Before Independent Hearings Commissioners Appointed by Canterbury Regional Council and Selwyn District Council

In the matter of The Resource Management Act 1991

And

In the matter of Applications by Fulton Hogan Limited for all resource

consents necessary to establish, operate, maintain and close an aggregate quarry (**Roydon Quarry**) between Curraghs, Dawsons, Maddisons and Jones Roads,

Templeton

EVIDENCE OF JOHN KYLE ON BEHALF OF FULTON HOGAN LIMITED – PLANNING

DATED: 23 SEPTEMBER 2019

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Introduction

- 1 My name is John Clifford Kyle.
- I hold an honours degree in Regional Planning from Massey University, obtained in 1987. I am the Managing Director of the firm Mitchell Daysh Limited, which practices as a planning and environmental consultancy throughout New Zealand.
- I have been engaged in town and country planning and resource management for more than 30 years. My experience includes a mix of local authority and consultancy resource management work. Since 1994, I have been involved with providing consultancy advice with respect to regional and district plans, designations, resource consent applications, environmental management and environmental effects assessments. This work includes extensive experience with large-scale consenting projects involving inputs from multi-disciplinary teams. An outline of projects in which I have been called upon to provide resource management advice in recent times is included as **Appendix A**.
- In preparing for this hearing I have visited Templeton and the proposed quarry site.

 I have also visited some of Fulton Hogan's other quarry operations in Canterbury.

 I am familiar with quarry and other extractive activities, having had experience with various quarry proposals at other locations in New Zealand over a long period of time and through my work with Oceana Gold and Bathurst Resources.
- 5 In preparing this evidence I have reviewed:
 - (a) The applications and the associated technical reports that assist to make up the Assessment of Environmental Effects:
 - (b) The statements of evidence of all of the other witnesses giving evidence on behalf of Fulton Hogan;
 - (c) The Canterbury Regional Council s42A reports by Ms Goslin, Ms Ryan, Dr Scott, Mr Freeman, the associated memorandums by Mr Firth and Mr Just, and the legal advice provided to Ms Goslin by Ms de Latour and Ms Woods;
 - (d) The Selwyn District Council s42A reports by Mr Henderson, Mr Trevathan, Mr Carr, Mr Robertson and Mr Yeoman; and
 - (e) Submissions made with respect to the applications.
- Whilst I appreciate that this is not a case before the Environment Court, I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note

2014. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Scope of evidence

- 7 I was not involved in the preparation of the applications for Roydon Quarry.
- I was approached in July 2019 and asked by counsel for Fulton Hogan if I was able to prepare planning evidence in relation to the Roydon Quarry for this hearing. My brief includes:
 - (a) A brief overview of the resource consents required to enable the Roydon Quarry to establish and operate;
 - (b) Some comment on key matters raised in the s42A reports by Mr Henderson and Ms Goslin, as well as submissions;
 - (c) An assessment of the resource consent applications against the relevant statutory planning documents; and
 - (d) An assessment of the resource consent applications against the relevant sections of the Resource Management Act 1991 (**RMA**).
- 9 Mr Bligh has prepared evidence which provides an overview of the key potential effects of Roydon Quarry and how it is proposed that those effects are addressed in consent conditions.
- 10 I confirm that my evidence relates to the proposal known as Roydon Quarry as described in Chapter 4 of the Assessment of Environmental Effects dated November 2018 (AEE).

Resource Consent Applications

A detailed description of Roydon Quarry, the consents required to authorise the various activities and their status, is contained in the Golder Associates Statutory Assessment contained in Appendix K to the AEE (Golder Statutory Assessment). In the interests of brevity, I do not repeat that analysis here. However, I have set out below my precis of the key aspects of the resource consent applications.

Land Use Consent

- A new land use consent is sought to authorise Roydon Quarry and a detailed analysis of the relevant rules in the District Plan which apply to each aspect of the activity is contained in the Golder Statutory Assessment. The activities which trigger the need for the land use consent include:
 - (a) The quarrying activity itself, by virtue of it exceeding the permitted activity standards for land area and staff numbers for an activity which does not meet the District Plan definitions of rural activity or residential activity;
 - (b) The proposed earthworks involved in the quarry activity exceed permitted volumes for this site, and permitted limits on the height of the vertical cut face;
 - (c) The proposed maximum number of vehicle movements to and from the quarry exceed the permitted activity levels for arterial roads and local roads;
 - (d) The removal of contaminated soil or earth from the site for disposal at an authorised offsite facility (in the event it is unexpectedly discovered during extraction) is not covered by any permitted activity rule;
 - (e) The cleanfill that will be brought onsite and used for rehabilitation meets the definition of solid waste¹, and the volumes expected will not meet permitted activity threshold for disposal of solid waste to land (3m³/week), or quality in the case of material which is identified as not meeting the sites specified cleanfill acceptance criteria and is temporarily stored on site before being collected and taken elsewhere.
 - (f) The site bunds meet the SDP definition of building² and will be located within building setback areas at the boundary of the site;
 - (g) Proposed road improvements will result in carriageway widths wider than the maximum specified for a local road (7m), and a new heavy crossing which exceeds the design requirements for such a crossing in the Plan;

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Solid Waste: includes any material which is discarded as being spent, useless, worthless or in excess, and includes liquid or gaseous waste which is stored in containers

Building means any structure or part of any structure whether permanent, moveable or immoveable, but does not include any of the following:

Any scaffolding or falsework erected temporarily for maintenance or construction purposes.

Any fence or wall of up to 2m in height.

Any vehicle, trailer, tent, caravan or boat which is moveable and is not used as a place of storage, permanent accommodation or business (other than the business of hiring the facility for its intended use).

Any utility structure.

- (h) The proposed signage advertising the site entrance, and other signage which will be erected to state that unauthorised access is prohibited to the quarry site, will exceed the permitted activity thresholds for this area;
- (i) Diesel will be stored in volumes which exceed permitted activity limit for this type of hazardous substance on this site; and
- (j) Noise levels during the hours of 6am 7am and 7pm 10pm will exceed the SDP night-time noise standards at the notional boundary of various residences located within 250m of the site:
- When bundled together the activity status of the land use consent sought for the Roydon Quarry is discretionary. I note the s42A report of Mr Henderson reaches the same conclusion³.

Canterbury Regional Council Consents

- 14 A combination of new and existing regional resource consents will be relied upon to authorise the Roydon Quarry.
 - (a) A new land use consent is needed to excavate material over an unconfined or semiconfined aquifer as the excavation will occur within 50 m of a surface water body – being the water races which exist on site and meet the Regional Plan's definition of surface water body (being an artificial waterbody) ⁴ which exist on site;
 - (b) A new land use consent is needed to use land for the deposition of backfill over an unconfined or semi-confined aquifer (as part of site rehabilitation) as the deposition site will have been excavated more than 5m below the natural land surface;
 - (c) A new discharge permit is needed to discharge water collected in treatment ponds as the expected volume will exceed the permitted activity volumes (10 m³/day), and to discharge water collected from the interceptor system which captures contaminants from the wash down of vehicles and machinery, and hard stand surfaces used for refuelling portable tankers and parking of machinery;

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³ Mr Henderson, paragraph 23.

Surface water body - means water above the ground surface and within a lake, river, artificial watercourse or wetland, but does not include water in the sea, snow or rain or water vapour in the air. When a distance to a surface water body is being considered, it means the distance to the bed of a lake, river, artificial watercourse or to the boundary of a wetland (see wetland boundary definition)

- (d) A new discharge permit is needed to discharge stormwater to land from the site, because it is listed on the Regional Council's LLUR as a HAIL site⁵:
- (e) A new discharge permit is sought associated with the deposition of cleanfill material for site rehabilitation – this covers off the discharge of cleanfill and any discharge of contaminants from within this material, which may in turn enter water;
- (f) A new discharge to air permit is needed because the rate of material handling onsite will exceed permitted activity limits (100 tonnes per hour), and discharges will occur within 200m of sensitive activities⁶; and
- (g) A new consent is needed to use water for dust suppression and other ancillary activities.⁷
- The rationale for each consent and relevant rule is described clearly in Section 3 of the Golder Statutory Assessment. Overall the consents sought are a discretionary activity. I note that the s42A report of Ms Goslin agrees with this analysis.⁸
- I note the application documents sought a change to the conditions of CRC182422 under s127 of the RMA so it also authorised the use of that water for the quarry activities. It was subsequently agreed with CRC that the new use of this water is better authorised by a new consent, rather than a change to the conditions of CRC182422, hence the application is now restricted to seeking a new resource consent to use water. There is therefore no application before the Panel to take water and in my opinion the abstraction of water to the full extent authorised by CRC182422 forms part of the existing environment against which the effects of these consent applications are to be assessed. I note the memorandum from Ms de Latour and Ms Woods in Appendix 4 of Ms Goslin's s42A report reaches the same conclusion.9

Commencement, Lapse and Term of Consent

An unlimited term of consent and standard lapse date of five years has been sought for all the resource consents sought for Roydon Quarry from the SDC. I consider

Listed Land Use Register - Environment Canterbury identify sites to be listed on the LLUR based on MfE's HAIL list.

Sensitive activities include the area within 20m of the façade of an occupied dwelling.

Fulton Hogan holds an existing resource consent to take and use groundwater from an existing bore onsite for irrigation (CRC182422, Granted 6 November 2017, Expires 1 July 2032).

⁸ Section 3 of the WRC Section 42A report

At paragraph 16.

this to be appropriate as the land use activities will be permanent modifications to the environment.

An unlimited consent duration is sought for all land use consents, and a consent duration of 35 years is sought for the discharge permits from CRC. The proposed expiry date for the resource consent to use water is 1 July 2032, which is the same expiry date as the existing water permit under which that water will be abstracted (CRC182422).

Effects and the Permitted Baseline

- The panel will be aware that section 104(2) of the RMA affords a consent authority discretion to disregard a potential adverse effect of allowing an activity if the relevant plan permits an activity with that effect.
- In my view none of the activities permitted in the Inner Plains Zone would be sufficiently similar in character, scale or effects to the proposed quarry to warrant applying a permitted baseline in this instance. I note that both Mr Henderson and Ms Goslin agree with this analysis.¹⁰

Matters Raised in the s42a Report and Submissions

- A summary of the issues raised by submitters is provided in the s42A reports of Mr Henderson¹¹ and Ms Goslin¹².
- 22 I agree with that summary.
- The only submission which directly raises a matter on the planning documents is a submission Brackenridge Services Limited (Brackenridge) which opposes the application in its entirety and considers "extraction or quarrying of material" is not an industrial or trade process and therefore the site is unable to be considered an industrial or trade premise. I agree with Ms Goslin that this is an incorrect interpretation, and that quarrying does fall within the definition of industrial and trade premise. ¹³
- 24 The other submissions raise various concerns with the effects of the project, and I have considered them when addressing the relevance of the various statutory planning documents to this proposal.

Mr Henderson paragraph 61; Ms Goslin paragraph 164.

¹¹ Mr Henderson paragraph 31 – 33.

¹² Ms Goslin paragraphs 33 – 37.

¹³ Ms Goslin paragraphs 149 – 152.

Statutory Planning Assessment

- 25 The relevant planning documents are set out in the AEE, the Golder Associates Statutory Assessment, and the s42A reports of Mr Henderson and Ms Goslin. They include:
 - (a) Resource Management (National Environmental Standard for Air Quality)Regulations 2004 (NES Air Quality);
 - (b) Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011:
 - (c) Resource Management (National Environmental Standard for Sources of Human Drinking Water) Regulations 2007;
 - (d) Resource Management (Measurement and Reporting of Water Takes) Regulations 2010;
 - (e) The National Policy Statement for Freshwater Management 2014 (NPSFW);
 - (f) The Canterbury Regional Policy Statement (RPS);
 - (g) The Selwyn District Plan (SDP);
 - (h) The Canterbury Land and Water Regional Plan (LWRP);
 - (i) Waimakariri River Regional Plan 2004;
 - (j) The Canterbury Air Regional Plan (Air Plan)
 - (k) The Mahaanui lwi Management Plan 2013 (IMP);
 - (I) Te Waihora Joint Managements Plan (Mahere Tukutahi o Te Waihora) 2005 (**JMP**);
 - (m) Te Runanga O Ngāi Tahu Freshwater Policy Statement 1999 (FPS)
- In the following sections I include a summary of my key conclusions on the relevance of the various planning documents based on my review of those documents, my understanding of the proposal and its effects, and my review of submissions. I also address any areas of disagreement with the reporting officer. Rather than repeat large tracts of material already referred to in the Golder Statutory Assessment and Mr Henderson and Ms Goslin's s42A reports I have cross referred to it.

Resource Management (National Environmental Standard for Air Quality) Regulations 2004

- Regulation 13(1) and Schedule 1 of the NESAQ specify ambient air quality standards for PM₁₀ which apply at all locations around the proposed quarry site. I note Ms Ryan considered that at the time of drafting her s42A report there was not enough information available to be conclusive that the NESAQ ambient air quality standard for PM₁₀ would not be exceeded, particularly given the relatively high ambient PM₁₀ concentrations that have been recorded in some locations during northeast wind conditions.¹⁴ Mr Cudmore has built on the information provided in the application documents and includes a more detailed assessment of effects on 24 hr PM₁₀ in his evidence.¹⁵ Based on that assessment Mr Cudmore concludes that given the quarry design, relatively small size of the working area and dust controls proposed, it is highly likely that the NES target for 24 hour PM₁₀ of 50 µg/m³ will be met.¹⁶
- The land immediately to the east of the quarry site is located within the gazetted Christchurch airshed which is 'a polluted airshed' when assessed against the criteria in Regulation 17(4)(a). I therefore agree with Ms Goslin that Regulation 17(1) and 17(3) also apply when considering the effects of the proposed quarry on air quality in this airshed. They state:

17 Certain applications must be declined unless other PM10 discharges reduced

- (1) A consent authority must decline an application for a resource consent (the proposed consent) to discharge PM10 if the discharge to be expressly allowed by the consent would be likely, at any time, to increase the concentration of PM10 (calculated as a 24-hour mean under Schedule 1) by more than 2.5 micrograms per cubic metre in any part of a polluted airshed other than the site on which the consent would be exercised ...
- 3) Subclause (1) also does not apply if—
 - (a) the consent authority is satisfied that the applicant can reduce the PM₁₀ discharged from another source or sources into each polluted airshed to which subclause (1) applies by the

Ms Ryan, paragraph 68.

¹⁵ Mr Cudmore, paragraph 119 – 120.

¹⁶ Mr Cudmore, paragraph 132.1.

same or a greater amount than the amount likely to be discharged into the relevant airshed by the discharge to be expressly allowed by the proposed consent; and

- (b) the consent authority, if it intends to grant the proposed consent, includes conditions in the consent that require the reduction or reductions to take effect within 12 months after the consent is granted and to then be effective for the remaining duration of the consent.
- The language I have highlighted in Regulation 17(1) is important. Satisfying it does not require there be no possibility of particulate matter from the quarry increasing the concentration of PM₁₀ (calculated as a 24-hour mean under Schedule 1) by more than 2.5 μg/m³. But it does require such an event to be unlikely, at any time. In that respect I disagree with Ms Goslin's s42A report where it states [emphasis added]:

"I consider that for the air discharge permit to be granted, the Hearings Panel must be satisfied that the applicant has demonstrated the discharge **will not cause** an increase of PM_{10} (calculated as a 24-hour mean under Schedule 1 of the NESAQ) of more than $2.5\mu/m^3$." ¹⁷

I also do not agree with the following passage from Ms Ryan's evidence which seems to inform Ms Goslin's analysis that the application does not meet Regulation 17(1). This analysis does not address the relative probability of an event of concern occurring, nor does it seem to account for the extensive mitigation proposed:

"In my view, there is a possibility that PM_{10} concentrations could be impacted within the airshed to a level where the increase is more than the 2.5 μ g/m³ as a 24-hour average allowable under the NESAQ, at least at sometime within the life of the consent. For example, an impact of this level, could conceivably occur when bund construction is occurring along the boundary with the airshed particularly if a high wind event occurred during construction and bund materials dried out". 18

¹⁷ Ms Goslin, paragraph 105.

Ms Ryan, paragraph 76.

- 31 Mr Cudmore has provided a detailed assessment of the likelihood the proposed activity will cause an increase of PM₁₀ (calculated as a 24-hour mean under Schedule 1 of the NESAQ) to determine whether an increase in excess of 2.5µ/m³ is likely In doing so, he analyses the proposed mitigation and its likely effectiveness in managing the possibility of potentially problematic dust events of the type highlighted by Ms Ryan. He also quantifies the extent to which such emissions will likely occur across the range of prevalent wind spectra. As a result of that analysis Mr Cudmore reaches the conclusion that it is likely the Regulation 17(1) limit will be achieved.¹⁹
- Close and careful management of the effects of dust underpins Mr Cudmore's conclusion in this regard, particularly in northwest wind conditions. Comprehensive monitoring will also be important to assist in detecting any potential effects of concern in a suitably timely way. Robust and effective conditions are critical in this regard. Mr Cudmore²⁰ and Mr Bligh²¹ have outlined that they consider the proposed conditions are suitably robust and will be effective in that context. I agree that the conditions are fit for purpose and have been structured to be effective.
- Therefore, based on Mr Cudmore's evidence, it is my opinion that neither Regulation 13, nor Regulation 17(1) presents a barrier to granting consent.

The Regional Policy Statement

- The RPS became operative on 15 January 2013. It has been revised since, in 2015²², 2016²³ and 2017²⁴, however none of those revisions addresses matters of much relevance to this activity. Therefore, the key RPS provisions have been in place since 2013.
- The Air Plan and the Land and Water Plan were both made operative in 2017 and postdate the sections of the RPS which address matters relevant to those documents. The Air Plan and Land and Water Plan both give effect to the RPS and contain relatively complete and recent coverage of the key issues at hand, including matters relating to ambient air quality which are identified by Ms Goslin and Ms Ryan. I consider the Air Plan and Land and Water Plan contain the most relevant planning matters when considering the regional council issues, and that it

¹⁹ Mr Cudmore, paragraph 123.

²⁰ Mr Cudmore, paragraph 83 - 88.

Mr Bligh, paragraph 7.5 - 7.7.

Relating to territorial authorities managing development in urban areas located within high hazard areas, management of coastal hazards, and providing for repair, rebuild and reconfiguration of Lyttelton Port and the redevelopment of Dampier Bay.

Relating to management of the Coastal Marine Area.

Relating to the Cranford Regeneration Plan.

is not necessary to address the RPS provisions any further in respect of those regional council issues.

I understand there are large parts of the District Plan that have not changed since 2004 when decisions on submissions were released. As I describe later, the District Plan requires a broad range of effects-based matters to be considered and accounted for in assessing this project, and it has considerable utility in the way that it informs this decision-making process. While the District Plan has been subject to numerous changes since that time, I am not aware of any comprehensive review by the District Council of whether it gives effect to the RPS. I understand a formal review of the District Plan has commenced, but I have no knowledge of how well progressed that review is, or any outcomes being contemplated which may differ from those in the current document. Therefore, in my view it is necessary to consider the RPS provisions which address district planning matters which are relevant to the circumstances of this application.

37 Those provisions are contained in:

- (a) Chapters 5 and 6 addressing land use, development and infrastructure related matters; and
- (b) Chapters 15, 17 and 18 which address landscape, soils, contaminated land and hazardous substances respectively.
- The provisions of Chapter 6 (Recovery and Rebuilding of Greater Christchurch) take precedence over those in Chapter 5 in the area in which Roydon Quarry is proposed.
- There are no provisions in Chapter 6 which directly address quarrying or rural activities and their place in the spatial planning of the Greater Christchurch area²⁵. The focus of the chapter is on managing urban development in Greater Christchurch, and provision of infrastructure.
- With respect to managing urban development, Chapter 6 contains a high degree of prescription on where urban development should locate, including residential, rural residential and business development. Of relevance here Chapter 6 does not contemplate new urban development at the quarry site or in its immediate surrounds. In that regard, the Panel will see in Policy 6.3.1, Policy 6.3.7 and Map A, that no provision is made for Templeton to expand beyond its current boundary, nor is it earmarked for more intensive development as a Key Activity Centre. Because the immediate area is affected by the 50 dBA L_{dn} air noise contour for

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The RPS explicitly includes quarrying in its definition of rural activities.

Christchurch Airport more intensive rural residential development of the area is also not contemplated. Therefore, in my view establishing a quarry in this location does not conflict with the RPS direction for urban development in Greater Christchurch.

With respect to infrastructure, the impacts on the road network are most relevant when considering the quarry, and Policy 5.3.7, Policy 5.3.8, Objective 6.2.1(9) and (10), and Policy 6.3.4 and Policy 6.3.5 contain the most relevant planning direction. Of note are Policy 5.3.7, Objective 6.2.1(10) and Policy 6.3.5(4) which are particularly directive, and which apply to Main South Road and that part of Jones Road located to the west of the quarry site which meet the RPS definition of Strategic Infrastructure²⁶. The directive aspects of those provisions being [emphasis added]:

5.3.7 Strategic land transport network and arterial roads (Entire Region)

In relation to strategic land transport network and arterial roads, the **avoidance of development which**:

1. adversely affects the safe efficient and effective functioning of this network and these roads, including the ability of this infrastructure to support freight and passenger transport services....

Objective 6.2.1 Recovery framework

Recovery, rebuilding and development are enabled within Greater Christchurch through a land use and infrastructure framework that ...

10. achieves development that does not adversely affect the efficient operation, use, development, appropriate upgrade, and future planning of strategic infrastructure and freight hubs;

Policy 6.3.5 Integration of land use and infrastructure

STRATEGIC INFRASTRUCTURE means those necessary facilities, services and installations which are of greater than local importance, and can include infrastructure that is nationally significant. The following are examples of strategic infrastructure ... Strategic transport networks.

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Recovery of Greater Christchurch is to be assisted by the integration of land use development with infrastructure by:...

- 4. Only providing for new development that does not affect the efficient operation, use, development, appropriate upgrading and safety of existing strategic infrastructure...; and
- 5. Managing the effects of land use activities on infrastructure, including avoiding activities that have the potential to limit the efficient and effective, provision, operation, maintenance or upgrade of strategic infrastructure and freight hubs.
- I acknowledge Mr Carr's concern regarding the potential queuing of vehicles on State Highway 1,²⁷ and agree with Mr Henderson's s42A report that queuing in a manner where it affected the safe and efficient operation of State Highway 1 would be inconsistent with Policy 5.3.7(1), Objective 6.2.1(10), Policy 6.3.4(4) or Policy 6.3.5(5).²⁸
- 43 Mr Metherell has provided detailed additional analysis of this queuing issue in his evidence. Based on that further analysis, Mr Metherall²⁹ (which is supported by the evidence of Mr Kelly³⁰) concludes that:
 - (a) The proposed mitigation improves the overall road safety performance of the arterial road network at Dawsons Road adjacent to the railway;
 - (b) The effect on the efficient and safe operation of the SH1 roundabout at Dawsons Road with the proposed quarry development (including mitigation) in place, is not readily discernible when compared with that expected without the quarry development;
 - (c) Queue monitoring and, if necessary, implementing queue warning signage would be a method to ensure any potential remaining safety effect is avoided; and

Mr Carr, paragraph 107 - 108.

Mr Henderson paragraph 137.

²⁹ Mr Metherell paragraph 161.

Mr Kelly, paragraphs 17 – 25.

- (d) The quarry development will not adversely affect the safe, efficient and effective functioning of the strategic transport network.
- Based on these conclusions it is my opinion that the proposal is consistent with meeting the outcomes set out in Policy 5.3.7(1), Objective 6.2.1(10), Policy 6.3.4(4) and Policy 6.3.5(5).
- The provisions in Chapters 15, 17 and 18 address soils, contaminated land and hazardous substances. I agree with the analysis in the Golder Statutory Assessment, Mr Henderson's s42A report³¹ and Ms Goslin's s42A report³² that the proposed activity is consistent with the direction in these provisions.
- 46 Given the above, in my view the key matters arising from the RPS insofar as these consent applications are concerned are:
 - (a) The provisions addressing Regional Council matters have been given effect to in a more detailed way by the Air Plan and Land and Water Plan and need not be considered further:
 - (b) Chapters 5 and 6 contain the RPS provisions most relevant to whether the quarry is an appropriate land use on this site;
 - (c) Establishing a quarry in this location does not conflict with the RPS direction for urban development in Greater Christchurch;
 - (d) Chapters 5 and 6 contain a number of directive provisions to avoid development which adversely affects the safe efficient and effective functioning of Main South Road and that part of Jones Road located to the west of the quarry site;
 - (e) Based on the conclusions of Messrs Metherall and Kelly it is my opinion that the proposal is consistent with meeting the outcomes set out in these Chapters insofar as transportation matters are concerned; and
 - (f) In my assessment, there are no other particularly directive policies in the RPS which represent a potential policy hurdle for the consent applications.

The Canterbury Land and Water Regional Plan

47 As set out in paragraph 16 the abstraction of water under CRC182422 forms part of the existing environment, and the annual volume of water that can be taken

Mr Henderson paragraph 136 – 137.

Ms Goslin paragraph 433 – 439.

under CRC182422 is not a matter that is relevant to determining the applications before the panel.

What is at issue here is the use of the water which has been abstracted under CRC182422. This water is required for dust suppression, and other ancillary activities within the proposed quarry. When considering the use aspect of the activity the most relevant provisions are Objective 3.9, Objective 3.10, Policy 4.65, Policy 4.69 and Policy 11.4.26 which state:

Objective 3.9

Abstracted water is shown to be necessary and reasonable for its intended use and any water that is abstracted is used efficiently.

Objective 3.10

Water is available for sustainable abstraction or use to support social and economic activities and social and economic benefits are maximised by the efficient storage, distribution and use of the water made available within the allocation limits or management regimes which are set in this Plan.

Policies

- 4.65 The rate, volume and seasonal duration for which water may be taken will be reasonable for the intended use.
- 4.69 Systems to convey or apply fresh water are designed to maximise efficient use of water, including the improvement over time of existing systems, taking into account:
 - a. practicable options to implement any change to existing systems; and
 - the benefits and costs of achieving a higher level of efficiency.

11.4.26

Only reallocate water to existing resource consent holders at a rate and volume that reflects:

- for irrigation takes, reasonable use as calculated in accordance with Schedule 10; and
- b. for other takes, despite Policy 4.50(b)(i), an amount of water that is reasonable and demonstrates efficient use of water for the particular end use.
- Mr Van Nieuwkerk has used a purpose-built water balance model to calculate what is a reasonable and efficient use of water for the proposed quarry activity. That method accounts for future climate change effects in accordance with recognised MfE guidance documents. Using that method Mr Mr Van Nieuwkerk has arrived at an annual volume of 112,375 m³ per annum. I note this is less than the 170,483 m³ per annum Mr Van Nieuwkerk has calculated would represent efficient use if Schedule 10 were applied to the currently consented take and use of water for irrigation purposes on site.
- The updated consent conditions attached to Mr Bligh's evidence restrict annual water use to 112,375 m³ and in my opinion granting consent to use water in accordance with those conditions is consistent with achieving Objective 3.9, Objective 3.10, Policy 4.65, Policy 4.69 and Policy 11.4.26.
- I disagree with the comment in Ms Goslin's s42A report that 'Policies 4.64 and 4.66 also require the calculation of an annual volume in accordance with Schedule 10'.
- None of the circumstances which Policy 4.64 lists as triggering imposition of a maximum seasonal volume in accordance with Schedule 10 applies here³³ so it has no relevance. I also observe that:
 - (a) Policy 11.4.26 set out above is clear that for takes that are not irrigation an alternative method of determining reasonable use is contemplated;
 - (b) Policy 4.66 applies only to 'water abstracted for irrigation ...";

Those circumstances being when the following occur:

a. resource consent conditions are changed in accordance with Section 127 of the RMA;

b. water permits are transferred;

c. existing resource consents to abstract water expire and are replaced; or

d. the consent authority determines that a review of consent conditions is required to impose seasonal or annual volumes in a catchment.

(c) The introductory text in Schedule 10 itself states the following [emphasis added]:

Schedule 10 Reasonable Use Test

This Schedule only applies to the activity of using water for irrigation purposes, and does not apply to wastes that are discharged to land under an authorised discharge permit. Such discharges will be subject to the relevant policy provisions and rules set out in Section 5.

(d) The proposed use is not irrigation which is defined in the LWRP as

"the application of water to land for the purpose of assisting the production of vegetation or stock on that land, other than by naturally occurring rainfall, springs or rainfall run-off."

- In my opinion the Golder Statutory Assessment and Officers Report have identified the relevant LWRP provisions when considering the various land use and discharge permits sought, and the associated submission concerns regarding the potential contamination of groundwater.
- They include the following provision which speaks directly to the quarry activity [emphasis added]:
 - 4.94 Enable the extraction of gravel from land, provided adverse effects on groundwater quality are minimised and remediation is undertaken to minimise any ongoing risk of groundwater contamination.
- The words I have emphasised in the Policy 4.94 are important in my view, in that they create definitive "bottom lines" that must be satisfied.
- There is no threshold of acceptable effect in the policy to minimise adverse effects on groundwater, so I interpret it to mean effects should be reduced to the smallest possible amount or degree. The AEE, Mr Van Nieuwkerk³⁴ and Mr Bligh³⁵ outline

Mr Van Nieuwkerk, paragraph 125 - 141.

Mr Bligh, paragraph 7.8 – 7.9.

the various means that will be utilised to achieve this,³⁶ and on that basis it in my opinion the application is consistent with Policy 4.94.

- With respect to Dr Scott's concern³⁷ that certain intensive activities³⁸ should be avoided at the site following rehabilitation, I note Mr Mthamo³⁹ and Mr Bligh's⁴⁰ observations that the rehabilitated site will either be unsuited to these activities, or would need to obtain a resource consent to authorise them which would allow potential effects on groundwater quality to be assessed. For those reasons I disagree with Ms Goslin⁴¹ that a covenant preventing the activities of concern from occurring on the post rehabilitated site is needed.
- Also, relevant when considering potential effects on groundwater quality and neighbouring groundwater users are the following policies:
 - 4.7 Resource consents for new or existing activities will not be granted if the granting would cause a water quality or quantity limit set in Sections 6 to 15 to be breached ...
 - 4.19 The discharge of contaminants to groundwater from earthworks, excavation, waste collection or disposal sites and contaminated land is avoided or minimised by ensuring that:
 - a. activities are sited, designed and managed to avoid the contamination of groundwater...
 - 4.23 Any water source used for drinking-water supply is protected from any discharge of contaminants that may have any actual or potential adverse effect on the quality of the drinking-water supply including its taste, clarity and smell and community drinking water supplies are protected so that they align with the CWMS drinking-water targets and meet the drinkingwater standards for New Zealand.

Including the selection of a site outside of groundwater protection areas, the pit design, maintaining 1m between the quarry pit floor and maximum seasonal high groundwater levels, and operational controls on the acceptance of cleanfill.

Dr Scott, paragraph 51.

These include: Intensively farmed stock (defined by the CLWRP as cattle or deer grazed on irrigated land or contained for break-feeding of winter feed crops, dairy cattle, including cows, whether dry or milking, and whether on irrigated land or not; or farmed pigs); and wastewater discharges (application of effluent).

³⁹ Mr Mthamo, paragraph 41 – 49 and 102.3.

⁴⁰ Mr Bligh, paragraph 7.10.

Ms Goslin, paragraph 305 and 306.

- I agree with Ms Goslin that the relevant limits for Policy 4.7 are those in Table 11m.
- The consensus view of the groundwater scientists commissioned by the applicant and council⁴² is that the risk of breaching any limits in Table 11m is low, and on that basis I agree with Ms Goslin's Officer's report that Policy 4.7 does not represent a barrier to granting these consents.
- In my opinion the proposed approach to managing effects on groundwater, which focusses on avoiding those effects in the first place, 43 sits comfortably with Policy 4.19, and I note Ms Goslin shares this view.44
- Ms Goslin expresses the view that the proposal is inconsistent with Policy 4.23 on the basis of Dr Scott's conclusion that the activity is likely to cause localised changes to the aesthetic quality of groundwater below the site and immediately downgradient. Mr Van Nieuwkerk disagrees that it is 'likely' such effects would be experienced and has described why he considers the effect unlikely.⁴⁵ Also, of relevance here, in my opinion, is Mr Van Nieuwkerk's view that:⁴⁶
 - (a) If the aesthetic properties of groundwater beneath the site where to change, or if it were to become contaminated, it would be detected by the proposed groundwater monitoring programme; and
 - (b) If a downgradient well was affected as a result of the above the consent holder could address the matter by providing the affected landowners with a water treatment option, or alternative source of water, or a deeper bore which intercepts the underlying aquifer and which Dr Scott and Mr Van Nieuwkerk's both agree will not be affected by the guarry.
- Based on Mr Van Nieuwkerk's evidence down gradient wells used for drinkingwater supply are unlikely to be affected, and if they were affected there are means proposed to protect the quality of the drinking water supply to those properties. Therefore, in my opinion the proposal achieves the outcome sought by Policy 4.23.

Canterbury Air Regional Plan

In my opinion the Golder Statutory Assessment and Ms Goslin's Officers Report have identified the relevant Air Plan provisions when considering the discharge of contaminants to air from the guarry site.

⁴² Dr Scott paragraph 68;

Including the selection of a site outside of groundwater protection areas, the pit design, maintaining 1m between the quarry pit floor and maximum seasonal high groundwater levels, and operational controls on the acceptance of cleanfill.

Ms Goslin, paragraph 461.

⁴⁵ Mr Van Nieuwkerk, paragraphs 75 – 94

Mr Van Nieuwkerk, paragraphs 92 – 97.

- Of most relevance to this application and the main concerns raised in submissions are provisions which address:
 - (a) Fine particulate matter;
 - (b) Respirable Crystalline Silica (RCS);
 - (c) Objectionable and offensive effects;
 - (d) Applying a precautionary approach;
 - (e) Application of the best practicable option to minimise effects;
 - (f) The appropriate location of new activities; and
 - (g) Maintaining amenity values.
- 66 I address each below.

Fine Particulate Matter

Ms Goslin's Report has recommended the application be declined due to potential effects from the discharge of fine particulate matter. When considering those effects the I agree with Ms Goslin that Objective 5.2, Objective 5.4 and Policy 6.1.⁴⁷ However, I also consider Objective 5.3 needs to be considered. Collectively those provisions state:

5. Objectives

- 5.2 Ambient air quality provides for the health and wellbeing of the people of Canterbury.
- 5.3 Competing demands for the use of the air resource of Canterbury are accommodated while unacceptable degradation of ambient air quality is avoided
- 5.4 Degraded ambient air quality is improved over time and where ambient air quality is acceptable it is maintained.

For completeness I note that I do not consider Policy 6.4 or Policy 6.5 are relevant here based on Mr Cudmore's observation that air quality at the site and in the surrounding area is not degraded when assessed against the national air quality standard or guidelines for particulate matter.

6. Policies

- 6.1 Discharges of contaminants into air, either individually or in combination with other discharges, do not cause:
 - a. adverse effects on human health and wellbeing...
- Ms Wagenaar has identified the relevant health effects criteria for fine particulate matter which should be used here to assess effects and described how they are set to protect sensitive populations. I note these criteria recommended by Ms Wagenaar are identical to those set out in the CDHB submission.
- 69 Mr Cudmore has provided detailed analysis of the effects of the quarry relative to those criteria. Based on that analysis Mr Cudmore expects:⁴⁸
 - (a) The quarry to have a very small effect on existing background concentrations:
 - (b) That relevant ambient health guidelines are likely to be readily complied with; and
 - (c) The existing rural type of air quality to be maintained.
- Based on the information available at the time of drafting her s42A report Ms Goslin did not consider the proposal aligned with Objectives 5.2, 5.3 and 5.4 and Policy 6.1(a) due to difficulties establishing compliance with the NESAQ.⁴⁹ Mr Cudmore provides more certainty on how and why the relevant health-based guideline levels for particulate matter will be achieved, and based on the evidence of Mr Cudmore and Ms Wagenaar, in my opinion the proposed activity would achieve the outcome sought by Objectives 5.2, 5.3 and 5.4 and Policy 6.1(a).

Health Effects of Respirable Crystalline Silica

Objective 5.2 and Policy 6.1 set out above are particularly relevant when considering the potential health effects of RCS. On the basis Ms Ryan⁵⁰, Mr Cudmore⁵¹ and Ms Wagenaar⁵² are all of the view that RCS exposure will not be

Mr Cudmore, paragraph 138, 141.

⁴⁹ Ms Goslin, paragraphs 491 – 494.

Ms Ryan, paragraph 71.

Mr Cudmore, paragraph 139 - 140.

⁵² Mr Wagenaar, paragraph 27.5.

an issue for people in the community surrounding the proposed quarry, in my opinion these provisions are achieved.

Offensive and Objectionable Effects, Soiling and Amenity Values

- Of particular relevance when considering the nuisance effects of dust is the clear direction in Objective 5.9 and Policy 6.3 of the Air Plan that *offensive and objectionable effects* are unacceptable, and that these are to be actively managed through the implementation of management plans. The Panel will be aware that 'offensive and objectionable effects' are not defined in the Air Plan, but in Schedule 2 it does set out a detailed suite of criteria for assessing offensive or objectionable dust which focusses on the FIDOL factors. This methodology has been used by the air quality experts commissioned by the applicant and council to assess the potential effects of dust from the quarry, and they agree that with implementation of the proposed mitigation measures (including the proposed Dust Management Plan) the activity can be managed to avoid offensive and objectionable effects beyond the site.⁵³ On that basis I consider the activity consistent with Objective 5.9 and Policy 6.3. It will also achieve the direction in Policy 6.1(d) that the discharge not cause significant soiling of structures or property.
- Objective 5.6 seeks that the amenity values of the receiving environment are maintained. In my view this will be achieved on the basis that:
 - (a) The air quality experts commissioned by the applicant and council are confident that dust can be managed via the proposed conditions to not be objectionable or offensive beyond the boundary of the site;⁵⁴
 - (b) The surrounding area is a working rural environment where some dust would be expected on occasion; and
 - (c) The District Plan direction on amenity values which seeks the area be a pleasant place to live and work, but which does not seek to maintain a particularly high level of residential amenity.
- Ms Goslin reaches a different conclusion, seemingly on the basis that Fulton Hogan does not have access to sufficient water to mitigate dust.⁵⁵ Based on the evidence of the air quality experts I agree that access to sufficient water is vital for managing dust effects in accordance with the Air Plan. However, for reasons set out in paragraph 47 0 it is my opinion that there is no policy barrier to granting the applicant consent to use water at the volumes sought, and on that basis I consider

Mr Cudmore, paragraph 104.

Mr Cudmore, paragraph 104, Ms Ryan paragraph 102.

⁵⁵ Ms Goslin paragraph 499.

this concern can be resolved. I also note that even if circumstances mean that Fulton Hogan has access to less water than the volumes sought, it would have the option to build storage (which I understand is intended) and / or use dust suppressants to complement a more restricted water supply and still achieve effective mitigation.

Best Practicable Option for Managing Effects

- Policy 6.22 requires the application to identify the best practicable option to be adopted to minimise effects, and Policy 6.13 directs the best practicable option be applied to minimise cumulative effects.
- Determining what the BPO is in a given circumstance requires a decision-maker to weigh competing considerations, including the nature of the discharge, sensitivity of the environment and practicalities of that and any other option. The use of the words "among other things" clearly signals that other factors can also be taken into consideration.
- As noted in the quote below the words 'BPO' do not mean the best option, the best technical option, the best economic option, or the best environmental option. Nor do they require adherence to what might be considered "best practice". A judgement needs to be made as to what is practicable and proportionate to the risks likely from a contaminant to be discharged. The key word is practicable and in my opinion resource consents should not be granted requiring adherence to an option that would be prohibitively expensive or involve procedures that are unnecessarily onerous or impractical.
- These considerations have been summarised by Dr Royden Somerville QC in his paper "How to give effect in regional plans to the National Policy Statement for Freshwater Management 2011", dated 20 January 2012:

"The words 'best practicable option' do not mean the best option, the best technical option, the best economic option, or the best environmental option. A judgement needs to be made as to what is practicable and proportionate to the risks likely from a contaminant. The Shorter Oxford English Dictionary defines "practicable" as "capable of being carried out in action; feasible".

In Medical Officer of Health v CRC, it was held that "practicable" is the key word in the definition of BPO, and it would be wrong to impose conditions which afforded the holder no practical means of compliance.

The words "among other things" in the definition do not limit the considerations a regional council may address, to those matters in paras (a), (b) and (c).

The matters in paragraphs (a), (b) and (c) are relative. This approach reflects the "principle of proportionality" which allows for a dilution of absolute standards and is used in European community law. Some overseas jurisdictions put more emphasis on technical options for addressing pollution. This is sometimes known as a technologically forcing regulatory approach. The BPO is the optimum combination of all methods to manage the risk of an adverse environmental effect to the greatest extent practicable. It is necessary to consider the options and financial implications when determining how best to attain the BPO.

Thus, what constitutes the BPO in any given case is a question of fact and degree. Regard is to be had primarily to all three subsections (a), (b) and (c) of the definition, although one or more may be given more weight than others in any given case. The environmental performance targets being aspired to by using the BPO should be set out in the documentation."

- However, given this activity is new, its size and scale, and its relative proximity to sensitive receptors I would expect the proposed measures for minimising effects should reflect best practice and I understand that is what is being proposed here. I note Ms Goslin's Officers Report also reaches this conclusion.⁵⁶
- A number of submissions concerned with effects on air quality have sought various mitigation measures be used to mitigate dust,⁵⁷ and Mr Cudmore has described that with the exception of boundary sprays all the suggested methods are included in the proposal⁵⁸ Mr Cudmore provides rationale for why boundary sprays are not proposed here in paragraph 151 of his evidence.

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Ms Goslin, paragraph 509.

These include 1. Increased setback distances (from property boundaries and machinery); 2. Increased air quality monitoring at all quarry boundaries and certification of equipment; 3. Spray or mist systems installed around the site perimeter and operated at all times (not just when quarrying); 4. Limiting open quarried area to 4 hectares; 5. All truck loads to be covered; 6. All operations to cease if dust goes beyond the property boundary; 7. Sufficient planting to mitigate dust; 8. Requiring dust monitoring to be undertaken on neighbouring properties; and 9. Wheel wash for trucks.

Mr Cudmore, paragraph 147 – 152.

In accordance with Policy 6.15 I also note the proposed conditions contemplate that changes in technology may allow for improvements in the quality of a discharge over the term of the consent and include suitable management plan⁵⁹ and review conditions⁶⁰ to allow those changes to be incorporated into the activity.

The Precautionary Approach

In my view this is not a circumstance when a precautionary approach is required⁶¹, as the extensive existing experience with quarrying in Canterbury provides a high degree of certainty on what the effects of this activity will be.

The Appropriate Location of New Activities

- Objective 5.7, Policy 6.9, Policy 6.10, Policy 6.11 and Policy 6.12 address the appropriate location of new activities taking into account adjacent land uses and sensitive activities. Central to whether the proposed quarry is located in an appropriate location is Policy 6.9 which states:
 - 6.9 Discharges into air from new activities are appropriately located and adequately separated from sensitive activities, taking into account land use anticipated by a proposed or operative district plan and the sensitivity of the receiving environment.
- In my view the quarry is appropriately located in the context of this policy for the following reasons:
 - (a) The applicant proposes to manage potential nuisance and health effects on existing sensitive activities beyond the boundary of the site via a variety of measures, including by ensuring adequate separation between the main dust generating activities and sensitive activities;
 - (b) There is agreement between the air quality experts commissioned by the applicant and council that with those management measures in place the amenity values associated with the area will be maintained, nuisance dust effects will be minor and significant soiling will be avoided, and there will be no adverse effect on plants or animals;⁶²

See proposed conditions 6 - 10.

See proposed condition 31.

⁶¹ Policy 6.17

Mr Cudmore paragraph 142 - 143, Ms Ryan paragraph 131.

- (c) The proposed quarry is in the Rural Zone which the District Plan recognises principally as a business rather than residential area, and the quarry is a type of activity the District Plan anticipates in this location;⁶³
- (d) While the District Plan seeks the surrounding areas be a pleasant place to live and work it does not place emphasis on maintaining a particularly high degree of amenity in that environment, and the only policy which directly addresses amenity only focusses on managing 'significant' adverse effects on amenity values;⁶⁴ and
- (e) The quarry site and adjacent land are not areas where the RPS or District Plan contemplate further residential intensification occurring.⁶⁵
- Ms Goslin considers the proposal to be inconsistent with (but not contrary to) Policy 6.9⁶⁶ on account of Ms Ryan's assessment that neighbouring properties will experience minor adverse effects due to dust. I disagree with Ms Goslin's analysis of Policy 6.9. For the reasons outlined above in my opinion achieving Policy 6.9 does not require there to be no adverse effects on sensitive receptors which seems to be what Ms Goslin is implying.
- As I consider the quarry to be appropriately located, I also consider this is an example of where Policy 6.12 applies, and a longer consent duration may be available to provide on-going operational certainty.

Policy 6.25

87 For completeness I note Policy 6.25 sets out various matters applications for resource consents for discharges to air from industrial and trade activities shall address. Each of those matters is addressed in the evidence of Mr Cudmore.⁶⁷

Conclusion

In my opinion there are no provisions in the Air Plan which prevent consent being granted to discharge contaminants to air provided robust conditions are included on the consent to ensure dust is managed in the matter described by Mr Cudmore.

Mr Cudmore⁶⁸ and Mr Bligh⁶⁹ have outlined that they consider the proposed conditions are suitably robust and will be effective in that context, and I agree.

See paragraph 94 – 96 of my evidence.

See paragraph 94 – 96 of my evidence.

See paragraph 35 and 98 of my evidence.

⁶⁶ Ms Goslin, Paragraph 504

⁶⁷ Mr Cudmore, paragraph 124 – 127.

Mr Cudmore, paragraph 83 - 88.

⁶⁹ Mr Bligh, paragraph 7.5 – 7.7.

The Selwyn District Plan

- I agree with the Golder Statutory Assessment and Mr Henderson's s42A report that the relevant provisions in the District Plan are those contained in:
 - (a) Chapter B1.1 addressing land and soil, and B1.3 water.
 - (b) Chapter B2.1 addressing transport networks;
 - (c) Chapter B2.4 addressing waste disposal;
 - (d) Chapter B3.2 addressing hazardous substances; and
 - (e) Chapter B3.4 addressing the quality of the environment.
- 90 With respect to Chapters B1.1, B1.3, B2.4 and B3.2 I consider that the analysis in the Golder Statutory Assessment and Mr Henderson's Officers Report⁷⁰ covers the relevant matters in a comprehensive way. From these assessments the respective authors conclude that the quarry activity sits comfortably with the relevant provisions. I agree with these assessments.
- I consider some detailed analysis of Chapter B2.1 and Chapter B3.4 is warranted given the nature of the activity and the concerns raised in submissions.
- I note that various submissions have raised concern that the proposed bunds will obstruct long distance views of areas identified as Outstanding Natural Landscape.⁷¹ In my view this is a local amenity issue which is dealt with in the provisions of Chapter B3.4, rather than those of Chapter B1.4 (Outstanding Natural Features and Landscapes), with the latter more focussed on managing the effects of activities in the Outstanding Natural Landscape areas themselves.

Chapter B2.1 Transport Networks

- 93 Chapter B2.1 of the District Plan addresses transport networks, including the following issues which are raised in submissions:
 - (a) Effects of activities on the safe and efficient operation of the transport network particularly roads (including State Highway 1), railway lines and cycleways; and
 - (b) Adverse effects including noise and vibrations from roads on surrounding land uses and the environment.

⁷⁰ In paragraph 146

See submission of Templeton Residents Association for example.

Ohapter B2.1 contains three objectives which are relevant when considering the effect of the guarry traffic on the road network. They state:

Objective B2.1.1

An integrated approach to land use and transport planning to ensure the safe and efficient operation of the District's roads, pathways, railway lines and airfields is not compromised by adverse effects from activities on surrounding land or by residential growth.

Objective B2.1.2

An integrated approach to land use and transport planning to manage and minimise adverse effects of transport networks on adjoining land uses, and to avoid "reverse sensitivity" effects on the operation of transport networks.

Objective B2.1.4

Adverse effects of land transport networks on natural or physical resources or amenity values, are avoided, remedied or mitigated, including adverse effects on the environment from construction, operation and maintenance.

A core part of the planning framework for achieving these objectives is the use of a road classification system which attributes different functions and roles to the District's roads,⁷² and directs that the effects of activities on the safe and efficient operation of those roads be managed considering that classification system.⁷³ This includes direction to recognise and protect the primary function of roads classified as State Highways or Arterial Roads to 'ensure the safe and efficient flow of through traffic en route to its destination'⁷⁴, and direction to 'ensure roads are designed, constructed, maintained and upgraded to an appropriate standard to carry the volume and types of traffic safely and efficiently'.⁷⁵

When considering the concerns raised by Mr Carr the key provisions are Objective 2.1.1 which I have set out above, and Policy 2.1.3 which states [emphasis added]:

Policy B2.1.3

Policy B2.1.1 and Appendix E9.

⁷³ Policy B2.1.2

Policy B2.1.3, Policy B2.1.4(b), Policy B2.1.12, Policy B2.1.25.

⁷⁵ Policy B2.1.11.

Recognise and protect the primary function of roads classified as State Highways or Arterial Roads in Appendix 9, to ensure the safe and efficient flow of through traffic en route to its destination

- Both Objective 2.1.1 and Policy B2.1.3 use the word 'ensure'. This language is directive and I agree with Mr Henderson's s42A report that queuing of vehicles on State Highway 1 in a manner that would have a deleterious affect the safe and efficient operation of that road would mean that the proposal would not meet Objective B2.1.1 or Policy B2.1.3. However, as set out in paragraphs 43 and 44 of my evidence, Messrs Metherell and Kelly have provided evidence that the probability of this occurring is so low as to be negligible. On the basis of that evidence it is my opinion that the provisions of Objective 2.1.1 and Policy B2.1.3 would be satisfied.
- In my view the proposed quarry also sits comfortably with the provisions of Chapter B2.1 for the following reasons:
 - (a) Except for Jones Road, the roads expected to carry a majority of the heavy traffic volumes to and from the quarry (Main South Road / Pound Road / State Highway 76 / Hamptons Road / Shands Road / Weedons Road) are all either State Highway or Arterial Roads;
 - (b) It is expected these types of road will carry significant volumes of heavy vehicle traffic around the district;
 - (c) With the exception of the queuing issue addressed above, there is general agreement between the traffic engineers that the impacts of the Roydon Quarry trucks on the safe and efficient flow of traffic on the affected State Highway and Arterial Roads will be acceptable provided the roading upgrades described in the Integrated Transport Assessment are implemented;
 - (d) While the volume of traffic expected on Jones Road immediately adjacent to, and to the west of, the quarry site will exceed those expected given its 'local road' classification:
 - The immediately adjacent stretch of road which will experience a significant increase in heavy traffic will be upgraded to accommodate the proposed increase in traffic;
 - (ii) Jones Road to the west of the site is already operating beyond its local road function and will continue to carry similar levels of heavy traffic

to those present due to the new quarry traffic being of similar volume to that removed from the road by the CSM; and

- (iii) There is general agreement between the traffic engineering witnesses that the upgraded road would be designed and constructed to an appropriate standard to carry the volume and type of traffic expected in a safe and efficient manner.⁷⁶
- 99 In my view the other policies in Chapter B2.1 are also achieved here for the following reasons:
 - (a) In accordance with Policy B2.1.4(a) the proposed quarry site access will be formed to a standard necessary to meet the needs of the activity considering the proposed vehicle movements generated by the quarry, and the classification and function of Jones Road. This appears to be agreed by Mr Carr and Mr Metherall;
 - (b) As directed by Policy B2.1.13 the bunds and associated landscaping planting will be managed to avoid shading roads for long period during winter and this is secured by condition 13(m). There appear to be no potential road safety issues due to the bunds being located in the proposed location within the permitted activity building setback area (Policy B2.1.9);
 - (c) In accordance with Policy B2.1.12 no new access onto a State Highway or arterial road is proposed;
 - (d) For the reasons set out in Section 18.1 of the Integrated Transport Assessment the quarry will not conflict with provisions promoting (Policy B2.1.5), or encouraging (Policy B2.1.17), provision for cycling and walking in the transport network;
 - (e) The quarry is not a noise sensitive activity that needs to be set back from the State Highway or arterial roads for reverse sensitivity reasons in the manner directed by Policy B2.1.25;
 - (f) The location of the proposed quarry, including its relatively direct access onto State Highway 1, means it is practical for heavy vehicles travelling to and from the site to bypass townships, including Templeton and Rolleston, in the manner 'encouraged' by Policy B2.1.26.

Mr Metherell paragraph 81 - 84.

100 I note Mr Henderson's Report reaches a similar conclusion with respect to these matters.

Chapter B3.4 Quality of the Environment

- 101 Chapter B3.4 of the District Plan addresses the effects of activities on the amenity values of the rural area its character and quality of the environment. It contains the District Plan's most relevant policy direction when considering submitter concerns relating to effects on the amenity values of neighbouring residents, including those relating to, visual effects and air quality.
- 102 Chapter B3.4 also addresses 'reverse sensitivity', however in my view this concept is not relevant here as the quarry would be a new land use.
- 103 Chapter B3.4 contains two objectives. They state:

Objective B3.4.1

The District's rural area is a pleasant place to live and work in.

Objective B3.4.2

A variety of activities are provided for in the rural area, while maintaining rural character and avoiding reverse sensitivity effects.

- 104 The associated policies of relevance to the proposed activity states:
 - ... Recognise the Rural zone as an area where a variety of activities occur and maintain environmental standards that allows for primary production and other business activities to operate.⁷⁷
 - ... Avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area.⁷⁸
 - ...Maintain low levels of building density in the Rural zone and the predominance of vegetation cover.⁷⁹

Policy B3.4.1.

⁷⁸ Policy B3.4.3

⁷⁹ Policy B3.4.6

... Avoid high rise buildings or highly reflective utility structures.⁸⁰

Require signs and noticeboards to be located on the site to which the sign or notice board relates.⁸¹

...Ensure signs and noticeboards are designed and positioned to avoid ... Restricting people's visibility along roads... Impeding access to or past sites...Nuisance effects from sound effects, moving parts, glare or reflectivity...Large structures protruding above rooftops.⁸²

... ensure continuous or regular noise is at a level which does not disturb people indoors on adjoining properties.⁸³

Avoid, remedy or mitigate adverse effects caused by excessive or prolonged vibration⁸⁴

Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material⁸⁵

The Rural Zone is recognised principally as a business area rather than residential area in the District Plan,⁸⁶ and in my view this is reflected strongly in the above objectives and policies. Collectively these provisions set an expectation that this area operates as a working rural environment, and the focus is on managing the external effects of activities. There is no directive policy that any type of activity, or effect needs to be avoided.

106 I accept that for various people who live and work in close proximity to the proposed quarry site the establishment of the activity will represent an adverse change in the amenities they currently attribute to the area. However, when considering that change it is important to acknowledge the planning framework here contemplates a dynamic, not static rural environment in which a range of different productive and commercial activities may occur. It is clear to me that relevant matters from the District Plan with respect to amenity require the effects of quarrying in this location to be very carefully managed so that neighbouring properties remain a pleasant place to live and work and that a rural character be maintained. However, it does not direct that the current level of amenity or outlook experienced at each site in

⁸⁰ Policy B3.4.7

⁸¹ Policy B3.4.9

Policy B3.4.10.

Policy B3.4.13

Policy B3.4.15 Policy B3.4.16

See Section 3.4 of the Plan.

that surrounding area be protected, and it is notable in that regard that the only policy which directly addresses amenity only directs that 'significant' adverse effects on amenity values be managed.⁸⁷

107 For this reason, the proposed conditions which are attached to the evidence of Mr Bligh have been informed by appropriate expert assessment and based on the application of recognised standards for achieving good practice in order to protect a reasonable degree of amenity. In my view this is an appropriate response in this location and will ensure that the proposed activities can exist whilst protecting a level of amenity which is consistent with that contemplated by the District Plan, noting in particular that:

- (a) While it is clear the quarry and its mitigation will change the visual outlook across the site and reduce the openness of the vista, the landscape experts commissioned by the applicant and the council conclude the site will retain a strong rural character which is in keeping with the surrounding environment. I agree with this conclusion.
- (b) Various measures are proposed to manage noise effects, and with those in place the acoustic experts commissioned by the applicant and council conclude that the quarry will generate noise levels at adjacent residences that are below the District Plan permitted activity noise standards.⁸⁸ Those permitted activity noise standards implement the objective and policy direction set out above.
- (c) The provisions recognise that lighting is an essential part of many activities which operate in the rural area at night and the only policy direction on the matter is that light not shine directly into houses which will not occur here.⁸⁹ The quarry will also meet permitted activity standards for lighting in this area.
- (d) Steps will be taken to mitigate potential dust nuisance, and the air quality experts commissioned by the applicant and council agree those mitigation measures will avoid more than minor adverse effects from dust deposition on neighboring properties. Therefore, I do not expect living and working conditions on neighboring properties will be unpleasant.
- (e) The majority of truck movements will be confined to Arterial Roads and State Highways which the District Plan expects to carry significant volumes of heavy traffic.

⁸⁷ Policy B3.4.6

Mr Farren, paragraph 47.

⁸⁹ Policy B3.4.11.

- 108 I note Mr Henderson's Report reaches a similar conclusion, subject to:
 - (a) the aforementioned water availability and queuing concerns being addressed; and
 - (b) additional restrictions being imposed on night time activities to protect the amenity values experienced by the closest residential properties.
- I agree that access to sufficient water is important for meeting the requirement in Policy B3.4.16 to mitigate nuisance effects caused by dust, and for the reasons I set out in paragraphs 47 52 in my opinion that uncertainty has been addressed. I also agree that the queuing issue is important insofar as accessing the State Highway is critically important for managing the effects of quarry traffic on the amenity values of Templeton, and other residences on surrounding roads. For reasons set out in paragraph 43 and 44 I also consider this issue has been satisfactorily addressed.
- 110 With respect to the restriction on night-time activities I set out above that it is clear to me that relevant matters from the District Plan with respect to amenity require the effects of quarrying in this location to be very carefully managed so that neighbouring properties remain a pleasant place to live. However, it is unclear to me why the additional restrictions proposed by Mr Henderson are needed. Mr Farren and Dr Trevathan both seem to agree that the proposed operation of the quarry between 2000 and 0600 hrs will not substantially change night time amenity experienced by the residents of the dwelling at 4 Dawsons Road (that closest to the site entrance). In addition, heavy vehicle movements will not occur between 2000 and 0600 hrs on the other route of concern Jones Road to the west of the site.

Chapter B4 - Growth Rural

- 111 Submissions express concern that locating the quarry site where future residential expansion from Christchurch is likely to otherwise have occurred and / where it will create reverse sensitivity effects.
- As I discussed above, the RPS dissuades expansion in this area, and that has been implemented in the District Plan which contains directive policy⁹⁰ that new residential development at densities greater than 1 dwelling per 4ha not occur in this area. Subdivision at densities higher than this are a non-complying activity.⁹¹

⁹⁰ Policy B4.1.4(b); Policy B2.1.28.

⁹¹ Rule 10.11.3.

Conclusion

- Objective B2.1.1 or Policy B2.1.3 are the key provisions when considering the queuing issue raised by Mr Carr. They are directive and, in my opinion, would not be achieved if queuing of vehicles on State Highway 1 occurs in a manner that would be deleterious to the safe and efficient operation of that road. However, for reasons set out in paragraph 43 and 44 in my opinion this issue has been addressed by Mr Metherell and Mr Kelly.
- Other than avoiding urban intensification, the objectives and policies for the Inner Plains Zone do not actively manage the type of activities which locate in this area. They focus on managing the effects of the activity on the surrounding environment, on maintaining rural character, and on it being a pleasant place to live and work. In my view the proposal would sit comfortably with the objectives and policies which provide guidance on how that should be done.
- Overall in my opinion the proposal is consistent with the District Plan framework and there are no directive objectives or policies which present an issue for granting the consent on the terms sought.

Other Planning Documents

In my opinion the planning documents I address above contain the most relevant provisions when considering the proposed quarry. However, for completeness I have reviewed the other planning documents listed in paragraph 25 of my evidence, and the analysis of them in the Golder Statutory Assessment, Ms Goslin's s42A report and Mr Henderson's s42A report. In my opinion there are no provisions in those documents that would prevent consents being granted in accordance with the conditions appended to Mr Bligh's evidence.

Section 105 and Section 107 of the RMA

117 I draw the panels attention to the analysis of these matters in Section 5 of the AEE, Ms Goslin's s42A report⁹² and my own analysis of alternative mitigation options for managing dust in paragraph 75 to Error! Reference source not found.above. I agree with Ms Goslin that there is no impediment under ss105 or 107 of the RMA to granting the consents sought.

Part 2 of the RMA

118 The various elements of Part 2 will be well known to the Panel.

⁹² Ms Goslin, paragraph 536 – 547.

- Many of the relevant Part 2 issues are directly addressed by the various planning instruments that I have referred to earlier, and I do not wish to repeat that analysis here. That analysis is directly applicable to your ultimate evaluation of Part 2 matters, insofar as you need to do that, in light of the most recent determination on *Davidson*.
- 120 By way of summary, the key matters which stand out to me are:
 - (a) The extent to which the quarry would contribute to and assist the social and economic wellbeing of Christchurch;
 - (b) There are no s6 matters of relevance to this proposal;
 - (c) With respect to s7(b), the project would enable the efficient use and development of the aggregate resource contained at the site, and is well sited to make efficient use of existing road network infrastructure⁹³;
 - (d) With respect to s7(c) amenity values will be maintained in accordance with the expectations set out within the District Plan;
 - (e) With respect to s7(f) the quality of the environment will be maintained in accordance with the expectations of the various planning documents; and
 - (f) There do not appear to be any particular issues here in respect of the various tangata whenua aspects of Part 2, including s6(e), 7(a), 7(aa) and 8.

Conclusion

- 121 I have assessed the proposed operation of the Roydon Quarry against the provisions of the relevant planning documents.
- 122 Overall the consents sought are a discretionary activity.
- 123 Of particular relevance when considering the proposed activities are the planning provisions which relate to:
 - (a) Traffic and insofar as these envisage that adverse effects on the safe and efficient operation of Main South Road will not result;
 - (b) Protection of amenity values;
 - (c) The discharge of fine particulate matter;

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⁹³ Mr Metherell, paragraph 55.

- (d) Provision for the reasonable use of water; and
- (e) Effects on groundwater quality and neighbouring groundwater users.
- With respect to traffic, Chapters 5 and 6 of the RPS, and Chapter B2.1 of the District Plan contain a number of provisions to avoid development which adversely affects the safe, efficient and effective functioning of Main South Road and that part of Jones Road located to the west of the quarry site. I agree with Mr Henderson's s42A report that queuing of vehicles on Main South Road in a manner that would have a deleterious affect the safe and efficient operation of that road would mean that the proposal would not meet those provisions. However, Messrs Metherell and Kelly have provided evidence that the probability of this occurring is so low as to be negligible. On the basis of that evidence it is my opinion that the provisions would be satisfied.
- I accept that for various people who live and work in close proximity to the proposed quarry site the establishment of the activity will represent an adverse change in the amenities they currently attribute to the area. It is clear to me that relevant matters from the District Plan with respect to amenity require the effects of quarrying in this location to be very carefully managed so that neighbouring properties remain a pleasant place to live and work and that a rural character is maintained. However, it does not direct that the current level of amenity or outlook experienced at each site in that surrounding area be protected, and it is notable in that regard that the only policy which directly addresses amenity only directs that 'significant' adverse effects on amenity values be managed, the proposed conditions which are attached to the evidence of Mr Bligh have been informed by appropriate expert assessment and based on the application of recognised standards for achieving good practice in order to protect a reasonable degree of amenity. In my view this is an appropriate response in this location.
- When considering discharges to air the main issue raised within the Section 42A reporting relates to particulate matter. Regulation 13(1) and Schedule 1 of the NESAQ specify ambient air quality standards for PM₁₀ which apply at all locations around the proposed quarry site, and Regulation 17 of the NESAQ specifies additional restrictions in respect of effects on the neighbouring Christchurch airshed. Key directives in the Air Plan are that dust is managed using the best practicable option, the relevant ambient air quality standards for particulate matter be achieved, and the activity does not cause offensive and objectionable effects beyond the boundary of the site. Based on Mr Cudmore's evidence, it is my opinion that neither Regulation 13, nor Regulation 17(1) presents a barrier to granting consent, and the other key policy direction in the Air Plan will be achieved.

However, close and careful management of the effects of dust in accordance with

Mr Cudmore's assessment is essential to achieving these outcomes.

127 When considering the proposed use of water the relevant provisions require that

the proposed volumes are necessary and reasonable for the intended use and that the water will be used efficiently. In my opinion Schedule 10 is not relevant when

determining the appropriate volume for the proposed use in this context, and Mr

Van Nieuwkerk's approach which uses a purpose-built water balance model to

calculate what is a reasonable and efficient use of water is the correct approach.

128 When considering potential effects on groundwater quality and neighbouring

groundwater users the Land and Water Plan contains a number of policies which

provide clear direction on how the effects of the activity are to be managed. Mr

Van Nieuwkerk's evidence states down gradient wells used for drinking-water

supply are unlikely to be affected. I acknowledge Dr Scott considers the risk to be

higher in terms of potential effects of aesthetic (not health) properties.Mr Van

Nieuwkerk's evidence is that if downgradient wells were affected the proposed

monitoring would detect this, and there are means available to protect the quality

of the drinking water supply to those properties. Therefore, in my opinion the

proposal can achieve the outcomes sought by the relevant policies.

129 In my view there is no impediment in the planning provisions to granting the

consents sought.

Dated 23 September 2019

John Kvle

Managing Director - Mitchell Daysh Limited

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APPENDIX A

Summary of Recent Experience of John Kyle

- Wellington International Airport Limited Lead consultant notice of requirement for airport site and former Miramar School site – Wellington City.
- Queenstown Airport Corporation Lead consultant Proposed plan change to manage the effects of aircraft noise – Queenstown Lakes District.
- Alliance Group Limited Lead consultant renewal of all discharge and land use consents Mataura Meat Processing Works, Mataura Southland Region.
- Simcox Construction Lead consultant Quarry operation consent renewal, Marlborough District.
- Pernod Ricard NZ Limited Planning witness Marlborough Environment Plan submissions – Marlborough District.
- Alliance Group Limited Lead consultant renewal of all discharge and land use consents Lorneville Meat Processing Works, Lorneville - Southland Region.
- Alliance Group Limited Air Discharge Consents Pukeuri Meat Processing Works, Pukeuri - Otago Region.
- Queenstown Lakes District Council preparation of a Plan Change to expand Queenstown town centre, including to accommodate a convention centre.
- Wellington International Airport Limited Lead consultant strategic and resource management advice with respect to the proposed runway extension – Wellington City.
- OceanaGold (New Zealand) Limited lead consultant Project Martha Gold Mine Expansion, Waihi – Hauraki District.
- Ryman Healthcare resource consent applications for new retirement villages New Zealand wide role.
- Environmental Protection Authority advisor to the Minister appointed Board of Inquiry regarding a Plan Change by Tainui Group Holdings and Chedworth Properties for the Ruakura Inland Port Development, Hamilton.
- Environmental Protection Authority advisor to the Minister appointed Board of Inquiry regarding a Notice of Requirement and resource consent applications by the New Zealand Transport Agency with respect to the Expressway between Peka Peka and North Otaki on the Kapiti Coast.
- Environmental Protection Authority advisor to the Minister appointed Board of Inquiry regarding a Notice of Requirement and resource consent applications by the New Zealand Transport Agency with respect to the Expressway between MacKays Crossing and Peka Peka on the Kapiti Coast.
- Environmental Protection Authority advisor to the Minister appointed Board of Inquiry regarding resource consent applications and designations by the New Zealand Transport Agency with respect to the proposed Transmission Gully Project – Wellington Region.
- Queenstown Lakes District Council member of the review team commissioned to undertake a review of Council consenting and resource management policy operations.
- Environmental Protection Authority advisor to the Minister appointed Board of Inquiry regarding a plan change application to the Wellington Regional Water plan to assist with the proposed Transmission Gully Project – Wellington Region.

- Queenstown Airport Corporation lead consultant Notice of Requirement for land adjacent to QAC in order provide for the future expansion of airport operations, Queenstown Lakes District.
- Genesis Power Limited due diligence Slopedown Wind Farm, Southland District and Southland Region.
- > TrustPower Limited Planning witness proposed Kaiwera Downs Wind Farm, Gore District and Southland Region.
- TrustPower Limited Planning witness proposed alteration to the Rakaia Water Conservation Order – Lake Coleridge Hydro Electric Power Scheme – Canterbury Region.
- Meridian Energy Limited Planning witness -Proposed Mokihinui Hydro Electric Power Scheme, damming, water and land use related consents, Buller District and West Coast Region.
- > TrustPower Limited Planning witness Wairau Hydro Electric Power Scheme, water and land use related consents, Marlborough District.
- Southern Health Plan Change Invercargill Hospital Development Invercargill City.
- Sanford Limited, various marine farm proposals Marlborough Sounds, Marlborough District.
- Port Marlborough Limited Lead consultant Plan Change proposal to alter the marina zone within the Marlborough Sounds Resource Management Plan to provide for consolidation of marina development in Waikawa Bay, Marlborough District.
- Port Marlborough Limited Resource consent application for occupation of coastal space – Shakespeare Bay port facilities – Marlborough District.
- Meridian Energy Limited Planning witness proposed Wind Farm, Lammermoor Range, Central Otago District and Otago Region.
- Queenstown Airport Corporation Lead consultant Runway End Safety Area, designation and construction related consents, Queenstown Lakes District and Otago Region.
- Riverstone Holdings Limited Lead consultant Proposed Monorail Link Lake Wakatipu to Fiordland, Department of Conservation Concession Application – Southland Conservancy.
- > Otago Regional Council Planning witness Consents required for controlling the Shotover River to mitigate flood risk Queenstown Lakes District and Otago Region.
- Queenstown Airport Corporation Lead consultant aircraft noise controls and flight fan controls – Plan Change and Designations, Queenstown Lakes District.
- Todd Property Pegasus Town Limited Pegasus Town, North Canterbury Waimakariri District, Canterbury Region.
- Willowridge Developments Lead consultant 3 Parks Plan Change to create new commercial, large format retail, service, tourist and residential land use zones, Wanaka, Queenstown Lakes District.
- ➤ Gibbston Valley Station Lead consultant Land use and regional consents, Viticulture and Golf Resort, Gibbston – Queenstown Lakes District and Otago Region.
- Marlborough District Council Business Park Plan Change, Blenheim Marlborough District.
- Ravensdown Fertiliser Limited Lead consultant Coastal and Air Discharge Consent Renewal, Dunedin – Otago Region.

- Irmo Properties Limited Resource consent application for retail complex, Green Island Dunedin City.
- Infinity Investment Group and JIT Investments Lead consultant Hillend Station Farm Park development, Wanaka Queenstown Lakes District.
- Infinity Investment Group Lead consultant Peninsula Bay Plan Change, Wanaka Queenstown Lakes District.
- Genesis Power Limited Planning witness Tongariro Power Development, Water Related Consents, Central North Island – Environment Waikato and Horizons MW.
- Genesis Power Limited Planning witness Waikato District Plan review and provision for the Huntly Power Station, Waikato District.
- Department of Corrections Planning witness New Corrections Facility, Milton -Clutha District and Otago Region.
- Department of Child Youth and Family Lead consultant -Youth Justice Facility,
 Rolleston Selwyn District and Canterbury region.
- Kuku Mara Partnerships Planning witness Large Scale Marine Farms, Marlborough Sounds – Marlborough District.
- Marine Farming Industry Plan Appeals, Tasman Aquaculture Inquiry, Tasman and Golden Bays Tasman District.