

Introduction

1. My full name is Robert Campbell Officer. I am the National Services Manager for Allied Concrete Limited and AML Limited (together Allied Concrete). I am responsible for Allied Concrete's fleet, plant maintenance programme, aggregate supply agreements, and training and development programme.
2. I have been employed by Allied Concrete since 1998, and in the concrete industry since 1990. I have held a number of senior roles during my time with company including South Plant engineer (2000 – 2006), Southern Regional Manager (2001 – 2005), South Island General Manager (2005 – 2006) and General Manager (2006 – 2015).
3. I hold a Bachelor of Mineral Technology (Honours), I am a Registered Engineering Associate (Civil) and I am a member of the Institute of Directors. I am also:
 - a) A Council member of the New Zealand Ready Mixed Concrete Association (NZRMCA), now the Ready Mixed sector Group of Concrete New Zealand, for over 20 years
 - b) On the board of Cement and Concrete Association of New Zealand, now Concrete New Zealand, representing NZRMCA since 2007.
 - c) I am the board secretary for Concrete NZ
 - d) I was a director of Rangitikei Aggregates Limited, a joint venture company between Winstone Aggregates, Fulton Hogan and Allied Concrete from 2011 to 2018
4. As a result of almost 30 years in the ready mixed concrete industry I have a good understanding of:
 - a) The importance of secure, quality aggregate supply for the ready mixed concrete industry
 - b) The impact of transporting aggregate, both on cost and CO₂ emissions
 - c) The importance of the environment to our communities, customers and staff
 - d) The importance of road safety in our communities
5. I am authorised to provide this evidence on behalf of Allied Concrete

Aggregate Supply for Concrete

6. Every cubic metre of concrete requires approximately two tonnes of coarse aggregate and sand.

7. In the June 2019 Statistics New Zealand quarterly survey of Ready Mixed Concrete production (the most recent available) the annual Christchurch Metropolitan market was 458,950m³, requiring some 910,000 tonnes of sand and aggregate.
8. The quality of these aggregate materials is vital. Poor or inconsistent size gradings will result in concrete that is difficult to handle, place and finish – it may not be able to pumped into position for example.
9. Aggregate which is dirty, with adhering clay or similar materials, or which is itself weak may not meet strength requirements.
10. In either of these cases it is certain that cement demands will increase, resulting in higher costs and CO₂ emissions.
11. Quality concrete aggregates are the result of favourable source properties and rigorous manufacturing and quality control systems.
12. We have worked closely with Fulton Hogan over many years and they have demonstrated a commitment to industry leading manufacturing practices and quality control systems
13. It is acknowledged that the Roydon Quarry is not intended to directly supply aggregates for concrete. However, in the absence of Roydon Quarry the top course, base course and sub-base aggregate materials it is intended to supply will have to be sourced from other, existing quarries, such as Miner's Rd.
14. Miner's Rd Quarry currently supplies approximately one third of Allied Concrete's aggregate requirements in Christchurch; approximately 130,000 tonnes in the year to September.
15. We have confidence that if Roydon Quarry were not consented that, due to Fulton Hogan's manufacturing processes and commitment to quality, this will not result in any deterioration in product quality in the short term.
16. It will have a significant impact on the quarry life expectancy at Miner's Road and our medium to long term security of supply.

Impact of Transporting Aggregate

17. We have read Mr. Copeland's evidence. His analysis of Mr. English's data is consistent with our experience that the impact of transporting aggregates an additional 15km is around \$5 per tonne.
18. This has an impact of \$10 per cubic meter in ready mixed concrete or, potentially, some \$4.5 million for the Christchurch metropolitan market in the most recently reported year.

19. I have referred to Dale Cocker, General Manager of Specialised Transport for the HW Richardson Group. He states that the typical fuel burn for a HPMV truck and trailer unit transporting aggregates around Christchurch is 1 liter for every 1.6 – 1.8 km travelled. An additional 15km distance equates to 30km additional travel
20. According to drivingtests.co.nz website burning liter of diesel results in 2.68kg of CO₂ being emitted.
21. Moving the aggregate source 15km, will result in up to 50kg of additional CO₂ emissions for each delivery.
22. Transporting Allied Concrete's aggregate requirements impacted by this proposal an extra 15km distance could result in up to an additional 215,000kgs of CO₂ emissions annually.

Road Safety Impact

23. I note that the Roydon Quarry proposal includes for a substantial upgrade to the intersection of Jones and Dawsons roads.
24. This intersection was identified as Canterbury's most dangerous by the NZ Transport Agency as reported in a Stuff January 2018 article.
25. An Allied Concrete driver involved in a serious accident at this intersection in December 2015 has yet to return to full time duties as a result of injuries received.
26. We are very supportive of this initiative by Fulton Hogan and which we see as a continuation of their willingness to "do the right thing" by the communities in which they operate.

Dated 10 October 2019

Bob Officer
National Services Manager – Allied Concrete Limited