hunter considered that the requirement for the risk of adverse effects on the health and safety of people on the site, or surrounding sites, to be either avoided or low, is unlikely to be able to be achieved for hazardous facilities like Liquigas. She also clarified that while the risk at the Liquigas is low in some situations the context may mean a greater risk is acceptable, for example in an industrial zoned area where there are low numbers of people (Statement of Evidence, pp. 16-17).

3.2.4.4.8 Ravensdown Limited evidence

200. *Ravensdown Limited* (OS893.16 and FS2481.16) called Mr Hansen (planning consultant) who supported the amendments to Policy 9.2.2.11 sought by *Horticulture NZ.* His view was that they appropriately reflect the role of both HSNO and the 2GP in managing hazardous substances and are consistent with the approach followed in the Christchurch Replacement Plan. He also disagreed that these amendments are inconsistent with the drafting protocol (Statement of Evidence, pp. 10-14).

3.2.4.5 Revised recommendations from Reporting Officer

201. The Reporting Officer, in response to the *New Zealand Fire Service Commission* (OS945.25), recommended a new clause g be added to Rule 9.3.4.3 as follows (Revised Recommendations, p. 23):

> *g. storage at fire stations and on emergency response appliances of specialist hazardous substances for fire fighting including compressed air, oxidising gas (medical oxygen), and foam*

202. The Reporting Officer supported the request by *Horticulture New Zealand* (OS1090.24) to exempt application of agrichemicals and fertilisers from the hazardous substances quantity limits (Rule 9.3.4.3.f) which was recommended in the s42A Report, but his revised recommendations were to remove the reference to 'vehicles' so the exemption is worded (Revised Recommendations, p. 21):

> *f. applying agrichemicals and fertilisers for their intended purpose.*

203. The Reporting Officer said that exemptions to the hazardous substances quantity limits sought by *the Oil Companies* (OS634.6) for exceptions g-k relating to fire-fighting substances, activities involving substances of HSNO sub-classes 1.4, 1.5, 1.6, 6.1D, 6.1E, 6.3, 6.4, 9.1D and 9.2D and the temporary storage, handling and distribution of national or international cargo containers retail outlets, are similar to exceptions in the Auckland and Christchurch district plans. He agreed that these exceptions had been identified through a robust process and he could see no reason why these exemptions, which are appropriate in Auckland and Christchurch, should not also be appropriate for Dunedin (Revised Recommendations, p. 29).

204. The Reporting Officer disagreed with *the Oil Companies'* (OS634.17) and other submitters concerns that the recommended amendments to the Public Health and Safety policy that requires hazardous substances to be stored and used in a way that avoids risk (Policy 9.2.2.11) meant that risks have to be no more than low. Instead he said this policy requires that the risk of adverse effects on the health and safety of people on the site or surrounding sites is avoided or, if avoidance is not practicable, is no more than low (Revised Recommendations, p. 26).

205. He agreed with the evidence of Ms McPherson in relation to the hazardous substances exception sought for liquid petroleum fuels and LPG by *the Oil Companies* (OS634.18) but recommended that this should be considered as part of a separate district plan process where further analysis could be undertaken (Revised Recommendations, p. 29).

206. The Reporting Officer, in regard to *Aurora Energy Limited (*OS457.54), recommended that the exception to Rule 9.3.4.3(b) in the s42A Report be amended to the notified version, as follows (Revised Recommendations, p. 16):

> *a. the storage and use of transformer cooling oils in electricity transformers;*

207. In relation to *University of Otago* (OS308.218), he clarified that he had contacted Mr Gray who confirmed that the evidence of Mr Brass is correct, and given there is an out-of-date reference in the Gazette Notice 35 in regard to Methanol, he therefore recommended the 2GP hazardous substances provisions be updated accordingly (Revised Recommendations, p. 5).

3.2.4.6 Decision and reasons

208. We accept in part the submissions from *the Oil Companies* (OS634.19 and OS634.6) and accept in part the submissions from *New Zealand Fire Service Commission* (OS945.25), *Horticulture New Zealand* (OS1090.24), *McKeown Group Limited* (OS895.14), *Transpower New Zealand Limited* (OS806.44), *Aurora Energy Limited* (OS457.54), and *University of Otago* (OS308.218) with respect to requested exceptions to Rule 9.3.4 Hazardous Substances Quantity Limits and Storage Requirements.

209. Our reasons for accepting, or accepting in part, these submissions are that the amendments to the exceptions to Rule 9.3.4 Hazardous Substances Quantity Limits and Storage Requirements, are consistent with other provisions, which have been tested through the Auckland and Christchurch district plan process, and therefore are considered consistent with best practice.

210. We also agree with relevant submitters that it is appropriate and effective and efficient to provide for these exceptions because these hazardous substances are generally of small quantities and it is unnecessary (because of their low potential for adverse environmental or health and safety effects) to control them separately in the 2GP.

211. An exception we have made is in relation to fire fighting foam. We did not receive evidence sufficient to convince us that this potentially toxic substance can safely be stored in areas which are identified as Hazard 1 and 2 flood overlays, and in relation to potential effects on groundwater protection.

212. To achieve this, we have included additional exemptions to the Hazardous Substances Quantity Limits and Storage Requirements rule.

213. These exemptions to the Hazardous Substances Quantity Limits and Storage Requirements rule (Rule 9.3.4) are contained in a new clause 3, and are worded as follows:

> *"3. The following facilities and quantities are exempt from this standard: {PHS 634.6 and others}*
> *a. storage of substances in or on vehicles being used in transit on public roads; {PHS 634.6}*
> *b. the storage and use of transformer cooling oils in electricity transformers; {PHS 457.54}*
> *c. fuel in mobile plant, motor vehicles, boats and small engines; {PHS 634.6}*
> *d. gas and oil pipelines and associated equipment; {PHS 634.6}*
> *e. waste treatment and disposal facilities not within Hazard 1 and 2 (flood) Overlay Zone, and waste in process in the DCC's trade waste sewers, municipal liquid waste treatment and disposal facilities not within Hazard 1 and 2 (flood) Overlay Zone, which may contain hazardous substance residues; {PHS 634.6} {PHS 945.25}*
> *f. the application of agrichemicals and fertilisers at a rate and in a manner consistent with their intended purpose; {PHS 634.6 and 1090.24}*
> *g. storage at fire stations and on emergency response appliances of specialist hazardous substances for firefighting including compressed air, oxidising gas (medical oxygen), and foam (excluding within the Hazard 1 and 2 (flood) Overlay Zone and* ***groundwater protection mapped area****); {PHS 945.25}*
> *h. retail outlets selling domestic scale usage of hazardous substances, such as supermarkets, trade suppliers, and pharmacies; {PHS 634.6}*
> *i. the accessory use and storage of hazardous substances in minimal domestic scale quantities; {PHS 634.6}*
> *j. activities involving substances of HSNO sub-classes 1.4, 1.5, 1.6, 6.1D, 6.1E, 6.3, 6.4, 9.1D and 9.2D unless other hazard classification applies; and {PHS 634.6}*
> *k. the temporary storage, handling and distribution of national or international cargo containers. {PHS 634.6}"*

Amendments are shown in Appendix 1 as attributed to submission point references PHS 634.6, PHS 457.54, PHS 1090.24 and PHS 945.25.

214. We have also decided to amend clause 2 of the Hazardous Substances Quantity Limits and Storage Requirements rule so that the setback requirements for hazardous substances from the National Grid only apply to hazardous substances 'with explosive or flammable properties'. Amendments are shown in Appendix 1 as attributed to submission point reference PHS634.19.

215. We reject the submission by *the Oil Companies* (OS634.18) in relation to providing exceptions for the underground storage of fuel tanks and agree with the evidence of Mr Gray and the Reporting Planner, for the reasons outlined above, that this should be part of a technical review thorough a separate future district plan process. See section 4 below titled 'Future plan change reviews and other suggestions'.

216. We accept in part the submissions by *Horticulture New Zealand* (OS1090.23), *Liquigas Limited* (OS906.11), *the Oil Companies* (OS634.17) and *Federated* Farmers *of New Zealand* (OS919.18) for amendment of Policy 9.2.2.11, but only as far as they align with the recommended amendments by the Reporting Officer in the s42A Report, which we agree with. We agree with the Reporting Officer and disagree with

Horticulture New Zealand (OS1090.23) and have decided that HNSO will not be referenced in Policy 9.2.2.11 as it does not align with the rule framework or drafting protocol, because HSNO sits outside the 2GP.

217. We note our amendment incorporates our decision, outlined in the Plan Overview report, to amend the word 'possible' to 'practicable' in response to a number of submissions including from *Liquigas*.

218. We also agree with the Reporting Officer's assessment that the amendments do not require that risk is 'no more than low', rather it requires that the risk of adverse effects on the health and safety of people on the site or surrounding sites is avoided, or if avoidance is not practicable, is no more than low. We also agree with the Reporting Officer's revised recommendations that this requirement is not unreasonable.

219. To achieve this, we have amended Policy 9.2.2.11, as shown in Appendix 1, and as attributed to submission point reference PHS634.17, as follows:

> Require hazardous substances to be stored and used in a way that avoids risk of adverse effects on the health and safety of people on the site or surrounding sites or, if avoidance is not ~~possible~~ practicable {PHS 634.17}, ensures any adverse effects ~~is~~ are no more than low ~~would be insignificant.~~ {PHS 634.17}

220. We reject the submissions from *Timothy Morris* (OS951.61) and the *RG and SM Morris Family Trust* (OS1054.61) who sought no restrictions on the storage of gunpowder, black powder and smokeless ammunition reloading powder in the rural zones. We agree with the Reporting Officer's recommendations because we consider that the 15kg quantity limits for gunpowder and black powder (excluding forestry and timber treatment) in the rural zones is sufficient for the Rural Zone, and we have not heard any evidence about why there should be an exception.

221. We also reject the submissions from *University of Otago* (OS308.361 and OS308.435) in relation to being consistent with its submission seeking amendment to Rule 9.3.4 'Hazardous Substances Quantity Limits and Storage Requirements' and to 'better reflect risk and regulatory requirements'. Our reason is that this submitter has not provided specific information (in the submission or in evidence) to establish what amendments to Appendix A6.3.3 and Rule 34.3.4.30 (hazardous substances) are requested, or the reasons for them. We have, however, corrected the reference to Gazette Notice 35 and have made other amendments to reflect the legislative changes to how hazardous substances are managed.

222. We note that these legislative changes, which came out after the Public Health and Safety Hearing concluded, include the Resource Legislation Amendment Bill (April 2017) and the transfer of the Hazardous Substances and New Organisms (HSNO) Act requirements into a new Health and Safety at Work (HSW) Act. Sub-sections 1.3.1 and 1.3.2 above provides additional detail on these changes.

3.2.5 Hazardous Sub-Facility

223. Hazardous Sub-Facility is defined in the 2GP as follows:

> *"A location within a site where multiple quantities of hazardous substances that meet the hazardous substances quantity limits performance standard may be stored."*

224. *The Oil Companies* (OS634.8) sought that this definition should be deleted because the definition essentially requires that any hazardous sub-facility can only store up to the permitted activity quantity limit and it is inappropriate to link a definition to the permitted storage thresholds in this way.

225. The Reporting Officer agreed with the submitter that it is unusual to link a definition to a permitted storage threshold, although he noted that this definition is consistent with the definition in the operative District Plan (Section 42A Report, Section 5.1.1, p. 22). Therefore, he disagreed that the definition of hazardous sub-facility should be deleted but recommended that it instead should be amended by removing the reference to the quantity limits performance standard in the definition.

226. Ms McPherson for *the Oil Companies* acknowledged that the recommended amendment would meet the intent of *the Oil Companies'* submission.

3.2.5.1 Decision and reasons

227. We accept in part *the Oil Companies'* submission (OS634.8) insofar as we agree with the recommendation of the Reporting Officer in his s42A Report to remove the reference to the quantity limits performance standard in this definition of Hazardous Sub-Facility.

228. We note that Ms McPherson in her evidence for *the Oil Companies* considers this amendment achieves the intent of this submission, and so the experts are in agreement. Amendments are shown in Appendix 1 and attributed to submission point PHS634.8.

3.2.6 Requests to amend Section 9.1 Introduction

229. Most of the changes requested to the Introduction (Section 9.1 Public Health and Safety) are to the fourth paragraph, which relate to hazardous substances and their storage and use.

230. *The Oil Companies* (OS634.55) sought an amendment to recognise the benefits of hazardous substances and the role of the HSNO Act in managing their effects, and considered there is a failure of the chapter to recognise the substantial benefits hazardous substances provide for the wider community and therefore there is a skewed perception of the issues (Submission, pp. 29 – 30).

231. *Fonterra Limited* (FS2317.4), *Liquigas Limited* (FS2327.20), *Federated Farmers of New Zealand* (FS2449.25), and *Horticulture New Zealand* (FS2452.23) supported this submission for similar reasons. In addition, *Liquigas Limited* (OS906.9), *Federated Farmers of New Zealand* (OS919.16), *Horticulture New Zealand* (OS1090.22), and *Ravensdown Limited* (FS2481.23) have made similar submission points.

232. The *LPG Association of NZ Inc* (OS85.4) also sought amendments to the hazardous substances provisions generally to recognise that the HSNO regime covers all effects related to LPG and should only include any extra provisions for LPG in circumstances where issues such as reverse sensitivity and sensitive areas have been identified by Council.

233. *The Oil Companies* (OS634.59) sought changes to paragraph 9 of the Introduction to clarify that earthworks, if inappropriately managed, may result in contamination of groundwater through silt and sediment runoff. This submitter said that it appears to confuse the issues of contaminated soil and the contamination of groundwater through silt and sediment runoff during earthworks. *Otago Regional Council* (FS2381.3) supported this submission.

234. *New Zealand Transport Agency* (*NZTA*) (OS881.96) considered that the introduction fails to consider the positive impact that transportation networks can have on the health and wellbeing of the wider community and should be revised to better provide

for integrated outcomes (Submission, p. 24). *New Zealand Fire Service Commission* (FS2323.16) supported this submission.

235. *Southern District Health Board* (OS917.23) stated that the:

> *"use of the word "excessive noise" in the first two paragraphs implies the excessive noise provisions of the Act only apply and not section 16 which is the primary section about noise in the RMA. Unreasonable noise must be mentioned."* (Submission, p. 14).

236. *Ravensdown Limited* (FS2481.23) supported this submission.

237. The Reporting Officer agreed with submitters who requested changes to the fourth paragraph of the Introduction to recognise the benefits of hazardous substances, and to clarify the role of the 2GP through the RMA and the HSNO in managing these hazardous substances. He considered that the wording proposed by *the Oil Companies* (OS634.55) better reflects the relationship between the RMA and HSNO in managing hazardous substances, and is consistent with the background to E31 Hazardous substances of the decision version of the proposed Auckland Unitary Plan. (s42A Report, Section 5.3.2, pp. 43-51)

238. He did, however, consider that there should be minor changes to the wording to the fourth paragraph of the Introduction 9.1 to properly reflect the role of hazardous substances, as follows:

> *"Hazardous substances are necessary for the operation of many commercial and other activities and need to be provided for. However, if not appropriately managed ~~and~~ their storage and use are potential threats to the health and safety of Dunedin's people and natural environment. ~~Activities which involve hazardous substances also pose a risk to the economic well-being of the city's people and businesses.~~ Hazardous substances encompass those identified in the Hazardous Substances and New Organisms Act 1996 (HSNO) and may include substances such as industrial, agricultural, horticultural and household chemicals, medical wastes, petroleum products including LPG and lubricating oils, and radioactive substances. HSNO and associated regulations set minimum performance standards for the management of these substances. The RMA enables plans to include additional land use controls for the prevention or mitigation of the storage, use, disposal and transport of hazardous substances. Such controls may relate to matters such as the location of hazardous facilities and their potential impacts on other land uses and the natural environment. ~~Given the risks that the storage and use of hazardous substances pose to the health and safety of people, these must be managed to ensure that these substances are able to be used in a safe and secure manner~~"* (s.42A Report, Section 5.3.2, p.51).

239. The Reporting Officer agreed with the submission point by *the Oil Companies* (OS634.59) that paragraph 9 relating to earthworks activities could cause confusion, and generally agreed with the recommended changes put forward by the submitter. He also considered that additional clarity could be provided by referencing silt and sediment runoff as the primary activity that requires management (s42A Report, Section 5.3.2, p.51).

240. The Reporting Officer agreed with the *New Zealand Transport Agency* (*NZTA*) (OS881.96) that transportation networks are important but noted that consideration of transportation and the importance of the transport network is outlined in Transportation, Section 6 of the 2GP, and that is the appropriate section for such a reference.

241. In response to the submission by the *Southern District Health Board* (OS917.23), Mr Hunt provided expert advice in a letter dated 5 October 2016 and in page 2 of his

letter, supported the replacement of the term 'excessive noise' with the term 'excessive or unreasonable noise' because this encompasses the wide range of noise effects dealt with by the RMA. The Reporting Officer, therefore, recommended that the *Southern District Health Board* (OS917.23) submission be accepted.

242. At the hearing *the Oil Companies* (OS634.55) called Ms MacPherson who presented expert planning evidence, noting that her suggested amendment had been given effect to in the s42A Report.

243. *Fonterra Ltd* (FS2317.4) called Mr Dean Chrystal (planning consultant) who supported the amendment to the Introduction recommended by the Reporting Officer.

244. *LPG Association of NZ Inc.* (OS85.4) called Ms Claire Hunter (planning consultant) who suggested amendments to the introduction to the Public Health and Safety section of the 2GP so that it is worded as follows:

> *"Hazardous substances play an important role in the economic wellbeing of the city's people and businesses. However, if not appropriately managed their storage and use are potential threats to the health and safety of Dunedin's people and natural environment. Hazardous substances encompass those identified in the Hazardous Substances and New Organisms Act 1996 (HSNO) and may include substances such as industrial, agricultural, horticultural and household chemicals, medical wastes, petroleum products including LPG and lubricating oils, and radioactive substances. The RMA enables plans to include additional land use controls for the prevention or mitigation of the storage, use, disposal and transport of hazardous substances, where such additional controls are necessary. Such controls may relate to matters such as the location of hazardous facilities and their potential impacts on other land uses and the natural environment. The rules below seek to avoid any duplication of regulation with the HSNO and other regulations, and only apply additional controls where it is considered necessary to do so.* (Statement of Evidence, Appendix F, p. 24).

245. *Horticulture New Zealand* (OS1090.22) called Ms Lynette Wharfe, whose expert planning evidence raised concerns about HSNO being a 'minimum' standard and the reference to 'hazardous facilities' which she considered shouldn't be used because it is not a term that is used in the Plan.

246. In paragraph 10.7 of her evidence she recommended the following amendments to the Reporting Officer's s42A Report recommended wording, as sought by *the Oil Companies* in submission OS634.55 (Statement of Evidence, pp. 10-11):

> *"HSNO and associated regulations set controls ~~minimum performance standards~~ for the management of these substances. The RMA enables plans to include additional land use controls for the prevention or mitigation of the adverse effects of storage, use, disposal or transport of hazardous substances where this is necessary to address a clear resource management issue. Such controls may relate to matters such as the location of hazardous ~~facilities~~ substances and their potential impacts on other land uses and the natural environment*."

3.2.6.1 Decision and reasons

247. We accept in part the submission from *the Oil Companies* (OS634.55) to amend the Introduction to the Public Health and Safety section (Section 9.1) to recognise the benefits of hazardous substances, and agree with the Reporting Officer's minor change to their suggested wording related to the necessity of hazardous substances for the

operation of many commercial and other activities, as the changes better reflect the relationship between the RMA and HSNO in managing hazardous substances. See Appendix 1 amendment reference (PHS634.55).

248. We also accept in part the submission of *Horticulture New Zealand* (OS1090.22) and agree with the evidence of Ms Wharfe who requested further amendments to *the Oil Companies* requested amendments to the Introduction. In doing so we also accept in part the submissions of *Liquigas Limited* (OS906.9), *Federated Farmers of New Zealand* (OS919.16) and *LPG Association of NZ Inc* (OS85.4) for amendments to the Introduction which are similar to the relief requested by *the Oil Companies* (OS634.55). See Appendix 1 amendment reference (PHS 1090.22).

249. The amendments to the Introduction to the Public Health and Safety section we have decided on, as amended by PHS634.55 and PHS 1090.22, are shown below:

> *"Hazardous substances are necessary for the operation of many commercial and other activities and need to be provided for. However, if not appropriately managed ~~and~~ {PHS 634.55} their storage and use are potential threats to the health and safety of Dunedin's people and natural environment. ~~Activities which involve hazardous substances also pose a risk to the economic well-being of the city's people and businesses.~~ {PHS 634.55} Hazardous substances encompass those identified in the Hazardous Substances and New Organisms Act 1996 (HSNO) and may include substances such as industrial, agricultural, horticultural and household chemicals, medical wastes, petroleum products including LPG and lubricating oils, and radioactive substances. HSNO and associated regulations set {PHS 634.55} controls ~~minimum performance standards~~ {PHS 1090.22} for the management of these substances. The RMA enables plans to include additional land use controls for the prevention or mitigation of the {PHS 634.55} adverse effects of {PHS 1090.22} storage, use, disposal and transport of hazardous substances {PHS 634.55} where this is necessary to address a clear resource management issue {PHS 1090.22}. Such controls may relate to matters such as the location of hazardous {PHS 634.55} ~~facilities~~ substances {PHS 1090.22} and their potential impacts on other land uses and the natural environment. ~~Given the risks that the storage and use of hazardous substances pose to the health and safety of people, these must be managed to ensure that these substances are able to be used in a safe and secure manner.~~" {PHS 634.55}*

250. We accept the submission from the *Oil Companies* (OS634.59) in relation to Earthworks activities and agree with the submitter and the Reporting Officer that paragraph 9 may be confusing, and also agree that additional clarity will be provided by referencing silt and sediment runoff as the primary activity that requires management. See Appendix 1 amendment reference (PHS634.59).

251. These amendments are show below:

> *"Earthworks activities often remove considerable amounts of soil, which if not undertaken appropriately, can create silt and sediment runoff, ~~often be contaminated and~~ which {PHS 634.59} may enter sources of groundwater and other water bodies {PHS 634.59} and cause risks to the {PHS 634.59} water supplies."*

252. We accept the submission from the *Southern District Health Board* (OS917.23) regarding "excessive noise" and agree it should be replaced with "excessive or unreasonable noise". We agree with the evidence of Mr Hunt that this encompasses the wide range of noise effects dealt with by provisions of the RMA and suitably includes in broad terms all types of noise that the 2GP addresses. Amendments are shown in Appendix 1 and attributed to submission point *Southern District Health Board* (PHS917.23).

253. These amendments are show below:

> *"The importance of the health and safety of people and communities is acknowledged within the purpose of the Resource Management Act 1991 and is a worldwide concern acknowledged through institutions such as the World Health Organisation. Throughout Dunedin, land use and development activities have the potential to affect the health and safety of people, including effects resulting from excessive or unreasonable {PHS 917.23} noise, light spill, the storage and use of hazardous substances, and threats to the City's water, wastewater, and stormwater systems.*
>
> *Almost all land use activities generate some degree of noise, and where this noise is excessive or unreasonable {PHS 917.23}, or extended over long durations, there is the risk that the health of people will be adversely affected. Some environments and activities are particularly vulnerable to excessive or unreasonable {PHS 917.23} noise, and these 'noise sensitive activities' require protection to ensure that adverse effects on the health of people are suitably managed, and reverse sensitivity issues are avoided."*

254. We reject the submission from *New Zealand Transport Agency* (NZTA) (OS881.96) and agree with the Reporting Officer that it is unnecessary to reference the transport network (or its importance) in the Introduction of the Public Health and Safety section of the 2GP because it is outlined in the Transportation Section (Section 6) of the 2GP.

3.3 Requests by Liquigas and the Oil companies for new hazard facility areas

3.3.1 Liquigas Limited request for a new hazardous facility overlay

3.3.1.1 Submissions

255. *Liquigas Limited* (OS906.1) sought a hazard facility area within a 200 metre radius of all boundaries of the Liquigas site at 254 Fryatt Street, Dunedin (refer Appendix 2 at the end of this report for a map showing the extent of this area). It also requested new definitions, objectives, policies and rules, and a non-complying activity status for 'sensitive activities' locating within the proposed hazard overlay.

256. *Liquigas Limited* (OS906.1) was concerned about the consequences of potential gas fire or explosion at the site and considered that the establishment of a buffer zone between the site and sensitive land use areas is the appropriate strategy to minimise the potential risk associated with storage, delivery and transportation of LPG. Moreover, *Liquigas* was concerned that the encroachment of sensitive uses into the area surrounding the *Liquigas* site may limit the ability to upgrade and expand LPG facilities.

257. *Liquigas Limited's* (OS906.1) request was opposed by further submitter *New Zealand Fire Service Commission* (FS2323.21) and supported in part by 12 further submissions from *the Oil Companies* (FS2487).

258. *New Zealand Fire Service Commission* (FS2323.21) considered that *Liquigas* had not provided adequate information and justification to support its submission.

259. *The Oil Companies* further submissions (FS2487.1, FS2487.2, FS2487.49, FS2487.54, FS2487.56, FS2487.57, FS2487.62, FS2487.64, FS2487.86, FS2487.97 and FS2487.124) supported, or supported in part, the *Liquigas Limited* submission point OS906.1, and included requests for:

- the Hazard Facility mapped area to be extended to include the Oil Companies 3 fuel depots (FS2487.1 and FS2487.54)
- support of the amendment of the definition of Sensitive Activities although the Oil Companies were not opposed to the location of activities such as cemeteries, crematoriums and landfills within the Hazard Facility mapped area (FS2487.2)
- support of a new policy under Objective 9.2.2 to avoid the encroachment of sensitive land uses within the Hazard Facility mapped area (FS2487.49)
- support of new provisions to require non-complying activity consent for sensitive activities within the Hazard Facility mapped area (FS2487.56)
- support of Community and Leisure, Early Childhood Education and Campgrounds being non-complying in the Hazard Facility mapped area (FS2487.124)
- amendment to assessment rules for non-complying activities seeking to locate within the Hazard Facility mapped area by including 'risk' as an assessment matter (Rule 9.7.2) (FS2487.57)
- amendment to the activity status of sensitive activities within the Princes, Parry and Harrow (PPH) zone so that they are non-complying within the Hazard Facility mapped area (Rule 18.3.4) (FS2487.86)

260. *The Oil Companies* (FS2487.58) also opposed the amendments sought by *Liquigas Limited* (OS906.1) to the Special Information Requirements - Site management and

emergency response plans (Rule 9.8.1) and preferred that 'risk' is a matter that is considered when assessing non-complying activities.

3.3.1.2 Section 42A Report

261. The Reporting Officer considered that the information provided in the *Liquigas Limited* submission, in regard to the low risk and high potential impact of an 'emergency event' occurring, and the potential impact of any such event on the health and safety of surrounding people, warranted recognition in the 2GP. He noted that the restriction of sensitive activities within a hazard facility area as requested by *Liquigas* is consistent with the approach followed in the Auckland Unitary Plan and Christchurch Replacement District Plan.

262. The Reporting Officer also considered that it was unnecessary to make changes to the activity status of sensitive activities in the Industrial Zone and Industrial Port Zone because most 'sensitive activities' are already non-complying. Furthermore, for the Stadium Zone, he noted that only a small part of the requested hazard facility area covers this zone and that the risk to users of the Stadium had already been considered through the assessment undertaken by Envirocom (NZ) Ltd as part of Plan Change 8 to the operative Plan.

263. He referred to the *Impact Assessment Overview of risks from proposed Spectator Events and Education Zone* by Envirocom (NZ) Ltd (2007). This document formed part of the application for Plan Change 8 – Stadium, which became operative on 30 March 2009. It relates to the management of risk associated with bulk fuel facilities (s42A Report, Section 5.6.1, pp. 158-160).

264. The requested hazard facility area also extends over Recreation zoned land at 65 Magnet Street. The Reporting Officer noted that the site is used in conjunction with the Otago Boat Harbour and is currently managed under the Otago Boat Harbour Management Plan, which, in addition to the District Plan provisions, restricts activities to those associated with aquatic sports. He considered that given the current ownership and management of the site, it was highly unlikely that new sensitive activities, which are likely to be occupied for large parts of the day by relatively large numbers of people (for example Plunket, playgrounds or early childcare education activities) would establish there. Overall, Mr Rawson considered that the combination of the low likelihood of an 'event' happening and the intermittent or low occupancy of 65 Magnet Street, meant that the risk to the health and safety of people on this site was limited. Therefore, he recommended that there be no change to the activity status table in the Recreation Zone as a result of the *Liquigas Limited* submission.

265. The Reporting Officer also:

- recommended a discretionary activity status for hazardous facility sensitive activities within the hazard facility area, where located in the PPH Zone (s42A Report, Section 5.6.1, p. 160)
- generally agreed with the list of activities considered by these submitters to be sensitive to hazardous facilities but considered that additional work is required to align these activities with the equivalent activities in the 2GP, and to consider whether existing definitions of sensitive activities could be amended to reflect those activities sensitive to hazardous facilities (s42A Report, Section 5.6.1, pp. 159-160).

3.3.1.3 Evidence presented at Hearing

3.3.1.3.1 Bindon Holdings Limited and East Parry Investments Limited evidence

266. *Bindon Holdings Limited* (FS2471.24, FS2471.25 and FS2471.27) and *East Parry Investments Limited* (FS2472.2 and FS2472.4) called Mr JG Hardie (Barrister) who primarily discussed the evidence of *the Oil Companies* relating to their request for a hazard overlay in the next section of this decision report. He also highlighted that Ms Claire Hunter in her evidence for *Liquigas Limited* clarified why additional controls in the 2GP around the vicinity of the *Liquigas* site are necessary, although in her evidence for the *LPG Association* argued that additional controls for hazardous substances in the 2GP under different circumstances cannot be justified.

3.3.1.3.2 Liquigas Limited evidence

267. *Liquigas Limited* (OS906.1) called Ms Claire Hunter (planning consultant), Mr Damian Phillis (Safety and Risk Engineer), Ms Anneke Theelen (Counsel) and Mr Albert de Geest (CEO of Liquigas Limited).

268. Ms Hunter clarified that the relief sought in *Liquigas'* submissions was driven by its concerns about the potential for an emergency event occurring at its site, for example, a gas fire or explosion. Although such an event is of a low probability, the risk is of high consequence. Ms Hunter considered that the key aspects of *Liquigas'* submission were:

- the retention of the port/industrial zoning surrounding the Liquigas site that existed in the operative Dunedin City District Plan and opposition to the proposed re-zoning to Recreation or Princes, Parry Harrow (PPH) zones
- a proposed hazard facility area to manage the exposure of surrounding sites to risk in the event of an emergency event at the Liquigas site, with a suite of corresponding plan provisions (Statement of Evidence, p. 4).

269. Ms Hunter said that due to actual and perceived risk, *Liquigas*' ability to operate, update, and expand the Dunedin LPG terminal will be constrained if the 2GP enables further and new sensitive or incompatible land uses to establish nearby, including from the potential for reverse sensitivity effects to adversely affect site operations.

270. She supported a hazard facility area in addition to industrial zoning within 200 metres of the Liquigas site boundaries. She said associated rules would trigger a non-complying resource consent requirement for sensitive or incompatible activities that seek to locate in the overlay area, and associated changes to definitions, objectives, policies and rules would also be required.

271. She argued that the requested industrial zoning and the risk management overlay seek to control different things and therefore the 2GP should provide for both. The Industrial Zone identifies the port area, generally, as being appropriate for industrial activities while managing any associated effects on the environment, and discourages activities not of that nature from locating in the area. The overlay, on the other hand, responds specifically to the issue of potential risk and reverse sensitivity that exists because of the Liquigas facility.

272. Ms Hunter also said the main difference in the submissions made by *Liquigas Limited* and the *Oil Companies* for a hazard facility area is that *the Oil Companies'* submission sought a two-tiered approach (building design requirements plus site emergency management planning requirements), and *Liquigas Limited* only has a single Emergency Management Area. Although, in the interests of consistency, she said that *Liquigas Limited* would be willing to adopt a similar two-tier approach for its facility. Ms Hunter also proposed that a controlled activity rule is inserted in Chapter 9, which applies to all new buildings or alterations to existing buildings seeking to establish within the overlay for the Liquigas facility (Statement of Evidence, p. 15).

273. Ms Hunter did not support the recommendation by the Reporting Officer for discretionary instead of a non-complying activity status for sensitive activities within the hazard overlay. Ms Hunter considered that a non-complying activity status will provide clear direction to the community that sensitive activities within hazard overlays are inappropriate.

274. She did not agree that the Otago Boat Harbour Management Plan (under the Reserves Act) is the appropriate tool to prevent sensitive land use activities from occurring, which she considered focused solely on the use, development and protection of the recreational area. Instead she considered that was the function of the District Plan, to make appropriate consideration of the compatibility of surrounding land use activities. Furthermore, she considered that the permitted or restricted activity status for many sensitive activities at the Recreation zoned reserve at 65 Magnet Street under the Reserves Act is inappropriate. As a minimum, if the Recreation Zone is retained, the hazard overlay must be imposed to ensure that sensitive or incompatible activities cannot establish as of right in the part of that land that is within 200m of the Liquigas site, without any consideration of that nearby risk.

275. Ms Hunter also outlined the *Liquigas Limited* proposed hazard facility area framework (Pre-circulated Evidence, pp. 18 – 19, paragraph 6.2), which is:

- amendments to Policy 9.2.2.11 to manage the adverse effects arising from the storage and use of hazardous substance, including by managing reverse sensitivity effects
- a new policy, which would seek the avoidance of sensitive or incompatible activities within the boundaries of the overlay
- a new non complying rule applicable to sensitive or incompatible activities within the overlay
- a new controlled activity rule applicable to all new buildings, or alterations to existing buildings within the overlay
- amendments to the District Planning maps to provide for the overlay so that the extent is clear to all plan users.

276. Alternatively, she considered that suitable provisions could be inserted into each relevant zone to set out the overlay requirements.

277. Mr Phillis said:

- the Health and Safety at Work (Major Hazard Facilities) Regulations 2016 (MHF Regulations) has designated the Dunedin LPG Storage Depot as an Upper Tier MHF under the new MHF Regulations, which justifies a risk management overlay approach
- industrial zoning by itself may not provide sufficient protection against reverse sensitivity as it may still be possible to locate incompatible land uses (for example land uses with high occupancies or a large number of traffic movements)
- a quantitative risk assessment (QRA) is the preferred method for determining the extent of hazard overlays
- no standard land use planning risk criteria developed for the New Zealand context (although guidance provided by Australian government documents)

278. Mr Phillis also said there are three options for consideration in determining the extent of these risk management overlays (or equivalent) around major hazard facilities, which are:

- option 1 – Council liaise with Worksafe New Zealand and develop an agreed methodology and assumptions list for the generation of risk contours around the defined hazardous facilities and then fund QRA's to determine the risk management overlays

- option 2 – only apply risk management overlays to hazardous facilities which have existing QRA's
- option 3 – leverage off the obligations on major hazard facilities under the proposed new MHF Regulations whereby each defined upper tier major hazard facility will be required to identify the potential magnitude and severity of the effects of all credible major incidents associated with the facility.

279. Mr Phillis considered that the QRA commissioned by *Liquigas* for the Dunedin Depot in 2009, although the underlying assumptions may be different if undertaken now, is still valid as a sound basis for representing the risk around the Liquigas facility. He also considered that option 1 and 3 will take some time and is likely to take until the next District Plan review to be implemented.

280. He also considered that a 200m hazard facility area from the *Liquigas* site boundaries, although beyond the *Liquigas* QRA boundaries (which are shown in Appendix 1 of his evidence) is appropriate because it is likely that more conservative assumptions would be used if this QRA was undertaken today, which would extend these boundaries.

281. Mr Phillis also clarified, under questioning, that the major concern is the heavier than air vapour cloud and the potential of wind moving the cloud rather than dispersing it. The conditions to do this occur more frequently at night, and that is why concern for residential activity is more pronounced. He also noted that there are three other LPG facilities in Dunedin with these being lower tier major hazard facilities under WorkSafe regulations.

282. Ms Anneke Theelen (Counsel) outlined the key components of the hazard facility area sought by *Liquigas Limited*, which are to recognise the inherent risks associated with the Liquigas LPG facility by imposing a 200m overlay and accompanying objectives, policies and rules to discourage activities sensitive to this risk to minimise risks to people and the wider environment and to also minimise reverse sensitivity effects.

283. She said that sensitive activities include activities that attract high occupancy levels or contain vulnerable people, for example community and leisure, early childhood education, hospitals, prisons, residential, schools or visitor accommodation activities.

284. Ms Theelen also said that this overlay could include a controlled activity resource consent process to ensure that the design of new buildings and alterations to buildings give adequate consideration to managing and responding to this risk.

285. Mr Albert de Geest described the Dunedin *Liquigas* operation and associated infrastructure, its concern with the 2GP and the necessity of a hazard facility area. He outlined that *Liquigas* is New Zealand's leading handler of LPG with four storage and distribution facilities throughout New Zealand. The Dunedin facility consists of a series of below ground mounded storage facilities capable of storing 1,300 tonnes of LPG, which is supplied by sea tankers via underground pipes. He said that *Liquigas* gained resource consent in 2009 (valid until 2019) for an upgrade to the facility to store an additional 1000 tonnes of LPG, and other associated developments, which have yet to be implemented. He said that the Dunedin facility supplies approximately 80% of the lower South Island's LPG. In addition, he made the point that the infrastructure is essentially fixed and so cannot be relocated.

286. Mr de Geest also said that *Liquigas* has invested $4 million in new safety and controlled shutdown measures to maintain a high level of safety, and other safety measures such as:

- mounding storage tanks under a. thick layer of sand and gravel for protection
- coating storage tanks with a coal tar epoxy coating and having a monitored cathodic protection system to prevent corrosion

- gas and fire detection system, which if detected automatically shuts down the facility including a deluge system which will spray high volumes of water across the truck loading bays and exposed areas of storage tanks in the event of a fire or if a high gas level (50% of the lower explosive level) is detected.

287. Mr de Geest also supported the hazard facility area requested by *Liquigas Limited* as necessary to appropriately manage the inherent risks associated with the operation of the facility, including the separation of sensitive activities from this bulk fuel storage facility. He said this was consistent with what had been accepted through the Auckland and Christchurch plan review processes.

3.3.1.3.3 New Zealand Fire Service evidence

288. The *New Zealand Fire Service* (FS2323.21) called Ms Carol Blight (consultant planner) who explained that the concern of the *New Zealand Fire Service* was the identification of emergency services as 'sensitive activities', which would make them non-complying activities in a hazard facility area. She said this is unusual and counter intuitive because emergency services contain people, appliances and equipment, which respond to emergencies in the community and are not 'sensitive' to other activities or sensitive to being located in such an overlay and she considered that it would be more usual for emergency services to be located within these areas (Statement of Evidence, p. 12).

3.3.1.3.4 Revised recommendations from Reporting Officer

289. The Reporting Officer at the end of the hearing made no change to his s42A Report recommendations.

290. We note here that Emergency Services were made permitted activities in the industrial zones as part of our decisions on submissions for the Industrial Zone.

3.3.1.4 Decision and Reasons

291. We accept in part the submission from *Liquigas Limited* (OS906.1) for a Hazard Facility mapped area within a 200 metre radius of all boundaries of the Liquigas site at 254 Fryatt Street, Dunedin and new definitions, objectives, policies and rules for 'sensitive activities' locating within the proposed hazard facility area.

292. We have decided on an approach which is somewhat different to what was requested by *Liquigas Limited* (OS906.1), and is also different to what was recommended by the Reporting Officer, and have decided that the amendments to the 2GP as a result of *Liquigas Limited* (OS906.1) will be:

- amendment to the 2GP planning maps to show the Hazard Facility mapped area

- amendment of strategic direction Policy 2.2.6.2 relating to the storage and use of hazardous substances, so that it reads as follows:

  "Protect people's health and safety from the storage and use of hazardous substances through rules that: {PHS cl.16}

  a. limit the amount of different hazardous substances that may be used in different environments (zones); and {PHS cl.16}
  b. restrict sensitive activities from locating within a hazard facility mapped area" {PHS 906.1}.

- inclusion of new Policy 9.2.2.15, as follows:

  *"Only allow sensitive activities within a **Hazard Facility mapped area** where the risk to people from a low probability but high consequence emergency event at the Hazard Facility are no more than low."*

- new performance standard Rule 9.3.8 Location (**Hazard Facility mapped area**), as follows:

"**Rule 9.3.8 Location (Hazard Facility mapped area)**

a. *Community and leisure - large scale, early childhood education, entertainment and exhibition, major facility activities (other than major recreation facility in the Stadium Zone and port activity in industrial zones), registered health practitioners, residential, training and education and visitor accommodation activities must not be located within the **hazard facility mapped area**.*
b. *Activities that contravene this performance standard are discretionary activities." {PHS 906.1}*

293. We have also decided to amend the rules for: assessment of discretionary activities; assessment of discretionary performance standard contraventions; and the assessment of non-complying activities (Rules 9.6.3, 9.6.4 and 9.7.3 respectively) for the activities set out in Rule 9.3.8. The potential circumstances that may support a consent application include the layout of the buildings, the location of glazing and emergency egress points, the type, hours of operation and number of people accommodated and the contents of an Emergency Management Plan.

294. These amendments are to add the following new rules:

- Rule 9.6.3.3 Assessment of discretionary activities - In a **hazard facility mapped area**
- Rule 9.6.4.7 Assessment of discretionary performance standard contraventions - Location (**hazard facility mapped area**)
- Rule 9.7.3.2 Assessment of non-complying land use activities - in a **hazard facility mapped area**.
- The addition of clause 5 to Rule 9.8.1, which may require activities within a **hazard facility mapped area** to provide a site management plan and an emergency response plan with an application for resource consent.

295. Related to the above, we have decided to amend the provisions in the commercial and mixed use zones, industrial, stadium and recreation zones, as summarised below.

296. The amendments in the commercial and mixed use zones, are to:
- add new Rule 18.5.4.6 Location (**hazard facility mapped area**), which requires activities to comply with Rule 9.3.8
- add new Rule 18.11.4.4 Assessment of discretionary performance standard contraventions - Location (**hazard facility mapped area**), which references Rule 9.6 Assessment of Discretionary Activities
- add new Rule 18.12.3.10 Assessment of non-complying land use activities - in a **hazard facility mapped area**, which references Rule 9.7 Assessment of non-complying activities.

297. The amendments in the industrial zones, are to:
- add new Rule 19.12.2.5 Assessment of non-complying land use and development activities - in a **hazard facility mapped area**, which references Rule 9.7 Assessment of non-complying activities.

298. The amendments in the Recreation Zone, are to:

- amend activity status for community and leisure - large scale (Rule 20.3.3.3) and Early childhood education - small scale (Rule 20.3.3.5) to reference new performance standard Rule 9.3.8 Location (**Hazard Facility mapped area**), as an applicable standard for these activities
- include new Rule 20.5.9 Location (**hazard facility mapped area**), which references Rule 9.3.8
- add to Rule 20.11.2.2 Assessment of discretionary land use activities - early childhood education - large scale to provide guidance to link discretionary activities to new guidance on assessing sensitive activities in the new **hazard facility mapped area**
- add new Rule 20.11.3.3 Assessment of discretionary performance standard contraventions - location (**hazard facility mapped area**), which links to Rule 9.6
- add new Rule 20.12.3.8 Assessment of non complying land use activities – in a **hazard facility mapped area**, which links to Rule 9.7.

299. The amendments in the Stadium Zone, are to:

- amend Rule 32.3.3 Activity status table land use activities. The amendment references Rule 9.3.8 Location (**hazard facility mapped area**) as a relevant performance standard for community and leisure - large scale (included as all other community activities), which is a permitted activity
- add new Rule 32.5.7 Location (**hazard facility mapped area**), which requires community and leisure - large scale to comply with Rule 9.3.8
- add new Rule 32.10.2.2 Assessment of discretionary activities - in a **hazard facility mapped area**, which references Rule 9.6 Assessment of discretionary activities
- add new Rule 32.11.2.3 Assessment of non-complying land use activities - in a **hazard facility mapped area**, which references Rule 9.7 Assessment of non-complying activities.

300. The reasons for our decision are that, in general, we accept the approach settled on for Auckland City and Christchurch City, through extensive assessment of technical evidence and agree with the Reporting Officer and the experts from the submitters at our hearings that there is no good reason why the general approach cannot be used or is not appropriate in Dunedin City.

301. A key factor in those cases was that a Qualitative Risk Assessment (QRA) had been undertaken for the key facilities in Auckland and Christchurch. We consider this approach has merit and accept the evidence on this. We note that in Dunedin a QRA has also been carried out for the *Liquigas* site (in 2009), which has quantified the potential health and safety risks of this LPG depot on the community.

302. We agree with *Liquigas Limited* that there is the potential, of a low probability but high consequence, emergency event occurring at the Liquigas LPG depot at 254 Fryatt Street, for example, a gas fire or explosion. We also consider that the policy and rule framework we have decided upon, as outlined above, is the appropriate method to minimise the risk to people if an emergency event occurs.

303. The major difference between the Auckland and Christchurch approaches and our decision, is that 'sensitive activities' in the former are either non-complying or prohibited activities, whereas we agree with the Reporting Officers that a discretionary activity status for 'sensitive activities' locating in the Hazard Facility mapped area is appropriate and still allows for 'sensitive activities' to locate within the mapped area, though only after thorough consideration of the potential risk to people of a 'emergency event' occurring at the Liquigas site. It also recognises that a number of sensitive activities are already located in the Princes, Parry and Harrow Street and Recreation zones. We do not consider it appropriate to apply a non-complying activity status, as it would send the message that locating 'sensitive activities' within the

hazard overlay is inappropriate in almost all circumstances, when there may well be opportunities for these activities to establish with appropriate conditions in place.

304. This discretionary activity status will also allow consideration of the layout of the buildings, the location of glazing and emergency egress points, the type, hours of operation and number of people accommodated within any 'sensitive activity' to ensure that the risk to people from a low probability but high consequence emergency event occurring at the *Liquigas* Hazard Facility are no more than low.

305. In making this decision we also agree, in part, with the Reporting Officer's approach for the management of 'sensitive activities' locating within the proposed Hazard Facility mapped area and note that:

- only a small part of one site (56 Parry Street) is both within the *Liquigas* hazard overlay and in the Princes, Parry and Harrow Street (PPH) Zone, and it is also in the extreme outer edge of the hazard overlay
- activities on the Recreation zoned land at 65 Magnet Street occur (and are likely to continue to occur) on an intermittent basis, with a relatively low occupancy
- in industrial zones activities sensitive to the Hazard Facility are non-complying, or in case of Community and Leisure – Large Scale we have made decisions (in response to *the Oil Companies* submission point OS634.34), outlined in the Industrial Zones Decision Report, that this activity be non-complying
- risks to the users of the Stadium have already been considered through the assessment undertaken by Environcom (NZ) Limited as part of Plan Change 8 of the operative Plan.

306. Equally we agree with the evidence of *Liquigas Limited* that there are strong controls on the *Liquigas* LPG depot site through the Health and Safety at Work (Major Hazard Facilities) Regulations 2016 (MHF Regulations), which includes designating the LPG depot as an Upper Tier Major Hazard Facility. We were also impressed by the evidence from *Liquigas Limited* that it treats health and safety very seriously, and has a number of systems in place to firstly ensure that an emergency event will not occur, and to manage such an event in the very low probability that it does occur.

307. Another difference from the Auckland and Christchurch approaches is that we have listed the activities sensitive to a Hazard Facility instead of defining them and referring to the definition in the rule. The reason for this is that Rule 9.3.8 Location (**Hazard Facility mapped area**) performance standard (Rule 9.3.8) only applies to sensitive activities that are within the hazardous facility mapped area. By comparison, activities that are defined in the 2GP generally relate to activities with occur in multiple places. Amendments are shown in Appendix 1 and are attributed to submission point reference PHS906.1.

3.3.2 The Oil Companies request for a new hazard facility area

3.3.2.1 Submissions

308. *The Oil Companies* (OS634.88 and OS634.89) sought a proposed hazard overlay, to extend 250m from all boundaries of the depot at 203 Fryatt Street and 102 Parry Street. *The Oil Companies* also sought a second overlay which extends 100m from all boundaries. The extent of these hazard overlays is shown in Appendix 3 below. Associated with this request *The Oil Companies* sought new definitions, objectives, policies and rules which apply a non-complying activity status for 'sensitive activities' locating within the proposed hazard overlay.

309. *The Oil Companies'* reasons for their submission are to do with risk and reserve sensitivity/encroachment issues. It considers that the presence of people and sensitive

activities in close proximity to bulk fuel facilities has the potential to create unacceptable risks, which will in turn affect resilience and efficiency in regional wide fuel supplies. The bulk fuel terminal creates potential risks for the surrounding area due to the nature and volume of the fuels stored, particularly from a low probability but high potential impact event (i.e. an unconfined vapour cloud of flammable vapour with a risk of ignition). It is concerned that the proposed rezoning (particularly the Princes, Parry and Harrow Street (PPH) Zone) would present the potential for risk sensitive activities to establish, which may result in reverse sensitivity effects and restrictions on the ongoing operation, maintenance and upgrade of the bulk fuel terminals. This may affect the ability of the bulk fuel terminal to meet ongoing and future fuel demands for the medium and long term, in an appropriate and safe manner.

310. *The Oil Companies* submission point (OS634.88) was opposed by *New Zealand Fire Service Commission* (FS2323.24), *Bindon Holdings Ltd* (FS2471.24) and *East Parry Investments Limited* (FS2472.4). *The Oil Companies* submission point (OS634.89) was supported in part by *Liquigas Limited* (FS2327.25) and opposed by *Bindon Holdings Ltd* (FS2471.25 and FS2471.27) and *East Parry Investments Limited* (FS2472.2).

311. *New Zealand Fire Service Commission* (FS2323.24) considered that the non-complying activity status for emergency services' facilities within a hazard overlay has not been justified in *The Oil Companies* submission.

312. *Bindon Holdings Limited* (FS2471.24, FS2471.25 and FS2471.27) and *East Parry Investments Limited* (FS2472.2 and FS2472.4) considered that *the Oil Companies* had failed to provide robust supporting evidence and justification including risk analysis of the area and are externalising responsibility for risk management to other parties.

313. *Liquigas Limited* (FS2327.25) considered that the 2GP should include mechanisms to identify areas vulnerable to risks associated with major hazard facilities and apply suitable regulation to manage such risk.

3.3.2.2 Section 42A Report

314. The Reporting Officer referred to documents relating to the management of risk associated with bulk fuel facilities (s42A Report, Section 5.6.1, pp. 158-160), and included on the 2GP website for the Public Health and Safety topic, as DCC evidence, titled:

- UK Health and Safety Executive land use planning advice around large scale petrol storage sites
- Risk Criteria for Land Use Safety Planning - Hazardous Industry Planning Advisory Paper No 4 – NSW Government Planning (2011).

315. He considered that, as with the *Liquigas Limited* submission, the information provided in *the Oil* Companies submission warranted special recognition in the 2GP, including restrictions on sensitive activities within the identified hazard overlays.

316. He also considered that it is unnecessary to make changes to the activity status of sensitive activities in the Industrial Zone and Industrial Port Zone because most 'sensitive activities' are non-complying. For example, he said:

- in the Rural Hill Slopes Zone (which is within *the Oil Companies* hazard overlay centred on 102 Parry Street) the 25 hectare minimum site size requirement will mean that the number of 'sensitive activities' likely to be established within the overlay will be small; and

- in the Recreation zoned land at 65 Magnet Street, there is also very little chance of new sensitive activities establishing (refer to the discussion for the *Liquigas Limited* submission above).

317. The Reporting Officer also made some specific recommendations, as summarised below (s42A Report, Section 5.6.1, pp. 159-160):

- it is unnecessary to add a new objective as proposed by *the Oil Companies* (OS634.88) because the new proposed policies will be able to successfully function under objective 9.2.2 and the Industrial Zone objective 19.2.1 (which this submitter supports) which protects the ability of industrial and port activities (which include bulk fuel supply and storage infrastructure) to establish and operate
- discretionary activity status is appropriate for hazardous facility sensitive activities should they locate within the hazard facility area
- agreed with the list of activities considered by these submitters to be sensitive to hazardous facilities but additional work is required to align these activities with the equivalent activities in the 2GP, and to consider whether existing definitions of sensitive activities could be amended to reflect those activities sensitive to hazardous facilities
- supported the addition of a hazardous facility building design rule to ensure that new buildings and additions or alterations to buildings within the hazardous facility building design overlay consider the design and location of development
- supported the requirement for new buildings, or a change of activity within a hazard facility area, to complete and submit to the DCC a Site Emergency Management Plan (in accordance with the template in Appendix 9B), to reduce the risk of injury to occupants from an emergency event, and associated changes to the assessment rules will be required.

318. The Reporting Officer suggested that amendments be drawn up to the 2GP provisions in response to these suggestions, and circulated to relevant parties for feedback prior to providing his final recommendation for consideration of the Panel (s42A Report, Section 5.6.1, p. 160).

3.3.2.3 Evidence presented at Hearing

3.3.2.3.1 The Oil Companies evidence

319. *The Oil Companies* (OS634) called Ms Georgina McPherson (consultant planner), Mr Gregory Akehurst (economics expert), Ms Jennifer Polich (expert risk management consultant) and Mr Andrew Sherriff (Terminal Manager at Fryatt St bulk fuel terminal).

320. Ms McPherson described the key aspects of two emergency management overlays requested around the Oil Companies' bulk fuel terminals as managing:

- sensitive activities and other activities that may result in constraints on the ongoing operation and development of the bulk fuel terminals (both overlays)
- all activities so they are suitably prepared for an emergency event, by the development of appropriate emergency management plans (both overlays)
- building design as a means of minimising risk to people (inner overlay only).

321. She confirmed the extent of the overlays has been determined on the basis of the UK Health and Safety Executive (HSE) standards, (detailed in the evidence of Ms Polich),

which she considered is a valid and sound basis for the proposed overlays (Pre-circulated Evidence, p. 2).

322. She described that the potential risk posed by the terminals (as Major Hazard Facilities) to surrounding land uses, are of a low probability but high potential impact event, such as a vapour cloud explosion or large fire, which could cause blast overpressure, debris or heat radiation (Pre-circulated Evidence, pp. 8-9).

323. She considered that a comprehensive suite of provisions is required to address this resource management issue rather than relying on underlying zone provisions. She also considered that a non-complying activity status is appropriate in relation to all sensitive activities within the defined emergency management area, sending a clear message that these sensitive activities are inappropriate in these locations.

324. Furthermore, Ms McPherson clarified that *the Oil Companies* approach:

- restricts the establishment or expansion of sensitive activities within 250m of the Terminals;
- requires neighbours within the management area to prepare emergency management plans to ensure that activities operating within proximity of the Terminals are aware of the risks and are suitably prepared;
- requires that the mitigation of risk to people is considered through building design and layout when developing and altering buildings within 100m of terminals (Pre-circulated Evidence, p. 9).

325. She clarified that activities sensitive to hazardous facilities encompasses people intensive activities, or those containing vulnerable populations, and these would require a greater level of assistance in the case of an emergency scenario.

326. Ms McPherson clarified the drivers (reasons) for *the Oil Companies* pursuing this approach (Pre-circulated Evidence, pp. 10-11):

- no clear national planning approach to major hazard facilities in New Zealand
- the Buncefield incident in the UK in 2005 changed the approach to risk assessment for fuel terminals internationally, in that a vapour cloud explosion became a credible event
- the Health and Safety at Work (Major Hazard Facilities) Regulations 2016 require major hazard facilities to undertake safety assessments and emergency planning in relation to health and safety impacts, including natural hazards, with the nature of the surrounding land use within a 2km radius a key element of that
- the assessment and decisions of the Christchurch Replacement District Plan for both the Liquigas terminal and Mobil terminal at Woolston, which led to the introduction of (interim) risk management overlays
- the decision of the Lyttelton Port Recovery Plan to produce a Cumulative Quantitative Risk Assessment (QRA) for the Naval Point Area, considering the cumulative risks from all the facilities in the area
- the experience at the Wiri Oil Terminal in Auckland, which included redesign of the adjacent women's prison and the introduction of risk management overlays in the Auckland Unitary Plan
- concern that the 2GP's proposed rezoning of industrial zoned land to the Princes, Parry and Harrow Street Zone and the Recreation Zone (of 65 Magnet Street) will encourage sensitive activities to establish within the vicinity of the *Oil Companies* bulk fuel depots.

327. Mr Akehurst reiterated Ms McPherson's final point as he also considered that the potential rezoning of land to the north of the Z and Chevron bulk fuel storage terminals to Princes, Parry and Harrow Street Zone and the neighbouring site at 65 Magnet Street to Recreation Zone will encourage 'sensitive activities' including residential and

childcare activities to occur within close proximity to these fuel storage facilities. He contended that this will create reverse sensitivity issues that could impact on the terminal's ability to carry out their operation, expansion or alteration of operations on the sites (Statement of Evidence, p. 2).

328. Furthermore, Mr Akehurst said that an inability to expand or alter operations in the future has costs for the regional economy, including additional truck movements and transport charges should the fuels need to be transported from different ports and the associated congestion and a reduction in the flexibility and resilience of the terminals to deal with outages or adverse events. He was of the view that these costs significantly outweigh any benefits that might accrue to the region from rezoning this land from Industry 1 to the PPH Zone or to Recreation Zone, because the costs of the Oil Companies' proposed overlay are low and only occur when considered against the potential gains associated with a change in zoning (Statement of Evidence, p. 3).

329. Ms Polich explained that sensitive activities are those with more vulnerable populations (children, the elderly, the sick) who may be present 24 hours per day or are also difficult to evacuate in the event of an emergency at a hazardous facility (Statement of Evidence, p. 3). She also elaborated on the submitter's concerns regarding reverse sensitivity effects. This includes potential exposure to risk levels from an incident (fire, explosion etc) that are higher than relevant land use safety planning risk acceptability criteria (Statement of Evidence, p. 3).

330. Furthermore, she stated:

> *"The options for setting a separation distance between a potential source of risk (in this case a hazardous substance facility) and receptors are:*
> *(a) Codes and standards, for example the New Zealand Hazardous Substances and New Organisms (HSNO) regulations, or codes such as AS1940 Storage and Handling of Flammable and Combustible Liquids.*
> *(b) Risk assessment, for example Quantitative Risk Assessment (QRA) and comparison to risk acceptability criteria defined for land uses of different sensitivity for example the Hazardous Industry Planning Advisory Paper (HIPAP) approach used in New South Wales (NSW), Australia (in the absence of any specific criteria in NZ).*
> *(c) "Risk areas" or overlays defined in planning instrument maps. These could be based on a risk assessment (if this was available) or could be based on evidence from events (for example "the Buncefield event" as it applies to flammable liquid storages)"* (Statement of Evidence, p.3).

331. Ms Polich considered that the overlay approach is a prudent means of achieving separation between potentially hazardous facilities and incompatible sensitive activities because it takes into account the potential for future changes that cannot be factored in using codes and standards, or risk assessment prepared by the source of risk (Statement of Evidence, p. 4).

332. Ms Polich's view was that the absence of a QRA should not preclude establishment of an overlay because industry guidance available in other jurisdictions such as the UK Health and Safety Executive (HSE) can be used to set the extent of an overlay for hazardous facilities handling hydrocarbon fuels. She also considered that this approach is in accordance with the general risk management principle of avoiding avoidable risk (Statement of Evidence, p. 4).

333. Ms Polich clarified that the 250m overlay, based on the UK HSE guidance, has been recommended for Dunedin (shown in Annexure A of her evidence). This will restrict 'sensitive activities' within the overlay and therefore minimise future reverse sensitivity effects. She also described that any future QRAs can be used to revise the overlays under a plan change process (Statement of Evidence, p. 4).

334. Mr Sherriff clarified that there are two Z Energy fuel storage terminals in Dunedin's upper harbour basin. These are Z Energy 2015 Ltd Terminal located at 203 Fryatt Street and the Z Energy Ltd Terminal at 9-25 Wickliffe Street. In addition, there is a BP Oil NZ Ltd terminal located at Parry Street (Statement of Evidence, p. 2).

335. Mr Sherriff stated:

> *"The two Z Energy Terminals' tankage is around 25 mL, storing 95 & 91 petrol, diesel and Light Fuel Oil (used for ship bunkering). The bulk petrol tanks have aluminium internal floating covers (IFC) inside them, these help reduce emissions and losses from the tanks. This is standard industry best practice. The Z terminal also has the following systems in place to prevent an overfill. The bulk tanks have four levels of concern, these are critical safety barriers to help prevent a loss of containment, i.e. a spill. They are:*
>
> *1. Normal product fill level;*
> *2. High Level Alarm activation;*
> *3. Independent High - High level alarm activation;*
> *4. Overfill or damage level (Level at which internal IFC would impact roof rafters or overfill from tank vents would occur).*
>
> *The time between these levels is determined by the response time to close the nearest tank valve or 5mins minimum, when pumping at the maximum flow rate. All tank alarms have to be tested prior to receiving product off ships.*
>
> *The tankage at the BP Terminal is around 20 mL, storing 95 & 91 petrol, diesel and Jet A1. The Terminals operate 24 hrs a day, 365 days a year. There is no Jet A1 storage in Bluff, Dunedin is responsible for supplying both Dunedin and Queenstown airports with Jet A1."* (Statement of Evidence, p. 3).

336. Mr Sherriff said that fuel is supplied to the terminals via ship (around 30 shipments each year), with around 70% of Dunedin's volume sourced from the New Zealand Refinery at Marsden Point and the other 30% from overseas refineries (usually Asia or Australia) (Statement of Evidence, p. 3). He said the Dunedin tanker berth has four wharf lines to the Terminals, a mogas line (95 / 91 petrol), a diesel line (diesel / Jet A1), a Light Fuel Oil line and a Bitumen line (Fulton Hogan), with fuel discharges taking between 12 to 30 hours and being able to be done concurrently (Statement of Evidence, p. 4).

337. Mr Sherriff also outlined that sometimes there are fuel shortages so these are covered by fuel being trucked from Bluff and Timaru to Dunedin and at other times Dunedin terminals provided fuel to Bluff and Timaru (Statement of Evidence, p. 4).

338. Mr Sherriff described that under the Health and Safety at Work (Major Hazard Facilities (MHF)) regulations 2016, the fuel storage terminals are Major Hazard Facilities (Lower Tier) and the obligations on MHF operators is to eliminate or minimise, as far as reasonably practicable, the risk of a major incident occurring. Operators are also obligated to prepare an emergency plan and safety assessment which satisfies specific requirements. He outlined that the regulations do not control land use near major hazardous facilities, only the facility itself (Statement of Evidence, pp. 4-5).

3.3.2.3.2 Bindon Holdings Limited and East Parry Investments Limited evidence

339. *Bindon Holdings Limited* (FS2471.24, FS2471.25 and FS2471.27) and *East Parry Investments Limited* (FS2472.2 and FS2472.4) called Mr John Hardie (Barrister) who tabled evidence that outlined why they believed the *Oil Companies* had failed to provide sufficient justification for the imposition of controls on neighbouring land as a consequence of activities carried out on their land.

340. In summary, he said the rigorous Section 32 analysis required under the Resource Management Act of the 'necessity' of the hazard facility area and associated provisions for achieving an objective has not been provided, primarily in two respects:

- a failure to properly assess from an economic point of view the benefits and costs of what is proposed. He refuted the economic evidence of Mr Akehurst called by the Oil Companies
- a failure to provide sufficient scientific evidence of the risk associated with the bulk fuel facilities, particularly that a Qualitative Risk Assessment for the Oil Companies' sites has not been undertaken to properly assess the risk of an incident occurring on the site and its effect on neighbouring properties.

341. Further, he said there was a lack of clarity on what any controls on neighbouring properties will achieve, whether they will result in less loss of life or injury, and if so how these controls will achieve this was also asserted (Statement of Evidence, pp. 4-9).

3.3.2.3.3 New Zealand Fire Service evidence

342. The *New Zealand Fire Service (*FS2323.24) called Ms Carol Blight (planning consultant) who clarified that the concern of the *New Zealand Fire Service* was the identification of emergency services as 'sensitive activities'. This would make them a non-complying activity in the hazard facility area. Her view was that this is unusual and counter intuitive because emergency services contain people, appliances and equipment, which respond to emergencies in the community and are not 'sensitive' to other activities or sensitive to being located in such an overlay, and she considered that it would be more usual for emergency services to be located within these areas (Statement of Evidence p. 12).

3.3.2.4 Decisions and Reasons

343. We reject the submission from *the Oil Companies* (OS634.88 and OS634.89) for new hazard facility areas surrounding the fuel depots at 203 Fryatt Street and 102 Parry Street and associated amendments to definitions, objectives, policies and rules.

344. Our principal reason is, although there has been significant evidence of the potential risk associated with these fuel depots which have been extrapolated from other parts of New Zealand, Australia and the UK, there has been no specific Qualitative Risk Assessment (QRA) undertaken for the Dunedin depots.

345. As a consequence, we are unsure of precisely what the health and safety risks on the community of these fuel depots are, nor are we sure of the validity of the provisions and overlays requested by *the Oil Companies*. We therefore disagree with the Reporting Officer that sufficient evidence has been provided to justify the relief requested by *the Oil Companies*.

346. It will be clear from our decisions with respect to the *Liquigas* facility that we are supportive of the hazardous facility overlay zones methodology, and we are conscious of the importance of the bulk fuel terminals and the need for them to be able to manage themselves without the threats from reverse sensitivity issues.

347. In the case of the *Liquigas* facility a QRA has been undertaken and has given us confidence to adopt the approach there. We accept the value of defining hazard facility areas, and note that if *the Oil Companies* were to undertake a QRA as a basis for a future plan change this would provide a full opportunity for all potentially affected parties to make their views known. It would also be an opportunity for a proper (Section 32 RMA) evaluation of costs and benefits of imposing significant constraints

on people and development within the 250 metre radius of the facility to be presented and assessed.

348. Accordingly, we accept the further submissions by *Bindon Holdings Limited* (FS2471.24, FS2471.25 and FS2471.27) and *East Parry Investments Limited* (FS2472.2 and FS2472.4) and the statement of Mr Hardie (Barrister) who raised the necessity of a QRA being undertaken for these fuel depots.

3.4 Fonterra proposed Mosgiel Noise Control Area

3.4.1 Submissions

349. *Fonterra Limited* (OS807.55) has proposed a new noise control area for their Mosgiel site, the Mosgiel Noise Control Area (MNCA). The MNCA surrounds the Fonterra Mosgiel distribution centre (at 222 Dukes Road North) and is shown in attachment D of its submission.

350. The proposed MNCA indicates the level of noise that can be expected to be experienced in the surrounding environment when the site reaches its operating capacity. Noise emissions will be able reach a maximum level of 45db LAeq at the MNCA boundary.

351. The requested MNCA is proposed to extend over the following properties: 191, 195, 199, 203, 221, 231, and 270 Dukes Rd Nth; 15, 20, 39, 51, 51b, 65, and 69 Sinclair Rd; Lot 8 Hazlett Rd; 42, pt 66, 96, and 110 Stedman Rd; 176 Milners Rd; and 1, 11, 21, and 58 Odlins Place, North Taieri.

352. Other amendments proposed by the submitter to facilitate this request (OS807.55) are to amend the Acoustic Insulation rule (Rule 9.3.1.1.1) by adding 'within the Mosgiel Noise Control Area' to the list of areas where acoustic insulation is required. In addition, consequential changes would be required to be made to the acoustic insulation rules in the residential, rural and rural residential zones (rules 15.5.1, 16.5.1, 17.5.1) by adding a new sub-clause to apply to noise sensitive activities 'within the Mosgiel Noise Control Area'. A further consequential change also relates to referencing the MNCA in the Separation Distances rule in the Rural Residential Zone (Rule 17.5.10).

353. *Fonterra Limited* described in its submission that the MNCA is to:
- consistently control and manage noise emissions from the site 24 hours a day, 7 days a week
- provide a clear compliance boundary that does not rely on notional boundaries and the associated potential risk from encroachment of sensitive activities.

354. The submission explains that "*noise emissions from the Mosgiel Fonterra site will need to be met (or come under) the level specified at the MNCA (i.e. 45dBALaeq). If noise levels exceed the 45dBALaeq limit, a discretionary resource consent would be required under Rule 9.6.*" (Fonterra Submission, p. 4).

355. *Fonterra Limited* also described that the use of a noise control boundary to manage and control noise emissions from airports and large industrial sites is long established and considered international best practice. For example, the Edendale Plant in Southland is managed through this planning mechanism.

356. Fonterra's submission was opposed by *Gary Pollock* (FS2347.3) and *Jane Mcleod* (FS2169.5) who considered that the inclusion of their properties in the MNCA reduces the value and attractiveness to future purchasers and negatively impacts on the amenity value of their homes.

357. *Fonterra Limited* has also submitted on policies and rules in the rural and rural residential zones to facilitate this relief for a MNCA. These submission points include:

- amendments to Objective 16.2.2 to include reference to industrial zones (OS807.27)
- amendments to Policy 16.2.2.1 by adding a new sub-clause for 'industrial activities' (OS807.28)
- amendments to Rule 16.5.9 Separation Distances to include 'any industrial zones'. *Jane Mcleod* (FS2169.6) opposed this relief because of concerns about the effect of the MNCA on her property (OS807.32)
- amendments to Policy 17.2.2.1.b to include setback of residential buildings from boundaries with 'industrial uses'. *Jane Mcleod* (FS2169.9) also opposed this relief because of concerns about the effect of the MNCA on her property (OS807.37).

358. *Fonterra Limited's* submission points (OS807.27, OS807.28 and OS807.32) were considered at the Rural Hearing, and *Fonterra Limited's submission point (*OS807.37) was considered at the Rural Residential Hearing.

359. In a related submission, which is considered in sub-section 3.6 under amendments to the Noise performance standard (Rule 9.3.6), *Fonterra Limited* (OS807.18), supported by *Oceana Gold (New Zealand) Limited* (FS2439.48), sought a number of amendments to the Noise Performance Standard. The amendments sought include increasing the noise limits at night time (10pm-7am) from 40 to 45 dB LAeq (15 min) and 70 to 75db LAFmax in the Rural Zone. *Fonterra Limited* considered that these noise limits are very low for the Rural Zone, particularly where they adjoin industrial and commercial zoned land.

3.4.2 Section 42A Report

360. The Reporting Officer noted that he had a pre-hearing meeting with *Fonterra Limited* and *Jane Mcleod (FS2169.5)* on 20 May 2016 to discuss the Fonterra request (Bernard Mcleod also attended the meeting). A summary of this meeting was included in the Reporting Officer's s42A Report (Section 5.5.11, pp. 147-148). We note that no agreement was reached by *Fonterra Limited* or *Jane Mcleod* at this pre-hearing meeting.

361. Mr Hunt (acoustic consultant) considered in his acoustic report the submission point by *Fonterra Limited (OS807.55)* to establish an MNCA, and described that he is of a view that no evidence has been provided which supports the concept that resource consent conditions will be breached by noise sensitive developments occurring on the properties identified. He also considered that by adopting practical noise control measures it should be possible to control the emission of noise from the site so that new buildings housing noise sensitive activities established on the properties listed can be protected to a reasonable standard without the added cost of acoustic insulation. Where this is not possible he considered that *Fonterra Limited* could purchase the most affected properties to ensure noise sensitive uses do not occur in the future (Mr Hunt's Statement of Evidence, p. 11).

362. Mr Hunt also stated he has not been provided with any information from *Fonterra Limited* that landowners affected by the proposed MNCA had been consulted about the request, and therefore he did not support the requested relief from *Fonterra Limited* (OS807.55) for a Mosgiel Noise Control Area (MNCA).

363. The Reporting Officer agreed with Mr Hunt that there has been limited information provided in the Fonterra submission about why Fonterra should be treated differently to any other factory operating in Dunedin, and why Fonterra will not be able to meet the noise standards of the 2GP. As a consequence, the Reporting Officer recommended that *Fonterra Limited's* (OS807.55) submission point be rejected.

364. The Reporting Officer also agreed with Mr Hunt's analysis of the submission by *Fonterra Limited* (OS807.18) for an increase in the noise level in the Rural Zone (and other relief) and recommended this submission is rejected (s42A Report, Section 5.5.7.1, p. 125).

365. In regard to *Fonterra Limited's* requests (OS807.27, OS807.28 and OS807.32) which were considered at the Rural Hearing, the Reporting Officer at that hearing had recommended rejecting these requests because existing policies and rules adequately address the issue. In particular, the Boundary Setbacks rule (16.6.11.1) which require setbacks of 20m for residential buildings from road boundaries and a setback of 40m from side and rear boundaries and the Acoustic Insulation rule (16.5.1), which requires acoustic insulation within 20m of an industrial zone, makes these requests unnecessary (s42A Rural Report, Section 5.4.3.1, p. 165 and Section 5.10.4, p. 322).

366. In regard to *Fonterra Limited's* request (OS807.37) which was considered at the Rural Residential Hearing, the Reporting Officer had also recommended rejecting this submission and he considered that the Boundary Setbacks rule (17.6.10.1), which requires residential buildings to be set back 10m from side and rear boundaries and 12m from road boundaries and the Acoustic Insulation rule (17.5.1), which requires buildings used for residential and other noise sensitive activities to have acoustic insulation if located within 20m of an industrial zone, are sufficient to address the concerns of *Fonterra Limited* (s42A Rural Residential Report, Section 5.1.10, p. 38).

3.4.3 Evidence presented at Public Health and Safety Hearing

367. *Fonterra Limited* (OS807.55) called Mr Dean Chrystal (planning consultant), Mr Rob Hay (acoustic consultant), Mr Tim Eketone (Operations Manager for Mosgiel site) and Mr Daniel Minhinnick (Counsel).

3.4.3.1 Mr Chrystal's evidence

368. Mr Chrystal described in his evidence that the use of specific rules to manage reverse sensitivity can take a variety of forms to suit the particular situation. One method has been to direct sensitive activities away from incompatible activities often through buffer distances. An alternative has been to allow sensitive activities in proximity to the established activity but only if they are appropriately acoustically insulated.

369. He described that Noise Control Areas ("NCA") or Noise Control Boundaries ("NCB") is one such method which has been used in district plans throughout the country for many years, in relation to noise from airports and ports for example. More recently state highways, railways and one-off activities such as motor racing venues are also using this method. He also clarified that the Fonterra facility is the subject of significant capital investment and is not easily moved elsewhere.

370. Mr Chrystal outlined that this technique provides a greater degree of certainty to the activity itself (as well as surrounding activities and the general public) because it requires a noise sensitive activity located inside the NCA to meet a design insulation standard and also requires the noise creator to meet the noise standard set at the NCA boundary.

371. He said that *Fonterra* has for a number of years been supporting the use of NCAs for its manufacturing sites around the country at a 45 db LAeq (15 min) level and provided additional information from other councils around New Zealand who have adopted this approach (Statement of Evidence, pp. 6-7).

372. Mr Chrystal also summarised the operation of Fonterra's distribution centre at Mosgiel, located on the corner of Dukes Road and Stedman Road, close to the Mosgiel to Middlemarch railway line.

373. This distribution centre utilises the rail network to transport product both to, and from, the site. On the south side, the distribution centre includes the loading of rail rakes with containers by straddle lifters, while on the north side rail wagons are unloaded within an enclosed rail tunnel. He outlined that at times, these operations generate high levels of noise, including a number of train movements, which is difficult to mitigate.

374. Mr Chrystal also said that Fonterra's distribution network is significant and may need to expand its operation in the future in order to meet logistical requirements. It is likely this will lead to increased rail movements, which may occur outside daytime hours along with associated unloading and loading operations. Apart from the Port he was unaware of another situation in Dunedin where such significant and complicated rail movement and associated unloading and loading operations occur within proximity of existing and potential sensitive activities.

375. He outlined that the Fonterra site is located on the edge of an industrial zoned area, within reasonably close proximity to rural and residential properties, including proposals for rezoning and the potential for further noise sensitive activities. At present there are a limited number of residential dwellings within close proximity to the distribution centre. However, the potential for an increase in such properties is highlighted by a proposal in the 2GP to expand the rural residential zoning to the north of Rutherford Road, along with a submission by Jane Mcleod seeking that rural zoned land north of Dukes Road be rezoned for rural residential purposes (Statement of Evidence, p. 8).

376. He referred to Mr Hay's acoustic evidence that it is impractical to control noise emissions so they are internalised entirely within the site and noted that there is no requirement in the RMA that effects must be completely contained within a site, which has been recognised by the Environment Court.

377. Mr Chrystal was also of the opinion that what Fonterra seeks is no different to the rules which require acoustic insulation for noise sensitive activities within 40m of a state highway and 70m of a railway line.

378. Mr Chrystal clarified that two new permitted activity rules are proposed to give effect to the NCA. The first permitted activity rule enables the Mosgiel site to generate noise up to 45 dB LAeq, and contravention of this rule is a restricted discretionary activity and Fonterra will need to either:

    a. apply for resource consent to exceed the noise limit; or
    b. undertake works on site to reduce noise to a level that complies with this rule.

379. The second permitted activity rule requires new sensitive activities proposing to locate within the NCA to meet specific internal acoustic design standards in all habitable rooms, as such activities within the NCA may be exposed to internal noise levels greater than 30 dB LAeq. Contravention of this rule is a restricted discretionary activity. This rule is intended to protect the Mosgiel site's operations from potential reverse sensitivity effects that may occur as a result of sensitive development within the surrounding area that does not adequately protect itself from noise effects (Statement of Evidence, pp. 8-11).

3.4.3.2 Mr Hay's evidence

380. Mr Hay's acoustic evidence is summarised as follows:

- The proposed 40 dB LAeq (15 min) rural zone night-time noise limit near the Mosgiel industrial zone is overly stringent.

- Fonterra Limited is proposing to increase the Mosgiel site's hours of operation to 24 hours-a-day, seven-days-a-week, including with the unloading of incoming trains.

- Fonterra will be unable to comply with this night-time noise limit, even after implementing best practicable options for noise mitigation, and despite the exemption of rail noise.

- A noise control area ("NCA") with a trigger level of 45 dB LAeq (15 min) will enable compliance by Fonterra, while ensuring a satisfactory level of sleep amenity for both existing and new noise sensitive activities nearby. (Statement of Evidence, p. 2)

381. Mr Hay assessed the 2GP's noise standards in the vicinity of the Mosgiel site, the NZS 6802:2008 noise standards and the World Health Organisation (WHO) guidelines, and was of the opinion that the night-time noise limit should be 45 dB LAeq (15 min) (Statement of Evidence, p. 6).

382. Mr Hay also stated that *Fonterra's* Mosgiel site was intentionally established in a location that was well away from existing noise sensitive activities (dwellings in this case), within an Industrial Zone, well serviced by road, and especially rail infrastructure, all of which are necessary to allow it to function as a distribution centre. This was done, in part, to ensure that noise effects on neighbouring, but distant dwellings, would be minimal.

383. He also contended that *Fonterra* would be disadvantaged by new dwellings established in close proximity to the Mosgiel site because of the potential for complaints arising from these new dwellings, which creates adverse reverse sensitivity effects. Therefore, he considered it is appropriate to provide a minimum set-back around the Mosgiel site to prevent any new noise sensitive activities being established within NCA, unless enhanced sound insulation is provided by the developer of the activity.

384. He described that *Fonterra's* distribution centre at Mosgiel differs from a typical industrial site both because of its large size, and the impracticality of effectively mitigating all noise from rail and heavy vehicle movements outdoors, as well as the prohibitive cost of constructing a building of the size required for loading and unloading with sufficient sound insulation. Furthermore, he considered that the Mosgiel site is very similar to typical port activities, which undertake much the same range of tasks and utilise similar equipment and buildings (Statement of Evidence, pp. 7-8).

385. Mr Hay also outlined his modelling of the noise levels generated:

- under the existing daytime operating scenario
- with best practicable options (BPO) for noise mitigation to enable proposed night-time operations on the import side of the site; and
- with full enclosure of the import rail siding.

386. His analysis included reference to Figures 1-5 of his evidence. In addition, he provided in Figure 6 a proposed NCA with overlays of predicted noise emissions from the site and also showing the extent of the 70m rail and 20m Industrial Zone acoustic insulation requirements contained in the 2GP.

3.4.3.2.1 Existing day time operations

387. Mr Hay stated that recorded noise levels for existing daytime operations (Appendix 1, tabled evidence) show that both the Mcleod and Pollock dwellings receive approximately 50 dB LAeq (15-min) during rail movements on the import side of the site.

388. He has become aware that a train arrives at the import side of the site between 0600 and 0700, which is likely to be a breach of the consented night-time noise limit (applying prior to 0700). Similarly, all rail movements on Sundays and the placement of an empty rake of wagons onto the export siding shortly prior to 0700 Monday – Friday will result in a breach of the consented night-time noise limit. He did, however, consider any breach is likely to be brief (approximately 15-30 minutes).

389. He also noted that *Fonterra* have not received any noise complaints about this existing operation and they could refuse KiwiRail access to the site prior to 0700, which would most likely result in the train sitting in the designated railway line until 0700. He considered that this will create the same noise effects because trains can remain on the Designated railway line and are exempt from the noise standards of the 2GP (Statement of Evidence, p. 9).

3.4.3.2.2 Proposed night-time import side operations

390. Mr Hay said he had carried out noise investigations at the site and then modelled a large number of scenarios to identify optimal noise mitigation scenarios. Based on this modelling and his experience of similar sites he has proposed the following treatment:

> *"(i) Environmental Loading Area ("ELA") rooftop fans treated with attenuators;*
> *(ii) ELA passive ventilation louvres replaced with acoustic louvres; and*
> *(iii) A bund/noise control fence combination to the immediate north of the rail import rail spur that is a minimum 2 m in height (above tracklevel)."* (Statement of Evidence, p. 10)

391. The results of this modelling are presented in Figure 2 and 3 of his evidence. Figure 2 shows that with the exception of the Pollock dwelling (270 Dukes Road North), the received noise level during a rail movement on the import siding is no more than 45 dB LAeq (15 min) at any lawfully established dwelling in the rural or residential zones. At the notional boundary of the Pollock dwelling he predicts a noise level of 49 dB LAeq (15 min) during a rail movement (Statement of Evidence, p. 10).

392. When allowing a 15 dB noise reduction for the Pollock dwelling with bedroom windows ajar for ventilation, he expects the noise level inside any bedroom directly facing the site to be 34 dB LAeq (15 min) during rail movements. This is greater than the recommended 30 dB LAeq by the WHO, but is still within the 35 dB LAeq recognised as the upper bound of acceptability by WHO (Statement of Evidence, pp. 10-11).

393. He outlined that dwellings such as the Mcleod's and those on Grant Dalton Street will receive a noise level inside any bedroom directly facing the site of 30 dB LAeq (15 min) during rail movements, which achieves the 30 dB LAeq recommended by the WHO (Statement of Evidence, p.11).

394. He considered noise sources (excluding rail noise) are primarily a large forklift operating inside the ELA and rooftop fans that provide ventilation.

395. He also clarified that Figure 3 showed that all nearby dwellings receive noise levels of approximately 41-42 dB LAeq (15 min) at the relevant site/notional boundary (Statement of Evidence, p. 11).

3.4.3.2.3 Alternative night-time import side mitigation scenario

396. Mr Hay also described the investigations he has undertaken to ascertain whether mitigation measures by Fonterra might prove beneficial, potentially eliminating any reverse sensitivity issues and the resulting need for an NCA and sound insulation rules. In Figures 4 and 5 he included the most complete treatment scenario as a comparison to the proposed scenario.

397. He outlined that he has considered many scenarios, including increased treatment of louvres and rooftop fans, complete enclosure of rail within the ELA and gaining the co-operation of KiwiRail to have the incoming trains from Edendale broken down and reformatted at Dunedin to enable a different style of movement through the site. He said that other than the complete reconfiguration of rail movement, none of these proved perceptibly better than the proposed scenario and KiwiRail had not responded about whether the reconfiguration proposed is technically feasible.

398. He also stated that the enlarged lightweight ELA modelled in this scenario would cost approximately $6 million while an industrial building with a heavier construction is likely to be multiples of this cost (Statement of Evidence, pp. 11 & 12).

3.4.3.2.4 Proposed night-time combined import and export operations

399. Mr Hay also considered a future night-time export operations scenario, as outlined in Figure 6. This:

a. there are no dwellings in rural or residential zones exposed to noise levels in excess of 45 dB LAeq (15 min)
b. the existing dwelling on the Mcleod property (231 Dukes Road North) is outside the proposed NCA, as is the land to the west of that dwelling, which the Mcleods have indicated they may wish to build an additional dwelling on
c. land owned by the Mcleods between their existing home and Dukes Road North, covered by the NCA, is also almost entirely overlaid by the acoustic insulation requirements within 70m of a railway line and 20m of an industrial zone, leaving only a narrow strip of land subject to the proposed NCA alone
d. a significant strip of land owned by the Pollocks is covered by the acoustic insulation requirements within 70m of a railway line, with approximately 1/3 of this boundary length covered by the proposed NCA
e. all remaining land covered by the NCA is either zoned industrial or part of the Taieri Aerodrome (Statement of Evidence, pp. 12-14).

400. Mr Hay concluded that (Statement of Evidence, pp. 15-16):

- the proposed Rural night-time noise limit of 40 dB LAeq (15 min) is overly stringent and conservative and cannot be complied with by Fonterra
- commonly accepted guidelines such as NZS6802 and WHO provide for noise levels of 45 dB LAeq (15 min)
- the establishment of a Noise Control Area and associated set of provisions controlling the establishment of new noise sensitive activities is an appropriate and robust solution that protects all parties' interests and residents sleep amenity.

3.4.3.3 Mr Eketone's evidence

401. Mr Eketone's (Operations Manager for Mosgiel site) presented an overview of *Fonterra Limited's* operation in, and importance to, New Zealand and its obligations under the Dairy Industry Restructuring Act 2001 (DIRA) (Statement of Evidence, pp. 4-5).

402. In regard to Fonterra's operations in Otago and Southland he stated:

"Processing activities in this region include:

a. the collection of milk produced by almost 1,200 farmer shareholders;
b. the subsequent processing of this milk at Fonterra's Edendale and Stirling Dairy Manufacturing sites; and
c. the distribution of finished product to both domestic and international markets via, primarily, the Mosgiel site through to the Port of Otago." (Statement of Evidence, p. 6).

403. Mr Eketone described the activities and operation of the Mosgiel site, noting that:

- buildings on the site include a 33,000m^2 drystore, 5,700m^2 coolstore and administration facilities, with approximately 45 people employed, which moves approximately 388,000 tonnes of product each year.
- rail infrastructure is provided at both the northern and southern sides of the site.
- rail siding on the northern side of the site provides for inward produce from the Edendale site and is covered with an environmental loading area ("ELA") to maintain product temperature (Statement of Evidence, p. 7).

404. Mr Eketone also explained that "*the ELA provides for up to 16 curtain-side containers (known as "TS containers") to be unloaded indoors by a forklift at any one time. Where a train has 32 TS containers, the driver is required to run the train through the ELA to unload the first (or last) 16 containers, and then push back through the ELA to unload the remaining containers. Empty wagons are, therefore, sometimes stored on the outside rail spur or across Stedman Road in the siding."* (Statement of Evidence, p. 7).

405. He said that Fonterra obtained a resource consent in 2009 (LUC-2009-234) for the development of the Mosgiel site, which occurred over two stages (a third stage was consented but never built). The resource consent includes a condition restricting the noise levels generated at the Mosgiel site (which he reproduced in his evidence). He said this resource consent condition effectively limits what can take place on the Mosgiel site between the hours of 2100 and 0700, particularly with regard to rail movements and the unloading and loading of rail wagons (Statement of Evidence, pp. 8-9).

406. Mr Eketone confirmed that Fonterra is looking to operate the Mosgiel site 24 hours a day/seven days a week and said that without the ability to expand, the site could be downgraded or closed (Statement of Evidence, p. 10). He was concerned at reverse sensitivity effects of new sensitive land uses (especially dwellings) establishing close to the Mosgiel site, and complaining about its legitimate operation. He therefore supported the NCA for reasons given by the other witnesses.

407. He outlined that Fonterra must demonstrate that it has taken all reasonable steps to internalise its effects, the steps that have been (or will be taken) are:

a. installing acoustic ventilation along the ELA;
b. installing attenuators on the fans in the ELA;
c. constructing either an earth bund or acoustic fence along the northern boundary of the site; and
d. considering options to reduce rail noise on the tracks.

3.4.3.4 Mr Minhinnick's statement

408. Mr Minhinnick, Counsel for *Fonterra Limited,* referred to guidance from the Environment Court on when controls on surrounding land to manage reverse sensitivity effects will be appropriate, which in summary are:

- adverse effects should be internalised as far as reasonably achievable, although the RMA does not require total internalisation
- there is a greater expectation of internalisation of adverse effects from newly established compared to older activities
- the main concern is to establish that adverse effects beyond the boundary are not unreasonable (i.e. offensive, objectionable or significant)
- in assessing what is reasonable the context of the environment beyond the boundary is relevant (Statement of Evidence, pp. 4-5).

409. He said that the evidence was that NCA option sought by *Fonterra Limited* is the most effective and appropriate way to respond to the Environment Court's principles, in particular the reverse sensitivity effects on the Mosgiel site (Statement of Evidence, pp. 6-8).

3.4.3.5 Jane Mcleod's evidence

410. *Jane Mcleod* (FS2169.5) presented a statement, summarised as follows:
- she has been living at 231 Dukes Road with her husband for 17 years
- Fonterra has told them of their desire to operate 24 hours a day/seven days a week through a noise control boundary, which would allow Fonterra to exceed the noise limits applied to other industrial sites in the city
- the proposed NCA covers the entirety of their property as well as their neighbours at 270 Dukes Road
- she refuted a statement in Mr Crystal's evidence (clause 5.15) that the perceived cost of an NCA is no different than a flood hazard overlay. Mrs Mcleod stated that the devaluation of their property by being captured in an NCA for the benefit of profits to the biggest business in New Zealand, is something else entirely
- she considered that the devaluation arises from the actual and perceived effects of the proposed NCA
- she stressed that there is no night time industrial noise at the moment, so they will be going from none to 45dBA at night
- she disagreed with Mr Crystal's evidence that they are the only people adversely affected and considered that Appendix 6 of Mr Hay's evidence showed that people who live on Grant Dalton Drive and the suburb of Janefield are affected by Fonterra's plans
- she clarified that the shunting of train wagons backwards and forwards vibrates the house at 270 Dukes Road and wakes residents
- since Mr Hunt's evidence and the s42A Report, Fonterra have shrunk the NCA boundary so that their dwelling is not included but their land is, as a result of modelling assuming the bunding of soil in front of the ELA (although this is only a model and its effectiveness cannot be confirmed until it is built)
- there is undeveloped industrial land within the NCA boundary, which could also be developed and produce equivalent amounts of noise which would have cumulative adverse effects
- similar way to Fonterra, they are trying to safeguard their future on their site by preserving the enjoyment and value in their home.

3.4.4 Evidence presented at the Rural Residential Hearing

411. *Fonterra Limited's* request (OS807.37) for amendments to Policy 17.2.2.1.b to include setback of residential buildings from boundaries with industrial use was considered at the Rural Residential Hearing. *Fonterra Limited* called Mr Dean Chrystal (planning consultant) who raised issues which centred on how reverse sensitivity, particularly for existing industrial land uses, are managed in the rural residential zones and recommended replacement of Policy 17.2.2.1 with the following:

"Manage potential reverse sensitivity conflict between existing activities and sites, and sensitive activities through appropriate separation distances or other measures, while giving priority to those existing lawfully established activities." (Statement of Evidence, p. 8)

3.4.5 Evidence presented at the Rural Hearing

412. In regard to *Fonterra Limited's* requests (OS807.27, OS807.28 and OS807.32) for amendment to Objective 16.2.2, Policy 16.2.2.1 and Separation Distances rule (Rule 16.5.9) to reference industrial zones or industrial activities were considered at the Rural Hearing.

413. *Fonterra Limited* called Ms Brigid Buckley (planning consultant) who pre-circulated a letter but did not appear at the hearing. This letter also dealt with reverse sensitivity issues and supported the addition of a policy, which was recommended by the Reporting Officer, in the Strategic Directions Section of the 2GP.

414. The policy recommended by the Reporting Officer was:

"Maintain or enhance the productivity of industrial and major facility activities that support the economy through rules that:
a. Require acoustic insulation in noise sensitive activities near industrial zones;
b. Ensuring new residential zones and developments and other noise sensitive activities are setback an adequate distance from industrial activities and zones, major facility zones, or other locations where there is a significant risk of reverse sensitivity effects arising…" (s42A Rural Report, Section 5.4.3.1, p. 165).

3.4.6 Revised recommendations

415. The Reporting Officer, in his revised recommendations from the Public Health and Safety Hearing, supported Mr Malcolm Hunt's revised recommendations obtained after questioning from us on 8th February 2017. This was that instead of applying a MNCA boundary (as proposed by Fonterra) it would be more appropriate to rely on the requirement in the Acoustic Insulation rule (Rule 9.3.1), clause j, for acoustic insulation within 70m of a railway line and change the night time noise level from 40dba to 45dba in the Rural zones, because this is compliant with the upper World Health Organisation acceptable limits for sleeping. He considered that this is a simpler and more pragmatic approach.

416. The Reporting Officer noted that the change to the night time noise level from 40dba to 45dba in the Rural zones was sought by Fonterra as part of submission point OS807.18 (Revised Recommendations, p. 10).

417. In regard to *Fonterra Limited's* requests (OS807.27, OS807.28, OS807.32 and OS807.37), the Reporting Officer at the Rural and Rural Residential Hearing did not recommend any changes to his recommendations in the s42A Report, or in his revised recommendations. This recommendation was to reject these requests because of existing policies and rules in the rural and rural residential zones which address the issues raised in these submission points.

3.4.7 Decisions and Reasons

418. We reject the submission by *Fonterra Limited* (OS807.55) for a new Noise Control Area surrounding the Fonterra site in Mosgiel.

419. Instead, we accept in part the submission by *Fonterra Limited* (OS807.18) and have decided that:

- the night time (10pm to 7am) noise level in those parts of the Rural Zone that are within 350 metres of an Industrial Zone be changed from 40 to 45dB LAeq (15 min) and from 70 to 75 dB LAFmax – line 3, column c of the Noise rule (Rule 9.3.6).

420. The reasons for our decision are as follows. We accept and acknowledge the evidence presented on behalf of *Fonterra Limited* as to the investment, infrastructure, and economic importance of the Fonterra facility, and that it needs to be able to continue operating. We also acknowledge and support the measures it has taken, and intends to take, to minimise and mitigate noise from its operations. But we do not accept this facility can be likened to Port Chalmers or to Dunedin International Airport, which due to their great size and scale of operations warrant a special noise management control line regime, as is often the case for facilities like this around New Zealand.

421. We are conscious of the stated intent to operate this facility on a 24 hour a day basis, and consider this represents a fundamental shift in amenity expectations for adjacent sensitive land uses. On balance, we agree with the evidence of the Reporting Officer, supported by evidence of Mr Hunt, that a more appropriate approach is to rely upon the current rule framework regarding noise, including the acoustic insulation requirements within 70m of a railway, with some relaxation of night time noise levels as explained below.

422. We agree with the evidence of Mr Hunt, and Mr Hay for *Fonterra Limited,* that the 45dB LAeq (15 min) and 75 dB LAFmax noise level is compliant with the upper World Health Organisation (WHO) acceptable limits for sleeping. On the evidence we heard, in relation to the Fonterra site and its environs, we are satisfied that the night time noise limit can be relaxed to the WHO standard but only in so far as it affects properties in the adjacent Rural Zone in proximity of industrial zones (such as the zone in which the Fonterra site is located).

423. While we did consider applying the higher night time noise limit more widely, we had some concerns with this, as will be evident in our decision on the submission by Fonterra Limited (OS807.18) in sub-section 3.6 below. In summary we note that this is an upper limit, and we feel we did not receive sufficient evidence on the noise environment in the wider rural zone to convince us that we should relax the night time noise limit across the whole rural zone as had been suggested by Mr Hunt and by the Reporting Officer. Accordingly, we have restricted the extent of areas affected by the increased night time noise limit to those parts of the Rural Zone within 350m of industrial zones. The 350 metres was based upon the extent of the NCA produced in evidence by Mr Hay as appropriate in the case of the Fonterra site and its night time noise operations. We consider this can be applied to other localities where rural zoned properties are adjacent to other industrial zones.

424. We also reject the associated *Fonterra Limited* requests (OS807.27, OS807.28, OS807.32 and OS807.37) which were considered at the Rural and Rural Residential Hearing, although we note that amendments have been made to Objective 16.2.2, Policy 16.2.2.1 and Policy 17.2.2.1 in decisions outlined in the Plan Overview Decision Report, which discuss reverse sensitivity objectives and policies across the 2GP.

425. We also refer *Fonterra Limited* to our decisions in regard to reverse sensitivity issues in the Rural and Rural Residential Decision Reports.

426. In making this decision we accept the further submissions from *Gary Pollock* (FS2347.3) and *Jane Mcleod* (FS2169.5) who opposed the submission by *Fonterra Limited* (OS807.55) for a new Noise Control Area surrounding the Fonterra site in Mosgiel.

427. Amendments are shown in Appendix 1 and attributed to submission point reference PHS807.18.

3.5 Acoustic Insulation

3.5.1 Request to amend definition of Noise Sensitive Activities

3.5.1.1 Definition of Noise Sensitive Activities

428. Noise Sensitive Activities are defined in the 2GP as:

> *"Activities where people are more likely to be sensitive to a high level of noise because they are sleeping, studying, seeking medical treatment, or engaged in religious activity. This definition includes:*
> - *residential activities*
> - *hospital*
> - *campus*
> - *schools*
> - *registered health practitioners*
> - *visitor accommodation*
>
> *the following community activities: libraries, early childhood education, marae-related activities, and places of worship."*

3.5.1.2 Submissions

429. *KiwiRail Holdings Limited* (OS322.12), *Fonterra Limited* (OS807.1), *Calder Stewart Development Limited* (OS930.9), *Cadbury Limited* (OS1015.3) supported the definition of Noise Sensitive Activities, although limited reasons, or none at all, were given.

430. *Air New Zealand Limited (ANZL)* (OS1046.2) sought that the definition of Noise Sensitive Activities be amended to clarify that it includes childcare and educational facilities, which *Fonterra Limited* (FS2317.1) and *Southern District Health Board (FS2370.1)* supported, although no reasons were given.

3.5.1.3 s42A Report

431. The Reporting Officer considered that in terms of whether activities are 'noise sensitive' or not, should be based on whether the activity is sensitive to a high level of noise when people are sleeping. He disagreed that people seeking medical treatment, studying or engaged in religious activity are noise sensitive, and recommended campus, libraries, schools and registered health practitioners be removed from this definition.

432. He considered the main difference between Early Childhood Education activities and other childcare activities like Plunket and play groups in terms of noise sensitivity, is that children often sleep in Early Childhood Education facilities while they generally do not in Plunket and play groups. Therefore, he believed that it is valid to retain Early Childhood Education activities in the definition of Noise Sensitive Activities and other activities that involve the provision of the care for babies and pre-school children.

433. The Reporting Officer recommended the definition of Noise Sensitive Activities be amended as follows (s42A Report, Section 5.1.2, pp. 25-26):

> *"**Noise Sensitive Activities***
>
> *Activities where people are more likely to be sensitive to a high level of noise because they are sleeping~~, studying, seeking medical treatment, or engaged in religious activity~~. {PHS1046.2}*
> *This definition includes:*
> • *residential activities*
> • *hospital*
> • ~~*campus*~~
> • ~~*schools*~~
> • *early childhood education*
> • ~~*registered health practitioners*~~
> • *visitor accommodation*
> • *the following community and leisure activities: ~~libraries, early childhood education~~, activities that involve the provision of care for babies and pre-school children and marae-related activities."*

3.5.1.4 Evidence presented at hearing

434. *Air New Zealand Limited (ANZL)* (OS1046.2) called Mr Aiden Cameron (legal counsel) who considered that there was no scope from its submission to make the recommended amendments to the definition of Noise Sensitive Activities. He referenced Judge Kirkpatrick and his review of the existing case law relating to the scope of submissions and identified two fundamental principles in *Environmental Defence Society & Ors v Otorohanga District Council.* These are:

> *"a. The Court cannot permit a planning instrument to be appreciably amended without real opportunity for participation by those potentially affected; and*
>
> *b. Care must be exercised on appeal to ensure that the objectives of the legislature in limiting appeal rights to those fairly raised by the appeal are not subverted by an unduly narrow approach"* (Statement of Evidence, p. 2).

435. Mr Cameron also noted that Judge Kirkpatrick observed that the paramount test was *"whether or not the amendments are ones which are raised by and within the ambit of what is reasonably and fairly raised in submissions."* (Statement of Evidence, p. 3).

436. Mr Cameron considered that the Reporting Officer's recommendation fails this test because the scope of the definition has been dramatically reduced, which would have a negative effect on ANZL and other noise emitters. Additionally, other noise emitters have no opportunity to be heard or have appeal rights, which raises procedural fairness and natural justice issues and the recommended amendment cannot be fairly or reasonably attributed to the wording of *Air New Zealand Limited (ANZL)* (OS1046.2) (Statement of Evidence, pp. 2-4).

437. *Fonterra Limited* (OS807.1) called Mr Dean Chrystal (planning consultant) and Mr Minhinnick (Counsel) on the definition of Noise Sensitive Activities.

438. Mr Chrystal was unconvinced that there is scope for the changes the Reporting Officer recommended and in his reading of the *Air New Zealand* submission considered that they are seeking clarity of the activity status and controls applying to childcare and educational facilities specified for the Dunedin International Airport Zone and that the

definition of "Noise Sensitive Activity" be clarified to ensure it covers such activities, and not seeking that these activities be deleted from the definition.

439. He also said that in his experience definitions of sensitive activity nearly always include education facilities because study can be affected by noise generating activities and reproduced the definitions from South Taranaki District Plan and the Replacement Christchurch City Plan (Statement of Evidence, pp. 14-16).

440. Mr Minhinnick had similar views to Mr Chrystal and considered that the amendments recommended by the Reporting Officer are beyond the scope of what was fairly and reasonably raised in *Air New Zealand's* submission and therefore should be rejected. He also considered that the recommended amendment is inappropriate and inconsistent with planning practise throughout New Zealand (Statement of Evidence, p. 9).

441. *KiwiRail Holdings Limited* (OS322.12) called Mr Aiden Cameron (legal counsel), Dr Stephen Chiles (acoustic consultant) and Ms Rebecca Beals (planner) on this matter. This evidence raised similar concerns to the evidence summarised above, which confirmed that authoritative bodies such as the World Health Organisation reference adverse noise effects associated with railway noise as sleep disturbance, communication interference, annoyance and distraction. Therefore, the recommendation of the Reporting Officer is inconsistent with the generally accepted approach from the New Zealand Standards and international research. This evidence reiterated *KiwiRail Holdings Limited's* support of the notified version of Noise Sensitive Activities.

3.5.1.5 Revised recommendations

442. After considering the evidence from a number of submitters on this matter, the Reporting Officer agreed that the recommended amendment in the s42A Report is out of scope and should be reconsidered. He therefore recommended that the definition for Noise Sensitive Activities and the associated definition for Rule 9.3.1 Acoustic Insulation should be revised to be more consistent with the notified version, although he considered there should also be changes to clarify that it includes childcare and educational facilities.

443. Consequently, he recommended revised wording of Noise Sensitive Activities, as follows (Revised Recommendations, pp. 5-7):

> *"Noise Sensitive Activities*
> *Activities where people are more likely to be sensitive to a high level of noise because they are sleeping, studying, seeking medical treatment, or engaged in religious activity.*
>
> *This definition includes:*
> - *residential activities*
> - *hospital*
> - *campus*
> - *early childhood education (OS1046.2)*
> - *schools*
> - *registered health practitioners*
> - *visitor accommodation*
> - *the following community and leisure activities: libraries, ~~early childhood education~~, marae-related activities, activities that involve the provision of care for babies and pre-school children and places of worship. (OS1046.2)."*

3.5.1.6 Decision and reasons

444. We accept the submission from *Air New Zealand* (OS1046.2) that the definition for Noise Sensitive Activities requires clarification and that it includes childcare and educational facilities. We agree with the relief suggested by the Reporting Officer in his revised recommendations to address their concerns, which are shown in Appendix 1 and attributed to (PHS1046.2). As a consequence, we accept in part the submissions from *KiwiRail Holdings Limited* (OS322.12), *Fonterra Limited* (OS807.1), *Calder Stewart Development Limited* (OS930.9) and *Cadbury Limited* (OS1015.3) who sought retention of the definition for Noise Sensitive Activities.

445. Our reasons are we agree with the evidence provided by submitters at the hearing that the definition for Noise Sensitive Activities is wider than just where people sleep, and encompasses activities where people are more likely to be sensitive to a high level of noise because they are sleeping, studying, seeking medical treatment, or engaged in religious activity. This rightly includes early childhood education.

3.5.2 Policy 9.2.2.2 (Acoustic Insulation)

446. Policy 9.2.2.2 states:

> *"Require buildings used for noise sensitive activities in the following areas to provide adequate acoustic insulation to avoid significant effects from the higher noise environment anticipated in these areas:*
>
> *a. Central Business District (CBD) Zone;*
>
> *b. Warehouse Precinct (WP) Zone;*
>
> *c. Princes, Parry and Harrow Street (PPH) Zone;*
>
> *d. Harbourside Edge (HE) Zone;*
>
> *e. port noise control mapped area;*
>
> *f. airport noise inner control mapped area;*
>
> *g. airport noise outer control mapped area;*
>
> *h. within 20m of an industrial zone;*
>
> *i. within 40m of a state highway;*
>
> *j. within 40m of the Taieri Aerodrome Zone;*
>
> *k. within 70m of a railway line;*
>
> *l. in-patient areas in the Dunedin Hospital Zone; or*
>
> *m. the Stadium Zone."*

447. The *University of Otago* (OS308.215), sought to clarify that within Policy 9.2.2.2 acoustic insulation is only required for private residential activities. This submission was supported by *Otago Polytechnic* (FS2448.13). The *University of Otago* also clarified the performance standard only applies to kitchens, dining areas, living rooms, studies and bedrooms and the policy should clarify that only private residential aspects are covered, to avoid capturing other activities (e.g. commercial and staff kitchens within the campus).

448. *Otago Polytechnic* (FS2448.13) also requested amendment to clarify that acoustic insulation requirements do not apply to those areas of buildings that are not noise-sensitive.

449. In contrast, *New Zealand Transport Agency* (*NZTA*) (FS2308.18) and *Cerebos Gregg's Limited* (FS2385.3) opposed this submission, as they considered the requested

amendment fails to recognise that activities other than residential activities can be sensitive to higher noise environments, such as those identified in the policy. They considered it is appropriate that the 2GP recognises this and provides guidance on how these effects may be mitigated.

450. *KiwiRail Holdings Limited* (OS322.81) sought retention of this policy specifically supporting noise mitigation for Noise Sensitive Activities within 70m of the rail network, which *the Oil Companies* (FS2487.21) supported.

451. *Southern District Health Board* (OS917.25) also supported this policy because it mitigates potential adverse noise effects upon people and communities, which *Air New Zealand Limited* (ANZL) (OS1046.9) also supported for similar reasons.

452. The Reporting Officer noted that he had recommended changes to the definition of 'Noise Sensitive Activities' in the 2GP so they only relate to where people are more likely to be sensitive to a high level of noise because they are sleeping (s42A Report, Section 5.4.6, pp. 63-64). Refer to sub-section 3.5.1 of this report above for discussion on 'Noise Sensitive Activities'.

453. He considered that the *University of Otago* (OS308.215) raised a valid point and changes to Policy 9.2.2.2 (as shown below), Rule 9.3.1 Acoustic Insulation performance standard, and the definition of Noise Sensitive Activities would make it clearer about the linkage between this policy and these rules and will clarify that Rule 9.3.1 does not apply to commercial and staff kitchens within the Campus Zone. He recommended that Policy 9.2.2.2 be amended as follows (s42A Report, Section 5.4.6, p. 64):

> *"Require <u>those parts of</u> {PHS308.215} buildings used for noise sensitive activities in the following areas to provide adequate acoustic insulation to avoid significant effects from the higher noise environment anticipated in these areas:"*

454. *University of Otago* (OS308.215) called Mr Murray Brass (planner) who discussed acoustic insulation and Noise Sensitive Activities, and noted that his comments only applied to the University Campus area. He supported the Reporting Officer's recommendation, saying:

> *"In the event that there are other submitters who oppose these changes, I would recommend that if any campus activities are retained as noise-sensitive activities, then the definition should specify which elements are covered (e.g. bedrooms or libraries) to avoid capturing non-sensitive activities."*

455. The evidence of *KiwiRail Holdings Limited* (OS322.81) is summarised in subsection 3.5.1 of this report above.

3.5.2.1 Decision and reasons

456. We accept the submission from the *University of Otago* (OS308.215) that clarification of private residential areas is required under Policy 9.2.2.2. We agree with the amendments to Policy 9.2.2.2 and consequential amendments to the assessment of discretionary performance standard contraventions (Rule 9.6.4.1) recommended by the Reporting Officer to address the *University*'s concerns, which are shown in Appendix 1 and attributed to (PHS308.215).

457. Our reasons are that acoustic insulation is only required for those parts of buildings that are used for Noise Sensitive Activities.

458. We also note our decision from the Plan Overview Hearing to accept the submission by the *University of Otago* (PO 308.497) for the policies that use the wording "no significant effects" or "avoid significant effects" to be reviewed and refer to sub-section

12 of the Plan Overview Decision Report. In doing so we have decided that Policy 9.2.2.2 be amended to read as follows:

> *"Require those parts of {PHS 308.215} buildings used for noise sensitive activities in the following areas to provide adequate acoustic insulation to avoid, as far as practicable,{PO308.497} significant adverse {PO308.497}, effects from the higher noise environment anticipated in these areas:*
>
> *a. Central Business District (CBD) Zone;*
> *b. Warehouse Precinct (WP) Zone;*
> *c. Princes, Parry and Harrow Street (PPH) Zone;*
> *d. Harbourside Edge (HE) Zone;*
> *e. port noise control mapped area;*
> *f. airport noise inner control mapped area;*
> *g. airport noise outer control mapped area;*
> *h. within 20m of an industrial zone;*
> *i. within 40m of a state highway;*
> *j. within 40m of the Taieri Aerodrome Zone;*
> *k. within 70m of a railway line;*
> *l. in-patient areas in the Dunedin Hospital Zone; or*
> *m. the Stadium Zone."*

459. In making this decision we also accept in part the submission points by *KiwiRail Holdings Limited* (OS322.81), *Southern District Health Board* (OS917.25) and *Air New Zealand Limited (ANZL)* (OS1046.9) who sought retention of Policy 9.2.2.2.

3.5.3 Acoustic Insulation (Rule 9.3.1) and NZTA requests

3.5.3.1 Background

460. Rule 9.3.1 Acoustic Insulation states:

1. *Any kitchen, dining area, living room, study or bedroom in a building to be used for noise sensitive activities in any of the following locations must have acoustic insulation that achieves a minimum design standard of DnT, w + Ctr > 30:*
    a. *Central Business District (CBD) Zone;*
    b. *Warehouse Precinct (WP) Zone;*
    c. *Princes, Parry and Harrow Street (PPH) Zone;*
    d. *Harbourside Edge (HE) Zone;*
    e. ***airport noise inner control mapped area**;*
    f. ***airport noise outer control mapped area**;*
    g. *within 20m of an industrial zone;*
    h. *within 40m of a state highway;*
    i. *within 40m of the Taieri Aerodrome Zone;*
    j. *within 70m of a railway line;*
    k. *in-patient areas in the Dunedin Hospital Zone; or*
    l. *the Stadium Zone.*
2. *Any kitchen, dining area, living room, study or bedroom in a building to be used for noise sensitive activities within the **port noise control mapped area** must have acoustic insulation that achieves a minimum indoor design standard of 40 dBA Ldn.*
3. *Habitable rooms must be supplied with a positive supplementary source of fresh air ducted from outside that achieves a minimum of 7.5 litres per second per person, to enable adequate ventilation when windows are closed.*

4. *The schedule in Appendix 9A describes the minimum requirements necessary to achieve an external sound insulation level of DnT, w + Ctr > 30.*
5. *Any development that contravenes the performance standard for acoustic insulation is a discretionary activity.*

3.5.3.2 Submissions

3.5.3.2.1 Requests by NZTA for acoustic insulation within 100m of a state highway

461. *New Zealand Transport Agency (NZTA)* (OS881.98, OS881.99, OS881.100, OS881.101 and OS881.108) requested amendments to Objective 9.2.2, Policy 9.2.2.2 (acoustic insulation) and Rule 9.3.1 Acoustic Insulation, so that acoustic insulation for Noise Sensitive Activities is required within 100m instead of 40m of a state highway. This was opposed by *Federated Farmers of New Zealand* (FS2449.26, FS2449.27), and *Southern District Health Board* (FS2370.5) supported in part the amendment sought by *New Zealand Transport Agency (NZTA)* (OS881.101) to Rule 9.3.1 Acoustic Insulation.

462. The *New Zealand Transport Agency's* (*NZTA*) reasons included that the current framework fails to recognise the specific noise effects of land transport activities. It also considered that the Acoustic Insulation performance standard (Rule 9.3.1) as proposed does not truly reflect the extent of the road noise effects area, or the nature of noise associated with land transport. The 40m distance, where acoustic insulation is required for Noise Sensitive Activities, is also not consistent with the Agency's guidelines.

3.5.3.2.2 Other specific requests related to Acoustic Insulation (Rule 9.3.1)

463. *Cerebos Gregg's Limited* (OS54.2), *KiwiRail Holdings Limited* (OS322.84), *Scenic Circle Hotels Limited* (OS896.3), *Bindon Holdings Ltd* (OS916.1), *East Parry Investments Limited* (OS922.2), *Calder Stewart Development Limited* (OS930.8), *Cadbury Limited* (OS1015.2) and *Air New Zealand Limited (ANZL)* (OS1046.10) sought the retention of the Acoustic Insulation performance standard (Rule 9.3.1), or parts thereof, as they considered it appropriate to have rules to ensure existing activities are not constrained by new sensitive activities establishing in the areas, identified in the rule (reverse sensitivity).

464. *Harboursides and Peninsula Preservation Coalition* (OS447.86) sought non-complying activity status for a performance standard contravention to obtain the full scrutiny of Section 104D of the RMA.

465. *The University of Otago* (OS308.215, OS308.217 and OS308.363), supported by *Otago Polytechnic* (FS2448.14), sought that the amendments are consistent with the decisions sought on Policy 9.2.2.2, which clarifies that acoustic insulation requirements do not apply to those areas of buildings that are not noise-sensitive and that only private residential aspects are covered, to avoid capturing other activities (e.g. commercial and staff kitchens within the campus. *Cerebos Gregg's Limited* (FS2385.2) considered that the relief sought by the *University of Otago* (OS308.217) would water down the rule and create reverse sensitivity effects on its plant.

466. Related to these submissions, *Fonterra Limited* (OS807.16) sought changes to the acoustic insulation rule to clarify which rooms the acoustic insulation standards should apply to and sought reference to habitable rooms in the first part of this rule.

467. Additionally, *Fonterra Limited* (OS807.59) sought minor changes to the wording of the ventilation of habitable rooms. *New Zealand Transport Agency* (NZTA) (OS881.102), supported by *SDHB* (FS2370.6), sought additional clauses regarding ventilation as

they considered that additional information could improve the rule, and provide better clarity for plan users.

468. *New Zealand Transport Agency* (NZTA) (OS881.102) also sought to insert the following after clause 3 of Rule 9.3.1. (Acoustic Insulation), as follows:

> *"Where windows must be able to be kept closed for noise reasons, the building must be designed, constructed and maintained with a ventilation system. For habitable spaces a ventilation system must achieve the following: i. Ventilation must be provided to meet clause G4 of the New Zealand Building Code. At the same time, the sound of the system must not exceed 30 dB LAeq(30s) when measured 1 m away from any grille or diffuser. ii. The occupant must be able to control the ventilation rate in increments up to a high air flow setting that provides at least 6 air changes per hour. At the same time, the sound of the system must not exceed 35 dB LAeq(30s) when measured 1 m away from any grille or diffuser."*

469. The *SDHB* (OS917.14 and FS2370.6) supported by *Port Otago Limited* (FS2378.11) considered that inflow air should be tempered to 18 degrees Celsius in cold weather otherwise ventilation is unlikely to be used.

3.5.3.3 Section 42A Report and Mr Hunt's evidence

470. The Reporting Officer noted that the submission points by *New Zealand Transport Agency* (*NZTA*) to extend the distance where acoustic insulation is required from 40m to 100m, have been assessed in Mr Hunt's acoustic evidence (s42A Report, Section 5.5.3, pp. 91-97). Mr Hunt considered that the *NZTA* have not provided evidence to justify why the extension in distance is necessary and he considered that a 40 metre setback with the basic insulation qualities for typical dwellings, as proposed in the Acoustic Insulation rule, is sufficient to address reverse sensitivity concerns associated with the use of state highways in Dunedin (Mr Hunt Statement of Evidence, p. 14).

471. The Reporting Officer agreed with this assessment and therefore recommended that the submission points OS881.98, OS881.99, OS881.100 and OS881.108 by the *NZTA* be rejected (s42A Report, Section 5.5.2, p.87).

472. Mr Hunt also recommended that submission point OS881.101 is accepted in part subject to additional recommended changes to amend which rooms the acoustic insulation standards should apply to (via a change to the definition of habitable room), and changes to an acoustic design certificate if the schedule in Appendix 9A is contravened (Statement of Evidence, pp. 12-14).

473. The Reporting Officer did not consider it was necessary to create an addition to the definition of habitable room, as suggested by Mr Hunt. He said that as "habitable room" is used for calculating density in the Residential Zone (Rule 15.5.2) it would create inaccuracies to widen the definition in the manner proposed. Instead, he considered that there should be amendments to the Acoustic Insulation rule and to the definition of Noise Sensitive Activities and Policy 9.2.2.2, to better articulate which activities in which parts of a building should require acoustic insulation. These will relate to activities where people are more likely to be sensitive to a high level of noise because they are sleeping.

474. The Reporting Officer therefore recommended that the submission points by *NZTA* (OS881.101 and OS881.102) be accepted in part, subject to the amendments to the Acoustic Insulation rule (s42A Report, Section 5.5.2, p.87).

475. The Reporting Officer considered the specific requests from other submitters to the Acoustic Insulation performance standard (Rule 9.3.1) and recommended (s42A Report, Section 5.5.3, pp. 91-97):

- rejection of *Harboursides and Peninsula Preservation Coalition's* (OS447.86) request for non-complying activity status for a performance standard contravention, because there is sufficient direction and guidance provided by Rule 9.6.4.1 Assessment of discretionary performance standard contraventions - acoustic insulation to appropriately consider resource consent applications (and refuse or grant with conditions these consent applications), and that as a consequence, a non-complying activity status is unnecessary
- accept in part *University of Otago* (OS308.217 and OS308.363) and *Fonterra Limited* (OS807.16) requests that the Acoustic Insulation rule be amended to only relate to parts of a building used for sleeping i.e. bedrooms. This was contrary to Mr Hunt's acoustic evidence (Statement of Evidence, p. 16)
- based on acoustic evidence from Mr Hunt, accept *Fonterra Limited's* (OS807.59) submission in regard to amendment of clause 3 of the Acoustic Insulation rule to reference 'ventilation' instead of 'fresh air from outside' because it is consistent with best practice and will enhance wording (Statement of Evidence, p. 15)
- based on acoustic evidence from Mr Hunt, reject *Southern District Health Board* (OS917.14) and reject in part *NZTA* OS881.102 (in regard to ventilation of habitable rooms (Statement of Evidence, pp. 15-16)
- based on acoustic evidence from Mr Hunt, accept in part *NZTA* OS881.102 (in regard to acoustic design in Appendix 9A to the 2GP) and amendments to clause 4 of the Acoustic Insulation rule (Statement of Evidence, p. 14).

3.5.3.4 Evidence presented at hearing

3.5.3.4.1 New Zealand Transport Agency (NZTA) evidence

476. The *New* Zealand *Transport Agency (NZTA)* called Dr Stephen Chiles (acoustic expert). Dr Chiles' evidence in summary was:

- road-traffic noise effects can extend several hundred metres from state highways and the 100 metres from a state highway is an appropriate distance within which to apply controls for acoustic insulation on new and altered Noise Sensitive Activities, to address the most significant effects
- setting an internal design sound level is more efficient and effective than the alternative of setting a sound insulation requirement as included in the notified 2GP for most sources, and the notified 2GP already uses such a criterion for port noise. He also disagreed with Mr Hunt on this matter
- amendments sought to the 2GP are in Appendix A of his evidence (Statement of Evidence, p. 2).

477. He said the Section 32 analysis and underlying research does not justify a 40m distance and he could only find a previous report from Mr Hunt[1] in which an 80m distance was recommended (Statement of Evidence, p. 6).

478. He also described that there are two approaches commonly used for land-use controls for Noise Sensitive Activities that establish beside existing infrastructure, which specify the:

a. sound insulation performance of the building
b. maximum resulting internal sound level.

[1] Malcolm Hunt Associates, Noise and vibration review, September 2014

479. He outlined that the 2GP uses the first approach (except in the Port Zone) which has the advantage that no knowledge of external sound levels is required to design the building. However, he considered that this can result in internal sound above reasonable levels, particularly when close to a road, but conversely, for a building located further from a road the sound insulation requirement can result in unduly onerous treatment and unnecessary cost.

480. He said the second approach requires the building to be designed for the actual environment as necessary to reduce road-traffic sound. He preferred this approach as the treatment required is directly related to the potential adverse effects and the desired outcome in terms of the internal environment occupants will experience. He said there are well established methods for determining the external road-traffic sound levels needed in this process.

481. He disagreed with Mr Hunt's evidence that this approach is 'over prescriptive' and more complicated than the approach proposed by Mr Hunt. Instead he considered that setting internal sound levels is the most efficient and flexible approach because it considers each situation separately and so acoustic insulation requirements vary depending on the Noise Sensitive Activities' distance, orientation and topography in relation to the noise source (Statement of Evidence, pp. 7-9).

3.5.3.4.2 KiwiRail Holdings Limited evidence

482. *KiwiRail Holdings Limited* (OS322.84) called Ms Rebecca Beals (planner) and Dr Chiles (acoustic consultant). Ms Beals did not support the recommended amendments by the Reporting Officer that would only allow acoustic insulation being required for sleeping spaces and instead preferred the reference to 'habitable space' as defined in the Building Code. She also relied on the detailed reasons in the evidence of Dr Chiles (Statement of Evidence, p. 2).

483. Dr Chiles also disagreed with the Reporting Officer's recommendation to only allow acoustic insulation for rooms required for sleeping, which he considered is inconsistent with New Zealand Standards and documented international research, and he supported the notified version of Noise Sensitive Activities.

484. Dr Chiles also referred to the evidence of Mr Hunt, that amendments to the definition of Habitable Rooms be made so that they included, for example, rooms used for teaching (Statement of Evidence, pp. 13-14). Dr Chiles agreed with the intent of this amendment but considered that his alteration of the definition of Habitable Rooms is potentially confusing because the term 'Habitable Space' is defined under the New Zealand Building Code and is widely used and understood, and Mr Hunt's proposed amendment includes building types that are never usually associated with Habitable Rooms (Statement of Evidence, p. 9).

3.5.3.4.3 Air New Zealand Limited (ANZL) evidence

485. *Air New Zealand Limited (ANZL)* (OS1046.10) called Mr Aidan Cameron (legal counsel) who raised similar issues around the scope of restricting acoustic insulation for 'Noise Sensitive Activities' to bedrooms or rooms used for sleeping (refer sub-section 3.5.1.4 above) (Statement of Evidence, pp. 4-5).

3.5.3.4.4 University of Otago evidence

486. The *University of Otago* (OS308.215, OS308.217 and OS308.363) called Mr Murray Brass (planner) who supported the s42A Report recommendations (Statement of Evidence, p. 4).

3.5.3.4.5 Fonterra Limited evidence

487. *Fonterra Limited* (OS807.16 and OS807.59) called Mr Dean Chrystal (planning consultant) and Mr Minhinnick (Counsel).

488. Mr Chrystal considered that the definition of habitable space as adopted by the Christchurch Replacement Plan and which follows the New Zealand Building Code definition should be inserted in the 2GP. This definition is:

> *"Habitable space*
>
> *means all the spaces of a residential unit or guest accommodation unit except any bathroom, laundry, toilet, pantry, walk-in wardrobe, corridor, hallway, lobby or clothes drying room (but including any portion of a garage used as a sleep-out)"* (Statement of Evidence, p. 16).

489. Mr Chrystal did not support the Reporting Officer's recommendation of restricting acoustic insulation to just those rooms which are used for sleeping, and considered that the wording originally proposed in the Fonterra submission to be more appropriate (Statement of Evidence, p. 17).

490. Mr Minhinnick also did not support the Reporting Officer's recommendation of restricting acoustic insulation to just those rooms which are used for sleeping and stated that the amendment is not fairly or reasonably intended by Fonterra's submission, and is inappropriate and inconsistent with planning practice around the country (Statement of Evidence, p. 10).

3.5.3.5 Reporting Officer revised recommendations

491. In his revised recommendations, the Reporting Officer agreed with the submitters that the Acoustic Insulation rule (Rule 9.3.1) should not be restricted to just those rooms which are used for sleeping. He preferred the evidence of Dr Stephen Chiles in his evidence for *KiwiRail* to amend the acoustic insulation rule to add reference to all rooms in buildings used for Noise Sensitive Activities, and add a specific exemption to where the rule does not apply, which is the same as the exemptions to 'habitable space' as defined in the building code. He therefore recommended that the Acoustic Insulation rule (Rule 9.3.1) be amended as follows (Revised Recommendations, pp.8-10):

1. *Any ~~kitchen, dining area, living room, study or bedroom~~ room in a building to be used for noise sensitive activities in any of the following locations must have acoustic insulation that achieves a minimum design standard of DnT, w + Ctr > 30:*
   a. *Central Business District (CBD) Zone;*
   b. *Warehouse Precinct (WP) Zone;*
   c. *Princes, Parry and Harrow Street (PPH) Zone;*
   d. *Harbourside Edge (HE) Zone;*
   e. *airport noise inner control mapped area;*
   f. *airport noise outer control mapped area;*
   g. *within 20m of an industrial zone;*
   h. *within 40m of a state highway;*
   i. *within 40m of the Taieri Aerodrome Zone;*
   j. *within 70m of a railway line;*
   k. *in-patient areas in the Dunedin Hospital Zone; or*
   l. *the Stadium Zone.*
2. *Any ~~kitchen, dining area, living room, study or bedroom~~ room in a building to be used for noise sensitive activities within the **port noise control mapped***

area *must have acoustic insulation that achieves a minimum indoor design standard of 40 dBA Ldn.*

3. *Rooms ~~Habitable rooms~~ must be supplied with a positive supplementary source of ventilation ~~fresh air ducted from outside~~ that achieves a minimum of 7.5 litres per second per person, to enable adequate ventilation when windows are closed.*
4. *The schedule in Appendix 9A describes the minimum requirements necessary to achieve an external ~~sound~~ noise insulation level of DnT, w + Ctr > 30. Where new or altered rooms in a building is proposed to be constructed using methods and materials that differ from the schedule in Appendix 9A an acoustic design certificate must be provided to Council by a qualified and experienced acoustic engineer accepted by Council which confirms that when built to the recommended design and specifications, the minimum acoustic insulation standard of Rule 9.3.1.1 will be achieved.*
5. *Except the following spaces are exempt from this standard; any bathroom, laundry, toilet, pantry, walk-in wardrobe, corridor, hallway, lobby, clothes-drying room, or other space of a specialised nature occupied neither frequently nor for extended periods*
6. *Any development that contravenes the performance standard for acoustic insulation is a discretionary activity*.

3.5.3.6 Decision and reasons

492. We accept in part Cerebos *Gregg's Limited* (OS54.2), *KiwiRail Holdings Limited* (OS322.84), *Scenic Circle Hotels Limited* (OS896.3), *Bindon Holdings Ltd* (OS916.1), *East Parry Investments Limited* (OS922.2), *Calder Stewart Development Limited* (OS930.8), *Air New Zealand Limited* (ANZL) (OS1046.10), the *University of Otago* (OS308.215, OS308.217 and OS308.363), *New Zealand Transport Agency* (NZTA) (OS881.101 and OS881.102) and *Fonterra Limited* (OS807.16 and OS807.59) and agree with the revised recommendations, and reasons given, by the Reporting Officer to amend the Acoustic Insulation rule (Rule 9.3.1) as shown above, subject to amendments in wording to provide additional clarity.

493. We also accept in part *New Zealand Transport Agency (NZTA)* (OS881.101) but only as far as the amendments to the Acoustic Insulation rule as recommended by the Reporting Officer in his revised recommendations, subject to amendments in wording to provide additional clarity.

494. The amendments we have decided on relate to referencing 'any building or parts of buildings' instead of a 'room' in clauses 1 and 2 of the Acoustic Insulation rule. We have also decided to move the addition to clause 4 (related to requiring an acoustic design certificate for methods and materials that differ from the schedule in Appendix 9A) to a new special information requirement rule (new Rule 9.8.2) and including clarification on what suitably qualified and experienced means. We consider that these amendments will add to the clarity and functionality of the Acoustic Insulation rule.

495. See amendment reference PHS308.215, PHS807.16, PHS807.59, PHS881.101 and PHS881.102 in Appendix 1.

496. We reject *New Zealand Transport Agency (NZTA)* (OS881.98, OS881.99, OS881.100 and OS881.108) requested amendments to Objective 9.2.2, Policy 9.2.2.2 (acoustic insulation) and Acoustic Insulation rule (Rule 9.3.1), for acoustic insulation for Noise Sensitive Activities is required within 100m of a state highway.

497. In making this decision we have relied on, and accept the evidence of Mr Hunt that the appropriate distance for which acoustic insulation for Noise Sensitive Activities is required is within 40m of a state highway.

498. We also agree with the Reporting Officer in his revised recommendations, and the evidence of Dr Chiles for *KiwiRail*, that it would add clarity to plan users to amend the

Acoustic Insulation rule to add reference to all rooms in buildings used for Noise Sensitive Activities, and add a specific exemption to where the rule does not apply. Although we have decided on slightly different wording for additional clarity. See amendment reference PHS807.16 in Appendix 1.

499. We reject the submission by *Harboursides and Peninsula Preservation Coalition* (OS447.86) for a non-complying activity status for a performance standard contravention and agree with the Reporting Officer's reasons outlined above that this is unnecessary.

500. We also reject *SDHB's* (OS917.14) request to require ventilated areas to be heated to 18° Celsius in colder weather, as we agree with the expertise of Mr Hunt who has considered that these ventilation systems should be turned off if the ventilation system is causing discomfort.

3.6 Noise Rule 9.3.6

501. The Noise performance standard (Rule 9.3.6) requires land use activities, public amenity activities, network utilities activities, and temporary activities to not exceed certain noise limits which vary, depending on the zone and time period (day, evening or night). There are also a number of exemptions to this standard in Rule 9.3.6.6a-n. Activities that contravene this performance standard by less than 5dB LAeq (15 min) are discretionary activities, and by 5dB LAeq (15 min) or more are non-complying activities.

3.6.1 Submissions

502. The *University of Otago* (OS308.219) sought the retention of Campus Zone Noise rule at the same noise level as Commercial and Mixed Use, Hospital and Museum zone. The *University of Otago* (OS308.220) did however seek a review of Rule 9.3.6 as it applies to the Campus Zone, particularly the method of measurement which they considered had changed without any justification in the Section 32 Report. *Cerebos Gregg's Limited* (FS2385.4 and FS2385.5) supported these submissions to the extent that any specific changes to Rule 9.3.6 better articulates how noise limits are to be measured. *Southern District Health Board* (FS2370.7) opposed the University's submission as it considered that the method of measurement is consistent with everywhere else in New Zealand. *Cerebos Gregg's Limited* (OS54.4) also sought the retention of noise limits for the Campus Zone (that adjoins the Cerebos Greggs Company's Forth Street plant).

503. *Raymond and Evelyn Beardsmore* (OS429.1) sought a 10min time interval for measuring noise levels rather than the 15min time interval in the Noise rule. Southern *District Health Board* (FS2370.8) notes that this is inconsistent with *NZS6802:2008 Acoustics Environmental Noise* that requires a 15 minute time interval for measuring fluctuating noise and is in general used throughout New Zealand. *Radio New Zealand Limited* (FS2332.13) and *Horticulture New Zealand* (FS2452.28) considered that the notified Noise rule is adequate and *Oceana Gold (New Zealand) Limited* (FS2439.47) did not support a noise reduction for rural zones.

504. *June Diane Yeldon* (OS12.2) requested that heat pumps be required to meet New Zealand standards for noise and vibration and the siting of them be a controlled activity because of her concerns about noise and low frequency vibrations caused by heat pumps.

505. *Simon Ryan* (OS600.4) was concerned with the adverse noise and vibration effects of wind generators (wind farms) and requested amendment of the Noise performance standard to reflect this. He also referred to the adverse noise effects of wind turbines

and referred to the British Noise Association investigation on wind turbines, which was attached to his submission. *Geraldine Tait* (FS2160.6) supported this submission for similar reasons.

506. *Fonterra Limited* (OS807.18), supported by *Oceana Gold (New Zealand) Limited* (FS2439.48), considered the Noise standards are very low for rural and residential zones, particularly where they adjoin Industrial or Commercial, that the evening 'shoulder' noise period is not best practice and there is no rationale for reducing the night time Noise limits in the Industrial Zone from 65 to 60 dB LAeq (15 min).

507. As a consequence, *Fonterra Limited* sought the Noise performance standards be amended by deleting the column in Rule 9.3.6b for the period 7pm to 10pm, increasing the daytime period to 10pm and increasing the noise limits by 5dBA.

508. *Gary Pollock* (FS2347.2) opposed *Fonterra's* submission as it relates to a reduction in amenity and property values and supports the changes to the Noise standards in the rural zones. *Horticulture New Zealand* (FS2452.29) considered that having two sets of Noise limits is simpler and provides adequate protection and *the Oil Companies* (FS2487.26) considered that the changes set an appropriate threshold.

509. *Southern District Health Board* (OS917.7, OS917.8 and OS917.21), supported by *Port Otago Limited* (FS2378.4, FS2378.5 and FS2378.10), sought amendments to better reflect best practice and national Noise standards.

510. *Southern District Health Board* (OS917.20) also requested that throughout the Plan reference should be made to a number of New Zealand standards, including 'NZS 6806:2010 Acoustics – Road-traffic noise – New and altered roads', which was supported in part by *Port Otago Limited* (FS2378).

511. *Otago Sports Car Club Inc (OS579.1)* was concerned that the Noise rule does not allow for competitive hill climbs occurring mainly in rural and semi-rural areas, which they have been having over the past 60 years and generally have a duration of 4-6 hours. *Southern District Health Board* (FS2370.9) considered that the exemption of sport and recreation involving the use of motor vehicles from the Noise standards would fail to protect people and communities from a potential noise source with a long history of causing noise complaint and costly proceedings for Council.

512. *Radio New Zealand Limited (OS918.37),* supported by *Aurora Energy Limited (FS2375.14)*, sought an exemption for standby generators for the sake of clarity.

513. *David Johnston* (OS245.2), *Mervyn & Jill Clearwater* (OS812.4 and OS812.5)*, David & Jacinta Grey* (OS830.2 and OS830.3) and further submitters in support (FS2094.2, FS2144.2, FS2166.2) had concerns with the adverse noise effects on surrounding residential amenity of ballast loading occurring on Sundays, and want "railway ballast loading" added as an exclusion from the exemption afforded trains by the Noise rule (Rule 9.3.6.6h).

514. *KiwiRail Holdings Limited* (OS322.85, FS2162.6, FS2162.7, FS2162.8, FS2162.12, FS2162.13) and *Fonterra Limited* (FS2317.8) supported that rail operations are exempt from the Noise standard and *KiwiRail* have raised in their submissions that if residents have concerns regarding KiwiRail operations, that these can be lodged with KiwiRail by contacting them on 0800 801 070 or at kiwirail@kiwirail.co.nz or logged online at www.kiwirail.co.nz. KiwiRail have stated that enquiries are taken seriously, and where both appropriate and feasible, actions are taken to address any issues that are raised.

515. Finally, *KiwiRail* noted that the DCC have existing powers in relation to excessive noise under the RMA (s. 16 & 17).

516. *Robert Francis Wyber* (OS394.74) considered that noise generated by normal residential activities has not and cannot be defined and should be replaced with the operative residential limits, and also considered that at night, wind generators should not exceed background noise levels because of the adverse effect on amenity (OS394.75).

517. *Eryn Makinson (OS516.2)* submitted that although the Port is an economically significant industry it should not be exempt from the Noise standards. *Port Otago Limited* (FS2378.21) opposed this relief because the Environment Court accepted that Noise limits were inappropriate, unworkable and unenforceable, that the noise regime in the existing plan is successful, and submitters are Careys Bay residents who are protected from the worst noise by topography, and complaints should be made to Port Otago in the first instance.

518. *Dunedin International Airport Limited* (OS724.14 and OS724.15) considered that a new noise exemption and an exemption to Rule 9.3.6.5 should be provided for the maintenance or construction of the airport runway. *Southern District Health Board* (FS2370.10) considered that construction noise should not be exempt and the New Zealand Noise standard NZS6803:1999 is best practice.

519. *The New Zealand Defence Force* (OS583.23) sought new rules for the protection of the NZ Defence Force Waitati Rifle Range at 108 Miller Road, Waitati, including a noise buffer zone, restrictions on residential development, and no complaints covenants because of the Waitati Rifle Range being a significant strategic asset and it should be protected from reverse sensitivity effects resulting from changes in land use zoning.

520. *Scenic Circle Hotels Limited* (OS896.4 and OS896.9) sought the retention of the Noise rule (9.3.6) and the retention of the performance standards that apply to all land use activities in the commercial and mixed use zones (Rule 18.3.3.1) which it considered as appropriate. *Bindon Holdings Ltd* (OS916.2 and OS916.22) and *East Parry Investments Limited* (OS922.3 and OS922.21) also sought retention of the Noise rule. *New Zealand Fire Service Commission (*OS945.31) sought retention of the Noise rule including the exemptions for emergency services.

521. *Horticulture New Zealand* (OS1090.25) also sought retention of Rule 9.3.6.6.l (noise generated as part of normal farming activities) and the addition of a new exemption for aircraft undertaking agricultural aviation activities in rural areas.

3.6.2 s42A Report

522. The Reporting Officer deferred to the acoustic expertise of Mr Hunt in making most of the recommendations on these submissions, and in summary recommended that:

- the submissions by *Mercy Dunedin Hospital Limited* (OS241.25 and OS241.45), *University of Otago* (OS308.219), *East Parry Investments Limited* (OS922.21 and OS922.3), *New Zealand Fire Service Commission* (OS945.31), *Cadbury Limited* (OS1015.4), *Horticulture New Zealand* (OS1090.25), *Scenic Circle Hotels Limited* (OS896.4 and OS896.9) *and Bindon Holdings Ltd* (OS916.2 and OS916.22) who seek retention of the Noise rule (or parts thereof) be accepted in part, subject to the amendments proposed below (s42A Report, Section 5.5.7.1, p. 124)
- the submission by *University of Otago* (OS308.220) be rejected because no alternative standards have been recommended by the submitter (Acoustic Statement of Evidence, p. 17) (s42A Report, Section 5.5.7.1, p. 124)
- *Raymond and Evelyn Beardsmore's* submission (OS429.1) be rejected because a 15 minute reference time period as recommended within NZS6802:2008 is consistent with best practice found in other district plans in New Zealand and there are no advantages in using a 10min compared to a 15min LAeq, or changing the rule to refer to a notional

boundary of noise sensitive areas (Acoustic Statement of Evidence, p. 17) (s42A Report, Section 5.5.7.1, p. 125)

- *June Diane Yeldon's* (OS12.2) submission be rejected because there is no need to stipulate specific types of noise to which the limits apply, and that adequate control over noise effects in residential areas is achieved by keeping the rule general in scope, which is the approach taken in the Noise rule (Acoustic Statement of Evidence, p. 17) (s42A Report, Section 5.5.7.1, p. 125)
- *Simon Ryan's* (OS600.4) submission be rejected because the wording in Rule 9.3.6.6.j is based on the recommendation of 'NZS 6808:2010 Acoustics Wind Farm Noise', which is considered best practice for managing health and amenity effects associated with noise from wind farms (Acoustic Statement of Evidence, p. 23) (s42A Report, Section 5.5.7.1, p. 125)
- *Fonterra Limited's* (OS807.18) submission be rejected because having separate day, evening and night time maximum noise levels is in accordance with the recommendations of NZS6802:2008 Acoustics Environmental Noise and the numerical Noise limits recommended within the Noise rule have been set by Council based on officer experience and measurements of the ambient sound climate (Acoustic Statement of Evidence, p. 19) (s42A Report, Section 5.5.7.1, p. 126)
- *Southern District Health Board*'s submission (OS917.7), which sought the correct legal formatting of New Zealand Standards throughout the 2GP, be accepted because it is needed for legal certainty in enforcement proceedings (Additional Acoustic Statement of Evidence, p. 2) (s42A Report, Section 5.5.7.1, pp. 126-127)
- *Southern District Health Board's* (OS917.8) submission be accepted in part by:
    - inserting the following as part of the Noise rule (Rule 9.3.6.7): *"Unless stated otherwise noise must be measured in accordance with NZS 6801:2008 - Acoustics - Measurement of environmental sound, and assessed in accordance with NZS 6802:2008 Acoustics - Environmental noise."*
    - Amending part of the Noise rule (Rule 9.3.6.6.j) so it only applies to wind turbines with a swept rotor area greater than 200m^2 (Acoustic Statement of Evidence, p. 20) (s42A Report, Section 5.5.7.1, pp. 126-127)
- *Otago Sports Car Club Inc's* (OS579.1) submission to exempt competitive motor vehicle racing from the Noise standards be rejected because the noise associated with these recreational activities can and does create potential adverse effects, which are appropriate to control in the 2GP (Acoustic Statement of Evidence, p. 19) (s42A Report, Section 5.5.7.1, p. 127)
- *Radio New Zealand Limited's* (OS918.37) submission and *Aurora Energy Limited's (FS2375.14)* further submission in support to exempt the temporary use of standby generators be rejected because they can be designed and located to meet the noise standard and the RMA requirements (sections 16, 17 and 18) of avoiding, remedying or mitigating potential adverse noise effects (Acoustic Statement of Evidence, p. 21) (s42A Report, Section 5.5.7.1, pp. 127-128)
- *David Johnston (OS245.2), Mervyn & Jill Clearwater (OS812.4 and OS812.5)* and *David & Jacinta Grey's (OS830.2 and OS830.3)* submissions that requested railway ballast loading to be subject to the noise provisions and not included as the exemption afforded to trains by part 9.3.6.6h of the Noise rule, be rejected and the *KiwiRail Holdings Limited's* submission (OS322.85) to retain part 9.3.6.6h of the Noise rule be accepted. This was because part 9.3.6.1 of the Noise rule does not apply to activities undertaken within designations and ballast loading is

considered as part of 'Railway Purposes' (Acoustic Statement of Evidence, pp. 21-22) (s42A Report, Section 5.5.7.2, pp. 133-134)

- *Robert Francis Wyber's* (OS394.74) submission to replace the 2GP Noise provisions with the operative provisions, and (OS394.75) for wind generators at night to not exceed the background noise levels because of the adverse effect on amenity, both be rejected. This was because it is appropriate for normal residential activities for example lawn mowing to be exempt from Noise controls and the wording of part 9.3.6.6.j of the Noise rule is based on the New Zealand Standard (NZS 6808:2010 Acoustics Wind Farm Noise) (Acoustic Statement of Evidence, pp. 23-24) (s42A Report, Section 5.5.7.4, p. 137)
- *Dunedin International Airport Limited* (OS724.14) submission to remove part 9.3.6.5 of the Noise rule (which applies Noise limits to industrial, airport and other zones), and *Dunedin International Airport Limited* (OS724.15) to include an exemption for construction in the Dunedin International Airport Zone, both be rejected. The reasons were that the Noise rule and its associated exemptions represent a balance between protecting people against the adverse effects of environmental noise whilst allowing legitimate economic and social activities to be undertaken so long as the noise effects are not unreasonable. In addition, construction noise is covered under a separate standard (Rule 4.5.4.1) within the temporary activities section of the 2GP (Acoustic Statement of Evidence, pp. 21-22) (s42A Report, Section 5.5.7.4, p. 138).

523. The Reporting Officer recommended that the *Southern District Health Board's* (OS917.21) submission to replace the term 'Noise Level Measured' with the term 'Sound assessed' be rejected. This is contrary to Mr Hunt's advice (which he describes as technically correct) but the Reporting Officer noted that 'noise' is commonly defined as unwanted sound, and therefore forms a subset of sounds. The Reporting Officer also noted that the RMA refers to a duty to avoid unreasonable noise (Section 16) and considered 'noise' to be the more common term when referring to effects (Acoustic Statement of Evidence, p. 9) (s42A Report, Section 5.5.7.1, pp. 126-127).

524. The Reporting Officer recommended that *Southern District Health Board's* (OS917.20) relief to reference 'NZS 6806:2010 Acoustics – Road traffic noise – New and altered roads' be rejected because part 9.3.6.6h of the Noise rule specifically exempts vehicles operating on public roads from the performance standards and there are no other rules in the 2GP which reference road traffic noise, therefore it is unnecessary (s42A Report, Section 5.5.7.5, p. 141).

525. The Reporting Officer recommended that *Eryn Makinson's* (OS516.2) suggested relief that noise generated by the port has to comply with the Noise standard (therefore is not exempt under part 9.3.6.6.a of the Noise rule) should be rejected, because the Port Noise rule (Rule 30.5.4) applies to noise produced by the operator of the port at Port Chalmers. He considered that it is appropriate to have specific Noise standards apply to Port Chalmers as it has unique noise characteristics, which makes the Port Noise rule more appropriate than the Noise rule (s42A Report, Section 5.5.7.4, pp. 137-138).

526. The Reporting Officer recommended that *New Zealand Defence Force's* (OS583.23) submission to include a noise buffer zone, restrictions on residential development, and a no complaints covenant related to the Waitati Rifle Range at 108 Miller Road, be rejected. This is because the site is designated for defence purposes in the 2GP and therefore it is unnecessary to provide for additional restrictions on land use activities within the vicinity of the Waitati Rifle Range as the activity being undertaken is in accordance with its designated purpose and therefore is not required to comply with the Noise standards in Rule 9.3.6 (s42A Report, Section 5.5.7.5, pp. 140-141).

3.6.3 Evidence presented at hearing

3.6.3.1 University of Otago evidence

527. The *University of Otago* (OS308.220) called Mr Murray Brass (planner). Mr Brass' evidence questioned what the overall impact will be of changing from the operative to the 2GP Noise standards and stated:

> *"My understanding is that the proposed provisions would be more permissive for general noise during the daytime - the numerical limit is higher, and the measurement descriptor (Leq) will generally give a 2-3dB lower value for a varying noise environment (eg inner city traffic) than L10. However, the use of Leq is more restrictive for infrequent loud noises. The night time provisions would be significantly more permissive for general noise, but would still restrict infrequent loud noises.*
>
> *On that basis I would support the proposed approach, but would seek confirmation through the hearing that the understanding outlined above is correct."* (Statement of Evidence, p. 4)

528. This statement was confirmed as correct by Mr Hunt at the hearing and is covered in Mr Hunt's acoustic report.

3.6.3.2 Raymond and Evelyn Beardsmore evidence

529. *Raymond and Evelyn Beardsmore* (OS429.1) talked to their submission (and did not provide written evidence) and raised concerns about motorised recreational vehicles (including motorbikes) and the noise from them, which adversely affects them where they live in West Taieri.

3.6.3.3 Fonterra Limited evidence

530. *Fonterra Limited* (OS807.18) called Mr Dean Chrystal (planning consultant) and Mr Rob Hay (acoustic consultant).

531. Mr Chrystal clarified that district plans around the country use different noise limits for what is essentially the same environment and gave examples of:

- Hurunui District Plan has a daytime (0700-1900 inclusive) Noise limit of 55 dB LAeq for the Rural zone and night-time (all other times) limits of 45 dB LAeq and 70 dB LAFmax
- South District Taranaki Plan has requirements of 7am to 7pm 55dB LAeq (15 min), 7pm to 10pm 50dB LAeq (15 min) and 10pm to 7am 45dB LAeq (15 min) and 75dBA LAmax for its Rural zone
- Christchurch Replacement District Plan, the Noise requirements are similar to those proposed by Dunedin.

532. Mr Chrystal also clarified that the World Health Organisation has recommended a 45dB LAeq (15 min) night-time Noise limit outside a dwelling which should not be exceeded so that people can sleep with windows open for ventilation (Statement of Evidence, p. 13).

533. Mr Hay said that a Rural Zone Noise limit of 40dB is at the lower end of those typical throughout New Zealand in his experience, with 45dB being quite common. Mr Hay also outlined that NZS6802:2008 does allow Council to set a limit lower than 45dB, but expects that a thorough assessment of both the benefits and negative

consequences of doing so should be undertaken, and apart from Officer experience of the ambient climate he cannot see any assessment which justifies a 40dB limit (Statement of Evidence, p. 14).

3.6.3.4 KiwiRail Holdings Limited evidence

534. *KiwiRail Holdings Limited* (OS322.85) called Ms Rebecca Beals (planning consultant) on the Noise performance standard.

535. Ms Beals accepted the Reporting Officer's recommendation to retain Rule 9.3.6.6.h without amendment (Statement of Evidence, p. 1). This rule is one of the exemptions from the Noise performance standard for vehicles operating on public roads or trains on rail lines.

3.6.3.5 David Johnston evidence

536. *David Johnston* (OS245.2) appeared for himself as well as *Mervyn & Jill Clearwater* (OS812.4 and OS812.5)*, David & Jacinta Grey* (OS830.2 and OS830.3). Mr Johnson discussed the issue of ballast loading, and said it had intensified since the designation hearing in May 2016 and now there was continual truck movements with trucks delivering ballast to the site and associated loader noise. He described that on average there were approximately 160 loader scoops to fill a wagon and it normally takes 3 to 4 hours with significant associated noise.

537. *Mr Johnston* also disagreed with both Mr Hunt and the Reporting Officer that ballast loading is considered as part of 'Railway Purposes' and therefore is exempt from the Noise requirements because it is designated. He considered that *KiwiRail* has not gained resource consent approval for ballast loading and has not considered alternative sites. He also noted that correspondence (which he attached as part of his evidence) from himself and from the East Taieri School Board of Trustees to *KiwiRail* had not been replied to (Statement of Evidence, pp. 2-6).

538. Residents, Mr Michael Brough and Mr David Grey, also appeared at the hearing and described that the noise from ballast loading was intense and had increased dramatically. They gave an example of it occurring recently over the period from 7.30am in the morning to 8.30pm in the evening on one day, and that it occurred almost on a daily basis.

3.6.3.6 Robert Francis Wyber evidence

539. *Robert Francis Wyber* (OS394.74) tabled a statement, which clarified that his main areas of concern are the Noise performance standard exemptions for noise generated as part of normal residential activities and noise generated by wind generators (Rule 9.3.6.6.e & 9.3.6.6.j respectively).

540. Mr Wyber considered that the exemption for noise generated by normal residential activities will have the potential to increase noise levels in residential areas, and provides a 'legal out' for those unreasonable people who create noise in these areas.

541. He also considered that the noise from wind generators in residential areas cannot be suppressed to comply with the night time noise levels in residential zones because the noise produced is based on the wind velocity not the time of day, and therefore he requested that the exemption for domestic scale wind turbines in residential zones be deleted from Rule 9.3.6.6.j.

3.6.3.7 New Zealand Defence Force evidence

542. *New Zealand Defence Force* (OS583.23) tabled a letter from Mr Rob Owen (Director Environmental Services) who disagreed with the Reporting Officer that it is unnecessary to provide additional restrictions on land use activities within the vicinity of the Waitati rifle range because it is designated for 'defence purposes'. He said the operation of the Rifle Range has effects which can extend beyond the boundaries of NZDF's land and designation boundary, with the use of weapons and explosives creating noise which could be perceived by residents as an adverse effect, which in turn has the potential to result in complaints, and as a consequence, lawfully and long-established activities at the range being constrained or curtailed (Statement of Evidence, p. 2).

543. Mr Owen outlined that *NZDF* seeks a level of protection from reverse sensitivity effects similar to that afforded to various other 'effects-generating' activities, such as factory farming, domestic animal boarding and breeding, mining activities, landfills and wind generators (Statement of Evidence, p. 2).

3.6.3.8 Aurora Energy Limited evidence

544. *Aurora Energy Limited* (FS2375.14) called Dr Stephen Chiles (acoustic expert), Mr Nicholas Wyatt (power systems engineer) and Ms Joanne Dowd (policy manager) in support of the *Radio New Zealand Limited's* (OS918.37) relief, which sought an exemption for temporary use of standby generators from the requirement to comply with the Noise limits proposed within each zone.

545. Mr Wyatt confirmed that Aurora have three tools available to undertake replacement or upgrading of the electricity network, while still allowing the supply of electricity within the network, which are:

- reconfiguring the network around the out of service equipment
- bypassing the substation with mobile distribution substations
- installing mobile temporary generators (called portable diesel generating sets (gensets) in Mr Wyatt's evidence).

546. Mr Wyatt said that Aurora has service level agreements which means that they are required to restore power within four hours for urban customers and six hours for rural customers, and with the revised health and safety legislation there is an increased requirement to undertake repairs and upgrades with the power off. This has meant that there is a greater need to deploy mobile generators and he contended that Aurora's ability to deploy these generators as and when required is critical to its ability to undertake maintenance and upgrade works efficiently (Statement of Evidence, pp. 3-5).

547. Dr Chiles said that often it is not practical to attenuate temporary generators to comply with standard district plan Noise limits. He considered it would be appropriate to provide an exemption from the Noise limits in the 2GP for temporary generators, subject to this exemption being limited to the continued operation of a network utility (as included in the submission by *Radio New Zealand*) and any generator maintenance being undertaken for less than an hour during a weekday (Statement of Evidence, pp. 3-5).

548. Ms Dowd considered that a requirement for temporary generators to comply with the Noise provisions in the 2GP (or to obtain consent where they do not) would be overly onerous, and that there are during emergencies and network outages that are necessitated by upgrade and/or maintenance work, that it is not always possible (especially in residential areas) to specify, locate and operate temporary generators to achieve the Noise performance standards.

549. She said that generators are rented by Aurora and they work with suppliers to develop units that produce the least noise possible (additional baffling and higher quality/quieter motors), while meeting Aurora's requirements for size (both physical and generation capacity) and manoeuvrability. She also outlined that as temporary generators are costly they are the last option which is used and Aurora always look for alternative options (Statement of Evidence, pp. 7-9).

3.6.4 Minutes after hearing

550. We issued two minutes, and received two memorandums in reply from *KiwiRail Holdings Limited* in regard to the ballast loading issue, which was originally discussed at the Designation Hearing but also at this hearing.

551. The first minute to *KiwiRail Holdings Limited* (dated 23 May 2016), requested more information about a ballast loading activity undertaken alongside the railway at East Taieri (designation D419).

552. *KiwiRail's* memorandum received on 9 December 2016 confirmed that ballast loading is no longer taking place on Sundays at the Mosgiel Depot in East Taieri. It also stated that *KiwiRail* did not support the imposition of conditions that put restrictions on activities or hours of operations at specific *KiwiRail* sites, such as the Mosgiel Depot, because appropriate procedures are already in place to address residents' concerns with noise. Localised restrictions are problematic as the designation relates to the entire Main South Line, and excessive noise is managed under sections 16 and 17 of the Resource Management Act 1991.

553. As a result of the evidence from submitters at this hearing about the noise effects of ballast loading, we asked through a second Minute to *KiwiRail Holdings Limited* (dated 2 February 2017) that additional information and assessment be provided about the ballast loading activity and why a condition on the designation should not be imposed.

554. A memorandum in response to this second minute was provided by *KiwiRail's* counsel on 23 May 2017, which confirmed that *KiwiRail* had decided to transfer its ballast loading and unloading operations from the East Taieri depot to another site by the end of 2017, and also reiterated its opinion that conditions on the designation are unnecessary. This matter was also discussed at the Reconvened Designation Hearing in December 2017.

3.6.5 Reporting Officer's revised recommendations

555. In his Revised Recommendations the Reporting Officer recommended no change to his s42A Report recommendations as a result of the evidence on the Noise performance standards.

556. Although, as outlined in sub-section 3.4 above in relation to the Fonterra facility, the Reporting Officer agreed with Mr Hunt's revised recommendations that instead of adopting the request for a Mosgiel Noise Control Area, the night time noise level in the rural zones should be increased from 40dba to 45dba, because this is compliant with the upper World Health Organisation acceptable limits for sleeping, which was sought by *Fonterra Limited* as part of OS807.18.

3.6.6 Decisions and reasons

557. We accept in part the submission by the *University of Otago* (OS308.220) and accept the evidence of Mr Hunt and the recommendation of the Reporting Officer that the Noise performance standard (Rule 9.3.6), as amended by us in response to other submissions, reflects best practice.

558. We reject the submission from *Raymond and Evelyn Beardsmore* (OS429.1) requesting a 10 minute time intervals for measurement of noise, and we accept the evidence of Mr Hunt that a 15 minute "reference time period" as recommended within NZS6802:2008 is consistent with best practice found in other District Plans in New Zealand.

559. We reject the submission from *June Diane Yeldon* (OS12.2) regarding heat pump noise and vibration as we accept the evidence of Mr Hunt that adequate control over noise effects in residential areas is achieved by keeping this rule quite general in its scope.

560. We reject the submission from *Simon Ryan* (OS600.4) for amendment of the Noise performance standard due to the adverse noise and vibration effects of wind generators, as we accept the evidence of Mr Hunt that the wording in Rule 9.3.6.6.j is based on the recommendation of 'NZS 6808:2010 Acoustics Wind Farm Noise', which is considered best practice for protecting health and amenity effects associated with noise from wind farms.

561. We accept in part the submission by *Fonterra Limited* (OS807.18) to increase the night time noise limit in rural zones. As noted in sub section 3.4.7 of this Decision Report, we agree with the evidence of Mr Hunt, and Mr Hay for *Fonterra Limited that* the 45dB LAeq (15 min) and 75 dB LAFmax noise level is compliant with the upper World Health Organisation (WHO) acceptable limits for sleeping and we consider it is appropriate and consistent with best practice to increase the night time noise limit accordingly, but only insofar is applies to rural zoned properties adjacent to industrial zones. There was not sufficient evidence to convince us that it is appropriate to replace the notified noise limit with the WHO upper night time noise limit across the whole rural zone. We did consider there was sufficient evidence from all the noise experts for us to apply this new limit in the Fonterra situation, and also in similar locations where rural zoned properties are adjacent to other industrial zones. Based on the evidence presented by Fonterra's experts in relation to a Noise Control Area, we consider that the new noise limit can apply to properties within 350m of industrial zone boundaries. See amendment reference PHS807.18 in Appendix 1.

562. The change to give effect to this decision is to create a new row Rule 9.3.6.3 to amend the night time (10pm to 7am) noise level in those parts of the Rural Zone that are within 350 metres of an Industrial Zone from 40 to 45dB LAeq (15 min) and from 70 to 75 dB LAFmax – line 3, column c of the Noise rule (Rule 9.3.6).

563. We also reject in part the submission by *Fonterra Limited* (OS807.18) to remove the shoulder period (7pm to 10pm) noise limits (column b of Rule 9.3.6), extend the daytime period to 10pm and increase the day time noise level from 50 to 55 dB LAeq (15 min). We agree with the evidence of Mr Hunt that managing noise in the shoulder period separately from the day-time and night-time periods is consistent with New Zealand Noise Standards and therefore best practice and that the noise limits have been carefully set by Council based on officer experience and measurement of the ambient sound climate.

564. We accept the submission by *Southern District Health Board* (OS917.7) that the relevant NZ Standards should be referred to in the 2GP as outlined by Mr Hunt in his evidence. We have attributed amendments to reference PHS917.8 in Appendix 1.

565. We accept in part the submission by *Southern District Health Board* (OS917.8) and agree with the evidence of Mr Hunt and the recommended amendments from the Reporting Officer in his s42A Report that reference to New Zealand acoustic standards in the Noise performance standard and amendment to the exception for noise generated by wind generators, are appropriate and consistent with best practice. The amendments to the exceptions for noise generated by wind generators is in clause 9.3.6.6.j of the Noise rule, as follows:

"j. noise generated by wind generators with a swept rotor area greater than 200m², provided that when measured or assessed in accordance with NZS 6808:2010 Acoustics - Wind Farm Noise they do not exceed the LA90 (10min) background sound level by more than 5 dB or a level of 40 dB LA90 (10 min), whichever is greater;" {PHS 917.8}

566. The other amendment attributed to PHS917.8 is in clause 9.3.6.7 of the Noise rule, as follows:

"7. For the purpose of this standard, noise levels will be measured at the boundary of the receiving property, or the notional boundary of a noise sensitive activity in a rural, rural residential or Ashburn Clinic zone. If it is not possible to measure noise levels at the boundary, noise levels will be measured at the closest practical point within the boundary. Unless stated otherwise noise must be measured in accordance with NZS 6801:2008 - Acoustics - Measurement of environmental sound, and assessed in accordance with NZS 6802:2008 Acoustics - Environmental noise." {PHS 917.8}

567. See amendment reference PHS917.8 in Appendix 1.

568. We reject the submission by *Southern District Health Board* (OS917.20) to reference 'NZS 6806:2010 Acoustics – Road traffic noise – New and altered roads', in the 2GP. We agree with the Reporting Officer that because Rule 9.3.6.6h specifically exempts vehicles operating on public roads from the performance standards and there are no other rules in the 2GP which reference road traffic noise, it is unnecessary to do this.

569. We reject the submission by *Southern District Health Board* (OS917.21) to use the term "sound" instead of "noise" and agree with the Reporting Officer that 'noise' is commonly defined as unwanted sound, and therefore forms a subset of sounds and there is a duty to avoid unreasonable noise in the RMA, therefore we consider that the term 'noise' is appropriate.

570. We reject the submission by *Otago Sports Car Club Inc* (OS579.1) to exempt competitive motor vehicle racing from the Noise standards and agree with the evidence of Mr Hunt and the Reporting Officer that it is appropriate, and consistent with best practice, to have noise controls on the racing of motor vehicles.

571. We reject *Radio New Zealand Limited's* (OS918.37) submission and *Aurora Energy Limited's (FS2375.14)* further submission to provide for an exception for standby generators and agree with the evidence of Mr Hunt and the Reporting Officer that this is inappropriate because generators should be designed and located to achieve the noise performance standard. The positive effects of maintaining power supply are acknowledged but the noise effects still need to be managed for the health, safety and welfare of people exposed to such noise.

572. We reject *David Johnston* (OS245.2), *Mervyn & Jill Clearwater* (OS812.4 and OS812.5), *David & Jacinta Grey* (OS830.2 and OS830.3) and accept *KiwiRail Holdings Limited* (OS322.85) submissions. We accept the evidence of Mr Hunt and the recommendations of the Reporting Officer that there should be no amendment to the performance standard for noise to cover ballast loading undertaken on railway land (designation D419) at Mosgiel. We note that as outlined in sub-section 3.6.4 above, *KiwiRail Holdings Limited* have confirmed that ballast loading operations, which were the source of noise complaints from residents of surrounding sites, have been discontinued.

573. We reject *Robert Francis Wyber's* submission (OS394.74 and OS394.75) and accept the evidence of Mr Hunt and the Reporting Officer that the Noise performance standards, including the exemptions for wind generators (with amendments to the noise exemptions for wind generators from *Southern District Health Board* OS917.8), are appropriate and consistent with best practice.

574. We reject *Eryn Makinson's* submission (OS516.2) and agree with the Reporting Officer that noise generated by the Port has to comply with Rule 30.5.4 Port Noise. We agree that the Port has unique noise characteristics, which makes this appropriate.

575. We reject *Dunedin International Airport Limited's* submission (OS724.14) to remove the noise limits from the industrial, Dunedin International Airport and several other zones (Rule 9.3.6.5) and *Dunedin International Airport Limited* (OS724.15) to include an exemption for construction noise in the Dunedin International Airport Zone. We accept the evidence of Mr Hunt and the Reporting Officer that these noise controls are not unreasonable and note that construction noise is covered under a separate standard (Rule 4.5.4.1) within the temporary activities section of the 2GP.

576. We reject the *New Zealand Defence Force's* submission (OS583.23) and agree with the Reporting Officer that because the Waitati Rifle Range is designated for defence purposes, additional land use restrictions including amendments to the Noise performance standard, are unnecessary.

577. We accept the *Horticulture New Zealand* submission (OS1090.25) for retention of Rule 9.3.6.6.l (noise generated as part of normal farming activities) and the *University of* Otago submission (OS308.219) for retention of Campus Zone Noise rule at the same noise level as Commercial and Mixed Use, Hospital and Museum zone, because these clauses are consistent with best practice.

3.7 Other Noise Requests

3.7.1 Overview

578. These requests are related to noise but are separate from the noise performance standard discussed above and include requests related to the definition of notional boundary, noise and acoustic terminology.

3.7.2 Request to amend definition of Notional Boundary

579. Notional Boundary is defined in the 2GP as follows:

> *"The notional boundary is a line 20m from the sides of any residential building, if this is within the site's boundaries. This line is used for the purpose of setting a location for the measurement of noise limit standards. However, for any part of a residential building that is located within 20m of the site boundary, the notional boundary does not apply."*

580. *Raymond and Evelyn Beardsmore* (OS429.2) sought that the notional boundary be 50m as in the operative District Plan, as it is a more effective buffer to reduce the impact of noise on houses. *Fonterra Limited* (FS2317.2) and three other submitters opposed this submission because the 20m distance is a commonly used threshold throughout New Zealand and is contained in NZS6802 Acoustic - Measurement of environmental noise.

581. *Fonterra Limited* (OS807.2) also sought minor changes to the definition of notional boundary wording to avoid ambiguity and to be the same as NZS6801:2008. This was supported by *Southern District Health Board* (FS2370.3) and three others for similar reasons. Finally, *Southern District Health Board* (OS917.6) sought to replace the words "the sides" with "any side" to create legal certainty and consistency with NZS6801:2008, which *Oceana Gold (New Zealand) Limited* (FS2439.42) supported.

582. The Reporting Officer deferred to, and agreed with, the pre-circulated acoustic evidence of Mr Hunt who recommended (s42A Report, Section 5.1.3, p. 29):

- the submission point by *Raymond and Evelyn Beardsmore* (OS429.2) be rejected because there is no effects-based rationale for this relief and the 20m is consistent with established best practice and NZS6801:2008 Acoustics-Measurement of environmental sound (Statement of Evidence, p .24)
- the submission point by *Southern District Health Board* (OS917.6) and *Fonterra Limited* (OS807.2) be accepted because it is the same as NZS6801:2008, which is therefore consistent with best practice.

583. Furthermore, Mr Hunt said that the latter part of the definition is incorrect because "*where any part of a residential building lies within 20m of the site boundary, it is only that portion of the notional boundary that is not on the same site as the residential building that would not be considered as part of the notional boundary.*"

584. The Reporting Officer accepted Mr Hunt's recommendations, subject to replacing "dwelling" with the words "residential building" (because this wording is defined in the 2GP) and recommended that the definition of Notional Boundary be amended to read, as follows:

> *A line 20m from any side of a residential building, or the site boundary where this is closer to the residential building."*

585. *Fonterra Limited* (OS807.2) called Mr Dean Chrystal (planning consultant) on the definition of Notional Boundary who supported the Reporting Officer's recommended amendment (Statement of Evidence, p. 5).

586. *Oceana Gold (New Zealand) Limited* (FS2439.40, FS2439.41, FS2439.42) called Jackie St John (lawyer) who also supported the Reporting Officer's recommended amendment (Statement of Evidence, p .2).

3.7.2.1 Decision and reasons

587. We accept the submission by *Southern District Health Board* (OS917.6) and *Fonterra Limited* (OS807.2) to amend the definition of Notional Boundary and accept the definition wording suggested by Mr Hunt with the minor change to replace "dwelling" with the wording "residential building" as recommended by the Reporting Officer, see Appendix 1 amendment reference PHS917.6.

588. We reject the submission by *Raymond and Evelyn Beardsmore* (OS429.2) to amend the notional boundary from 20m to 50m, accepting the evidence of Mr Hunt that there is no effects-based rationale for this change, and noting this also aligns with the revised recommendations of the Reporting Officer.

589. We agree with the evidence of Mr Hunt that these amendments to the definition of 'notional boundary' are consistent with established best practice and NZS6801:2008 Acoustics-Measurement of environmental sound.

3.7.3 Request to amend Acoustic Terminology and add new acoustic abbreviations

590. Noise, and acoustic terminology, are not currently defined in the 2GP, although Ldn, LAeq and LAFmax are used in the performance standard for Noise (Rule 9.3.6).

591. The *Southern District Health Board* (OS917.17) sought that acoustic terms should have the same meaning as in NZS 6801:2008 Acoustics – Measurement of

environmental sound and NZS 6802:2008 Acoustics – Environmental noise, because acoustic terms are used throughout the 2GP without any definition of the terminology and readers must obtain access to external documents to determine the meaning of this terminology. *Port Otago Limited* (FS2378.2) supported this relief.

592. In addition, the *Southern District Health Board* (OS917.18) also sought that noise abbreviations for LAEq, Ldn, L10, dB, dBA, DnT,w + Ctr, LAmax, and NZS be included in the 2GP to aid clarity. *Port Otago Limited* (FS2378.3) supported this relief.

593. The Reporting Officer deferred to, and agreed with, the pre-circulated acoustic evidence of Mr Hunt (Statement of Evidence, pp. 7-8) and recommended that L10, Ldn, LAeq, LAFmax, dB, dBA, DnT,w + Ctr, LAmax, and NZS be defined in the 2GP because it will add clarity about what these terms mean and will assist in the interpretation and understanding of Noise rules (s.42A Report, Section 5.1.5. pp. 32-33 & Section 5.1.7, pp. 36-37).

3.7.3.1 Decision and reasons

594. We accept in part the submission from the *Southern District Health Board* (OS917.17) and accept the evidence of Mr Hunt and the recommendation of the Reporting Officer that Ldn, LAeq and LAFmax be defined in Rule 1.5.1 Definitions (see Appendix 1 amendment reference PHS917.17). We agree with the Reporting Officer and Mr Hunt that it is unnecessary to define 'Noise Limit' as this is defined by the rules that limit noise levels. The definitions of Ldn, LAeq and LAFmax are worded as follows:

> "**LAeq (15 minutes) (LAeq (15 min))** The A-frequency-weighted time-average noise level over 15 minutes, in decibels (dB).
>
> **LAFMax (LAFMax)** The maximum A-frequency-weighted fast-time-weighted noise level, in decibels (dB), recorded in a given measuring period.
>
> **Ldn (Ldn)** The day/night level, which is the A-frequency-weighted time average noise level, in decibels (dB), over a 24-hour period obtained after the addition of 10 decibels to the noise levels measured during the night (2200 to 0700 hours)."

595. We also accept the submission from the *Southern District Health Board* (OS917.18) and agree with the evidence of Mr Hunt and the recommendation of the Reporting Officer that dB, dBA, DnT,w + Ctr, LAmax, and NZS be defined under Rule 1.5.3 Abbreviations, see Appendix 1 amendment reference (PHS917.18). The definitions of dB, dBA, DnT,w + Ctr, LAmax, Ldn, L10 and NZS are worded as follows:

> "**dB**
> Decibel
> **dBA**
> A-frequency-weighted decibels.
> **DnT, w + Ctr**
> Weighted Standardised Level Difference with Spectrum Adaption Term Ctr
> **LAEq (15 minutes)**
> Time average A-frequency-weighted noise pressure level in a 15 minute time interval.
> **LAmax**
> Maximum A-frequency-weighted noise pressure level.
> **Ldn**
> Day/night average noise level.
> **L10**
> 10% centile level (fast response) noise pressure level.
> **NZS**
> New Zealand Standard"

596. We consider these amendments will add clarity about what these terms mean, and will assist in the interpretation and understanding of noise rules.

3.7.4 Request to amend Noise assessment rules

597. *Southern District Health Board* (OS917.22) in order to provide clarity and certainty to plan users, sought:

> *"Throughout the plan in sections headed 'Assessment of discretionary performance standard contraventions' and 'Assessment of non-complying performance standard contraventions':*
>
> *Under the column General assessment guidance where FIDOL factors are mentioned amend: 'potential FIDOL'; and where it begins 'Council will consider the sensitivity' amend as follows: '…sites to the source,' and before "boundary", insert 'site'; and add a new para: 'How noise is measured and assessed' with a new sub-para: 'Council will consider cumulative effects'."*

598. The Reporting Officer agreed with the *Southern District Health Board* that it is appropriate to ensure certainty about how noise is measured and assessed, and therefore agreed that the changes throughout the Plan in sections headed 'Assessment of discretionary performance standard contraventions' and 'Assessment of non-complying performance standard contraventions' are appropriate (s42A Report, pp. 198-199).

599. With regard to including an assessment matter specifically on how noise is measured and assessed, he considered that this is unnecessary as noise must be measured in accordance with the relevant New Zealand Standard, and the very inclusion in an assessment rule means that assessment is taking place (s42A Report, Section 5.8.1, pp. 198-199).

600. *Ravensdown Limited* (OS893.2) sought to amend the noise limit where contravention of the Noise performance standard (Rule 9.3.6.8) resulted in a discretionary activity status from less than 5dB LAeq (15 min) to less than 10dB LAeq (15 min), because it considers that the trigger for discretionary activity status was too low.

601. The Reporting Officer relied on and agreed with the evidence of Mr Hunt who had reviewed the evidence of Mr Jon Farren (acoustic consultant) who appeared at the Industrial Hearing on behalf of *Ravensdown Limited* (OS893.2).

602. Mr Hunt did not support Mr Farren's evidence. He said a major concern was that the source of ambient sound may be high during the working day, and may reduce at night when the effects on residential sites would be greatest. He also was concerned that the exceedance of the permitted Noise standard by up to 10 dB is not contingent on there being a significant level of ambient sound present or any other mitigating circumstances. Mr Hunt also outlined that the presence of significant ambient sound, while a mitigating factor, is no guarantee of an acceptable noise outcome. Some types of sound may be detectable (and possibly annoying) at levels below the ambient sound level occurring at the time (Mr Hunt's Acoustic Evidence, p. 1).

603. *Ravensdown Limited* called Mr Jon Farren who responded to the evidence of Mr Hunt and said that in his opinion Mr Hunt's response supports the adoption of the *Ravensdown* submission rather than its rejection. He said as Mr Hunt appears to agree, any adverse noise effects from an activity operating above the permitted standard is dependent on a number of factors and it is these "factors" that Council should consider when exercising their discretion regarding a particular activity.

604. Mr Farren also clarified that the *Ravensdown Limited* relief does not:

- promote an increase in noise emissions across the City
- limit the ability of Council to reject an application where it is considered that noise effects will be unacceptable
- limit Council's ability to impose specific conditions.

605. Instead, Mr Farren was of the opinion (based on practical experience with the Christchurch District Plan) that the proposed change from a 5dB threshold to 10dB provides Council with a more practical window in which to apply their discretion to noise matters (Acoustic Evidence, within attachment A of Mr Chris Hansen's Evidence for *Ravensdown Limited*).

3.7.4.1 Decision and reasons

606. We accept in part *Southern District Health Board's* submission (OS917.22) to amend the wording of discretionary (performance standard contraventions) and non-complying activities assessment matters for clarity but reject that part of the submission requesting a new paragraph headed 'how noise will be measured and assessed'. We agree with the Reporting Officer's recommended amendments to the noise assessment rules, with slight amendments to refer to 'noise source' instead of 'source' and consider that these amendments will provide clarity and certainty to plan users. See Appendix 1 amendment reference (PHS917.22).

607. The amendments are to 'Rule 9.6.4.4 Assessment of discretionary performance standard contraventions - Noise where the limit is exceeded by less than 5dB LAeq (15 min)' and 'Rule 9.7.2.6 Assessment of non-complying performance standard contraventions - Noise where the limit is exceeded by 5dB LAeq (15 min) or more'. The amendments to Rule 9.6.4.4 Assessment of discretionary performance standard contraventions, which are replicated in Rule 9.7.2.6 Assessment of non-complying performance standard contraventions are:

608. "*General assessment guidance:*
e. Council will consider the sensitivity of activities on surrounding sites <u>to the noise source</u> {PHS 917.22}, and the distance of noise sensitive activities from the <u>site</u> {PHS 917.22} boundary of the noise source.
f. Council may use the following <u>potential</u> {PHS 917.22} 'FIDOL' factors to guide the assessment of a resource consent application:"

609. We reject *Ravensdown Limited*'s submission (OS893.2) to change the threshold for discretionary activity status for contravention of the Noise performance standard (Rule 9.3.6) and agree with the acoustic evidence of Mr Hunt about the concerns with increasing the 5dB threshold to 10dB in Rule 9.6.4.4 Assessment of discretionary performance standard contraventions – Noise, which we consider as a pragmatic and prudent approach.

3.8 Light spill

3.8.1 Policy 9.2.2.4 (Light Spill)

610. Policy 9.2.2.4 states:

> *"Require activities to be designed and operated to avoid adverse effects from light spill on the health of people or, where avoidance is not possible, ensure any adverse effects would be insignificant."*

611. *The Oil Companies* (OS634.14) sought that Policy 9.2.2.4 should be amended so that it is worded:

"Provide for appropriate levels of artificial lighting to enable the safe and effective undertaking of outdoor activities, including night-working and security, while ensuring that artificial lighting is managed to ensure that significant glare and light spill into adjacent sites does not occur."

612. *The Oil Companies'* reasons were to recognise the need for artificial lighting (including for outdoor and night-time activities and security), while appropriately managing its adverse effects. It considered the reference in the policy to adverse light effects being 'avoided' is unreasonable, therefore they opposed this.

613. *Oceana Gold (New Zealand) Limited* (FS2439.43) supported this submission for similar reasons.

614. The Reporting Officer described that *the Oil Companies* alternative policy wording proposed is inconsistent with the drafting protocol of the 2GP, whereupon 'Provide for' policies set up what is provided for within the zone (e.g. what is not non-complying) and 'Require' policies set up performance standards (s42A Report, Section 5.4.8, p. 66).

615. He advised that this policy uses the strictest management of effects, with adverse effects from light spill required to be avoided or no more than insignificant. He noted that the submitters in effect want it shifted to the least strict level of effects managed, where any level of effect less than significant is acceptable. He did not consider it appropriate to shift to the most permissive level of effects management and only require that "significant glare and light spill into adjacent sites does not occur" which in his opinion will have the potential to have unacceptable levels of adverse effects on the health of people (s42A Report, Section 5.4.11, p. 68).

616. He also considered that 'possible' should be replaced with 'practicable' in line with recommendations at the Plan Overview Hearing and he preferred 'insignificant' because of the potential adverse effects of light spill on the health of people (s42A Report, Section 5.4.8, p. 66).

617. *The Oil Companies* called Ms Georgina McPherson (planning consultant) who outlined that the term 'insignificant' has less clarity of meaning in RMA terms than terms such as 'no more than minor', 'less than minor' or 'do not have significant adverse effects', which are well established via case law. Further, she considered the test implied by the ordinary meaning of 'insignificant' that effects are too small or unimportant to be worth consideration will not be achievable for many activities that, depending on the nature of the activity and receiving environment, may quite appropriately create a no more than minor effect, but which could not be considered to create an insignificant effect. Therefore, she considered these policies should be amended to delete the word 'insignificant' and replace it with 'no more than minor' (Statement of Evidence, p. 6).

618. The Reporting Officer in his revised recommendations reiterated that he considered the use of the term 'insignificant' is appropriate for Policy 9.2.2.4 because of the potential adverse effects on the health and safety of people and communities, and therefore he recommended no change to his s42A Report recommendation for Policy 9.2.2.4 (Revised Recommendations, p. 25).

3.8.1.1 Decision and reasons

619. We accepted in part *the Oil Companies* (OS634.14) submission for amendment of Policy 9.2.2.4 and agree with the Reporting Officer that replacement of the word 'possible' with 'practicable' is consistent with the policy drafting protocol for the 2GP and the term 'insignificant' is appropriate for Policy 9.2.2.4 because of the potential adverse effects on the health and safety of people and communities of contravention of the Light Spill standard. See amendment reference PHS634.14 in Appendix 1.

620. Our decision on the policy drafting protocol and the reasons are outlined in Section 3.1 and 3.2 of the Plan Overview topic decision report.

3.8.2 Rule 9.3.5 Light Spill and assessment rules

3.8.2.1 Background

621. Rule 9.3.5 Light Spill states:

1. Light spill measured at the boundary of a residential zone or any site used for residential purposes must not exceed the following limits:

Time		*Limit*
a.	*7am - 10pm*	*10 Lux*
b.	*10pm - 7am*	*3 Lux*

c. This standard does not apply to light spill from the headlights of motor vehicles.

2. Activities that contravene any light spill limit in Rule 9.3.5.1 by 25% or less are discretionary activities.

3. Activities that contravene any light spill limit in Rule 9.3.5.1 by greater than 25% are non-complying activities.

3.8.2.2 Submissions

622. *Mercy Dunedin Hospital Limited* (OS241.24), *McLeary Family Trust (OS832.12), Save The Otago Peninsula (STOP) Inc. Soc (OS900.122)* and the *New Zealand Fire Service Commission* (OS945.48), supported the retention of the Light Spill rules (Rule 9.3.5 and Rule 16.5.4).

623. *John Kaiser (OS165.3)* sought the inclusion of two additional clauses to the Light Spill rule, which he considered will account for unwanted illumination next to residential properties and will stop point light sources (such as security and street lights) being seen from a distance. *Fonterra Limited* (FS2317.7) considered that the amendment is unrealistic and *Oceana Gold (New Zealand) Limited* (FS2439.46) considered that the relief would be overly restrictive and could result in unnecessary constraints, or preclude mining.

624. *RJS Thomas* (OS366.1) sought amendment of the Light Spill rule so that strobe lighting from pivot irrigators is managed appropriately. He considered that strobe lighting from pivot irrigators is clearly visible from a distance, restricts ability to view the night sky and adversely affects rural amenity.

625. *New Zealand Transport Agency (NZTA)* (OS881.103) sought amendment to the Light Spill rule so that outdoor lighting, except street lighting, is designed, installed and maintained so that it is shielded from, or directed away from, adjacent roads. It considered that the Light Spill rule should be strengthened because of potential effects of traffic hazard and confusion for drivers. However, *the Oil Companies* (FS2487.25) considered the wording requested by *NZTA* is too absolute and may result in unnecessary restrictions on certain outdoor lighting such as internally illuminated signs, or security lighting, or on-site vehicle manoeuvring at night.

626. *New Zealand Transport Agency (NZTA)* (OS881.104) also sought an amendment to the Light Spill rule by adding the following: "*(e) Whether the written approval of the NZ Transport Agency has been obtained for lightspill that impacts upon State*

highways". *The Oil Companies* (FS2487.27) opposed this submission point because *"it is ultra vires to require 3rd party approval as part of a consent process."*

627. *Oceana Gold (New Zealand) Limited* (OS1088.28) sought amendment to the Light Spill rule so it relates to the 'notional boundary' similar to noise, and the limits should reflect the current limits in the Macraes Mining Project Mineral Zone in the Waitaki District Plan.

628. *Fonterra Limited* (OS807.17) sought amendment to the Light Spill rule so it relates to the 'notional boundary' of any lawfully established residential building in non-residential zones (for example rural and rural residential zones). It also considered a 3 lux night time limit is an appropriate balance for industrial activities while protecting residential amenity. *The Oil Companies* (FS2487.24) also supported the notional boundary approach.

629. *The Oil Companies* (OS634.15) sought addition of the word "lawfully" in the first part of the Light Spill rule and also sought increases in the Light Spill limits from 10 lux to 100 lux over the 7am-10pm period and from 3 lux to 10 lux over the 10pm-7am period (OS634.16).

630. In its submission *the Oil Companies* described that the proposed Light Spill rule is significantly more restrictive than many other district plans including the operative District Plan which includes no limits on glare and lighting in Port and Industrial zones, and imposes significantly less restrictive controls on lighting in all other zones." (Oil Submission, p. 26).

631. *Robert George & Sharron Margaret Morris* (OS355.1), *Timothy George Morris* (OS951.50) and *RG and SM Morris Family Trust* (OS1054.50) sought deletion of the Light Spill rule, which they considered is unnecessary and may impose restrictions on seasonal farming activities.

632. *Dunedin International Airport Limited* (DIAL) (OS724.12) sought removal of Light Spill in the Dunedin International Airport zone (Rule 24.5.3.3), which it considered is unnecessary in relation to DIAL's property.

633. *St Hilda's Collegiate School Inc's* (OS746.4) submission sought amendment of the Light Spill rule to exempt the use of sports field lighting from this performance standard between 7am and 10.30pm because the Light Spill rule times are inconsistent with the likely times that sports field lighting is required. This request is related to their request to amend the Hours of Operation performance standard for the Schools Zone (Rule 31.5.3) so that the times that sports fields can be used align with when they can be lit (OS746.3). This was considered in the Major Facilities Zone Hearing and our decision was to amend Rule 31.5.3.2 to enable flood lighting of sports fields from 7am to 10:30pm.

634. *Kristine Nicolau* (OS398.2) sought a review of the Light Spill rule with regard to lux limits, however the submission lacked any detail about the relief sought or reasons. *Port* Otago *Limited* (FS2378.34) opposed her submission as it considered the Light Spill rule needs no amendment.

3.8.2.3 s42A Report

635. The Reporting Officer relied on the expertise of Mr Keith Gibson (lighting consultant) in making most of the recommendations on these submissions and in summary recommended that:

- *John Kaiser's* submission (OS165.3) and associated further submissions from *Fonterra Limited* (FS2317.7) and *Oceana Gold (New Zealand) Limited* (FS2439.46) be accepted in part and the Light Spill rule amended

so that light spill is not emitted in the angles above the horizontal, because with modern luminaires and design practices, there is little reason for exterior lighting to shine in the angles above the horizontal (Lighting Evidence, pp. 2-3) (s42A Report, Section 5.5.6, p. 110)

- *RJS Thomas's* submission (OS366.1) be rejected because strobe lighting of irrigators relates more to glare and visibility of light than spill lighting and it is more appropriate to deal with this on a case by case basis. Although the Reporting Officer considered that the amendments discussed as part of the *John Kaiser* (OS165.3) submission may in part address this issue (Lighting Evidence, p. 5) (s42A Report, Section 5.5.6, p. 110)
- the *New Zealand Transport Agency's (NZTA) submission* (OS881.103) be accepted in part and that the Light Spill performance standard (Rule 9.3.5) be amended to include the *NZTA's* requested amendments to direct exterior lighting (except street lighting) away from roads in order not to cause a hazard to traffic. Although the Reporting Officer considered that there should be slight amendments for clarity purposes so that the amendment in clause 3 of this rule is:

  "All outdoor lighting, except street lighting, must be shielded from or directed away from adjacent roads" (Lighting Evidence, pp. 5-6) (s42A Report, Section 5.5.6, pp. 110-111)
- *Oceana Gold (New Zealand) Limited's* (OS1088.28) submission be accepted in part and reference be made to the 'notional boundary' in the Light Spill rule, although Mr Gibson recommended that the night-time Light Spill limit should remain at 3 lux (Lighting Evidence, p. 6) (s42A Report, Section 5.5.6, p. 111)
- *Fonterra Limited's* (OS807.17) submission be accepted in part and reference be made to the 'notional boundary' in the Light Spill rule, which will ensure consistency with how the noise rule is measured. Although Mr Gibson did not support the inclusion of the term 'lawfully established' (Lighting Evidence, pp. 6-7) (s42A Report, Section 5.5.6, p. 111)
- *the Oil Companies'* (OS634.16) request for increases in the Light Spill limits from 10 lux to 100 lux over the 7am-10pm period, and from 3 lux to 10 lux over the 10pm-7am period be rejected, because the amendments are unnecessary and the limits excessive in a residential environment and with modern lighting practices the lighting limits in the rule can be met (Lighting Evidence, p. 4) (s42A Report, Section 5.5.6, pp. 111-112)
- *Robert George & Sharron Margaret Morris* (OS355.1), *Timothy George Morris* (OS951.50) and *RG and SM Morris Family Trust*'s (OS1054.50) requests for deletion of the Light Spill rule be rejected because it is appropriate to limit obtrusive lighting in the rural environment (Lighting Evidence, pp. 3-4) (s42A Report, Section 5.5.6, p.112)
- *St Hilda's Collegiate School Inc.'s* (OS746.4) request for amendment of the Light Spill rule so that it is consistent with the floodlight operating times (Rule 20.5.3b Scale of Operation) be rejected because there is no reason why these two standards need to be consistent (Lighting Evidence, pp. 6-7) (s42A Report, Section 5.5.6, p. 113).

636. The Reporting Officer recommended that *the Oil Companies'* (OS634.15) request for inclusion of the word "lawfully" be rejected because there is a presumption that the 2GP rules will only apply to lawfully established development and that unlawful development may be subject to enforcement action, therefore the requested amendment is unnecessary (s42A Report, Section 5.5.6, pp. 111-112).

637. The Reporting Officer recommended that *Dunedin International Airport Limited (DIAL)* (OS724.12) relief sought for the removal of the Light Spill rule in the Dunedin International Airport zone (Rule 24.5.3.3 (Light Spill) in relation to DIAL's property be accepted in part, but only in relation to the amendments recommended to be consistent with the amendments to the general Rule 9.3.5 Light Spill. He considered

it is appropriate that, irrespective of ownership, at the boundary of a residential zone or any site that could be used for residential purposes, that Light Spill standards should apply given the potential health effects associated with the need for darkness to enable suitable sleeping conditions, and he therefore did not support the removal of this rule entirely.

638. The Reporting Officer recommended that *Kristine Nicolau's* (OS398.2) submission be rejected because the submission lacks any detail at all.

639. The Reporting Officer recommended rejection of the *New Zealand Transport Agency (NZTA)* (OS881.104) relief sought for written approval of the NZ Transport Agency being required for light spill that impacts upon state highways, because he considered Light Spill effects on state highways should be managed on a case by case basis relying on the affected party requirements in section 95E of the RMA (s42A Report, Section 5.8.1, p. 197).

3.8.2.4 Evidence presented at hearing

640. The Reporting Officer, in his Opening Statement, as a response to matters raised in submissions proposed a revised recommendation to clause 1 of the Light Spill rule (Rule 9.3.5 and Rule 24.5.3.3), as follows:

1. *Light spill measured at <u>any point of the vertical plane that marks:</u>{PHS165.3} the boundary of ~~a residential zone or~~ any site ~~used for~~ <u>within a</u> residential ~~purposes~~ <u>zone, or in any other zone</u> <u>the notional boundary of any residential building</u> must not exceed the following limits:*

	Time	**Limit**
a.	*7am - 10pm*	*10 Lux*
b.	*10pm - 7am*	*3 Lux*

   c. *This standard does not apply to light spill from the headlights of motor vehicles <u>or from street lighting</u> {PHS881.103}.*

2. *<u>Light spill must not be emitted in the angles above the horizontal</u> {PHS165.3}*

3. *<u>All outdoor lighting, except street lighting, must be shielded from or directed away from adjacent roads</u> {PHS881.103}*

4. *Activities that contravene any light spill limit in Rule 9.3.5.1 by 25% or less are discretionary activities.*

5. *Activities that contravene any light spill limit in Rule 9.3.5.1 by greater than 25% are non-complying activities.*

641. *RJS Thomas* (OS366.1) tabled a statement, which he spoke to, that clarified his concern relating to the extent of visual pollution emanating from irrigators and he described when irrigators are operating there are up to five sets of intense white strobe lights running, which are intrusively visible (for distances exceeding 8km) from any residence. He also outlined that the Middlemarch community is looking to promote themselves as a 'night sky' viewing destination, which will build on the success of the Otago Rail Trail and strobe lights are inconsistent with this.

642. Mr Thomas also disagreed with the evidence of Mr Gibson that strobe lighting of irrigators relates more to glare and visibility of light than spill lighting and considered that as it impacts on him it is light spill.

643. Mr Thomas requested an approach be followed, which is similar to the approach followed in the Mackenzie District Plan where an Outdoor Lighting Restriction applies. Mr Thomas claims that this approach means that strobe lights are removed from irrigators and therefore are not an issue in the district.

644. *The Oil Companies* called Ms Georgina McPherson (planning consultant) who described that the Light Spill rule represents a significant change in approach for industrial or port activities, who are exempt from the operative plan lighting controls and the Light Spill rule and had not been justified in either the s32 Report or the s42A Report. She considered that this could potentially lead to significant restrictions and/or reverse sensitivity effects on existing industrial and port zone activities, including on the bulk fuel terminals. She also outlined that it will place an unreasonable burden on existing industrial and port zone activities to demonstrate compliance and/or existing use rights in relation to existing lighting with respect to both new and existing residential activities (Statement of Evidence, p. 5).

645. *Oceana Gold (New Zealand) Limited* (OS1088.28) called Jackie St John (Lawyer) who clarified that it has sought a Macraes Gold Project Overlay Zone, which would align with the special purpose mining zone in the Waitaki District Plan where a 5 lux night time limit applies. If this zone was adopted in the 2GP this would allow a 5 lux standard within the zone and 3 lux elsewhere.

3.8.2.5 Reporting Officer's revised recommendations

646. The Reporting Officer, as a result of the evidence of *RJS Thomas* (OS366.1) on light spill from strobe lights on irrigators, consulted with Mr Gibson (lighting consultant) who supported an amendment to clause 3 of the Light Spill rule, so that outdoor lighting must also be shielded from or directed away from site boundaries (refer below).

> 3. <u>All outdoor lighting, except street lighting, must be shielded from or directed away from adjacent roads and site boundaries</u>{PHS881.103}

3.8.2.6 Decision and reasons

647. We accept in part the submission by *John Kaiser* (OS165.3) and agree with Mr Gibson and the Reporting Officer that with modern luminaires and design practices, there is little reason for exterior lighting to shine in the angles above the horizontal. See amendment to the rule, reference PHS165.3, as outlined below, and in Appendix 1.

648. We accept in part the submission by *New Zealand Transport Agency (NZTA)* (OS881.103) and we also accept in part the submission from *RJS Thomas* (OS366.1). We agree with Mr Gibson and the Reporting Officer about the importance of directing exterior lighting (except street lighting), including security lights and strobe lights on irrigators, away from roads and site boundaries in order not to cause a hazard to traffic or light nuisance to residents. The amendments we have decided on include a new clause within the Light Spill rule which requires outdoor lighting (except street lighting) to be shielded or directed way from site boundaries, and a general advice note stating that outdoor lighting such as security lights or strobe lights on irrigators that are not shielded or directed away from site boundaries will generally contravene this standard. See amendment reference PHS881.103 and PHS366.1, as outlined below, and in Appendix 1.

649. We accept in part the submissions by *Fonterra Limited* (OS807.17) and *Oceana Gold (New Zealand) Limited* (OS1088.28) in relation to the reference to the 'notional

boundary' where light spill can be measured from, and agree with Mr Gibson and the Reporting Officer that this will ensure consistency with how the noise rule is measured, i.e. from the notional boundary. See amendment reference PHS 1088.28 in Appendix 1.

650. We accept in part the submission by *Dunedin International Airport Limited (DIAL)* (OS724.12) for removal of the Light Spill rule in relation to *DIAL*'s property (Rule 24.5.3.3), but only in relation to the amendments recommended to be consistent with the amendments to the Light Spill rule (Rule 9.3.5). We agree with Mr Gibson and the Reporting Officer that it is appropriate, irrespective of ownership, that Light Spill standards should apply given the potential health effects associated with the need for darkness to enable suitable sleeping conditions and therefore we reject the removal of this rule entirely.

651. The amendments to the Light Spill rule (Rule 9.3.5), which we have also replicated in the Light Spill rule in Rule 24.5.3 are as follows:

9.3.5 Light Spill

1. Light spill measured at any point of the vertical plane that marks {PHS 165.3} the boundary of ~~a residential zone, or~~ any site ~~used for~~ within a residential ~~purposes~~ zone, or in any other zone the notional boundary of any residential building {PHS 1088.28} must not exceed the following limits:

	Time	Limit
a.	7am - 10pm	10 Lux
b.	10pm - 7am	3 Lux

c. This standard does not apply to light spill from headlights of motor vehicles or from street lighting. {PHS 881.103}

2. Light spill must not be emitted in the angles above the horizontal. {PHS 165.3}
3. All outdoor lighting, except street lighting, must be shielded from or directed away from adjacent roads and site boundaries. {PHS 881.103}
4. Activities that contravene any light spill limit in Rule 9.3.5.1 by 25% or less are discretionary activities.
5. Activities that contravene any light spill limit in Rule 9.3.5.1 by greater than 25% are non-complying activities.

Note 9.3B - General Advice {PHS 366.1}

Outdoor lighting such as security lights or strobe lights on irrigators that are not shielded or directed away from site boundaries will generally contravene this standard. {PHS 366.1}

652. We reject the submission by *the Oil Companies* (OS634.16) to increase the Light Spill limits from 10 lux to 100 lux over the 7am-10pm period and from 3 lux to 10 lux over the 10pm-7am period, accepting the evidence of Mr Gibson and the Reporting Officer that these amendments are unnecessary and excessive.

653. We also reject the submission by *the Oil Companies* (OS634.15) which sought addition of the word "lawfully" in the first part of the Light Spill rule and agree with the Reporting Officer that that there is a presumption that the 2GP rules will only apply to lawfully established development and that unlawful development may be subject to enforcement action.

654. We reject the submission by *Oceana Gold (New Zealand) Limited* (OS1088.28) to increase the night-time Light Spill limit to 5 lux, accepting the evidence of Mr Gibson and the Reporting Officer that a 3 lux night-time Light Spill limit is appropriate. We also refer *Oceana Gold (New Zealand) Limited* to decisions on the Cross Plan Provisions

– Mining Decision. In brief, we have agreed that a plan change should be investigated in consultation with Waitaki District Council.

655. We reject the submission by *Robert George & Sharron Margaret Morris* (OS355.1), *Timothy George Morris* (OS951.50) and *RG and SM Morris Family Trust* (OS1054.50) for deletion of the Light Spill rule, and agree with Mr Gibson and the Reporting Officer that it is appropriate to limit obtrusive lighting in the rural environment.

656. We reject the submission by *St Hilda's Collegiate School Inc.* (OS746.4) for amendment of the Light Spill rule so that it is consistent with the floodlight operating times (Scale of Operation - Rule 20.5.3b). We agree with Mr Gibson and the Reporting Officer that there is no reason why these two standards need to be consistent. We also refer to our decision in sub-section 3.5.3 of the Major Facilities Decision Report in relation to Hours of Operation (Rule 31.5.3.2).

657. We reject the submission by *Kristine Nicolau* (OS398.2) and agree with the Reporting Officer that the submission lacks any detail or reasons to support the request.

658. We reject the submission by *New Zealand Transport Agency (NZTA)* (OS881.104) and agree with the Reporting Officer that light spill effects on state highways should be managed on a case by case basis and rely on the affected party requirements in section 95E of the RMA.

3.9 Infrastructure definition, objectives and policies

3.9.1 Definition of Wastewater

659. 'Wastewater' is defined in the 2GP as:

> *Wastewater*
> *"Liquid waste, including liquids containing solids, originating from domestic, industrial and commercial activities. It includes but is not limited to:*
> - *toilet wastes*
> - *trade wastes*
> - *sullage."*

660. The *Dunedin City Council* (OS360.196) has requested that the 3rd bullet point be amended as follows: 'greywater (sullage)' because the term 'sullage' will be obscure for most plan users.

661. The Reporting Officer noted that the amendment proposed is minor and clarified what 'sullage' is and therefore recommended that the submission be accepted.

3.9.1.1 Decision and reasons

662. We accept in part *Dunedin City Council* (OS360.196) and have instead decided that the word "sullage" be deleted and replaced with the term "grey water". Our reasons are that we have confirmed with the Water and Waste Group of DCC that sullage and greywater have the same meaning and we consider that the term greywater is more widely understood and therefore will add clarity to the interpretation of the definition of wastewater. See Appendix 1 amendment reference PHS360.196.

3.9.2 Policy 2.2.5.2 (on-site stormwater and wastewater management)

663. Policy 2.2.5.2 states:

"Enable and encourage on-site stormwater and wastewater management, where not in conflict with the efficient use of existing infrastructure, through rules that provide for an alternative to connecting to reticulated infrastructure."

664. This policy sits under Objective 2.2.5: Environmental performance, which states:

"Development in the city is designed to reduce environmental costs and adverse effects on the environment as much as practicable, including energy consumption, water use, and the quality and quantity of stormwater discharge."

665. *Ravensdown* Limited (OS893.39) sought retention of Policy 2.2.5.2. The *Otago Regional Council* (OS908.7) sought amendment of Policy 2.2.5.2 to recognise that on-site stormwater and wastewater disposal must not adversely affect groundwater resources. They considered an advice note should be added highlighting the ORC's role in managing such discharges.

666. *The Oil Companies* (FS2487.17) were not opposed to such a change but wanted to ensure that the roles of ORC and DCC in managing stormwater discharges are not confused.

667. The Reporting Officer agreed with *the Oil Companies* (FS2487.17) that it is important not to confuse the roles of the DCC and ORC in regard to managing stormwater discharges but considered that amending Policy 2.2.5.2 and adding an advice note as requested by ORC may actually serve to confuse plan users. He noted that Rule 1.3.2.2 explains the role of regional plans and the regional policy statement, and that the DCC has had regard to them when developing the 2GP provisions. Therefore, he believed it is unnecessary to provide any additional clarification in Policy 2.2.5.2.

668. The Reporting Officer also thought that making such an amendment is inconsistent with the overall direction of the objective, which is about reducing environmental costs and adverse effects on the environment generally and not adverse effects on groundwater specifically. As a consequence, he recommended that Policy 2.2.5.2 be retained without amendment (s42A Report, Section 5.2.1, pp. 37-39).

669. *Ravensdown Limited* (OS893.39) called Mr Christopher Hansen (planning consultant) who said he supported the Reporting Officer's recommendation (Statement of Evidence, p. 26).

670. *The Oil Companies* (FS2487.17) called Ms Georgina McPherson (planning consultant) who confirmed that *"the Oil Companies'* submission is given effect" by adopting the Reporting Officer's recommendation (Statement of Evidence, p. 34).

3.9.2.1 Decision and reasons

671. We accept in part the *Otago Regional Council* (OS908.7) and *Ravensdown Limited's* (OS893.39) submissions and disagree with the Reporting Officer that Policy 2.2.5.2 should be retained without amendment.

672. We consider that it is appropriate that reference be made in this policy to not endangering groundwater because, based on evidence we heard in relation to effects on groundwater from on site effluent disposal systems as part of hearings on Urban Land Supply, we are conscious of the effects that un-reticulated systems can have on environmental health, discussed in both the Urban Land Supply and Natural Environment decision reports This was a factor in our decisions relating to rezoning requests.

673. We also consider this amendment to the Policy aligns it more closely to Objective 2.2.5, which is concerned with 'Environmental Performance' generally.

674. Therefore, we have decided to make the following amendments to Policy 2.2.5.2:

> "Enable and encourage on-site stormwater and wastewater management, where this would not endanger groundwater and is {PHS 908.7} not in conflict with the efficient use of existing public, wastewater and stormwater {PO 881.11, 881.13 and 881.167} infrastructure, through rules that provide for an alternative to connecting to ~~reticulated~~ public water supply, wastewater and stormwater {PO 881.11 and 881.13} infrastructure."

675. See amendment reference PHS908 in Appendix 1. We also note our decisions in the Plan Overview decision (sub-section 3.7.1), which has resulted in other amendments to Policy 2.2.5.2, refer amendment references PO 881.11, 881.13 and 881.167.

3.9.3 Objective 9.2.1 and associated policies (efficiency and affordability of public infrastructure)

676. Objective 9.2.1 in the 2GP states:

> *"Land use, development and subdivision activities maintain or enhance the efficiency and affordability of water supply, wastewater and stormwater public infrastructure."*

677. Policies 9.2.1.3 and 9.2.1.5 sit underneath Objective 9.2.1, and use the term 'insignificant' in relation to adverse effects.

678. Policy 9.2.1.3 states:

> *"Require subdivisions to provide any available water supply and wastewater public infrastructure services to all resultant sites that can be developed, unless on-site or multi-site services are proposed that will have positive effects on the overall water supply and/or wastewater public infrastructure services, or any adverse effects on them are insignificant."*

679. Policy 9.2.1.5 states:

> *"Require earthworks to be designed to ensure adverse effects from sediment run-off from the site on any drains, channels, soakage and treatment systems or stormwater reticulation will be avoided or, if avoidance is not possible, would be insignificant."*

680. *University of Otago* (OS308.464) sought the amendment of Objective 9.2.1 and associated policies 9.2.1.1- 9.2.1.6 by revising requirements that effects be no more than insignificant. This submitter considered that there is no justification for a requirement that effects be no more than insignificant, particularly when considering health effects, which can be highly subjective and controversial. Therefore, the submitter considered that these provisions should be deleted, or revised to be more realistic. *The Oil Companies* (FS2487.19) supported this submission.

681. The *New Zealand Transport Agency* (*NZTA*) (OS881.97) sought amendment to broaden the focus of the objective to reflect the social and economic outcomes that public infrastructure can promote.

682. *Ravensdown Limited* (OS893.13) supported Objective 9.2.1.

683. The Reporting Officer said that Policy 9.2.1.3 relates to the Service Connections performance standard (Rule 9.3.7) and an infringement of this performance standard is a restricted discretionary activity, which he considered better aligns with the 'no

more than minor' rather than the 'insignificant' adverse effects test (s42A Report, Section 5.4.2, p. 54).

684. He said that it is appropriate for Policy 9.2.1.5 to have a more onerous policy direction because there are well known techniques of controlling sediment run-off from sites so it does not enter drains, channels, soakage and treatment systems or stormwater reticulation systems. He also considered that the potential adverse effects if sediment enters these systems or into water bodies also warrants this more onerous policy direction (s42A Report, Section 5.4.2, p. 54).

685. The Reporting Officer therefore recommended that Policy 9.2.1.3 be amended by replacing 'insignificant' with 'no more than minor' and Policy 9.2.1.5 be retained without amendment (s42A Report, Section 5.4.2, p. 54).

686. The Reporting Officer also considered that it was unnecessary to amend Objective 9.2.1 in accordance with the *New Zealand Transport Agency* (*NZTA*) (OS881.97) relief because of recommendations at the Plan Overview Hearing to include reference to public roading networks in the definition of public infrastructure, as a result of *New Zealand Transport Agency* (*NZTA*) (OS881.11 and OS881.13).

687. *University of Otago* (OS308.464) called Mr Murray Brass (planner) who outlined that in relation to Policy 9.2.1.5, Policy 7.B.3 of the Regional Plan: Water for Otago applies, which states:

> *"Allow discharges of water or contaminants to Otago lakes, rivers, wetlands and groundwater that have minor effects or that are short-term discharges with short-term adverse effects."*

688. Mr Brass said that because a district plan must not be inconsistent with a regional plan, to avoid inconsistency, Policy 9.2.1.5 should be amended to replace 'insignificant' with 'no more than minor' (Statement of Evidence, pp. 1-2).

689. *The Oil Companies* (FS2487.19) called Ms Georgina Beth McPherson (planning consultant) who considered that Policy 9.2.1.5 should be modified to delete the word 'insignificant' and replace it with 'no more than minor'. She considered that the 'insignificant' test is unrealistic test, particularly when considering effects on health and safety, which can be highly subjective. Furthermore, she considered that the phrase 'is not possible' is more appropriate and therefore should be replaced with 'is not practicable' (Statement of Evidence, pp. 30-32).

690. The Reporting Officer in his revised recommendations at the end of the hearing agreed with the evidence of Mr Brass and Ms McPherson and therefore recommend that Policy 9.2.1.5 be amended by replacing 'insignificant' with 'no more than minor', and also changing 'possible' to 'practicable' as a result of the *Oil Companies'* evidence.

3.9.3.1 Decision and reasons

691. We accept in part *University of Otago's* (OS308.464) submission; although we agree with Mr Brass that the "insignificant" effects test is overly restrictive in this case, we have decided to amend the test to "avoided or minimised as far as practicable". We consider that the effects test should be aligned with those of other policies that manage sediment run-off from earthworks, i.e. Policy 8A.2.1.2 in the Earthworks section and Policy 10.2.2.4 in the Natural Environment section. See discussion of our decisions on these policies in, respectively, section 3.6.4 of the Earthworks Decision and section 3.6.9 of the Natural Environment Decision.

692. However, we do not accept the *University of Otago's* (OS308.464) submission or evidence, or the revised recommendations of the Reporting Officer to replace 'insignificant' with 'no more than minor' in Policy 9.2.1.3. This decision is based on

evidence we heard in relation to effects on groundwater from on site effluent disposal systems as part of hearings on Urban Land Supply, we are also conscious of the effects that un-reticulated systems can have on environmental health, discussed in both the Urban Land Supply and Natural Environment decision reports.

693. The amendments required for our decision to amend Policy 9.2.1.5, including consequential amendments, are as follows:

- Amend Policy 9.2.1.5 as follows:
  Require earthworks to be designed to ensure adverse effects from sediment run-off from the site on any drains, channels, soakage and treatment systems or stormwater reticulation will be avoided or~~, if avoidance is not possible, would be insignificant~~ minimised as far as practicable.
- Amend the paraphrasing of Policy 9.2.1.5 in assessment Rule 9.4.3.5.a.ii, to reflect this amendment.

See Appendix 1 (amendments are referenced PHS308.464).

694. We reject *New Zealand Transport Agency's* (NZTA) (OS881.97) relief and agree with the Reporting Officer that instead the definition of public infrastructure be amended, as a result of *New Zealand Transport Agency* (NZTA) (OS881.11 and OS881.13). Refer Plan Overview Decision Report.

695. We also note that as a result of the Plan Overview decision, we have replaced the word 'possible' with 'practicable' in Policy 9.2.1.5.

3.9.4 Objective 9.2.1.4 (public infrastructure capacity for supported living facilities)

696. Policy 9.2.1.4 states:

> *"Only allow supported living facilities where public infrastructure has capacity and where this would not compromise the capacity required for any future permitted activities within the zone."*

697. Furthermore, supported living facilities are a sub-activity of residential activities, and are defined as:

> *"The use of land or buildings for the purposes of providing supported living accommodation for over 10 residents that includes full-time management, care and supervision, and may include laundry, meal, and cleaning services. This definition includes any ancillary activities directly associated with the functioning of the facility, including medical treatment, recreational facilities, and other facilities necessary to service the needs of the residents or their visitors.*
> *Student hostels, rest homes, and retirement villages are sub-activities of supported living facilities.*
> *Supported living accommodation for ten residents or less is defined as part of standard residential*."

698. *University of Otago* (OS308.214) sought amendment of Policy 9.2.1.4 to reflect that restrictions will only apply where justified, which was supported by *Otago Polytechnic* (FS2448.12). Both of these submitters considered that this policy could potentially restrict future residential college developments, and the s32 report contains no analysis of the infrastructure constraints or the need for constraints restrictions.

699. The Reporting Officer noted that Supported living facilities (student hostels, rest homes, and retirement villages) are a restricted discretionary activity in the Residential Zone and Campus Zone, and non-complying in the rural, rural residential, industrial and recreation zones, and permitted in all commercial mixed use zones

(except in the Trade Related and CBD Edge Commercial zones) (s42A Report, Section 5.4.3, p. 57).

700. He noted that the matters of discretion for the assessment of supported living facilities in campus and residential zones are effects on safety and efficiency of transport network and effects on efficiency and/or affordability of infrastructure (s42A Report, Section 5.4.3, p. 57). He also said that Supported Living Facilities can accommodate hundreds of people (for example Unicol University College has 518 residents, and Cumberland College has 328 residents), which will inevitably have a much larger load on public infrastructure (particularly 3 waters and on-street car parking) than normal residential activity (s42A Report, Section 5.4.3, p. 57).

701. He therefore considered that it would be prudent and not overly restrictive to direct Supported Living Facilities to locations within the city where the infrastructure has the capacity to accommodate the additional demand (s42A Report, Section 5.4.3, p. 57).

702. *University of Otago* (OS308.214) called Mr Murray Brass (planner) who reproduced a statement regarding the activity status of Supported Living Facilities in the Residential Zone, which was presented at the Residential Hearing. In summary he encouraged the Panel to still seek the least restrictive activity status that will allow adverse effects to be managed and gave an example of making supported living facilities a controlled activity subject to performance standards outside infrastructure constraint overlay areas (Statement of Evidence, p.2).

703. He considered that Policy 9.2.1.4 would be appropriate without wording changes, provided that the implementation of the policy through zone rules takes account of these points (Statement of Evidence, p. 2).

3.9.4.1 Decision and reasons

704. We reject the submission from the *University of Otago* (OS308.214) and agree with the Reporting Officer (and also the evidence of Mr Brass) that it is not necessary to amend Policy 9.2.1.4.

705. We agree that Supported Living Facilities are best located on sites within the city where the infrastructure has the capacity to accommodate the additional demand. We also refer to our decision from the Residential decision report to reject *University of Otago* submission point OS308.274, which sought a controlled activity status for Supported Living Facilities and have decided to retain their restricted discretionary status in residential zones.

3.9.5 Objective 9.2.2 (people's health and safety) and associated policies

706. Objective 9.2.2 states:

> *"Land use, development and subdivision activities maintain or enhance people's health and safety."*

707. Policies 9.2.2.1, 9.2.2.4, 9.2.2.5, 9.2.2.7, 9.2.2.11, 9.2.2.12 and 9.2.2.13 relate to the management of discretionary activities and some performance standard contraventions: they all end with the wording "*ensure any adverse effects would be insignificant"* and relate to adverse effects on the health and safety of people. This wording was chosen to give a high priority/high test for gaining consent in matters related to health and safety.

708. The *University of Otago* (OS308.477) sought amendment of Objective 9.2.2 and associated policies 9.2.2.1- 9.2.2.14 by revising requirements that effects be no more than insignificant. It considered that there is no justification for the insignificant test particularly when health effects can be highly subjective and controversial. *The Oil*

Companies (FS2487.20) agreed that requirements in policies that adverse effects be avoided or be no more than insignificant are unduly onerous.

709. *The Oil Companies* (OS634.56) and *Liquigas Limited* (OS906.10) sought the retention of Objective 9.2.2. *Liquigas Limited* considered that *"it is appropriate to ensure that the maintenance and enhancement of health and safety is prioritised in planning decisions."*

710. The Reporting Officer agreed with *Liquigas Limited* (OS906.10) that health and safety should be prioritised in planning decisions and therefore recommended that Objective 9.2.2 should be retained without amendment. He noted the other submissions seeking amendments are not related to this objective, with the *University of Otago's* concern with the use of the word "insignificant" in underlying policies. (s42A Report, Section 5.4.4, p. 59).

711. The Reporting Officer described that the adverse effects covered by the policies which use "insignificant" as a policy test are ones which if not managed effectively could have serious potential consequences on the health and safety of people, including potential serious injury or death. Therefore, he considered that it is appropriate for these policies to be highly directive and restrictive, and he recommended that the "insignificant" wording be retained (s42A Report, Section 5.4.4, p. 59).

712. The Reporting Officer considered that the adverse effects on the safety of people from public amenities, network utility activities, and signs (Policy 9.2.2.13) are likely to be less potentially serious and therefore a medium level of strictness in terms of the drafting protocol is appropriate and that Policy 9.2.2.13 be reworded, so that adverse effects will be no more than minor (s42A Report, Section 5.4.4, p. 59).

713. Mr Murray Brass (planner) appeared for the *University of Otago* (OS308.477), and disagreed with the Reporting Officer's contention that, in order to avoid serious consequences such as injury and death, adverse effects must be insignificant. He said that all of the matters addressed by these policies could have effects which are minor (or even significant) without risking such serious consequences and gave examples of noise which can be heard but which complies with relevant standards, low levels of light spill or hazardous substances which create an unpleasant smell (Statement of Evidence, p. 3).

714. Mr Brass also considered that the approach could create inconsistencies, and gave examples, including that tree planting for erosion control which have to be set back from boundaries to reduce the risks from fire and tree fall (Policy 9.2.2.5) which has an insignificant policy test, while tree planting for amenity purposes would have no such requirement (Statement of Evidence, p. 3).

715. Mr Brass also raised issues with the construction of these policies stating that the *"avoid…" portion is* limited *to effects on health, but if effects on health cannot be avoided then the wording requires that all adverse effects must be insignificant. In some cases this is inconsistent with the approach taken in the rules, where adverse effects are accepted if they comply with specified performance standards."* (Statement of Evidence, p. 3).

716. Furthermore, Mr Brass considered that "possible" should be replaced with "practicable" describing that this is more realistic, as it allows for consideration of what is proportionate and reasonable in the circumstances, not just what is theoretically achievable (Statement of Evidence, p. 3).

717. Therefore, Mr Brass stated:

> *"For all of these reasons I therefore consider that the concerns raised in the University's submission are still valid, and suggest the following changes:*

- *Replace the word "insignificant" in all of these policies with "minimised" (my preference) or "no more than minor" (if a specific limit is still sought);*
- *Clarify that the policies only relate to health and safety effects, and provide a more realistic test of achievability, by rewording along the lines "…adverse effects on [health / safety] are avoided or, if avoidance is not practicable, those effects are minimised."*
- *As a consequential change, revise performance standard 9.2.3 Electrical Interference along the lines: "…to ensure that any adverse effects on the health of people are no more than minor".* (Statement of Evidence, p. 4)

3.9.5.1 Decision and reasons

718. We accept in part the submission by the *University of Otago* (OS308.477) to replace 'insignificant' with 'no more than minor' in Policy 9.2.2.13 and also to replace 'possible' with 'practicable', which is shown in Appendix 1 and attributed to PHS308.477. We also refer to the cl.16 amendments to Policy 9.2.2.7 so that it is more concise and so easier to understand (see section 5.0 of this report below).

719. We agree with the Reporting Officer that a medium level of strictness in terms of the drafting protocol is appropriate for Policy 9.2.2.13 because the adverse effects on the safety of people from public amenities, network utility activities, and signs are likely to be less potentially serious.

720. We also agree with the Reporting Officer that it is appropriate to retain the 'insignificant' policy test for policies 9.2.2.1, 9.2.2.5, Policy 9.2.2.7 and 9.2.2.12 because of the serious potential consequences on the health and safety of people if not managed effectively.

721. We also accept *Liquigas Limited's* (OS906.10) submission and reject the *University of Otago's* submission (OS308.477) and agree with *Liquigas Limited* and the Reporting Officer that health and safety should be prioritised in planning decisions and therefore we have decided that Objective 9.2.2 be retained without amendment.

722. We also note our decision at the Plan Overview Hearing that policies that use the wording "no significant effects" or "avoid significant effects" be reviewed and our decision to replace 'possible' with 'practicable', and as a consequence have amended Policy 9.2.2.6 (relating to mining and mineral exploration), Policy 9.2.2.7 (related to land use, development, or subdivision activities), Policy 9.2.2.13 (related public amenities and signs) and associated assessment rules, which are shown in Appendix 1 and attributed to PHS308.477. We also refer to our Mining Activities Decision Report where this issue is discussed in more detail.

3.9.6 On-site wastewater and stormwater disposal provisions

723. *Kati Huirapa Runaka ki Puketeraki and Te Runanga o Otakou* (OS1071.56) sought:

> *"Amend Policy 9.2.2.7 to ensure that in unreticulated areas, resultant sites form subdivision must provide for a waste disposal area to be located at least 50m from any MHWS. Make consequential changes to the Shape performance standards in each zone."*

724. This submission was supported by *Jen Rodgers* (FS2413.9) in regard to changes to the Shape performance standard (Rule 17.7.6) in the Rural Residential Zone (Rule 17.7.6) and *Oceana Gold (New Zealand) Limited* (OS1088.26) sought the retention of Policy 9.2.2.7.

725. Policy 9.2.2.7 states:

> *Only allow land use, development, or subdivision activities that may lead to land use and development activities, in areas without public infrastructure where the land use, development or the size and shape of resultant sites from a subdivision, ensure wastewater and stormwater can be disposed of in such a way that avoids adverse effects on the health of people on the site or on surrounding sites or, if avoidance is not possible, ensure any adverse effects would be insignificant.*

726. The Reporting Officer said that although the submission by *Kati Huirapa Runaka ki Puketeraki and Te Runanga o Otakou* (OS1071.56) had been directed at Policy 9.2.2.7, the relief sought was to amend the shape performance standard rule in each management zone to ensure waste disposal areas are located at least 50m from the level of Mean High Water Spring (MHWS) (s42A Report, Section 5.4.11, p. 70).

727. He noted that the submitter's reasons are that discharges from waste disposal areas into the coastal marine area adversely affect Manawhenua cultural values and practices, including the safe gathering of kaimoana.

728. The Reporting Officer noted that this rule, as currently drafted, would allow a waste disposal area to be located within 50m of MHWS, which could have adverse effects on Manawhenua cultural values and practices, biodiversity values and general recreational values of the coastal marine area. He considered that this is inappropriate and recommended that the shape factor rule in the residential, rural, rural residential, commercial and mixed use and industrial zones should be amended.

729. The Reporting Officer considered it is highly unlikely that unreticulated development would occur in industrial, commercial and mixed use or campus zones, which generally either are reticulated or require reticulation to be able to operate effectively, therefore this rule in these zones is largely superfluous. In addition, the Campus Zone is generally not located in the vicinity of the coastal marine area, although parts of it are located adjoining the Water of Leith and the Portobello Aquarium may be included in the Campus Zone (s42A Report, Section 5.4.11, p. 70).

730. The Reporting Officer therefore recommended the following amendment:

> *Amend the shape factor rule in the Residential, Rural, Rural Residential, Commercial and Mixed Use and Industrial zones (rules 15.7.6, 16.7.5, 17.7.6, 18.7.5, 19.7.5 and 34.7.5), by amending line 3 of these rules, as follows:*
>
> *3. For unreticulated areas, resultant sites must provide for a waste disposal area to be located at least 50m from any water body and MHWS. (PHS1071.56)*

3.9.6.1 Decision and reasons

731. We accept in part the submission from *Kati Huirapa Runaka ki Puketeraki and Te Runanga o Otakou* (OS1071.56) and agree with the Reporting Officer that requiring waste disposal areas to located at least 50m from Mean High Water Springs is in accordance with the intent and scope of this submission. While the control of land use for the maintenance and enhancement of water and ecosystems in water bodies and coastal water is a responsibility of regional councils under s30(c) of the RMA, we consider this measure is appropriate to address the submitter's concerns of adverse effects on Manawhenua cultural values and practices (noting additional evidence on this discussed in the Manawhenua Decision Report), biodiversity values and general recreational values of the coastal marine area (noting evidence we heard in relation to effects on the health of coastal ecosystems from on site effluent disposal systems, particularly that of Dr Marc Schallenberg and Mr Gerald Fitzgerald, discussed in the

Urban Land Supply and Natural Environment decision reports), in accordance with Part 2 of the Act (particularly s6(a), (d) and (e)).

732. Therefore, we have decided to amend the Shape rule in the residential zones (Rule 15.7.6), rural zones (Rule 16.7.5), rural residential zones (Rule 17.7.6), commercial and mixed use zones (Rule 18.7.5), industrial zones (Rule 19.7.5) and Campus Zone (Rule 34.7.5), which require "for unreticulated areas, resultant sites must provide for a waste disposal area to be located at least 50m from any water body and Mean High Water Springs."

733. See Appendix 1 amendment reference (PHS1071.56).

3.10 Performance Standards and related policies

734. The following are requests for changes to individual performance standards and related policies.

3.10.1 Policy 9.2.2.8 (Fence height performance standard)

735. Policy 9.2.2.8 states:

> *"Require fences to be designed to allow a visual connection between buildings and public places, to enable opportunities for informal surveillance."*

736. *Paul Pedofski* (OS234.2) requested that Policy 9.2.2.8 be removed as there is no evidence to suggest that providing a visual connection from the street through low or permeable fences will reduce harm or increase safety (Submission, p. 2).

737. *University of Otago* (OS308.216) requested that Policy 9.2.2.8 be amended to avoid unnecessary requirements and describe that many University buildings will not provide informal surveillance (e.g. storage and loading areas, non-windowed parts of buildings) and it would be inappropriate to have a blanket requirement for visually permeable fencing (Submission, p. 19).

738. *Federated Farmers of New Zealand* (OS919.17) requested amendments to reference that Policy 9.2.2.8 is related to fences within urban areas, to address concerns in the urban zones, and should be qualified as such (Submission, p. 26).

739. The Reporting Officer relied on the evidence of Mr Peter Christos, DCC Urban Designer at the Residential Hearing, about the urban design principles relating to passive surveillance and custodianship (s42A Report, Section 5.4.12, p.73; Statement of Evidence, p.3).

740. The Reporting Officer also noted that the National Guidelines for Crime Prevention through Environmental Design in New Zealand by the Ministry of Justice provides guidelines on the importance of designing fences (and other structures) to allow a visual connection between buildings and public places, to enable opportunities for informal surveillance (s42A Report, Section 5.4.12, p. 73).

741. He recommended that *Paul Pedofski's* (OS234.2) submission be rejected and instead recommended that the submissions of *University of Otago* (OS308.216) and *Federated Farmers of New Zealand* (OS919.17) be accepted in part and Policy 9.2.2.8 be amended as follows:

> *"Require fences, in residential, recreation and some major facility zones, to be designed to allow a visual connection between buildings and public places, to enable opportunities for informal surveillance."*

742. *University of Otago* (OS308.216) called Mr Murray Brass (planner) who considered that the s42A Report recommendations will improve clarity, and noted that the specific zone provisions were addressed as part of the hearing on the Campus Zone Fence Height and Design performance standard (Rule 34.6.3) (Statement of Evidence, p. 4).

3.10.1.1 Decision and reasons

743. We accept the submissions of *Federated Farmers of New Zealand* (OS919.17), and the *University of Otago* (OS308.216) in part, and reject the submission of *Paul Pedofski* (OS234.2).

744. Our reasons are that we agree with the Reporting Officer, and the evidence of Mr Christos at the Residential Hearing, that it is appropriate to require fences to be designed to allow a visual connection between buildings and public places, to enable opportunities for informal surveillance.

745. We also agree that it is appropriate to amend Policy 9.2.2.8 to reflect that the application of these restrictions is in residential, recreation and some major facility zones where the fence height and design performance standard applies, as shown below:

> *"Require fences in residential, recreation and some major facility zones {PHS 919.17 and 306.216} to be designed to allow a visual connection between buildings and public places, to enable opportunities for informal surveillance."*

746. We have also made consequential amendments to Rule 9.4.3.7 Assessment of performance standard contraventions - Fence height and design, where Policy 9.2.2.8 is referenced. See Appendix 1 amendment reference PHS919.17 and PHS308.216.

3.10.2 Rule 9.3.2 Electrical Interference

747. The Electrical Interference rule states:

> *"9.3.2 Electrical Interference*
> *Activities must be designed and located to ensure that there are no effects from electrical interference on surrounding sites."*

748. *Transpower New Zealand Limited* (OS806.43) and *Powernet Limited* (FS2264.8) seek clarification regarding the meaning of this provision, particularly how "electrical interference" is to be measured and how a restricted discretionary application will be triggered, and assessed.

749. *Transpower New Zealand Limited* (OS806.53) and *Powernet Limited* (FS2264.9) also sought the removal of the land use performance standards for management zones that hyperlink to the Electrical Interference rule.

750. *Allan Douglas McLeary, Sylvia Violet McLeary and Farry & Co Trustees Limited (on behalf of McLeary Family Trust)* (OS832.10) sought the retention of the Electrical Interference rule, but did not provide any reasons.

751. The Reporting Officer agreed with *Transpower New Zealand Limited* (OS806.43 and OS806.53) and *Powernet Limited* (FS2264.8 and FS2264.9) that the guidance on how electrical interference is to be measured and how a restricted discretionary application will be triggered, and assessed, is limited in the 2GP.

752. The Reporting Officer advised that Radio Spectrum Management, a subsidiary group of the Ministry of Business, Innovation and Employment, is the leading government agency on this subject and monitors and manages the radio spectrum. He clarified

that as part of their role they investigate electrical interference complaints and enforce the appropriate electromagnetic compatibility standards. Radio Spectrum Management also outline the compliance requirements for radio operators and electrical equipment through New Zealand Gazette notices pursuant to the Radiocommunications Regulations 2001.

753. The Reporting Officer considered it would be more efficient and effective to manage electrical interference outside the 2GP (apart from considering reverse sensitivity effects by activities locating near to facilities that are likely to create this effect), and that it should be the role of Radio Spectrum Management, rather than the DCC to do this.

754. Therefore, he recommended that Policy 9.2.2.12 (Electrical Interference), the Electrical Interference rule (Rule 9.3.2), the Assessment of Restricted Discretionary Activities performance standard contraventions for Electrical Interference (Rule 9.4.3.6) and associated references to these provisions in the 2GP be deleted entirely from the 2GP (s42A Report, Section 5.5.4, pp. 99-101).

3.10.2.1 Decision and reasons

755. We reject the submissions of *Transpower New Zealand Limited* (OS806.43 and OS806.53) and *Powernet Limited (FS2264.8 and FS2264.9)* and accept *Allan Douglas McLeary, Sylvia Violet McLeary and Farry & Co Trustees Limited (on behalf of McLeary Family Trust* (OS832.10).

756. Our decision is to retain Policy 9.2.2.12, the Electrical Interference (Rule 9.3.2) and the Assessment of Restricted Discretionary Activities performance standard contraventions for Electrical Interference (Rule 9.4.3.6). We have also decided to retain the rules for management zones that hyperlink to Rule 9.3.2 - Electrical Interference.

757. Our reasons are that we were not convinced on the evidence that the effects from electrical interference on people's health and safety is a matter that is not appropriately managed or controlled in terms of the RMA or that relevant policies should be deleted entirely from the 2GP.

758. While we accept and acknowledge the role of Radio Spectrum Management, in terms of management and guidance related to electrical interference, we disagree with the Reporting Officer that it will adequately cover these effects.

3.10.3 Rule 9.3.3 Fire Fighting

759. The Public Health and Safety Fire Fighting performance standard (Rule 9.3.3) states that:

> 1. *Subdivision activities must ensure resultant sites have access to sufficient water supplies for fire fighting consistent with the SNZ/PAS:4509:2008 New Zealand Fire Service firefighting water supplies code of practice except sites created and used solely for the following purposes are exempt from firefighting requirements:*
>   a. *reserve;*
>   b. *Scheduled ASCV or QEII covenant;*
>   c. *access;*
>   d. *network utilities; or*
>   e. *road.*
> 2. *New residential buildings must either:*
>   a. *connect to the water supply public infrastructure; or*

b. provide a hardstand area of minimum dimensions of 4.5m x 11m with suitable fire engine access, water storage of 45,000 litres (45m³) or equivalent fire fighting capacity, and have the water supply located within 90m of the fire risk.

760. *The McLeary Family Trust* (OS832.16) sought the retention of the Fire Fighting performance standard, but did not provide any reasons for their support.

761. *New Zealand Fire Service Commission* (OS945.24) sought to retain clause 1 of the Fire Fighting rule and amend clause 2.b of this rule (Rule 9.3.3.2.b) by deleting the existing words and replacing them with the following:

> *"provide for water supply and access to water supplies for firefighting purposes consistent with the SNZ/PAS 4509:2008 New Zealand Fire Service firefighting water supplies code of practice."*

762. *New Zealand Fire Service Commission* (OS945.24) also sought to add a new general advice note, which states:

> *"The best means to comply with the code is to provide a hardstand area of minimum dimensions of 4.5m x 11m with suitable fire appliance access, water storage of 45,000 litres (45m³), and have the water supply located within 90m of the fire risk."*

763. The *New Zealand Fire Service Commission* reasons were to reflect that the Code of Practice provides flexibility within it that can respond to the individual circumstances of the development and the environment in which it sits.

764. *New Zealand Fire Service Commission* (OS945.33) also sought to retain management zone performance standards and subdivision rules that direct activities to comply with this rule, as well as (OS945.43) retention of the rules for assessment of development performance standard contraventions for fire fighting in the residential, rural residential, commercial mixed use and industrial zones.

765. *Timothy George Morris* (OS951.57) and *Timothy Morris (on behalf of RG and SM Morris Family Trust)* (OS1054.57) sought removal of the Fire Fighting performance standard and considered that the requirement to provide 45m^3 firefighting storage for a new residential building in a rural zone is completely unreasonable, which *Geoff Scurr Contracting Limited* (FS2391.33), agreed with. *New Zealand Fire Service Commission* (FS2323.6 and FS2323.7) opposed the relief sought by the Morris family interests.

766. The Reporting Officer noted that he did not have any expertise with the NZFS Code of Practice and so relied on the *New Zealand Fire Service Commission* for appropriate standards. He considered that it is appropriate for the rule to have greater consistency with the SNZ/PAS 4509:2008 New Zealand Fire Service firefighting water supplies code of practice.

767. However, he did not recommend the exact change requested by the *New Zealand Fire Service Commission* as it does not align well with the general drafting of the Plan. Instead, he considered that advice note wording be included as part of amendments to Rule 9.3.3.2.b, which he considered will give more flexibility in how compliance will be achieved.

768. The Reporting Officer recommended that performance standard (Rule 9.3.3) be amended as follows (s42A Report, Section 5.5.5, p. 103):

1. Subdivision activities must ensure resultant sites have access to sufficient water supplies for fire fighting consistent with the SNZ/PAS:4509:2008 New Zealand Fire Service fire fighting water

supplies code of practice except sites created and used solely for the following purposes are exempt from fire fighting requirements:

a. reserve;
b. Scheduled ASCV or QEII covenant;
c. access;
d. network utilities; or
e. road.

2. New residential buildings must either:

a. connect to the water supply public infrastructure; or
b. provide a hardstand area of minimum dimensions of 4.5m x 11m with suitable fire engine access, water storage of 45,000 litres (45m³) or equivalent fire fighting capacity, and have the water supply located within 90m of the fire risk or otherwise provide for water supply and access to water supplies for fire fighting purposes consistent with the SNZ/PAS 4509:2008 New Zealand Fire Service Fire fighting Water Supplies Code of Practice. (s42A Report, p.104)

769. The Reporting Officer also agreed with the retention of associated assessment rules for firefighting in the residential, rural residential, commercial mixed use and industrial zones be accepted (s42A Report, Section 5.8.1, p. 196).

770. *New Zealand Fire Service Commission* called Ms Fiona Blight (planning consultant) who considered that the s42A Report recommended amendments provide flexibility for plan users to provide alternative complying firefighting water supplies, which will better enable the management of the adverse effects of fire and will achieved the outcomes sought by the Commission (Statement of Evidence, p. 6).

3.10.3.1 Decision and reasons

771. We accept in part the submissions from the *New Zealand Fire Service Commission* (OS945.24, OS945.33, FS2323.6 and FS2323.7) and *McLeary Family Trust (OS832.16)* and reject submissions from *Timothy George Morris (OS951.57), RG and SM Morris Family Trust (OS1054.57) and Geoff Scurr Contracting Limited* (FS2391.33) and agree with the Reporting Officer's recommended amendments to the Fire Fighting performance standard (Rule 9.3.3).

772. We have also decided to delete the word 'hardstand' in recognition that is not defined in the 2GP (and therefore there may be uncertainty as to its meaning). We consider the word unnecessary, as we would expect that when applying this rule, consent planners and applicants alike will have regard to what constitutes a suitable area for a fire engine to be able to access and deploy on a site, and that the area of hardstanding needs be to an appropriate standard, but would not like to see the rule interpreted to require impermeable surfacing where there is no practical need for this. See attachment 1 amendment reference PHS945.24.

773. We agree with the Reporting Officer and the evidence of Ms Blight that this amendment will provide additional flexibility by providing an alternative to the Fire Fighting performance standard, as long as there is compliance with the New Zealand Fire Service Firefighting Water Supplies Code of Practice, which will better enable the management of the adverse effects of fire.

3.10.4 Request for a performance standard to require rain water tanks

774. *Graeme & Lynette Reed* (OS491.6) requested that the DCC require all new buildings to include a rainwater tank for flushing toilets, showers, watering plants etc., because of the essential nature of water for life and the uncertainty of future supply.

775. *The Oil Companies* (FS2487.28), opposed this request and said that while rainwater tanks can be effective it does not support a requirement for all new buildings to include

a rainwater tank, particularly because the definition of 'building' includes a wide range of structures, some of which would not be suitable for the capture of rainfall (Oil Companies Further Submission, p. 11).

776. The Reporting Officer did not consider that it is appropriate for all new buildings to be required to include a rainwater tank for similar reasons to *the Oil Companies*. Retrofitting existing buildings to incorporate rainwater tanks, the cost to landowners, and the potential effect on the amenity in areas which may have surplus reticulated water or in high rainfall areas may outweigh any benefits of storing and using rainwater in this manner. Instead he believed that a voluntary, rather than a compulsory approach, to the establishment of rainwater tanks is more appropriate. (s42A Report, Section 5.5.10, p. 144).

3.10.4.1 Decision and reasons

777. We reject *Graeme & Lynette Reed's* submission (OS491.6) and accept *the Oil Companies* further submission (FS2487.28) and agree with the Reporting Officer and *the Oil Companies* that it is unnecessary to follow a compulsory approach to the establishment of rainwater tanks, and instead a non-regulatory approach is more appropriate.

3.11 New suggested objectives and policies

3.11.1 Request for Soil Contamination policies

778. *The Oil Companies* (OS634.58) sought an appropriate policy framework in the Public Health and Safety section of the 2GP for applications requiring consent under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NESCS). It suggested the following:

"Objective:

> *There are no significant risks to human health posed by residual soil contaminant levels in land that has a history of land use which may have resulted in contamination.*

Policies:

> *Ensure that before any development, redevelopment or change of land use on land that has a history of land use that may have resulted in contamination, associated health risks are appropriately identified and managed.*
>
> *Any change of land use, development or redevelopment on contaminated land ensures that any proposed management controls, including remediation, pathway or receptor controls, will ensure the risks to human health are acceptable for the intended land use"* (The Oil Companies' Submission, pp. 36-37).

779. *The Oil Companies* said that there are no objectives and policies in the 2GP or NES that specifically address contaminated land therefore it would be appropriate to include a policy framework to provide guidance on the assessment of applications that require consent under the NES, particularly those that require a discretionary activity consent under the NES (the Oil Companies' Submission, p. 35).

780. *Oceana Gold (New Zealand) Limited* (FS2439.44), *Federated Farmers of New* Zealand (FS2449.28) and *Horticulture New Zealand* (FS2452.26), supported this submission for similar reasons.

781. The Reporting Officer noted that even though the NESCS does not have objectives and policies regarding contaminated land it does have clear guidance on what is covered and not covered when a resource consent is required and what information should be included with any resource consent application. This guidance includes the 'Users' guide on the NESCS' and an 'Information leaflet for landowners and developers' and there is additional technical information incorporated by reference. Additional guidance is provided by DCC officers, upon request, in the form of a summary flowchart of the NESCS requirements.

782. The Reporting Officer also considered, in terms of the 2GP, that it would provide additional clarity to add a new policy under Objective 9.2.2 to clarify to plan users that the NESCS manages changes of use, soil disturbance, removal or upgrade of fuel tanks or any subdivision on a HAIL site. He recommended a new Policy 9.2.2.15, as follows:

> *"Only allow any change of use, soil disturbance, removal or upgrade of fuel tanks or any subdivision on a HAIL site where the requirements of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 are met."* (s42A Report, pp. 80-81).

783. *The Oil Companies* called Ms Georgina McPherson (consultant planner) who considered the wording of the policy may result in the unintended outcome of precluding activities that do not meet the permitted activity requirements of the NESCS (such as retanking of service stations sites) but which can be appropriately carried out. She considered this was inappropriate and preferred the policies sought in the Oil Companies' submission (Statement of Evidence, p. 5).

784. The Reporting Officer in his Revised Recommendations said he disagreed, and noted that the new policy reflects the resource consent process as part of the requirements of the NESCS and the Ministry for the Environment contains guidance material for users of the NESCS. He therefore recommended no change to the section 42A Report recommendation *(*Revised Recommendations, p. 27).

3.11.1.1 Decision and reasons

785. We accept in part the submission from *the Oil Companies* (OS634.58) although we disagree with the Reporting Officer about the necessity of adding new Policy 9.2.2.15. Instead we have decided to add advice note 1 after the activity status table in the Earthworks chapter, note 8.3A – Other requirements outside of the District Plan as follows:

> *"The National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 applies to any piece of land on which an activity described in the Hazardous Activities and Industries List (HAIL) is being undertaken, has been undertaken, or is more likely than not to have been undertaken. On land of this kind, any change of use, disturbance of soil, soil sampling, removal, replacement or upgrade of fuel tanks, and any subdivision will trigger the provisions of the NES, and may require a resource consent. The requirements of the NES are site specific; the DCC Resource Consents team can provide advice on likely requirements in relation to a particular property or activity. Information is also available from the Ministry for the Environment at www.mfe.govt.nz/land/nes-assessing-and-managing-contaminants-soil-protect-human-health/about-nes."*

786. We have decided that an Advice Note, rather than a new policy, is more appropriate because we accept the submitter's point that there are no provisions in the 2GP which

relate to this matter, and it will provide clarity and guidance to plan users about the separate process which is required to be followed for works on a HAIL site under the NESCS.

787. See attachment 1 amendment reference PHS634.58.

3.12 Assessment Rules

788. Submitters requested various amendments or retention of assessment rules, Rules 9.4 to 9.7 Assessment of Restricted Discretionary, Discretionary and Non-Complying Activities (Performance Standard Contraventions and Activities).

789. In summary these submitters were:

- *University of Otago* (OS308.221) sought amendments to Rule 9.4 to 9.7, and *University of Otago* (OS308.225) sought amendments to Rule 9.8 Special Information Requirements to reflect consequential changes created by requested changes to 9.2 Objectives and Policies and 9.3 Performance Standards
- *KiwiRail Holdings Limited* (OS322.86) sought retention of Rule 9.4.3.9 - Assessment of performance standard contravention forestry and tree planting setback because it includes effects on health and safety
- *Waste Management (NZ) Limited* (OS796.19) sought the removal of Rule 9.6.3.2.b Assessment of discretionary activities (Rural industry, Landfills) which it considers is unclear, because it relates to the health of people rather than the wider environment
- *Kati Huirapa Runaka ki Puketeraki and Te Runanga o Otakou* (OS1071.44 and OS1071.45) support the assessment rules for restricted discretionary performance standard contraventions and discretionary activities (Rule 9.4.3.2 and Rule 9.6.4.2), which it considers is appropriate.

790. The Reporting Officer:

- in regard to the *University of Otago* (OS308.221) recommended that the *University of Otago* submission points OS308.216 regarding policy 9.2.2.8, OS308.464 regarding policy 9.2.1.3, and OS308.477 regarding policy 9.2.2.13 be accepted in part and these policies be amended. As a consequence, he recommended that the assessment criteria which reference these policies be revised to be consistent with the amended policies (s42A Report, Section 5.8.1, p. 196)
- did not consider that any consequential changes to Rule 9.8 Special Information Requirements were needed as a result of proposed amendments to Objective 9.2.2 and the associated policies and therefore recommended that *University of Otago* (OS308.225) be rejected (s42A Report, Section 5.5.9, pp. 142-143)
- in relation to *KiwiRail Holdings Limited* (OS322.86) and *Kati Huirapa Runaka ki Puketeraki and Te Runanga o Otakou* (OS1071.44 and OS1071.45) who sought the retention of assessment rules, he supported this relief (s42A Report, Section 5.8.1, p. 196)
- disagreed with *Waste Management (NZ) Limited* (OS796.19) that the assessment guidance is unclear in the assessment of discretionary activities - Rural industry (Rule 9.6.3.2). He considered that there are industry accepted standards understood by suitably qualified engineers that will address the potential adverse effects on the health of people from wastewater and stormwater disposal from rural industry and landfills (s42A Report, Section 5.8.1, p. 197).

3.12.1 Decision and reasons

791. We accept in part the *University of Otago's* submission (OS308.221) and agree with the Reporting Officer that Rule 9.4 to 9.7 Assessment of Restricted Discretionary, Discretionary and Non-Complying Activities be amended to be consistent with recommended amendments to policies requested by other *University of Otago* submission points.

792. We have decided to amend:
- Rule 9.6.4.1 Assessment of discretionary performance standard contraventions - acoustic insulation, which reference Policy 9.2.2.2 (PHS 308.215)
- Rule 9.4.3.5 Assessment of performance standard contraventions - Earthworks standards, which reference Policy 9.2.1.5 (PHS 308.464)
- Rule 9.6.3 Assessment of discretionary activities and Rule 9.6.4 Assessment of discretionary performance standard contraventions, which reference Policy 9.2.2.6 (PHS 308.477)
- Rule 9.4.3 Assessment of performance standard contraventions, Rule 9.5.2 Assessment of restricted discretionary activities, Rule 9.6.3 Assessment of discretionary activities and Rule 9.6.4 Assessment of discretionary performance standard contraventions and Rule 16.8.2 Assessment of controlled land use activities, which references Policy 9.2.2.7 (PHS 308.477)
- Rule 9.4.3 Assessment of performance standard contraventions, which references Policy 9.2.2.13 (PHS 308.477).

793. See attachment 1 amendment references PHS 308.215, PHS 308.464 and PHS 308.477.

794. We reject *University of Otago's* submission (OS308.225) and agree with the Reporting Officer that there is no need to make any consequential changes to Rule 9.8 Special Information Requirements, as a result of amendments to Objective 9.2.2 and the associated policies.

795. We reject *Waste Management (NZ) Limited's* submission (OS796.19) and disagree with the submitter that the assessment guidance in the assessment of discretionary activities - Rural industry (Rule 9.6.3.2) is unclear. We agree with the Reporting Officer that there are industry accepted standards that will address the potential adverse effects on the health of people from wastewater and stormwater disposal from rural industry and landfills.

796. We note *KiwiRail Holdings Limited* (OS322.86) and *Kati Huirapa Runaka ki Puketeraki and Te Runanga o Otakou* (OS1071.44 and OS1071.45) submissions which sought the retention of assessment rules.

4.0 Future plan change reviews and other suggestions

797. The Macraes Gold Project Overlay Zone was considered at the Cross Plan – Mining Hearing and decisions made to undertake a future plan change in consultation with the Waitaki District Council. As part of this future plan change there may be consideration of rules related to mining that affect the Public Health and Safety section of the 2GP.

798. We have also decided to undertake a review of the hazardous substances provisions in the 2GP to assess the type and location of hazardous substance, and their associated effect on the potential situations where additional controls under the 2GP may be 'necessary'. This will include a technical review of the appropriateness of

providing exemptions for the underground storage of fuel tanks, as discussed in section 3.2.4.6 of this Decision Report.

799. We consider this is necessary especially because of recent legislative change and in particular the Resource Legislation Amendment Act 2017 and the Hazardous Substances Regulations (2017) under the Health and Safety at Work (HSW) Act, and in order to consider how hazardous substances interact with the different types and distribution of sensitive activities, sensitive natural environments and natural hazards in Dunedin.

5.0 Minor and inconsequential amendments

800. Clause 16(2) of Schedule 1 of the RMA allows a local authority to make an amendment where the alteration "is of minor effect", and to correct any minor errors, without needing to go through the submission and hearing process.

801. This Decision includes minor amendments and corrections that were identified by the DCC Reporting Officer and/or by us through the deliberations process. These amendments are referenced in this report as being attributed to "cl.16". These amendments generally include:

- correction of typographical, grammatical and punctuation errors
- removing provisions that are duplicated
- clarification of provisions (for example adding 'gross floor area' or 'footprint' after building sizes)
- standardising repeated phrases and provisions, such as matters of discretion, assessment guidance, policy wording and performance standard headings
- adding missing hyper-linked references to relevant provisions (eg. performance standard headings in the activity status tables)
- correctly paraphrasing policy wording in assessment rules
- changes to improve plan usability, such as adding numbering to appendices and reformatting rules
- moving provisions from one part of the plan to another
- rephrasing plan content for clarity, with no change to the meaning

802. There was also an error when the 2GP was notified in that strategic directions objective 2.2.6 and policy 2.2.6.2 was referenced in the assessment of non-complying performance standard contraventions (Rule 9.7.2) in the Public Health and Safety chapter of the 2GP, although this objective and the related policies 2.2.6.1 and 2.2.6.2 were not notified with rest of the strategic direction objectives and policies.

803. This is purely a technical error, or oversight by DCC in that these provisions were already drafted and intended to be included as part of the strategic directions but were mistakenly not included. The inclusion of this objective and these policies is of minor effect because there are more specific objectives and policies in the Public Health and Safety chapter and management zones which cover the issues raised (health and safety) in this strategic direction objective and these policies. Therefore, Objective 2.2.6 and policies 2.2.6.1 and 2.2.6.2 in the strategic directions chapter of the 2GP has been added as a cl.16 amendment.

804. The Plan has also been updated to reflect legislative changes to how hazardous substances are managed under the Health and Safety at Work Act (HSWA) and Hazardous Substances and New Organisms Act (HSNO).

Appendix 1 – Amendments to the Notified 2GP (2015)

Please see www.2gp.dunedin.govt.nz/decisions for the marked-up version of the notified 2GP (2015). This shows changes to the notified 2GP with strike-through and underline formatting and includes related submission point references for the changes.

Appendix 2 – Hazard facility mapped area (*Liquigas Ltd OS906.1)*

Appendix 3 – Summary of Decisions

1. A summary of decisions on provisions discussed in this decision report (based on the submissions covered in this report) is below.

2. This summary table includes the following information:

    - Plan Section Number and Name (the section of the 2GP the provision is in)
    - Provision Type (the type of plan provision e.g. definition)
    - Provision number from notified and new number (decisions version)
    - Provision name (for definitions, activity status table rows, and performance standards)
    - Decision report section
    - Section 42A Report section
    - Decision
    - Submission point number reference for amendment

Summary of Decisions

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
1. Plan Overview and Introduction	Definition	1.5		Noise sensitive activities	Amend definition wording by adding additional activities	PHS 1046.2	3.5.1	5.1.2
1. Plan Overview and Introduction	Definition	1.5		Wastewater	Amend definition wording	PHS 360.196	3.9.1	5.1.4
1. Plan Overview and Introduction	Definition	1.5		Hazardous Sub-Facility	Amend the definition by removing the reference to the quantity limits performance standard	PHS 634.8	3.2.5	5.1.1
1. Plan Overview and Introduction	Definition	1.5		Ldn, LAeq, LAFmax (new)	Add new definitions for Ldn, LAeq and LAFmax (clarfication rather than substantive change)	PHS 917.17	3.7.3	5.1.5
1. Plan Overview and Introduction	Definition	1.5		dB, dBA, DnT,w +Ctr, LAEq, LAmax, Ldn, L10, NZS	Add new abbreviations for dB, dBA, DnT,w +Ctr, LAEq, LAmax, Ldn, L10 and NZS (clarfication rather than substantive change)	PHS 917.18	3.7.3	5.1.7
1. Plan Overview and Introduction	Definition	1.5		Notional Boundary	Amend definition wording	PHS 917.6	3.7.2	5.1.3
9. Public Health and Safety	Policy	2.2.5.2			Amend policy wording	PHS 908.7 and PHS 893.39	3.9.2	5.2.1

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
2. Strategic Directions	Policy	2.2.6.2 (new)			Amend policy wording to include reference to the new method of restricting sensitive activities in the new hazard facility mapped area (note the policy was added as a clause 16)	PHS 906.1	3.3.1	5.7.1
9. Public Health and Safety	Introduction	9.1		Public Health and Safety Introduction	Amend the introduction wording	PHS 634.55, PHS 1090.22, PHS 634.59, PHS 917.23, PHS 881.96	3.2.6	5.3.2
9. Public Health and Safety	Policy	9.2.1.4			Do not amend policy as requested	PHS 308.214	3.9.4	5.4.3
9. Public Health and Safety	Policy	9.2.1.5			Amend policy	PHS 308.464	3.9.3	5.4.2
9. Public Health and Safety	Policy	9.2.2.1			Do not amend as requested	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Policy	9.2.2.2			Amend policy wording	PHS 308.215	3.5.2	5.4.6
9. Public Health and Safety	Policy	9.2.2.4			Amend policy wording	PHS 634.14	3.8.1	5.4.8
9. Public Health and Safety	Policy	9.2.2.5			Do not amend as requested	PHS 308.477	3.9.5	5.4.4

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	Policy	9.2.2.6			Amend policy wording	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Policy	9.2.2.7			Amend policy wording	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Policy	9.2.2.8			Amend policy wording	PHS 919.17 and PHS 308.216	3.10.1	5.4.12
9. Public Health and Safety	Policy	9.2.2.11			Amend policy wording	PHS 634.17	3.2.4	5.4.14
9. Public Health and Safety	Policy	9.2.2.12			Do not amend as requested	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Policy	9.2.2.13			Amend policy wording	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Policy	9.2.2.15 (New)			Add policy linked to new performance standard for 'Location (hazard facility mapped area)'	PHS 906.1	3.3.1	5.4.15
9. Public Health and Safety	Objective	9.2.2			Do not amend as requested	PHS 308.477 and PHS 906.10	3.9.5	5.4.4
9. Public Health and Safety	Objective	9.2.2			Do not amend as requested	PHS 881.98	3.9.3	5.4.2

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	Performance Standard	9.3.1		Acoustic Insulation	Amend performance standard to clarify the rooms which must meet acoustic insulation standards	PHS 308.215, 807.16, 807.59, 881.101 and 881.102	3.5.3	5.5.3
9. Public Health and Safety	Land Use Performance Standard	9.3.2		Electrical Interference	Do not amend as requested	OS806.43, OS806.53	3.10.2	5.5.4
9. Public Health and Safety	Development Performance Standard	9.3.3		Fire fighting	Amend performance standard	PHS 945.24	3.10.3	5.5.5
9. Public Health and Safety	City Wide Performance Standard	9.3.4		Hazardous Substances Quantity Limits and Storage Requirements	Do not amend as requested	PHS 634.18	3.2.3	5.7.1
9. Public Health and Safety	City Wide Performance Standard	9.3.4		Hazardous Substances Quantity Limits and Storage Requirements	Amend the performance standard to clarify that the set back from the National Grid applies to hazardous substances 'with explosive or flammable properties'	PHS 634.19	3.2.4	5.7.1
9. Public Health and Safety	City Wide Performance Standard	9.3.4		Hazardous Substances Quantity Limits and Storage Requirements	Amend the performance standard to add exemptions to the standard	PHS 634.6, PHS 457.54, PHS 945.25 and PHS 1090.24	3.2.4	5.7.1

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	City Wide Performance Standard	9.3.4		Hazardous Substances Quantity Limits and Storage Requirements	Amend the performance standard so that it does not apply to the Port Zone or Industrial zones outside a hazard 2 and 3 (flood), hazard 2 (land instability), hazard 3 (alluvial fan) or hazard 3 (coastal) overlay zone	PHS 85.1	3.2.3	5.7.1
9. Public Health and Safety	City Wide Performance Standard	9.3.4		Hazardous Substances Quantity Limits and Storage Requirements	Delete Appendix A6.5 - Port Zone to reflect performance standard not applying to the Port Zone	PHS 85.1	3.2.3	5.7.1
9. Public Health and Safety	Land Use Performance Standard	9.3.5		Light spill	Amend performance standard (several amendments)	PHS 165.3, PHS 881.103, PHS 366.1	3.8.2	5.5.6
9. Public Health and Safety	Land Use Performance Standard	9.3.5		Light spill	Add new note to clarify types of lighting that will generally not meet the performance standard for Light Spill	PHS 366.1	3.8.2	5.5.6
9. Public Health and Safety	Performance Standard	9.3.6		Noise	Amend performance standard to change the night time (10pm to 7am) noise level in those parts of the Rural Zone that are within 350 metres of an Industrial Zone be changed from 40 to 45dB LAeq (15 min) and from 70 to 75 dB LAFmax, amending	PHS 807.18 and PHS 917.8	3.4 and 3.6	5.5.7

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
					the exception for noise generated by wind generators and by adding reference to noise standard NZS 6801:2008			
9. Public Health and Safety	Performance Standard	9.3.8 (New)	9.3.8	Location (hazard facility mapped area)	Add a new performance standard to restrict certain sensitive activities in a new 'hazard facility mapped area' (contravention becomes D)	PHS 906.1	3.3.1	5.6.1
9. Public Health and Safety	City Wide Performance Standard	9.3.4 & Table A6.1.1		Hazardous Substances Quantity Limits and Storage Requirements	Do not amend performance standard as requested	PHS 951.61 & PHS 1054.61	3.2.3	5.7.1
9. Public Health and Safety	Assessment of Restricted Discretionary Performance Standard Contraventions	9.4.3.2	9.5.3.2		Amend guidance to reflect change in Policy 9.2.2.7	PHS 308.477	3.9.5	5.4.4

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	Assessment of RD Performance Standard Contraventions	9.4.3.6	9.5.3.5		Do not amend as requested	OS806.43, OS806.53	3.10.2	5.5.4
9. Public Health and Safety	Assessment of Restricted Discretionary Performance Standard Contraventions	9.4.3.7	9.5.3.6		Amend guidance to reflect change in Policy 9.2.2.8	PHS 919.17 and PHS 308.216	3.10.1	5.4.12
9. Public Health and Safety	Assessment of Restricted Discretionary Performance Standard Contraventions	9.4.3.10	9.5.3.9		Amend guidance to reflect change in Policy 9.2.2.11	OS634.17	3.2.4	5.4.14
9. Public Health and Safety	Assessment of Restricted Discretionary Performance Standard Contraventions	9.4.3.10	9.5.3.9		Amend guidance to reflect change in Policy 9.2.2.13	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Assessment of Restricted Discretionary Performance Standard Contraventions	9.4.3	9.5.3		Amend guidance to reflect change in Policy 9.2.1.5	PHS 308.464	3.9.3	5.4.2

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	Assessment of Restricted Discretionary Activities	9.5.2	9.6.2		Amend guidance in 9.5.2.1 (intensive farming) and 9.5.2.5 (subdivision) to reflect change in Policy 9.2.2.7	PHS 308.477	3.9.5	5.4.4
. Public Health and Safety		9.6.2.1	9.7.2.1		Amend guidance to reflect change in policy 9.2.2.4	PHS 634.14	3.8.1	5.4.8
9. Public Health and Safety	Assessment of Discretionary Activities	9.6.3.1	9.7.3.1		Amend guidance to reflect change in Policy 9.2.2.6	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Assessment of Discretionary Activities	9.6.3.2	9.7.3.2		Do not amend as requested	PHS 796.19	3.12.1	5.4.4
9. Public Health and Safety	Assessment of Discretionary Activities	9.6.3.3 (New)	9.7.3.3		Add new guidance for sensitive activities that are D in a hazard facility mapped area	PHS 906.1	3.3.1	5.6.1
9. Public Health and Safety	Assessment of Discretionary Activities	9.6.3	9.7.3		Amend guidance in 9.6.3.1 (Mining) and 9.6.3.2 (Rural industry and Landfills) to reflect change in Policy 9.2.2.7	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Assessment of Restricted Discretionary Performance Standard Contraventions	9.6.4.1	9.7.4.1		Amend guidance to reflect change in Policy 9.2.2.2	PHS 308.215	3.12.1	5.4.6

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	Assessment of Discretionary Performance Standard Contraventions	9.6.4.3	9.7.4.3		Amend guidance to reflect change in Policy 9.2.2.7	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Assessment of Discretionary Performance Standard Contraventions	9.6.4.4	9.7.4.4		Amend guidance wording for contravention of performance standard for Noise	PHS 917.22	3.7.4	5.1.8
9. Public Health and Safety	Assessment of Discretionary Performance Standard Contraventions	9.6.4.5	9.7.4.5		Amend guidance to reflect change in policy 9.2.2.4	PHS 634.14	3.8.1	5.4.8
9. Public Health and Safety	Assessment of Discretionary Performance Standard Contraventions	9.6.4.6	9.7.4.6		Amend guidance to reflect change in Policy 9.2.2.6	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Assessment of Discretionary Performance Standard Contraventions	9.6.4.7 (New)	9.7.4.7		Add guidance for contravention of new performance standard for location (hazard facility mapped area)	PHS 906.1	3.3.1	5.6.1
9. Public Health and Safety	Assessment of Non-complying Performance Standard Contraventions	9.7.2.6	9.8.2.6		Amend guidance wording for contravention of performance standard for Noise	PHS 917.22	3.7.4	5.1.8

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
. Public Health and Safety		9.7.3.1	9.8.3.1		Amend guidance to reflect change in policy 9.2.2.4	PHS 634.14	3.8.1	5.4.8
9. Public Health and Safety	Assessment of Non-complying Activities	9.7.3.2	9.8.3.2		Add new guidance for sensitive activities that are NC in a hazard facility mapped area	PHS 906.1	3.3.1	5.6.1
9. Public Health and Safety	Special Information Requirement	9.8.2	9.9.2	Acoustic Insulation	Add new special information requirement to clarify information that must be supplied if not following the method outlined in Appendix 9A to achieve the performance standard for acoustic insulation	PHS 881.101	3.5.3	5.5.3
9. Public Health and Safety	Special Information Requirement	9.8	9.9		Do not amend as requested	PHS 308.225	3.12	5.5.9
9. Public Health and Safety	Subdivision Performance Standard	15.7.6.3		Shape	Amend performance standard to require waste disposal areas to be located at least 50m from Mean High Water Springs	PHS 1071.56	3.9.6	5.4.11
9. Public Health and Safety	Subdivision Performance Standard	16.7.5.3		Shape	Amend performance standard to require waste disposal areas to be located at least 50m from Mean High Water Springs	PHS 1071.56	3.9.6	5.4.11

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	Assessment of Controlled Activities	16.8.2.1			Amend guidance to reflect change in Policy 9.2.2.7	PHS 308.477	3.9.5	5.4.4
9. Public Health and Safety	Subdivision Performance Standard	17.7.6.3		Shape	Amend performance standard to require waste disposal areas to be located at least 50m from Mean High Water Springs	PHS 1071.56	3.9.6	5.4.11
18. Commercial Mixed Use Zones	Land Use Performance Standard	18.5.4.6		Location (hazard facility mapped area)	Add a new performance standard for Location (hazard facility mapped area) - links through to 9.3.8	PHS 906.1	3.3.1	5.6.1
9. Public Health and Safety	Subdivision Performance Standard	18.7.5.3		Shape	Amend performance standard to require waste disposal areas to be located at least 50m from Mean High Water Springs	PHS 1071.56	3.9.6	5.4.11
18. Commercial Mixed Use Zones	Assessment of Discretionary Performance Standard Contraventions	18.11.4.4	18.11.4.3		Add guidance for performance standard contravention of Location (hazard facility mapped area) linking to new guidance on assessing sensitive activities in the new hazard facility mapped area (link to section 9.6)	PHS 906.1	3.3.1	5.6.1

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
18. Commercial Mixed Use Zones	Assessment of NC Activities	18.12.3.10			Add link to new guidance for sensitive activities that are NC in a hazard facility mapped area (link to section 9.7)	PHS 906.1	3.3.1	5.6.1
9. Public Health and Safety	Subdivision Performance Standard	19.7.5.3		Shape	Amend performance standard to require waste disposal areas to be located at least 50m from Mean High Water Springs	PHS 1071.56	3.9.6	5.4.11
19. Industrial Zones	Assessment of Non-complying Activities	19.12.2.5	19.12.2.7		Add link to new guidance for sensitive activities that are NC in a hazard facility mapped area (link to section 9.7)	PHS 906.1	3.3.1	5.6.1
20. Recreation Zone	Activity Status	20.3.3		Community and Leisure - Large Scale and Early Childhood Education - small scale	Amend activity status table to add new performance standard Location (hazard facility mapped area) to Community and Leisure - Large Scale and Early Childhood Education - small scale	PHS 906.1	3.3.1	5.6.1
20. Recreation Zone	Land Use Performance Standard	20.5.9	delete		Add a new performance standard for Location (hazard facility mapped area) - links through to 9.3.8	PHS 906.1	3.3.1	5.6.1

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
20. Recreation Zone	Assessment of Discretionary Activities	20.11.2.2			Add guidance for ECE - large scale (a D activity) linking to new guidance on assessing sensitive activities in the new hazard facility mapped area (link to Section 9.6)	PHS 906.1	3.3.1	5.6.1
20. Recreation Zone	Assessment of Discretionary Performance Standard Contraventions	20.11.3.3	20.11.3.2		Add guidance for performance standard contravention of Location (hazard facility mapped area) linking to new guidance on assessing sensitive activities in the new hazard facility mapped area (link to section 9.6)	PHS 906.1	3.3.1	5.6.1
20. Recreation Zone	Assessment of Non-complying Activities	20.12.3.8	20.12.3.6		Add link to new guidance for sensitive activities that are NC in a hazard facility mapped area (link to section 9.7)	PHS 906.1	3.3.1	5.6.1
24. Dunedin International Airport	Land Use Performance Standard	24.5.3		Light spill	Amend performance standard (several amendments)	PHS 165.3, PHS 881.103, PHS 1088.28	3.8.2	5.5.6
30. Port	Activity Status	30.3.4.6	delete	Storage and use of hazardous substances	Amend activity status by deleting Rule 30.3.4.6 Storage and use of hazardous substances in the Port Zone	PHS 85.1	3.2.3	5.7.1

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
30. Port	Development Performance Standard	30.6.2	delete		Amend performance standard by deleting Rule 30.6.2 Hazardous Substances Quantity Limits and Storage Requirements in the Port Zone	PHS 85.1	3.2.3	5.7.1
30. Port	Assessment of Restricted Discretionary Performance Standard Contraventions	30.8.4.5	delete		Amend guidance by deleting Rule 30.8.4.5 Assessment of development performance standard contraventions - Hazardous substances quantity limits and storage requirements	PHS 85.1	3.2.3	5.7.1
32. Stadium	Assessment of Non-complying Activities	30.11.2.Y		In a hazard facility mapped area	Add link to new guidance for sensitive activities that are NC in a hazard facility mapped area (link to section 9.7)	PHS 906.1	3.3.1	5.6.1
30. Port	Assessment of Non-complying Performance Standard Contraventions	30.11.3.2			Amend guidance by deleting reference to hazardous substances quantity limits and storage requirements	PHS 85.1	3.2.3	5.7.1
32. Stadium	Activity Status	32.3.3		All other activities in the community activities category	Amend activity status table to add new performance standard Location (hazard facility mapped area) to 'all other activities in the community activities category'	PHS 906.1	3.3.1	5.6.1

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
32. Stadium	Land Use Performance Standard	32.5.7		Location (hazard facility mapped area)	Add a new performance standard for Location (hazard facility mapped area) - links through to 9.3.8	PHS 906.1	3.3.1	5.6.1
32. Stadium	Assessment of Discretionary Activities	32.10.2.X	32.10.2.2	In a hazard facility mapped area	Add guidance for Training and Education, Registered Health Practitioners, and Visitor Accommodation (D activities) linking to new guidance on assessing sensitive activities in the new hazard facility mapped area (link to Section 9.6)	PHS 906.1	3.3.1	5.6.1
32. Stadium	Assessment of Discretionary Performance Standard Contraventions	32.10.3.4		In a hazard facility mapped area	Add guidance for performance standard contravention of Location (hazard facility mapped area) linking to new guidance on assessing sensitive activities in the new hazard facility mapped area (link to section 9.6)	PHS 906.1	3.3.1	5.6.1
9. Public Health and Safety	Subdivision Performance Standard	34.7.5.3		Shape	Amend performance standard to require waste disposal areas to be located at least 50m from Mean High Water Springs	PHS 1071.56	3.9.6	5.4.11

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	Policy	New Policy under objective 9.2.2			Do add new policy as requested	PHS 881.100	3.9.3	5.4.2
9. Public Health and Safety	Development Performance Standard	Note 9.3.1A (new)		Acoustic Insulation	Add new Note 9.3.1A Other relevant District Plan provisions to refer to Rule 9.8.2 Special Information Requirements – Acoustic insulation	PHS 881.101	3.5.3	5.5.3
9. Public Health and Safety	City Wide Performance Standard	Table A6.3.3		Hazardous Substances Quantity Limits and Storage Requirements	Do not amend performance standard as requested	PHS 308.361 PHS 308.435	3.2.3	5.7.1
9. Public Health and Safety	Development Performance Standard			New performance standard for rainwater tanks	Do not amend as requested	PHS 491.6	3.10.4	5.5.10
9. Public Health and Safety	Note to Plan User			Note 8A.3.2A Other requirements outside the District Plan	Add a new advice note in the earthworks chapter relating to managing soil contamination	PHS 634.58	3.11.1	5.4.15
9. Public Health and Safety	Land Use Performance Standard			New hazard overlay	Do not amend as requested	PHS 634.88 and PHS 634.89	3.3.2	5.6.1

Plan Section	Provision Type	Provision number	New Number	Provision Name	Decision	Submission Point Reference	Decision Report Topic number	S42A Report Section Number
9. Public Health and Safety	Land Use Performance Standard			New Noise Control Area	Do not amend as requested	PHS 807.55	3.4	5.5.11