

**BEFORE THE INDEPENDENT COMMISSIONERS**

**UNDER** the Resource Management Act 1991

**IN THE MATTER OF** submissions and further submissions on the Proposed  
Canterbury Air Regional Plan

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**EVIDENCE IN CHIEF OF KEVIN MICHAEL BLIGH ON BEHALF OF THE  
CANTERBURY AGGREGATE PRODUCERS GROUP (SUBMITTER ID. 62784;  
FURTHER SUBMITTER ID: 104102)**

**DATED: 18 SEPTEMBER 2015**

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## INTRODUCTION

1. My full name is Kevin Michael Bligh.
2. I am a Senior Planner at Golder Associates (NZ) Limited (**Golder**), a ground engineering and environmental consultancy firm. I have been employed in this role since May 2012. I am a full member of the New Zealand Planning Institute and have 12 years' experience in the field of resource management and planning in New Zealand.
3. Prior to joining Golder, I worked for Winstone Aggregates, primarily a quarrying company, in the role of Resource and Development Planner, and before that as a Consents Planner at the former Rodney District Council. I hold the qualifications of a Bachelor of Resource Studies from Lincoln University, and a Master of Resource and Environmental Planning with First Class Honours from Massey University.
4. I have been asked by the Canterbury Aggregate Producers Group (**CAPG**), to provide planning evidence in relation to their submission on the Canterbury Air Regional Plan (**CARP**).
5. Members of the CAPG are (in alphabetical order):-
  - Blackstone Quarry
  - Christchurch Ready Mix Concrete Ltd
  - Fulton Hogan Ltd
  - Isaac Construction Co. Ltd
  - KB Contracting & Quarries Ltd
  - Road Metals Ltd
  - Selwyn Quarries Ltd
  - Taggart Earthmoving Ltd
  - Winstone Aggregates – a division of Fletcher Concrete & Infrastructure
6. The CAPG have diverse interests within the Christchurch District. By way of summary, members' interests may include but are not limited to:-
  - a) Gravel extraction, both within riverbeds and within land-based quarries/pits;
  - b) Aggregate processing and storage;

- c) Land use and infrastructure development and maintenance activities, either directly or on behalf of third parties;
  - d) Asphalt and bitumen manufacture and bulk storage
  - e) Pre-cast concrete manufacture and storage
  - f) Hazardous substance use, transport and storage;
  - g) Workshops, transport depots, storage yards, staff offices, and supporting infrastructure.
7. I have extensive experience with quarrying and operations of an industrial nature and the effects associated with these activities, including the discharge of contaminants to air. I have been involved in the preparation of submissions and evidence on a range of statutory planning documents throughout New Zealand on matters relating to quarrying, including the management of air quality effects. I also have been involved in preparing a number of assessments of environmental effects associated with quarrying projects as well as taking an active role in community consultation and the management of reverse sensitivity effects as they relate to quarrying activities.
8. Since joining Golder I have worked on a number of projects for quarry operators and industrial activities that discharge contaminants to air within the Canterbury Region including:
- a) Preparation of resource consent applications on behalf of Fulton Hogan for a 10 hectare quarry at Templeton (the Barthers Road Quarry) approved in February 2013;
  - b) Preparation of resource consent applications on behalf of Fulton Hogan and KB Contracting and Quarries for a 165 hectare quarry at McLeans Island (McLeans Island Quarry) approved in November 2013;
  - c) Preparation of resource consent applications on behalf of Fulton Hogan for a 20 hectare quarry at Islington (Roberts Road Quarry) approved in October 2014;
  - d) Preparation of resource consent applications on behalf of Winstone Aggregates to expand its Yaldhurst Quarry approved in February 2015; and
  - e) Preparation of resource consent applications on behalf of Christchurch Ready Mix to establish a concrete batching plant at Rolleston approved in May 2015.
9. I have also been involved in the preparation of resource consent applications for a range of industrial activities within Canterbury including gelatine and foam manufacturing plants and animal feed producers.

10. I am also familiar with the majority of the other various sites operated by the CAPG within Christchurch.
11. In addition to preparing this evidence for the CAPG, I have also been involved in the preparation of submissions on the CARP for St George's Hospital and Gelita NZ Limited (**Gelita**). I have prepared a separate brief of evidence on behalf of Gelita for this hearing which addresses some of the same matters raised in this submission.
12. I acknowledge that I have read and am familiar with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court updated Practice Note 2014, and agree to comply with it. My qualifications as an expert are set out above. Other than where I state that I am relying on the advice of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.
13. In preparing this evidence, I have reviewed and considered the following documents:
  - a) The Section 32 Report as publically notified on 19 February 2015 (**Section 32 Report**).
  - b) The Section 42A Officer's Report as publically notified on 28 August 2015 (**Officer's Report**).
  - c) The air quality evidence prepared on behalf of the CAPG by Richard Chilton.

#### **EXECUTIVE SUMMARY**

14. In my opinion, the CARP as notified, fails to appropriately provide for quarrying and related activities and as a result unduly constrains the use of the region's air resource particularly with respect to the use and development of mineral resources. In addition, the CARP confuses the issue of reverse sensitivity and places the onus for the management of such effects on discharging activities, rather than on the sensitive activity that has established in the vicinity of the existing discharging activity. To correct this imbalance, along with other provisions which I consider to be inappropriately worded in the notified version of the CARP, I consider a number of amendments as proposed by the CAPG, or with some variation, are needed.

**SCOPE OF EVIDENCE**

15. I have been asked to prepare planning evidence on behalf of the CAPG. The CAPG's submission seeks to ensure that the CARP provides for the sustainable management of the region's air resource that enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety. This wellbeing is in part achieved through the use and development of the region's mineral and aggregate resources which play a critical role in the development and rebuilding activities within the region.
16. To enable wellbeing to be maximised, the CAPG' submission sought that the provisions of the CARP appropriately provide for these activities subject to the management of adverse effects. This includes ensuring that other activities with the potential to constrain the nature of quarry operations are not able to establish in such a manner so that they have adverse reverse sensitivity effects on those operations.
17. I note that the term "mineral extraction activity" is used throughout the CAPG's submission. However, I understand the concerns raised in the CAPG's submission relate primarily to the activity of quarrying, which is one of several activities typically included within the definition of mineral extraction. My evidence has been prepared on this basis.
18. My evidence discusses the key submission points for the CAPG which are broken down into the following categories:
  - a) Location of discharging activities
  - b) Recognition of the importance of mineral extraction activities
  - c) Reverse sensitivity
  - d) Rules
  - e) Definitions
  - f) Planning Maps, and specifically the Clean Air Zones; and
  - g) Schedule 1 – resource consent information requirements.
19. Except for the matters specifically addressed in my evidence, I have not made any comment on submission points where:
  - a) A provision of the proposed CARP was supported and no significant change has been recommended in the Officer's Report (Objective 5.7, Definition of Cleanfill)

- b) The CAPG requested changes which have been supported in the Officer's Report (Policy 6.10).
  - c) The CAPG does not wish to pursue provisions further at this hearing (Objectives 5.5, 5.6, Rule 7.3, Schedule 4, Figure 8.10.1, the Definition of Handling/Mineral Extraction Activity).
20. In preparing parts of my evidence, I have relied on the technical air quality evidence presented by Mr Chilton. Mr Chilton's evidence specifically addresses matters relating to air quality, including the technical considerations associated with the proposed use of the Ambient Air Quality Guidelines 2002 (**AAQG**), appropriate thresholds for handling volumes, the need for dust management plans, and potential effects associated with cleanfilling.
21. A representative of the CAPG will also be in attendance at the hearing and will provide an overview of the range of activities that the CAPG undertakes throughout Canterbury and the contribution this makes to the region, including the rebuild. This representative will outline the impacts that the provisions of the CARP, if not amended, will have on quarry operations including the management of effects from such activities.

#### **LOCATION OF DISCHARGING ACTIVITIES**

22. A key feature of the CARP is the emphasis on activities, both discharging activities and sensitive activities, being located so that appropriate air quality outcomes are achieved. Objective 5.9 states that activities *are spatially located so that they result in appropriate air quality outcomes both at present and in the future*. This is reinforced through Policies 6.6, 6.7 and 6.8 which I will discuss in further detail later in my evidence (with respect to reverse sensitivity matters).
23. The CAPG requested that Objective 5.9 be deleted and replaced with the following objective:
- "It is recognised that some activities which discharge to air have a functional need to locate within close proximity to a resource and that part of the Region requiring the goods or services."*
24. While this change has not been made, the Officer's Report has recommended that the Objective be amended as follows:<sup>1</sup>

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<sup>1</sup> Officer's Report, at page 9-6 (Recommendation R-5-9).

*“Discharging and sensitive activities are spatially located so that ~~they result in~~ appropriate air quality outcomes are being achieved both at present and in the future.”*

25. While I consider the wording as proposed in the Officer’s Report is an improvement in terms of clarity, the Objective still does not recognise that many discharging activities are significantly constrained in where they can locate. This is particularly true for quarries in that they can only locate where the aggregate resource exists, and where the area has not already been subject to other (typically urban) development which would preclude subsequent quarrying of the aggregate resource. Even more so than other activities, the avoidance or mitigation of adverse effects from quarry sites cannot be achieved by simply choosing another location. Without further policy guidance, the outcome sought by the Objective has the potential to unduly constrain the extraction of the aggregate resource required for development and rebuilding within Canterbury. In my opinion, this is not the most appropriate manner in which to achieve the purpose of sustainable management.
26. To provide this additional policy guidance and recognise the locational constraints facing activities such as quarries (albeit not exclusively quarries), I consider it would be appropriate to include a new policy which generally reflects the amendment sought by the CAPG.
27. I acknowledge that as a result of other submissions on the CARP, the Officer’s Report recommends a new policy 6.11A be included in the CARP as follows:<sup>2</sup>

*“Locational constraints of discharging activities, including heavy industry and infrastructure, are recognised so that operational discharges into air are enabled where the best practicable option is applied.”*

28. I support the inclusion of the wording, although I consider it would be appropriate to also include reference to quarrying activities within this policy. I do not consider the reference to best practicable option (**BPO**) is warranted given other policies (such as 6.10) already recognise the application of BPO, and the addition is unnecessary in the context of the policy.
29. I therefore recommend that the wording proposed by the Reporting Officer be amended to as follows:

*“Locational constraints of discharging activities, including heavy industry, quarrying, and infrastructure, are recognised so that operational*

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<sup>2</sup> Section 42A Report, page 9-2 (Recommendation R-5).

*discharges into air are enabled ~~where the best practicable option is applied.~~*

## RECOGNITION OF MINERAL EXTRACTION ACTIVITIES

30. The CAPG sought a new Objective 5.10 be added to the CARP as set out below to recognise the contribution mineral extraction activities make to the continued rebuild and development of the region generally:

*“Mineral extraction activities that positively contribute to the continued rebuild and development of the Region and the efficient and effective provision of regionally significant infrastructure are provided for and enabled.”*

31. In addition, the CAPG sought that Policy 6.11 be amended to recognise mineral extraction activities, in addition to infrastructure, and that a new Policy 6.19A be added as follows:

*“Enable discharges of contaminants to air associated with mineral extraction activities, provided that the best practicable methods are applied to manage adverse effects.”*

32. The Officer’s Report recommends these submissions be rejected. I have discussed above the Officer’s recommended Policy 6.11A and my support of this new policy subject to amendment. Subject to the inclusion of such a policy, I consider this would effectively address the CAPG submission point in respect of Policy 6.11.
33. I also consider that a policy which achieves the intent of the wording sought by the CAPG for new Objective 5.10, and also reflects its request for new Policy 6.19A, would better enable the sustainable management of the Region’s air resource and is therefore appropriate for inclusion within the CARP.
34. Such a policy would give effect to the Canterbury Regional Policy Statement (CRPS),<sup>3</sup> which specifically provides for recovery and rebuilding activities including policy drivers within Chapters 5 and 6 of the CRPS. It would also, in respect of the greater Christchurch metropolitan areas, be consistent with the provisions of the Land Use Recovery Plan<sup>4</sup>. I have set out the relevant provisions of the CRPS in full in **Attachment A** to my evidence.

<sup>3</sup> As required by section 67(3)(c) RMA.

<sup>4</sup> As required by section 23(1)(f) of the Canterbury Earthquake Recovery Act 2011.



35. Accordingly, I consider that a new policy should be added to the Central Policies of the CARP as follows:

*“Recognise the importance of quarrying to the continued rebuild and development of the Region and the efficient and effective provision of regionally significant infrastructure is provided for and enabled.”*

## **REVERSE SENSITIVITY EFFECTS**

36. The CAPG submitted on Policies 6.6 and 6.8 which related to reverse sensitivity effects.
37. The CRPS seeks to avoid reverse sensitivity effects with key policy drivers including Policy 14.3.5 (Relationship between discharges to air and sensitive land-uses), and Policies 5.3.2(2)(b) and 6.3.9(5)(g), specifically with respect to the need to avoid mineral extraction being compromised through reverse sensitivity effects.
38. The Section 32 Report<sup>5</sup> recognises the directives of the CRPS to avoid reverse sensitivity effects as follows:

*“Reverse sensitivity effects occur when sensitive activities move into an area where existing activities can cause adverse effects to the sensitive activity. When reverse sensitivity occurs with discharging activities, the effects of these discharging activities can become offensive and objectionable in the new receiving environment, even if the effects were minor when the activity established. The Regional Policy Statement has strong directive policy seeking the avoidance of reverse sensitivity effects and it is anticipated that future incidents of reverse sensitivity will not occur.”*

39. Unfortunately, the Section 32 Report and then subsequently the Officer’s Report<sup>6</sup> confuses the issue of reverse sensitivity by discussing what it considers to be ‘legacy’ situations. The Section 32 Report seems to infer that the CARP would be responsible for addressing these issues through policy that indicates that where land use changes have occurred and the receiving environment is no longer appropriate for a discharging activity, discharging activities will need to reduce contaminant discharges to levels commensurate with the new environment, or move. This is reinforced in the Officer’s Report which states that the CARP seeks the ‘resolution’ of such legacy issues<sup>7</sup>.

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<sup>5</sup> Page 3-10 of Section 32 Report.

<sup>6</sup> Page 3-29 of the Officer’s Report.

<sup>7</sup> Page 9-6 of the Officer’s Report.

40. In my view, this policy approach incorrectly places the onus for managing reverse sensitivity effects on the 'existing' discharging activity. Rather it is the onus of those parties who are seeking to establish the new sensitive activity, and those with responsibility for preparing planning documents and assessing resource consent applications, to ensure that reverse sensitivity effects do not occur to the detriment of existing activities (or appropriately located activities). This includes ensuring that reasonable expansion of existing activities, or zonings that provide for discharging activities, has been provided for within district plans.
41. This rationale outlined in the Section 32 Report is then carried through to the provisions of the CARP, including Policies 6.6, 6.7 and 6.8 which state:

Policy 6.6

*"Discharges of contaminants into air, and the effects of those discharges, occur in appropriate locations, taking into account the distribution of land use as provided for by the relevant district plan."*

Policy 6.7

*"Where, as a result of authorised land use change, land use activities within the neighbourhood of a discharge into air are significantly adversely affected by that discharge, it is anticipated that within a defined time frame the activity giving rise to the discharge will reduce effects or relocate."*

Policy 6.8

*"Where activities that discharge into air locate appropriately to avoid the potential for reverse sensitivity effects, then longer consent duration may be available to provide ongoing operational certainty."*

42. Having been involved with reverse sensitivity issues in the past, I consider that the approach set out in Policies 6.7 and 6.8 does not reflect sound resource management practice. In effect it reverses where the onus lies in respect of reverse sensitivity and how such effects are to be managed. The policy approach promoted in the notified CARP therefore fails to give effect to the provisions of the CRPS, including the policy direction established by Policy 14.3.5 of the CRPS, which sets out the following in relation to the proximity of discharges to air and sensitive land-uses:

*"(1) To avoid encroachment of new development on existing activities discharging to air where the new development is sensitive to those discharges, unless any reverse sensitivity effects of the new development can be avoided or mitigated.*

...

*(3) New activities which require resource consents to discharge contaminants into air are to locate away from sensitive land uses and receiving environments unless adverse effects of the discharge can be avoided or mitigated."*

43. In my view, Policy 6.7 of the CARP, in particular, also fails to recognise the often limited location opportunities for industrial and quarrying activities, or the substantial investment that it is typically made on such sites to avoid, remedy or mitigate adverse effects.
44. CAPG sought that Policy 6.6 be deleted and replaced with the following wording:
- “Where legally established discharges of contaminants to air occur, sensitive activities should avoid establishing in proximity to those activities.”*
45. The Officer’s Report has recommended the CAPG submission on Policy 6.6 be rejected.
46. I acknowledge that CAPG were not a submitter on Policy 6.7 and only sought a minor change to 6.8 so that the words ‘may be’ are replaced with ‘will be’. However, consistent with other evidence I have prepared on the CARP on behalf of Gelita, I consider that the most appropriate approach to addressing the shortcomings of the CARP in respect of reverse sensitivity effects is for Policy 6.7 to be deleted and Policy 6.8 to be amended as set out below:

*“Where activities that discharge into air locate appropriately and where the effects of the discharge are avoided, remedied or mitigated ~~to avoid the potential for reverse sensitivity effects~~, then a longer consent duration may be available is appropriate to provide for ongoing operational certainty.”*

47. I consider that replacing Policy 6.6 with the amendment sought by the CAPG will further enhance the overall policy framework within the CARP by correctly addressing reverse sensitivity effects and giving effect to the CRPS. Such an approach would also be more consistent with the existing policy taken in Policies AQL5, AQL6 and AQL7 of the Natural Resources Regional Plan (**NRRP**).

## **RULES**

48. CAPG made a number of submissions on the rules. The changes sought by the CAPG are aimed at achieving a framework which appropriately provides for mineral extraction and associated activities, including quarrying, while managing adverse effects. I discuss the submissions made by CAPG with regards to Rules 7.17, 7.18, 7.37, 7.38 and 7.55 below.

**Rules 7.17 and 7.18 – discharges from large scale fuel burning devices and industrial and trade premises**

49. The CARP outlines a framework, through its policies (Policies 6.2, 6.3 and 6.21) and rules (Rules 7.17 and 7.18), whereby the AAQG are to be used to both guide decision making and to restrict or prohibit discharges where the AAQG may or will be exceeded. These provisions, along with other provisions of the CARP, aim to implement Objectives 5.1 and 5.2 which seek to ensure that where air quality provides for people's health and safety it is maintained, and where it does not, then air quality is improved.
50. The CAPG sought the deletion of Rules 7.17 and 7.18 which specify non-complying and prohibited activity status for discharges from large scale solid fuel burning devices and industrial and trade premises which are likely to exceed the AAQG.
51. In my opinion it is appropriate to include policy direction within the CARP to the effect that if ambient air quality is degraded in terms of contaminants not managed by the Resource Management (National Environmental Standards for Air Quality) Regulations 2004 then measures should be adopted that ensure that ambient air quality is improved. This is dealt with through Policies 6.2 and 6.3, for which I have addressed and proposed amendments separately on through my evidence for Gelita.
52. As I have discussed in relation to Gelita, I support the retention, with amendment, of Policies 6.2 and 6.3. I consider, however, that Rules 7.17 and 7.18 should be deleted, on the basis that the policy framework provides an appropriate and adequate resource management approach for improving ambient air quality utilising the AAQG. In addition, in my opinion discharges from large scale burning devices and industrial and trade premises should not be subject to a more onerous approach whereby it is likely, particularly within clean air zones, that the driver would be to restrict or prohibit such a discharge without the opportunity to consider the potential effects of the activity.
53. Rule 7.18 risks prohibiting discharges from activities, and thus the activities themselves, without enabling decision makers to have the opportunity to consider the significance of the activity in terms of enabling people and communities to provide for their social, economic and cultural well-being. The approach adopted by Rule 7.18 may also preclude other policy drivers contained in the CRPS or the CARP itself to be properly considered, which may otherwise support an activity

being able to continue to discharge. In my opinion, this creates a lack of balance, and does not reflect a sound resource management approach.

54. The Officer's Report recommends the following in respect of Rules 7.17 and 7.18:<sup>8</sup>

*"Rule 7.17 is deleted and replaced with a new rule or rules that enable application of BPO as appropriate to the receiving environment, and in line with the Objectives of the Plan.*

*Rule 7.18 is deleted and replaced with a new rule or rules that enable application of BPO as appropriate to the receiving environment, and in line with the Objectives of the Plan."*

55. Mr Chilton, in his evidence, discusses the purpose of the AAQG and the manner in which they are supposed to be utilised when establishing a framework for the management of air quality. In his opinion, the AAQG have been inappropriately applied, through Rules 7.17 7.18, as a management tool on individual discharges. The AAQG specifically state that they are *not designed to be used to assess the environmental and health impacts of individual discharges to air as required by the RMA or a regional or district plan.*<sup>9</sup>
56. However, at the time of preparing this evidence, no amended wording was provided for either rule and it is therefore not possible to comment further on any proposed amendments. Regardless, I remain of the opinion that both rules as notified should be deleted, for the reasons outlined.
57. In summary, in my opinion, and based on the technical advice of Mr Chilton, the CARP needs to ensure that the use of the AAQG within the resource management framework is consistent with the manner with which the AAQG are supposed to be used. That is, the AAQG are a tool that can be used to make decisions about the management of the ambient air resource (i.e. if it is degraded and should be improved) but they should not be used as a means for restricting or prohibiting individual discharges.

#### **Rules 7.37 and 7.38 – discharges from handling and storage of bulk solid materials**

58. The CAPG sought deletion of Rules 7.37 and 7.38 which deal with the handling and storage of 'bulk solid materials' and their replacement with two new rules which specifically refer to mineral extraction as set out below:

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<sup>8</sup> Officer's Report, page 13-9 (Recommendations R-17 and R-18).

<sup>9</sup> Ambient Air Quality Guidelines 2002 Update, page 40.

“7.37. The discharge of contaminants to air associated with mineral extraction activities is a permitted activity provided that:

1. Any discharge shall not result in dust, odour, gas or vapour, which is noxious, dangerous, offensive or objectionable at or beyond the boundary of the property.

2. A Dust Management Plan must be prepared and held.

3. The Dust Management Plan is supplied to the CRC on request.

7.38. The discharge of contaminants to air associated with mineral extraction activities that is not provided for by rule 7.37, and is not prohibited is a restricted discretionary activity.

The Council will restrict its discretion to the following matters when assessing restricted discretionary activity resource consent applications:

1. The quantity, quality and type of discharge and any effects rising from that discharge beyond the boundary of the site;

2. The methods to minimise the discharge and to avoid, remedy or mitigate any adverse effects of the discharge beyond the boundary of the site;

3. Dust Management Plans; and

4. Monitoring

Non notification:

Applications for restricted discretionary activities shall be considered without public notification or the need to serve notice of the application on affected persons in accordance with Section 95A(2) of the RMA, unless in the opinion of the Council there are special circumstances justifying public notification in accordance with Section 95A(4) of the RMA.”

59. The equivalent rules to Rules 7.37 and 7.38 within the NRRP are AQL42 - 42B which address the handling of ‘bulk materials’. Specifically, Rule AQL42A addressed “*Handling of bulk materials as part of a quarry or mining activity not permitted by Rule AQL42...*” as a permitted activity.
60. I consider it would be helpful to include a new rule or rules as sought by the CAPG for mineral extraction, specifically quarrying. These rules could be additional to the Rules 7.37 and 7.38, as notified, to enable other activities which involve the handling of bulk solid materials to continue to be assessed under those Rules while allowing quarrying activities to be easily assessed by plan users in accordance with a specific rule – as was the case in the NRRP. However, having considered the evidence of Mr Chilton, I cannot support the wording that has been proposed by the CAPG and therefore I propose an alternative wording below.
61. Alternatively, should the Panel be of a mind to retain the notified form of Rules 7.37 and 7.38, I consider there are a number of matters which require amendment so that the Rules are not unduly restrictive and can be applied with

certainty by plan users. I discuss these matters below, and then propose an alternative rule to that sought by CAPG addressing mineral extraction.

Definition of Bulk Solid Materials

62. As noted in the CAPG submission, bulk solid materials are not defined in the CARP. If the rules are retained to reflect bulk solid materials, I consider that for clarity and ease of understanding, it would be appropriate to include a definition for bulk solid materials that reflects the wording from the NRRP for 'bulk materials', which reads as follows:

*“Bulk materials include all materials consisting of fragments or particles that could be discharged as dust or particulate. These materials include, but are not limited to: gravel, quarried rock, fertiliser, coal, cement, flour, rock aggregate, grains and wood chips.”*

63. I acknowledge that in response to submissions the Reporting Officer has recommended this definition be included in the CARP.<sup>10</sup>

Limits on processing and storage volumes for bulk solid materials

64. While the CAPG's submission sought a new rule that does not include a limit on processed or stored volumes of material, I consider that it is appropriate to retain a limit so as plan users can assess with certainty when a consent is needed.
65. I am guided by Mr Chilton's opinion on the matter of appropriate limits for handling and storage of bulk materials, and consider that retaining the 100 tonnes an hour limit for a permitted activity is appropriate. As noted by Mr Chilton, the likelihood of adverse effects on air quality arising increases with increased production volumes, as does the need for control measures.

Dust Management Plan

66. Mr Chilton discusses why he considers from an air quality perspective that there is no need to have a requirement for a dust management plan within a permitted activity rule. I concur with Mr Chilton on this point and consider that subject to retaining a limit of 100 tonnes per hour, and subject to the CARP including a rule such as Rule 7.3, as notified, which otherwise regulates any offensive or objectionable effect beyond the site boundary, then there is no need for this additional requirement.

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<sup>10</sup> Officer's Report, page 6-12 (Recommendation R-T2.1).

67. As noted above, I propose that a new rule is added to the CARP which addresses discharges to air associated with quarrying activities as set out below. Consequential amendments will need to be made to reflect that Rules 7.37 and 7.38 no longer apply to quarrying activities:

7.37 The discharge of contaminants into air from the handling, processing, conveying or storage of bulk solid materials associated with quarrying is a permitted activity provided the following conditions are met:

1. The rate of handling does not exceed 100t per hour; or
2. Where handling occurs on less than 21 days per calendar year, the rate of handling does not exceed 250t per hour; and
3. The discharge does not cause a noxious or dangerous effect and
4. The amount of material stored does not exceed 1000t when it has an average particle size of less than 3.5mm;
5. The discharge does not occur within 200m of a sensitive activity located on a different property.

68. However, should the Panel consider that is appropriate to retain Rules 7.37 and 7.38, I propose they be amended as set out below, to reflect the comments I have made above in respect of why a dust management plan should not be a condition of a permitted activity rule:

7.37 *The discharge of contaminants into air from the handling of bulk solid materials is a permitted activity provided the following conditions are met:*

- 1. The rate of handling does not exceed 100t per hour; or*
- 2. Where handling occurs on less than 21 days per calendar year, the rate of handling does not exceed 250t per hour; and*
- 3. The discharge does not cause a noxious or dangerous effect; and*
- 4. ~~Where the rate of handling exceeds 20t per hour, a dust management plan prepared in accordance with Schedule 2 must be held and implemented by the persons responsible for the discharge into air; and~~*
- 5. ~~The dust management plan is supplied to the CRC on request; and~~*
- 6. The discharge does not occur within 200m of a sensitive activity located on a different property, wāhi tapu, wāhi taonga or site of significance to Ngāi Tahu.*

7.38 *The discharge of contaminants into air from the outdoor storage of bulk solid materials is a permitted activity provided the following conditions are met:*

- 1. The amount of material stored does not exceed 1000t when it has an average particle size of less than 3.5mm; and*
- 2. The discharge does not cause a noxious or dangerous effect; and*
- 3. ~~Where the storage exceeds 200t, a dust management plan prepared in accordance with Schedule 2 must be held and implemented by the persons responsible for the discharge into air; and~~*
- 4. ~~The dust management plan is supplied to the CRC on request; and~~*
- 5. The discharge does not occur within 100m of a sensitive activity located on a different property, wāhi tapu, wāhi taonga or site of significance to Ngāi Tahu.*



**Rule 7.55 - Cleanfilling**

69. The CAPG's submission sought deletion of Rule 7.55 which deals with cleanfilling. As will be discussed by the CAPG representative, the companies within the CAPG operate numerous cleanfill operations throughout the region, typically associated with the backfilling of quarry sites.
70. There is no equivalent rule for cleanfilling in the NRRP with the exception of minor cleanfilling associated with roading. Typically, applications for cleanfill that require a permit to discharge contaminants to air would be covered under Rule AQL42 of the NRRP addressing the handling of bulk materials.
71. I consider that Rule 7.55 could be deleted as sought in the CAPG submission as it would otherwise be covered under Rules 7.37 or 7.38 as notified (or the new rule I have proposed earlier in my evidence). However, it would provide some additional clarity for plan users as to what rule applies to cleanfilling and if the Panel is of a mind to retain Rule 7.55, I consider the associated conditions should be amended to better align with the provisions pertaining to handling of bulk solid materials.
72. Such changes should also reflect that cleanfill material as defined by the CARP should not result in a discharge of odour. This may be expected from other materials which would not typically fall within the definition of cleanfill. Additionally, as cleanfilling activities involve depositing material into the ground which then stays there permanently, the condition regarding storage may not be appropriate as it is somewhat confusing.
73. In my opinion, condition 1 of Rule 7.55 should be amended to reduce the currently proposed setback of 300 m from a sensitive activity located on an adjoining property to 200 m. This amendment is required to make the Rule consistent with the rules pertaining to the handling of bulk solid materials (i.e. Rule 7.37, discussed earlier in my evidence). As discussed by Mr Chilton, cleanfilling is not expected to generate dust effects greater than those which would be associated with quarrying and I therefore consider that 200 m is appropriate in the context of this rule.

74. Should the Panel be of a mind to retain Rule 7.55, I propose the following amendments:

*The discharge of contaminants into air from the disposal of cleanfill material is a permitted activity provided the following conditions are met:*

- 1. The discharge does not occur within 2300m of a sensitive activity located on an adjoining property; and*
- 2. The discharge does not occur within 100m of a wāhi tapu, wāhi taonga or site of significance to Ngāi Tahu; and*
- ~~3. The amount of material stored does not exceed 1000t when it has an average particle size of less than 3.5 mm; and~~*
- 4. The discharge does not cause a noxious or dangerous effect beyond the boundary of the property; and*
- ~~5. If there is a discharge of odour or dust beyond the boundary of the property of origin, an odour and/or dust management plan prepared in accordance with Schedule 2 must be held and implemented by the persons responsible for the discharge into air; and~~*
- ~~6. The odour and/or dust management plan is supplied to the CRC on request.~~*

## DEFINITIONS

75. The CAPG made a number of submissions on definitions. Some of these submissions have been accepted. Those that have been rejected in the Officer's Report, and that I believe should be amended to better reflect the framework of the CARP, I discuss below.

### **Sensitive Activity, including Notional Boundary**

76. The CAPG opposed the definition of sensitive activity on the basis that it is incomplete and uncertain. Additionally, the CAPG requested inclusion of a definition of notional boundary which is a term used in the definition of sensitive activity.
77. The Officer's Report recommends that the CAPG submission requesting a definition of notional boundary be rejected, and it also recommends that the definition of sensitive activity be expanded (based on other submissions) to address cropping, as follows:<sup>11</sup>

#### *Sensitive Activity*

*Any non-target crop that will actually or potentially be adversely effected by a discharge; or an activity undertaken in:*

- (a) the area within the notional boundary of an occupied dwelling; or*
- (b) a residential area or zone as defined in a district plan; or*

<sup>11</sup> Officer's Report, page 6-16 (Recommendation R-T2.1)

*(c) a public amenity area, including those parts of any building and associated outdoor areas normally available for use by the general public, excluding any areas used for services or access areas; or  
(d) a place, outside of the Coastal Marine Area, of public assembly for recreation, education, worship, culture or deliberation purposes.*

78. I consider the definition as proposed is significantly flawed for several reasons. In summary, it will prove difficult for plan users to interpret and implement and has the potential to unduly restrict a wide range of activities in my opinion. The absence of a definition of “*notional boundary*”, upon which part of the definition relies, will create considerable uncertainty.
79. Having regard to the evidence of Mr Chilton, I consider that it is entirely inappropriate to specifically include crops within the definition of a sensitive activity, as now recommended by the Reporting Officer. In respect of dust deposition, Mr Chilton considers effects on crops are likely to only occur where there are very high levels of dust deposition, which would presumably require consent under the CARP in any case.
80. With such a large part of the region being used for rural purposes, including the words “...*any non-target crop that will actually or potentially be adversely affected by a discharge...*” is likely to trigger the requirement for resource consent for a wide range of otherwise permitted activities. Again, being able to understand the definition and implement plan rules which make reference to sensitive activities is likely to be highly problematic for plan users as a case by case assessment would be required to determine whether a particular discharge is likely to impact on a particular crop. It is also unclear as to what type or scale of cropping activity would constitute a “sensitive activity”, e.g. what amount of cropping would need to exist on a property, or in what state of maturity it would have to be to be considered as a sensitive activity?
81. The problems I have identified above are perhaps best illustrated with reference to examples. The first of these is that a farmer undertaking outdoor burning in accordance with Rule 7.10 would have to ensure the burning did not occur at least 100m upwind or 50m in any direction of any such crop (quite possibly owned by the same farmer). Alternatively the farmer might otherwise come to the determination that what was being burnt would not affect the particular crop in question, but the definition gives no indication of how this might be determined. The opinion of the person responsible for the discharge, those who may be potentially affected, and Canterbury Regional Council staff, could well differ in such circumstances.

82. A further example is that many of the hundreds of river gravel takes that occur throughout the region would go from being a permitted activity under Chapter 3 of the NRRP, to requiring consent under the CARP as a discretionary activity if they occur within 200 metres of a cropping activity.
83. I also consider that amending the definition as proposed in the Officer's Report will result in plan users having extreme difficulty, if not making it impossible in many cases, in determining whether or not resource consent is required. In my view, this is not a satisfactory outcome.
84. With respect to the management of reverse sensitivity effects, district plans often seek to use land use planning controls to regulate sensitive activities establishing in proximity to activities that generate adverse effects. The purpose of these controls is to avoid or mitigate the potential for reverse sensitivity effects to arise. An example is Rule 2.5.3 of Volume 3, Part 4 of the operative Christchurch City Plan<sup>12</sup> which requires any residential unit shall not be erected within:
- (a) *400 metres of the Special Purpose (Landfill) Zone boundary;*
  - (b) *250 metres of the boundary of scheduled sewage treatment plants...*
  - (c) *250 metres of the Carrs Road Speedway ...*
  - (d) *200m of a Rural Quarry Zone boundary.*
85. To my mind, it is highly unlikely that District Councils would consider applying such controls in respect of cropping activities not establishing within a specified distance of a discharging activity. However, under the CARP as notified the discharging activity would be faced with a conundrum of being located close to a sensitive activity, but with no realistic likelihood of ever being able to prevent such an activity from locating close to it.
86. In addition, I do not agree with the rationale in the Officer's Report for rejecting the CAPG's request for the CARP to include a definition of notional boundary, which is that providing a definition would not provide additional clarity or readability, and would reduce the discretion with regard to identification of a "sensitive activity"<sup>13</sup>.
87. On the contrary, not providing a definition will make it almost impossible for plan users to determine how far a notional boundary extends and consequently when an activity may or may not require consent. The application of plan rules will rely on plan users having to make an arbitrary assessment as to how far the notional

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<sup>12</sup> 2.5.3 Separation from special purpose areas (Rural 1, 2, 3, 4 and 5 Zones)

<sup>13</sup> Page 6-6 of the Officer's Report

boundary extends around a property in each particular case, which is fraught with difficulty as to determining whether an activity is permitted or not.

88. I consider that it would be more appropriate for the definitions of sensitive activity and the definition of notional boundary that currently exist in the NRRP to be carried through to the CARP. These definitions read as follows:

**Sensitive activity** means an activity undertaken in:

(a) the area encompassed by the notional boundary of an occupied dwelling; or

(b) a residential area; or

(c) a public amenity area; or

(d) a place of public assembly.

**Notional boundary** means a line 20 metres from the façade of a dwelling, or the legal boundary of any site where this is closer to the dwelling.

89. These definitions are well understood and commonly accepted. I am not aware of any problems associated with the implementation of these provisions in the NRRP and have found them relatively straightforward to apply myself with respect to a wider range of activities that discharge contaminants to air. In my view, including cropping within the definition of sensitive activity has the potential to significantly compromise the sustainable management of the region's air resource through unduly restricting a wide range of activities and creating difficulties in plan implementation.

## **PLANNING MAPS – INCLUDING CLEAN AIR ZONES**

90. The CAPG sought that the Clean Air Zones identified in the CARP around Christchurch be amended so as to exclude areas currently being used for mineral extraction, and amend the maps so as to pull the zone boundaries for Clean Air Zone 1 back to the position of the zone in the NRRP.
91. The Section 32 report discusses how the CARP proposes the amalgamation of the Clean Air Zone 1 and 2 boundaries for Christchurch, Kaiapoi, Rangiora and Ashburton, "...to ensure that the space heating (including home heating) provisions apply to sites less than two hectares currently located inside Clean Air Zone 2. ... As the urban boundary expands it is the intention that the Clean Air Zone would align to ensure that discharges to air from urban activities are managed to reduce their effect on the airshed."

92. The problem I see with this amalgamation is that in addition to space heating rules, as notified the CARP also requires other activities such as large scale fuel burning devices and the discharge of PM<sub>10</sub> which would have previously been located within Clean Air Zone 2, to meet higher thresholds as they are now within the Clean Air Zone 1. This includes activities taking place on quarry sites within Christchurch.
93. Such an approach has the potential to significantly impact upon quarrying activities and unduly constrain these activities and the important contribution they make to overall social and economic wellbeing in the region.
94. The logic applied in the Section 32 report is that, “...as the urban boundary expands it is the intention that the Clean Air Zone would align to ensure that discharges to air from urban activities are managed to reduce their effect on the airshed.”<sup>14</sup> In my opinion this does not take into account the provisions of the CRPS regarding urban activities, which includes Policy 6.3.1 (4) which seeks to ensure that new urban activities only occur within existing urban areas or identified greenfield priority areas as shown on Map A of Chapter 6, unless they are otherwise expressly provided for in the CRPS.
95. To achieve the purpose stated in the Section 32 report, in my opinion it would be more appropriate for the CARP to amend the Clean Air Zone boundary so that for Christchurch, Clean Air Zone 1 aligns with the urban limits established in Map A of Chapter 6 of the CRPS. This would provide a more robust approach to account for potential urban expansion in Christchurch than simply expanding the boundary to capture the entirety of the Christchurch City territorial boundaries.
96. The CRPS envisages that any future change to the urban limits will require an accompanying change to the CRPS, at which point amendments to the CARP Clean Air Zones would be appropriate in my view. I therefore consider that the Clean Air Zone for Christchurch should be revised to be consistent with the urban limits established in Map A of Chapter 6 of the CRPS.

## **SCHEDULE 1**

97. The CAPG sought that the final section of Schedule 1 requiring that a risk assessment in accordance with Risk Management Standard AS/NZS ISO 31000:2009, “...where the effects of an activity are unknown or unpredictable due to an absence of information...”, be deleted.

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<sup>14</sup> Page 4-62 of Section 32 Report.

98. I support this deletion on the basis that it is unreasonable for such a detailed assessment to be undertaken owing only to unpredictability. Rather, such an approach should only be required where effects are unpredictable and likely to be significant.

#### **SUMMARY**

99. Broadly speaking, I am supportive of the provisions within the CARP. They aim to provide a resource management framework whereby activities are provided for while managing adverse effects associated with discharges.
100. However, there is a range of improvements and amendments that I consider need to be made so that quarrying activities can take place within an appropriate resource management context without being unduly constrained, and where changes are required to provide certainty for users of the CARP.
101. In summary, in identifying proposed changes to the provisions of the CARP, I have endeavoured to ensure that quarrying activities are effectively provided for, while the effects of such activities, including reverse sensitivity effects, are appropriately managed.

**Kevin Bligh**  
18 September 2015

**ATTACHMENT A - CANTERBURY REGIONAL POLICY STATEMENT 2013 –  
OBJECTIVES AND POLICIES OF RELEVANCE TO QUARRYING**

**Chapter 5 – Land-use and Infrastructure**

*Objective 5.2.1 – Location, design and function of development (Entire Region)*

Development is located and designed so that it functions in a way that:

- (1) achieves consolidated, well designed and sustainable growth in and around existing urban areas as the primary focus for accommodating the region's growth; and
- (2) enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety; and which:
  - (a) maintains, and where appropriate, enhances the overall quality of the natural environment of the Canterbury region, including its coastal environment, outstanding natural features and landscapes, and natural values;
  - (b) provides sufficient housing choice to meet the region's housing needs;
  - (c) encourages sustainable economic development by enabling business activities in appropriate locations;
  - (d) minimises energy use and/or improves energy efficiency;
  - (e) ...
  - (f) ...
  - (g) ...
  - (h) ...
  - (i) avoids conflicts between incompatible activities.

*Policy 5.3.1 – Regional growth (Wider Region)*

To provide, as the primary focus for meeting the wider region's growth needs, sustainable development patterns that:

- (1) ensure that any
  - (a) urban growth; and
  - (b) limited rural residential development occur in a form that concentrates, or is attached to, existing urban areas and promotes a coordinated pattern of development;
- (2) encourage within urban areas, housing choice recreation and community facilities, and business opportunities of a character and form that supports urban consolidation;
- (3) promote energy efficiency in urban forms, transport patterns, site location and subdivision layout;



- (4) maintain and enhance the sense of identity and character of the region's urban areas; and
- (5) encourage high quality urban design, including the maintenance and enhancement of amenity values.

*Policy 5.3.2 – Development conditions (Wider Region)*

To enable development including regionally significant infrastructure which:

- (1) ensure that adverse effects are avoided, remedied or mitigated, including where these would compromise or foreclose:
  - (a) ...
  - (b) options for accommodating the consolidated growth and development of existing urban areas;
  - (c) ...
  - (d) ...
  - (e) significant natural and physical resources;
- (2) avoid or mitigate:
  - (a) ...
  - (b) reverse sensitivity effects and conflicts between incompatible activities, including identified mineral extraction areas; and
- (3) integrate with:
  - (a) the efficient and effective provision, maintenance or upgrade of infrastructure; and
  - (b) transport networks, connections and modes so as to provide for the sustainable and efficient movement of people, goods and services, and a logical, permeable and safe transport system.

**Chapter 6 – Recovery and Rebuilding of Greater Christchurch**

*Policy 6.3.9 – Rural residential development*

In Greater Christchurch, rural residential development further to areas already zoned in district plans as at 1st January 2013 can only be provided for by territorial authorities in accordance with an adopted rural residential development strategy prepared in accordance with the Local Government Act 2002, subject to the following:

...

- (5) The location and design of any proposed rural residential development shall:
  - (a) ...
  - (b) ...
  - (c) ...

- (d) ...
- (e) ...
- (f) ...
- (g) ...
- (h) ...
- (g) avoid significant reverse sensitivity effects with adjacent rural activities, including quarrying and agricultural research farms, or strategic infrastructure;...

## **Chapter 14 – Air Quality**

### *Policy 14.3.5 – Relationship between discharges to air and sensitive land-uses*

In relation to the proximity of discharges to air and sensitive land-uses:

- (1) to avoid encroachment of new development on existing activities discharging to air where the new development is sensitive to those discharges, unless any reverse sensitivity effects of the new development can be avoided or mitigated.
- (2) existing activities that require resource consents to discharge contaminants into air, particularly where reverse sensitivity is an issue, are to adopt the best practicable option to prevent or minimise any actual or likely adverse effect on the environment.
- (3) new activities which require resource consents to discharge contaminants into air are to locate away from sensitive land uses and receiving environments unless adverse effects of the discharge can be avoided or mitigated.