Before the Independent Hearing Commissioners

Under	the Resource Management Act 1991
In the matter of	a hearing on submissions on the proposed Te Tai o Poutini Plan
	Topic: Rural Zone
	CMP Kokiri Limited
	Submitter number: 611

Evidence of Katharine Jones

18 March 2024

Submitter's solicitors: Sarah Eveleigh I Sarah Schulte Anderson Lloyd Level 3, 70 Gloucester Street, Christchurch 8013 PO Box 13831, Armagh, Christchurch 8141 DX Box WX10009 p + 64 3 379 0037 | f + 64 3 379 0039 sarah.eveleigh@al.nz I sarah.schulte@al.nz

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Introduction

- 1 My name is Katharine Jones.
- I hold a Bachelor of Science in Civil and Environmental Engineering, and I am a Chartered Member of Engineering New Zealand (CMEngNZ).
- 3 I have eleven years' experience, and I am currently employed as a Transport Engineer with GHD. I have held that position since 04 March 2024.
- 4 My previous work experience includes the design and project management of various minor transport projects, as well as reviewing existing road sites and plans to provide advice and recommendations with respect to mitigating any transport safety or operational issues that are present or may become present.
- I have prepared a transport safety assessment supporting the submission of CMP Kokiri Limited, trading as ANZCO Foods Kokiri Limited (ANZCO), on the proposed Te Tai o Poutini Plan (TTPP).
- 6 ANZCO owns and operates a meat processing plant located at RD1 Dobson-Arnold Valley Road, Arnold Valley 7872, legally described as Lots 1 and 2 DP 2134 (**Site**).
- 7 ANZCO seeks to rezone Rural to General Industrial, or similar zoning that provides for continued meat processing activities on the Site.
- 8 In preparing this evidence I have considered the following documents:
 - (a) High-Level summary of the existing transport environment [Refer attached Appendix 1: Memorandum – Existing transport environment]
 - (b) CAS (Crash Analysis System) output of crashes in the last 5-year period (2019-2024) [Refer attached Appendix 2: Crash Report_ANZCO.2024-03-05.09-37.xlsx]
 - (c) Te Tai o Poutini Plan the combined district plan for the West Coast [https://westcoast.isoplan.co.nz/eplan/rules/0/402/0/0/76]
 - (d) Google Maps and Street View [maps.google.com]

Code of Conduct for Expert Witnesses

9 While this is not a hearing before the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the

Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope of evidence

- 10 This evidence considers transport safety matters for the Site. This includes:
 - (a) Whether the Site and its activities contribute to any safety issues on the existing surrounding road network.
 - (b) Any recommendations for changes to the Site or Site access/es to improve safety on the existing roading network.

Location and Average Daily Traffic (ADT)

- The Site sits on land adjacent to Arnold Valley Road. The Site entrance is located via Blair Road approximately 55 metres from its intersection with Arnold Valley Road. An aerial view of the site is included in Figure 1, below. The Average Daily Traffic (ADT) of Arnold Valley Road is 1,131 vehicles per day (vpd) north of the site location and 754 vpd south of the site location. The heavy vehicle (HV) percentage is 18% north of site and 16% south of site. The ADT of Blair Road is 65 vpd, and the HV percentage is 24.2%.
- 12 Arnold Valley Road is classified as a Primary Collector, and Blair Road is classified as a Secondary Collector. Both roads are either within capacity or under capacity for their roadway classifications¹. This indicates that traffic volumes from any existing operations that are utilising and travelling through the network are able to be supported by the road network, based on current classifications and expected operational performance.

¹ https://www.nzta.govt.nz/assets/Road-Efficiency-Group/docs/functional-classification.pdf; accessed 15 March 2024.



Figure 1: Aerial Image of site. Source: GHD ArcGIS Enterprise

Roadway Characteristics and Environment

13 The intersection of Arnold Valley Road and Blair Road is relatively flat, with the approaches and departures to the intersection being on flat and straight sections of roadway. While sight visibility was not measured and quantified, there appears to be adequate visibility along both stretches of roadway and at the intersection itself. It is estimated from aerial images as being approximately 270m looking northbound and over 300m looking southbound. There is no streetlighting present at the intersection. The posted speed limit for Arnold Valley Road and Blair Road is 100 km/hr. There is a level rail crossing located approximately 5 metres from the intersection, and the rail line runs parallel to Arnold Valley Road adjacent to the Site. Upon inspection of the Grey District Council website², there are no plans to make any changes to either roadway in the near future that have been publicised.

Crash Data

14 Crash records from the Waka Kotahi Crash Analysis System (**CAS**) were requested for Arnold Valley Road/Lake Brunner Road from the intersection of State Highway 7 to the north and State Highway 73 to the south, a total

² https://www.greydc.govt.nz/04your-council/alerts; accessed 14 March 2024.

distance of approximately 53 kilometres. The data was requested for a 5year period from 2019 to 2024, and includes all Police reported crashes in CAS. In total, there were 41 crashes recorded that fell within the parameters. Of these crashes, one was fatal, five were serious injury, and the remaining crashes were minor injury or non-injury. The causes of these crashes include loss of control when turning, crossing centre line, and missed intersection.

15 Upon analysis, there were zero crashes recorded at the intersection of Arnold Valley Road and Blair Road and there were zero crashes recorded within one kilometre of the intersection. I consider that this indicates that there are no safety issues connected with movements directly in and out of the Site and the intersection. I consider that it is difficult to determine based on ADT and crash history alone whether ANZCO operations could be contributing to safety issues or crashes further down the network towards State Highway 7 or State Highway 73. However as there are no demonstrable safety effects near the Site, I consider that any effects of the Site on the surrounding road network would be likely be negligible or nil.

Minor Safety Issues and Recommendations

- I consider that the roadway characteristics and crash history mentioned above do not seem to reflect any major safety issues at the intersection or along both stretches of roadway that are adjacent to the Site. However, it is apparent to me from the layout, configuration, and scale that the current site is operating at, that it is an influential contributor to the traffic on the adjacent roadway. There will be associated transport effects due to the nature of current onsite activities and movement of vehicles, including heavy vehicles. It is my view that the nature of these current transport effects should be mitigated.
- 17 I have identified that installing lighting at the ANZCO site entrance would be one opportunity for improvement of the legibility and conspicuity of the access and any obstructions during hours of darkness. Flag lighting at the intersection of Arnold Valley Road and Blair Road is not deemed to be a requirement based on typical warrant criteria³; however, this would fall to the Grey District Council for consideration.

³ https://www.nzta.govt.nz/assets/resources/specification-and-guidelines-for-road-lighting-design/docs/m30road-lighting-design.pdf; accessed 15 March 2024.

18 I have not, as part of this brief, been able to assess the evidence of existing transport effects regarding vehicle tracking paths. It is my view that this should be undertaken prior to the hearing.

Future Development

- 19 Should ANZCO seek to expand operations at the Site beyond the proposed permitted standards, consideration should be given to TRN-P3 (relating to road and rail level crossings); TRN-P5 (relating to vehicle access sites adjacent to road/rail level crossings); and TRN-R1 (relating to the establishment of items such as vehicle crossings and parking spaces).
- 20 One section of particular note is TRN-R12 and the accompanying Table TRN 6 – High Trip Generating Activities. For activities of an industrial nature, the qualifier listed in Table TRN 6 is "5,000m² Gross Floor Area." There are assessment requirements that would need to be considered and actioned in order to gain approval from the Grey District Council. This includes a transport assessment "prepared by a suitably qualified and experienced transport specialist." I note that ANZCO seeking to include an exemption in these provisions for activities that are otherwise permitted in the plan.

Conclusion

- 21 While it is difficult to determine whether any of the recorded crashes directly involved operations tied to ANZCO, the presence of zero crashes at the intersection and within one kilometre of the intersection either side indicates that the Site itself and direct movements into and out of the Site are not contributing to any safety issues on the existing roading network. Some minor safety improvements, such as lighting at the Site entrance, are recommended and would improve safety on the existing roading network if implemented.
- If ANZCO plans to further develop the Site in the future beyond the proposed permitted activity and this triggers the "high trip generating" criteria for Industrial activities, the development would need to be assessed against the criteria stated in TRN S14 of the TTPP. This would include the preparation of a transport assessment by an appropriate professional that is reviewed and approved by the Grey District Council.

Dated 18 March 2024

Katharine Jones

Appendix 1 – Memorandum – Existing transport environment



Memorandum

Internal use only

5 March 2024

То	Amy Callaghan		
Copy to	Katharine Jones		
From	Christina Johansson	Tel	[Office phone]
Subject	ANZCO Kokiri District Plan Rezoning Submission	Project no.	[Project number]

Existing transport environment

Road classification

Arnold Valley Road

- ONRC: Primary Collector, ADT for Rural 1000 3000 vpd and 150 300 HVs
- Function: Primary Collector are locally important roads that provide a primary distributor/collector function, linking significant local economic areas or population areas

Blair Road

- ONRC: Secondary Collector, ADT for Rural 200 1000 vpd and 25 150 HVs
- Function: Secondary Collectors link local areas of population and economic sites. They may be the only route available to some places within this local area.

Lake Brunner Road

- ONRC: Primary Collector majority road length (Secondary Collector for short distance shown below)



Figure 1 Lake Brunner Road Secondary Collector for short distance

The Power of Commitment

Traffic Volumes

Arnold Valley Road

- Immediately north of site access: ADT 1,131 vpd and 18% HV (=204 HV) counted 19/07/2023
 - 1000 < <u>1131</u> < 3000 vpd adequate capacity for its classification
 - 150 < 204 < 300 HVs adequate capacity for its classification. Can accommodate up to 96 daily HVs - there
- Immediately south of site access: ADT 754 vpd and 16% HV (=121 HV) counted 19/07/2023de
 - <u>754</u> < 1000 < 3000 vpd under capacity for its classification
 - <u>121</u> < 150 < 300 HVs under capacity for its classification

Blair Road

- ADT 65 vpd and 24.2% heavy vehicles (= 16 HVs) counter 19/07/2023
 - <u>65</u> < 200 < 1000 vpd under capacity for its classification
 - <u>16</u> < 25 < 100 HVs under capacity for its classification

Road Characteristics

Arnold Valley / Blair Road site access intersection

The site is accessed via Arnold Valley Road onto Blair Road and required to pass a level crossing.

- Flat and straight alignment
- Good visibility in both directions for road and rail tracks (have not accurately measured this)



Figure 2 Approaching Arnold Valley Road (on Blair Road) leaving site



Figure 3 Looking to the right (north) on Blair Road to Arnold Valley Road



Figure 4 Looking to the left (south) on Blair Road to Arnold Valley Road

Arnold Valley Road / SH7 intersection

This is a key intersection at the northern end of Arnold Valley Road, which connects to SH7 to travel east / west. (Note sight visibility has not been accurately measured).

- Sight visibility to the east constrained due to road curvature approx. 145m distance
- Sight visibility to west constrained by road crest approx. 60m
- Down gradient on Arnold Valley Road as approaching SH7
- Very wide approach on Arnold Valley Road likely to accommodate heavy vehicles
- Short right turn bay on SH7



Figure 5 Looking left (west) on Arnold Valley Rd to SH7



Figure 6 Looking right (east) on Arnold Valley Rd to SH7

Lake Brunner Road / SH73 intersection

This is a key intersection at the southern end of Lake Brunner Road, which connects to SH73 where Google Maps indicates is the preferred route to/from Christchurch and ANZCO site. Note the sight visibility has not been accurately measured, and Google Street view does not provide the best positioning to understand the visibility.



Figure 7 Looking left (east) on Lake Bruner Road to SH73



Figure 8 Looking right (west) on Lake Bruner Road to SH73

Crashes

Arnold Valley / Blair site access

- 2015 - 2024 recorded no crashes in past 10 year period

Arnold Valley Road / SH7 intersection

 One crash (non injury) recorded in past 5 year period, located 250m west of intersection. This is not considered a factor of the intersection, thus not considered applicable and low risk.



Figure 9 Crash recorded on SH7 located 250m west of intersection

Arnold Valley Road / Lake Brunner Road

- 2019 2024 recorded 41 crashes along entire road which comprises Arnold Valley Road which starts at SH7 at the northern end and becomes Lake Brunner Road at Lake Brunner to the south at SH73.
- Only 3 crashes located north of site (minor and non-injury crashes)
- Remaining crashes located south of site (1 Fatal and 5 serious injury)



Figure 10 Crashes recorded north of site in past 5 year period



Figure 11 Crashes located south of site (circled in red)

Lake Brunner Road / SH73 intersection

 One crash (non injury) recorded in past 5 year period, located 750m west of intersection. This is not considered a factor of the intersection, thus not considered applicable and low risk.



Figure 12 Crashes recorded at SH73 / Lake Bruner Road located 750m west of intersection

District Plan

 With reference to Te Tai o Poutini Pan, consider the following items described in Part 2 TRN Transport section:

- Transport TRN-P3 & P5 relates to level crossings and ensuring safety of road users on approach ٠ to crossings.
- TRN R1 relates to permitted activity and new vehicle crossings, parking/loading spaces, queueing etc which must comply with identified standards.
- TRN R12 relates to restricted discretionary where expansion of existing activity that is high trip generating (listed in TRN 6 table below) which complies with assessment requirements in TRN S14

Table TRN 6 - High Trip Generating Activities		
Activity	Qualifier	
Childcare including preschool, kindergarten and play centre	25 children	
Education – Schools	30 students	
Education – Tertiary	150 FTE students	
Industrial	5,000m ² Gross Floor Area	
Mining and Quarrying	>30 heavy vehicle movements per day	
Warehousing and distribution	6,500m ² Gross Floor Area	
Healthcare	300m ² Gross Floor Area	
Office	2,000m ² Gross Floor Area	
Residential	20 residential sites / units	
Retail – Shops and supermarkets	250m ² Gross Floor Area	
Retail - Large Format and Bulk Goods	500m ² Gross Floor Area	
Service Stations	2 filling pumps	
Mixed use or other activities not otherwise listed in this Table	60 vehicle movements per day	

Appendix 2 – Crash report – see separate spreadsheet