

IN THE MATTER OF

the Environment Canterbury
(Temporary Commissioners and
Improved Water Management Act)
2010 and the Resource
Management Act 1991

AND

IN THE MATTER OF

submissions and further
submissions by **Christchurch
International Airport Limited**

EVIDENCE OF FIONA ANNE AMBURY

INTRODUCTION

- 1 My name is Fiona Anne Ambury.
- 2 I hold a Bachelor of Engineering degree with honours in Natural Resources from the University of Canterbury. I have been employed as an Environmental Engineers at Pattle Delamore Partners for 12 years and my experience relates to on-site stormwater and wastewater treatment, management of hazardous substances, air assessments, as well as the preparation of assessments of environmental effects.
- 3 I have been involved in stormwater management at Christchurch Airport since I began with Pattle Delamore Partners (12 years ago). This has involved auditing sites for compliance with consent conditions, assessing stormwater and groundwater quality data at the Airport and preparing consent applications for stormwater discharges and the storage of hazardous substances.

- 4 A copy of my CV is attached to my evidence as Appendix A.
- 5 Although this is a Council hearing I have read the Expert Code of Conduct contained in the Environment Court's Practice Note 2011 and I agree to comply with it. I have prepared this evidence in accordance with the Practice Note.

SCOPE OF EVIDENCE

- 6 I have been engaged by Christchurch International Airport Ltd (CIAL) to prepare this evidence.
- 7 My evidence discusses, on the basis of my experience and expertise, the following specific plan provisions:

(i) Rules 5.7 and 5.9 and the requirement that the operators of existing on-site wastewater systems that were lawfully installed and new systems that are not located within the "Septic tank suitability – Area A" planning map to apply for a resource consent (noting that the soils within the Special Purpose Airport Zone have not been mapped and as a result the area is not included within the "Septic tank suitability – Area A").

(ii) Rule 5.29 and the requirement for a resource consent for an offal pit and the associated discharges if the site is not within the "Septic tank suitability - Area A" planning map.

(iii) Rule 5.72 and its conditions for the permitted discharge of stormwater to land and surface water. As notified, the plan suggests that if these cannot be met then the activity is classified as non-complying under Rule 5.73. CIAL has submitted that it would be more suitable for an activity to be considered discretionary if it cannot meet the permitted activity rules.

(iv) Policy 9.4.1 (b) of the Christchurch-West Melton Sub Regional Area and the use of best practicable options for

the treatment and disposal of stormwater, contaminants containing hazardous substances and other contaminants which are discharged onto land where it may enter groundwater. This policy is supported by CIAL;

- (v) Policy 9.4.1 (c) of the Christchurch-West Melton Sub Regional Area and a concern that CIAL has that this policy seeks to limit the land used for activities which involve the aggregation of large quantities of hazardous substances. The airport is required to store large quantities of fuel and other substances. .

POINTS OF SUBMISSION

Page 5-3 of the PLWRP Rule 5.7: The discharge of wastewater from an existing on-site wastewater treatment system onto or into land in circumstances where a contaminant may enter water

- 8 Rule 5.7 outlines the permitted activity conditions for the discharge from existing on-site wastewater systems. If an on-site wastewater system is performing well but is not within the "Septic tank suitability – Area A" then a retrospective resource consent is required. The "Septic tank suitability - Area A" planning map uses a Landcare soils map to identify areas of poorly drained soils located low permeable pans or rock, strongly sloping land (>15 degrees) and areas with high groundwater and excludes these areas from the "Septic tank suitability - Area A". Where areas have not been mapped, such as a large part of the land within the Special Purpose Airport Zone, it has been classified as outside of the "Septic tank suitability - Area A".
- 9 The area surrounding the CIAL land is included in the "Septic tank suitability - Area A". Given the soils across the airport land are generally similar to the type of surrounding soils shown on the Landcare map, I would consider that all of the airport land would meet the requirements for being included within the "Septic tank suitability - Area A".

- 10 The ECan submission and the Section 42A report recommend removing Condition 5, which references the “Septic tank suitability – Area A” planning map from Rule 5.7. The Section 42A report also recommends classifying all unmapped areas as being within the "Septic tank suitability - Area A".
- 11 I support the Section 42A report recommendations.

Page 5-9 of the PLWRP - Rule 5.29: The use of Land for an offal pit and the associated discharges onto or into land in circumstances where a contaminant may enter water.

- 12 As discussed in paragraph 7, I would consider that once the soils are mapped across CIAL’s land, the land would be within the "Septic tank suitability - Area A" planning map. The ECan submission has recommended removing reference to the "Septic tank suitability - Area A" planning map. In addition, the Section 42A report recommends including the unmapped areas within the Septic tank suitability – Area A”.
- 13 I support both the ECan submission and Section 42A report recommendation.

Page 5-17 of the PLWRP- Rule number 5.72 and 5.73: The discharge of stormwater into a river, lake, wetland or artificial watercourse or onto or into land in circumstances where a contaminant may enter water

- 14 A joint study undertaken with ECan and the Christchurch City Council found that the most appropriate method of stormwater management from the Special Purpose Airport Zone was to dispose of it to land. The same position was taken by the Environment Court in relation to the appeal of certain stormwater consents at Christchurch International Airport.
- 15 As a result CIAL currently holds a number of stormwater consents and will need to apply for additional stormwater consents in the future. Condition 2 of Rule 5.72 does not allow the discharge to be

from or onto potentially contaminated land. If a land parcel cannot meet this permitted activity condition, then it would be classified as a non-complying activity under Rule 5.73.

- 16 It is considered that this change from a permitted activity to a non-complying activity does not take into consideration the site management and design solutions available or the absence of adverse effects demonstrated by CIAL's long history of stormwater discharge without causing adverse effects.
- 17 The S42A report recommends Rule 5.73 be amended such that activities that cannot comply with all of the conditions of Rule 5.72 will be classified as discretionary. I support this change.

Page 9-2 of the PLWRP- Section 9 Christchurch-West Melton Sub Regional Area, Policy 9.4.1 (b)

- 18 CIAL supports the use of best practicable options for the treatment and disposal of stormwater, contaminants containing hazardous substances and other contaminants which are discharged onto land where it may enter groundwater.

Page 9.2 of the PLWRP- Section 9 Christchurch-West Melton Sub Regional Area, Policy 9.4.1 (c)

- 19 CIAL is concerned that this policy seeks to limit the land used for activities which involve the aggregation of large quantities of hazardous substances. Many activities need to store large quantities of hazardous substances and there are a number of design solutions to protect the environment in the event of a spill. The airport is required to store large quantities of fuel. In the Natural Resources Regional Plan there were special provisions in the hazardous substances rule for organisations that provide 'strategic infrastructure'.
- 20 In the NRRP, the Christchurch Groundwater Zone includes a provision for the airport by way of the subzone classification 1C. The NRRP gives the following reason for this:

“this zone recognises areas associated with the operational and functional needs of the Christchurch International Airport.”

- 21 Policy WQL17 (of the NRRP) covers the potential effects of activities in the Christchurch Groundwater Protection Zone 1C (Christchurch International Airport) and includes the following:

“Manage the adverse effects of activities in the Christchurch Groundwater Protection Zone 1C so that there is no significant increase in the effects of contamination of groundwater by avoiding or mitigating the adverse effects of activities that may result in contaminants entering and persisting in groundwater, and minimising effects of activities where contaminants will exist in groundwater for only a short period. In particular:

(3) Enable the Christchurch International Airport to continue to operate, function and expand to meet the community’s needs on:

(a) land which is zoned for such purposes (Special Purpose Airport) in the City of Christchurch District Plan; and

(b) land designated for Airport Purposes in the City of Christchurch District Plan; by

(c) recognising and providing for those activities provided for in Volume 3, Part 8, Rule 3.3.3 within the City of Christchurch District Plan in the Special Purpose(Airport) Zone, or undertaken by the requiring authority in accordance with the Airport Purposes designation within the City of Christchurch District Plan; but

(d) avoiding or mitigating the adverse effects on groundwater quality of any activities in these locations that potentially contaminate Christchurch groundwater.

(5) Any extension to existing hazardous facilities, or any new hazardous facility, must provide best management practice measures to avoid or mitigate the adverse effects of toxic, mobile or persistent contaminants entering groundwater as a result of:

(a) the routine use of a hazardous substance;”

- 22 In the reasons given for Policy 20 of the NRRP, the following rational is given for the groundwater protection subzones:

“Some land uses that may have an adverse effect on groundwater quality, including parts of the urban area of Christchurch, Christchurch International Airport, mineral extraction or excavation, and other regionally significant activities (e.g. state highways), are already well-established in Zones 1A, 1B, 1C and 1D. While these land uses may continue in these areas, the policies require that they must be, to the extent practicable, undertaken in a way that ensures that their effects do not compromise the groundwater quality in an adverse manner.

- 23 CIAL supports the approach in the NRRP and seeks the same acknowledgement in the PLWRP that it operates a regionally significant infrastructure and therefore there needs to be allowance for the aggregation of large quantities of hazardous substance for such sites in policy 9.4.1 (c).

CONCLUSION

- 24 The changes sought by CIAL to the PLWRP that I have presented will help ensure the on-going safe and efficient operation of the airport and in my opinion will still achieve a sustainable environmental outcome.

A handwritten signature in blue ink, appearing to read 'Fiona Ambury', is written on a light-colored rectangular background.

Fiona Ambury, 4/2/13

On behalf of Christchurch International Airport