

IN THE MATTER

of the Resource Management Act
1991

AND

IN THE MATTER

of the Proposed Canterbury Air
Regional Plan

**STATEMENT OF EVIDENCE OF EMILY BUCKINGHAM
ON BEHALF OF WINSTONE WALLBOARDS LIMITED**

Dated 18 September 2015

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INTRODUCTION

Qualifications and Experience

- 1 My full name is Emily Chee Win Buckingham. I hold the position of Consultant Planner at Hill Young Cooper Limited. I have been in this position since February 2008.
- 2 I hold a Bachelor of Planning from the University of Auckland. I have seven years of experience in resource management planning and am a full member of the New Zealand Planning Institute.
- 3 I have been a planning advisor in relation to the following industrial projects involving discharges to air:
 - (a) Fonterra Brands Takanini production site air discharge permit;
 - (b) Fonterra Brands Tip Top Mt Wellington production site air discharge permit;
 - (c) Impact of the Proposed Auckland Unitary Plan air discharge provisions on Winstone Wallboards' Auckland site;
 - (d) Golden Bay Cement Aotea Quay service centre air discharge permit renewal.
- 4 I am providing evidence on behalf of Winstone Wallboards Limited, a division of Fletcher Building (WWB), on the Proposed Canterbury Air Regional Plan (pCARP). I assisted WWB in the preparation of its submission and further submission on the pCARP.

Scope of Evidence

- 5 My evidence addresses the following:
 - (a) The relevant statutory framework; and
 - (b) The submissions made by WWB in relation to the following provisions:
 - (i) Reverse sensitivity issues (Objective 5.9 and Policies 6.7 and 6.8);
 - (ii) Policy 6.4 and the focus on PM_{2.5};
 - (iii) Offsetting and Rule 7.14;

- (iv) Rule 7.18 – Prohibited activity status;
- (v) Rule 7.19 - External combustion (gas);
- (vi) Rules 7.24 and 7.25 - Discharges from emergency electricity generation, maintenance and peak electricity load management;
- (vii) Rule 7.27 - Combustion discharges not complying with or provided for by other rules.

6 I have read the Code of Conduct for Expert Witnesses as contained in the Environment Court's Consolidated Practice Note (2014), and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

The Statutory Framework

- 7 The pCARP is a proposed regional plan prepared under the provisions of the Resource Management Act 1991 (the RMA). The purpose of the RMA in section 5 is to promote the sustainable management of natural and physical resources.
- 8 Under section 32 of the RMA, the objectives of the pCARP should be the most appropriate to achieve the purpose of the RMA, and the policies and rules of the pCARP should be the most appropriate to achieve its objectives.
- 9 Rules in the pCARP are to be for the purpose of carrying out regional council functions and achieving the objective and policies of the plan, and in making the rules, regard shall be had to the actual or potential effects on the environment including any adverse effect¹.
- 10 The pCARP must also give effect to relevant higher policy documents including the Canterbury Regional Policy Statement 2013 (CRPS)² and its rules must not be more lenient than a national environmental standard, most relevantly the National Environmental Standards for Air Quality (NESAQ)³.

¹ RMA Section 68(1) and (3)

² RMA Section 67(3)

³ RMA Section 43B(3)

- 11 The objectives and policies of the CRPS for air quality are contained in Chapter 14. In summary, objectives are to maintain or improve ambient air quality; and enable the discharge of contaminants into air provided there are no significant localised adverse effects.

Reverse sensitivity (Objective 5.9, Policies 6.7 and 6.8)

- 12 Objective 5.9 and Policies 6.6, 6.7 and 6.8 are focused on the spatial location of activities to achieve appropriate air quality outcomes. Policy 6.6 suggests that the appropriate location of air discharging activities is linked to the land use provisions in the relevant district plan. However, Policy 6.7 then states that if there are significant adverse effects on neighbouring land use activities, an air discharging activity should reduce effects or relocate. Policy 6.8 promotes a longer consent duration for air discharging activities which 'locate appropriately to avoid the potential for reverse sensitivity effects'.
- 13 WWB sought that Objective 5.9 be deleted as the objective aims to control the locations of existing air discharging activities, and this should be a district plan matter. WWB submitted that Policy 6.7 created uncertainty as to the long term viability of its site and did not protect established industries in industrial zones from reverse sensitivity effects, and should also be deleted. WWB also sought that Policy 6.8 be amended to remove the reference to reverse sensitivity, and that Policy 6.6 should be retained.
- 14 In the Section 42A report, the reporting officers state that the scope of the pCARP cannot ensure protection to discharging activities from sensitive activities, and aims to manage 'legacy reverse sensitivity issues'⁴. There is no information given about the extent of any legacy reverse sensitivity issues. The reporting officers have not recommended any amendments to Policies 6.6, 6.7 and 6.8. Only clarification amendments are proposed to Objective 5.9.
- 15 It is my view that District Plans are the key statutory instrument by which suitable locations should be identified for different land use activities. WWB's Opawa Road site is zoned Business 5 (General Industrial) under the operative Christchurch City Plan (Map 47) and Industrial Heavy under the proposed Christchurch Replacement District Plan (Map 46). This is the most suitable zone for WWB's

⁴ Section 42A report page 10-7

manufacturing activities and in my opinion WWB is appropriately located as sought by Policy 6.6.

- 16 I am concerned with the implications of Policy 6.7, as it may cause industries located appropriately within heavy industrial zones to become uncertain about the viability of their ongoing operations. While I recognise that relocation is only anticipated when an air discharge has a significant adverse effect, I also recognise that determining the scale of effect requires an assessment at the time of consent renewal. Therefore whether the adverse effects of an air discharge are considered 'significant' may be uncertain until this time.
- 17 I expect that such uncertainty would have an impact upon an industry's willingness to make ongoing investments in a site, and may discourage such investment if consent renewal is required within a certain timeframe. For example, should a site upgrade to take advantage of technological advancements and continue to achieve best practicable option (BPO)? Or will BPO still not be enough to avoid 'significant adverse effects', in which case the site will not be able to obtain a renewed consent (in which case any investment in the site is wasted).
- 18 I note that Policies 6.6, 6.7, 6.19, 6.20 and new Policy 6.11A as recommended in the section 42A report will potentially be in conflict when it comes to renewing air discharge permits for industrial activities. With many activities falling to a discretionary activity status under the pCARP, the effect of this status is not just to enable assessment of the BPO (as the section 42A report states is the aim),⁵ but to also subject each consent to consideration under Policy 6.7 which suggests that relocation may be necessary.
- 19 From my experience working with WWB and other industries, I understand the economic costs to industries from potential relocation requirements and ongoing operational uncertainty are significant. In my view, these costs, as well as the economic and social benefits that successful industries create, need to be weighed up carefully against the benefits to air quality from requiring industry to relocate. These factors are important when considering whether Policy 6.7 achieves the purpose of the RMA (including enabling people and communities to provide for their social and economic wellbeing and health and safety).

⁵ Section 42A report page 13-13

20 The key guidance on reverse sensitivity issues in the objectives and policies of the CRPS is Policy 14.3.5. Importantly, the policy states that existing air discharging activities where reverse sensitivity is an issue are to adopt the BPO - which may involve reducing effects, but does not suggest the requirement to relocate. It is new air discharging activities that are required to locate away from sensitive land uses and receiving environments. In my view, pCARP Policy 6.7 fails to give effect to Policy 14.3.5 of the CRPS.

21 Objective 5.9 of the pCARP appears to be addressing a district planning matter, but I do recognise that location may be an important factor when considering the effects of air discharge consent applications for new activities, particularly if in a location where such activities are not anticipated under the district plan zoning. To better give effect to Policy 14.3.5(3) of the CRPS, I suggest Objective 5.9 (if it is retained) be amended to refer to new activities only:

5.9 New discharging and sensitive activities are spatially located so that appropriate air quality outcomes are achieved both at present and in the future.

22 I am also of the view that Policy 6.8 should be reworded for sense. Air discharging activities are already located on a site before the potential for reverse sensitivity effects arises. Therefore I support the following wording:

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

23 It is my view that Policy 6.6 (retained in full) and my amended Policy 6.8 are most appropriate to achieve Objective 5.9.

24 I consider that Policy 6.7 should be deleted. If it is to be retained, it could be amended in order to better give effect to the CRPS and address the concerns I have raised above as follows:

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, the effects of the discharge shall be reduced where this represents the best practicable option. ~~it is anticipated~~

~~that within a defined time frame the activity giving rise to the discharge will reduce effects or relocate.~~

- 25 WWB's submission sought to retain Policy 6.19. However, Policy 6.19 refers to enabling air discharges that are compatible with the surrounding land use pattern. When applied to lawfully established industries, this approach is potentially inconsistent with the approach I have supported above in relation to Objective 5.9 and Policies 6.6-6.8 on reverse sensitivity matters. This is because it is my view that air discharges from established industrial activities should generally be enabled where the activities are appropriately located (in terms of the underlying zoning). I therefore suggest that (if the panel has scope to do so) that Policy 6.19 be amended as follows:

"Enable discharges of contaminants to air associated with large scale, industrial and trade activities and nationally and regionally significant infrastructure, in locations where the discharge is compatible with the ~~surrounding land use pattern~~ underlying zoning and while ensuring that activities on air quality are minimised."

Policy 6.4 and the focus on PM_{2.5}

- 26 Mr Curtis' evidence for WWB states (at paragraph 4.3) that Policy 6.4 (focusing on PM_{2.5}) appears to have been set in the absence of any analysis as to whether the PM_{2.5} concentrations sought are practical and possible.
- 27 This is a concern for me, as it means that the implications of Policy 6.4 on air discharging activities cannot be determined, and the information required to assess whether the policy is appropriate is unavailable.
- 28 I therefore consider that Policy 6.4 should be deleted. As an alternative, as it is the PM_{2.5} concentration target set by the policy that is the key issue, I suggest Policy 6.4 could be amended as follows:

6.4 Reduce overall concentrations of PM_{2.5} in clean air zones ~~so that by 2030 PM_{2.5} concentrations do not exceed 25µg/m³ (24 hour average)~~, while providing for industrial growth.

Rule 7.14 - Offsetting

- 29 Rule 7.14 of the pCARP concerns the discharge of PM₁₀ and off-setting, similar to Regulation 17 of the NESAQ. However, as noted in paragraph 5.3 of the evidence of Mr Curtis for WWB, the requirements and outcomes of Rule 7.14 are different to the NESAQ.
- 30 Rule 7.14, as notified, effectively states that discharges of PM₁₀ from large scale burning devices need to be off-set where existing concentrations of PM₁₀ beyond the property boundary are equal to or exceed 2.5µg/m³. Regulation 17 of the NESAQ requires off-setting only when the discharge of PM₁₀ increases the existing concentration of PM₁₀ beyond the property boundary by 2.5µg/m³ or more.
- 31 Regulation 17(2) of the NESAQ further allows for existing consented air discharging activities to renew their consents for the same activity without any off-setting requirement applying, if the amount and rate of PM₁₀ discharge is the same or less than the previously consented activity.
- 32 In the Section 42A report, the officers recommend that Rule 7.14 is deleted and replaced. The new Rule 7.14 now refers to existing offsite concentrations of PM₁₀ being increased by more than 2.5µg/m³, which makes the rule more similar to Regulation 17.
- 33 While the Section 42A report states that Rule 7.14 is intended to provide a consent path through which observance of Regulation 17 of the NESAQ can be enforced, and generally states that inconsistencies identified between Rule 7.14 and Regulation 17 should be taken into account in amending the rule⁶, the new rule does not contain an exemption for existing activities renewing their consents as is included in Regulation 17(2). In this respect WWB's submission has not been addressed.
- 34 Hence the amended Rule 7.14 remains inconsistent with Regulation 17. Based on my discussions with Mr Curtis I understand that it is likely many established industrial sites contribute over 2.5µg/m³ to offsite concentrations, and the implementation of this rule would require off-setting PM₁₀ emissions to a level below the existing baseline level, at the time of air discharge consent renewal.
- 35 A rule in the pCARP can be stricter than the NESAQ⁷ but this needs to be justified. The Section 42A report suggests that only the space

⁶ Section 42A report page 13-9/10/11

⁷ NESAQ Regulation 28

heating rules were intended to be stricter than the NESAQ⁸, and neither the section 32 report or the section 42A report justifies the need for stricter large scale burning PM₁₀ rules. These reports suggest that it was unintentional that Rule 7.14 is stricter than the NESAQ.

- 36 The relevant objectives and policies of the CRPS and pCARP support enabling air discharges associated with existing industrial activities that achieve the BPO, do not have significant adverse effects, and maintain or improve ambient air quality⁹.
- 37 It is my view that new Rule 7.14 is inconsistent with the abovementioned objectives and policies because the existing PM₁₀ discharges to be subject to off-setting requirements would have no impact on existing ambient air quality. They would possibly already represent the BPO, and would not necessarily have significant adverse effects. Further, from my review of Mr Curtis' evidence I understand that off-setting is an exercise of significant difficulty, and in my view this requirement is not proportionate to the scale of adverse effects on the existing environment resulting from existing PM₁₀ discharge activities.
- 38 Therefore it is my opinion that an off-set requirement which is stricter than the NESAQ is not justified and is not in accordance with RMA sections 32 and 68(3). I suggest this could be resolved by accurately implementing Regulation 17(2), allowing existing activities to renew air discharge permits while maintaining the same PM₁₀ emission rates, without an off-set requirement.
- 39 This could be achieved through amendments to Rule 7.14 as below:

7.14 Any discharge of PM₁₀ into air that would be likely, at any time, to increase the concentration of PM₁₀ (calculated as a 24-hour mean) by more than 2.5µg/m³ in any part of a polluted airshed other than the site on which the discharge occurs, is a restricted discretionary activity provided the following condition is met:

- 1. ~~100%~~ The portion of the discharge which results in the exceedance will be off-set within the polluted airshed in accordance with Regulation 17 of the*

⁸ Section 42A report page 3-11

⁹ CRPS Objective 14.2.2, Policy 14.3.5(2); pCARP Policy 6.19, 6.20

Note: when an application is for a renewal of an existing consent, this rule does not apply unless the amount or rate of PM₁₀ discharge to be expressly allowed by the proposed consent is greater than under the existing consent.

Rule 7.18

- 40 Rule 7.18 of the pCARP, as notified, prohibits air discharges from large scale fuel burning devices and industrial premises that will likely result in the Ambient Air Quality Guidelines 2002 (AAQG) being exceeded.
- 41 In locations where any of the AAQG are already exceeded, this rule could prevent existing industrial activities from obtaining renewals of their existing air discharge permits and force them to effectively close down and move elsewhere.
- 42 Policy 6.21 of the pCARP seeks to 'avoid' exceedances of the AAQG and the notified rule was consistent with this. However, the rule as notified was inconsistent with pCARP Policies 6.19 and 6.20. It was also stricter than the NESAQ Regulation 20, which only requires consent authorities to decline consent applications that are likely to breach NESAQ standards (which are the same as some of the AAQG standards) if the discharge is likely to be a principal source of the contaminant for which the standard is breached.
- 43 In the Section 42A report, the reporting officers recognised that Rule 7.18 does not provide sufficient discretion to enable industrial and large scale discharges where appropriate. The officers recommended deleting Rule 7.18 and replacing it with a new rule enabling BPO on discharging sites. No wording has yet been prepared for the new rule¹⁰.
- 44 If the intention is to include a rule on exceedances of the Ambient Air Quality Guidelines 2002, I suggest that a discretionary activity status is more appropriate than prohibited. This would be more consistent with policies 6.19 and 6.20 of the pCARP, as well as the CRPS, and enable the consideration of the activity against the policies seeking BPO when deciding whether to grant consent. I wish to address the

¹⁰ Section 42A report pages 13-7/8/9

panel further in regard to new Rule 7.18 once the proposed wording is provided.

- 45 I also recommend that (for consistency, and if there is scope for the panel to do so¹¹) Policy 6.21 be amended to better reflect the new rule. I consider that Policy 6.21 (which as currently drafted requires avoidance) is in conflict with other policies.

Rule 7.19 - External combustion (gas)

- 46 As notified, Rule 7.19 contains two different permitted activity conditions controlling emission stacks in relation to building heights. Condition 7.19(3) requires no buildings on the property that are higher than five metres above natural ground level to be within a 25m radius of an emission stack. Condition 7.19 (5) requires an emission stack (of 501-5000 kilowatt output) to be 3m higher than any buildings within 35m of that stack, and at least 7m high.
- 47 As confirmed in paragraph 7.3 of the evidence of Mr Curtis for WWB, it is common for industrial sites to contain buildings that are taller than five metres, including in the vicinity of their emission stacks. In these cases, the effect of condition 3 is that no matter how high a stack is, any gas combustion of any output will require consent as a discretionary activity. Relevantly, there is no height limit for the Business 5 zone in the operative Christchurch City Plan, and in the proposed Christchurch Replacement District Plan the height limit for the Industrial Heavy zone is 15m (with chimneys allowed to be an additional 6m or 20% higher than the height of the building). WWB sought that condition 3 be deleted.
- 48 The Section 42A report does not specifically address the concerns WWB raised about condition 3. The reporting officers state that dispersion modelling assisted in determining appropriate stack heights and the general application of the modelling requires certain environmental conditions¹². The officers have not explained why one of these conditions should be that there are no buildings higher than 5m within 25m of an emission stack, and did not recommend any changes to Rule 7.19.
- 49 As outlined in the paragraph 7.5 of Mr Curtis' evidence, the presence of 5m high buildings within 25m of an emission stack is not in itself a factor in determining the air quality effects of the stack's discharge.

¹¹ WWB did not submit on Policy 6.21

¹² Section 42A report page 13-13

Rather, it is building heights in relation to the stack height which affects dispersion of the products of combustion therefore air quality - a matter adequately addressed by condition 5.

50 Relying upon his evidence, it is my view that condition 3 is inappropriate because it does not directly relate to the adverse environmental effects of concern (effects on air quality) as required by section 68(3) of the RMA. It does not implement the relevant objectives and policies of the CRPS and pCARP which aim to enable air discharges from industrial activities where adverse effects on air quality are minimised¹³.

51 I am therefore of the view that condition 3 would unnecessarily constrain large scale burning and industrial activities and should be deleted entirely. Condition 5 is sufficient to address the air quality matters of concern.

Rules 7.24 and 7.25 - Discharges from emergency electricity generation, maintenance and peak electricity load management

52 Condition 3 of proposed Rules 7.24 and 7.25 limit the sulphur content of diesel and petrol burnt for emergency electricity generation, maintenance and peak electricity load management purposes to 0.001%. As noted in paragraph 8.2 of Mr Curtis' evidence, the maximum allowable sulphur content of petrol in the New Zealand Fuel specifications is 0.005%, and WWB's submission asked that the limit be changed to reflect this.

53 There was no specific response given to WWB's submission in the Section 42A report and the reporting officers did not recommend any changes to Rules 7.24 and 7.25.

54 As set out in the paragraph 8.4 of Mr Curtis' evidence, the impact upon air quality from allowing petrol with a sulphur content of 0.005% rather than 0.001% to be burnt is negligible, and I further note that the fuel will only be burnt intermittently. In my view the benefits of better enabling emergency electricity generation, maintenance and peak electricity load management to support the uninterrupted operations of industrial activities would far outweigh any negligible benefit achieved by limiting the sulphur content of petrol below the New Zealand Fuel specifications level.

¹³ CRPS Objective 14.2.2; pCARP Policy 6.19

- 55 I therefore suggest condition 4 of Rule 7.24 and condition 3 of 7.25 be amended to read as follows:

The sulphur content of the ~~fuel~~ diesel burnt does not exceed 0.001% by weight, and the sulphur content of the petrol burnt does not exceed 0.005% by weight.

Rule 7.27 - Combustion discharges not complying with or provided for by other rules

- 56 Rule 7.19 is the only rule in the pCARP specifically dealing with external gas combustion activities on industrial sites. Any site not meeting the permitted activity conditions, or with a large scale fuel burning device of greater than 5 megawatt output, becomes a discretionary activity under Rule 7.27. There is no controlled or restricted discretionary activity status.
- 57 I understand from the Section 42A report that the widely applicable discretionary activity status is considered necessary in order to be able to assess combustion discharges as to whether they are the BPO and achieve the objectives of the pCARP¹⁴. No changes were recommended to the combustion rules 7.19 - 7.27 in the Section 42A report.
- 58 The five permitted activity conditions (I have recommended only four of these are retained in my evidence on Rule 7.19 above) are related to discrete technical matters. As set out in paragraph 9.2 of Mr Curtis' evidence, breaches of these technical standards will not always give rise to adverse effects particularly given natural gas (LPG or CNG) is the cleanest burning fuel, and the maximum output of the combustion devices covered by this rule is 5 megawatts.
- 59 The Section 42A report states that restricted discretionary status has been applied where the effects that are to be managed are limited and where it is possible to determine the limits necessary for discretion¹⁵. In my view this status is most suitable for breaches of the conditions of Rule 7.19, as the potential issues and effects of concern are easily identifiable based on the purpose of the condition. Restricted discretionary is more appropriate than the discretionary activity status to be applied 'where the discharge is likely to cause adverse effects'¹⁶.

¹⁴ Section 42A report page 13-13

¹⁵ Section 42A report page 3-26

¹⁶ Section 42A report page 3-26

60 Therefore, it is my view that a non-compliance with any of the conditions of Rule 7.19 should be a restricted discretionary activity, with discretion restricted to any effects of not complying with the particular condition(s) (based on the purpose of that condition). Whether the BPO is achieved could be an additional matter for discretion.

61 I recommend a new rule 7.19A be added as follows:

7.19A The discharge of contaminants to air from the combustion of liquefied petroleum gas or compressed natural gas in any large scale combustion device with a net energy output of less than or equal to 5MW that does not comply with one or more of conditions 1-5 in Rule 7.19 is a restricted discretionary activity.

The exercise of discretion is restricted to the purpose of the condition(s) that is not complied with, and the BPO for the discharge.

CONCLUSION

62 In my opinion the amendments which I have recommended in my evidence (redlined version attached) are consistent with the CRPS and NESAQ, and will better achieve the purpose of the RMA. The amendments which I have recommended will enable industrial activities such as WWB to operate without consenting requirements that are disproportionate to, or insufficiently related to, the nature and scale of their adverse effects on the environment, while still promoting the achievement of the best practicable option for air discharges.

Emily Buckingham

September 2015

Attachment: Relevant objectives and policies including my recommended changes to the provisions of the pCARP

CRPS Objective 14.2.1 – Maintain or improve ambient air quality

Maintain or improve ambient air quality so that it is not a danger to people's health and safety, and reduce the nuisance effects of low ambient air quality.

CRPS Objective 14.2.2 – localised adverse effects of discharges on air quality

Enable the discharges of contaminants into air provided there are no significant localised adverse effects on social, cultural and amenity values, flora and fauna, and other natural and physical resources.

CRPS Policy 14.3.1 – Maintain and improve ambient air quality

In relation to ambient air quality:

- (1) To set standards to maintain ambient air quality in Canterbury based on concentrations of contaminants that cause adverse health effects and nuisance effects.
- (2) Where existing ambient air quality is higher than required by the standards set, to only allow the discharge of contaminants into air where the adverse effects of the discharge on ambient air quality are minor.
- (3) To give priority to ensuring that PM₁₀ ambient air quality improvements are achieved in Rangiora, Kaiapoi, Christchurch, Ashburton, Timaru, Geraldine and Waimate.

CRPS Policy 14.3.2 – Emissions from the use of solid and liquid based fuels

To promote measures, including the transfer to cleaner technology and fuel sources, that reduce the adverse effect on ambient air quality from the use of solid and liquid based fuels.

CRPS Policy 14.3.3 – Avoid, remedy or mitigate localised adverse effects on air quality

To set standards, conditions and terms for discharges of contaminants into the air to avoid, remedy or mitigate localised adverse effects on air quality.

CRPS 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.

pCARP

Objectives

The section 42A report recommends some amendments to Objective 5.9. I recommend that that Objective 5.9 be deleted as sought in the WWB submission or that the wording proposed in the section 42A report be further amended as follows:

5.9 New dDischarging and sensitive activities are spatially located so that appropriate air quality outcomes are achieved both at present and in the future.

Policies

The section 42A report recommends that Policy 6.4 be retained as notified. I recommend either deletion of Policy 6.4 as sought in the WWB submission or that the policy be amended as follows:

6.4 Reduce overall concentrations of PM_{2.5} in clean air zones ~~so that by 2030 PM_{2.5} concentrations do not exceed 25µg/m³ (24 hour average)~~, while providing for industrial growth.

The section 42A report recommends that Policy 6.7 be retained as notified. I recommend either deletion of Policy 6.7 as sought in the WWB submission or amendment of the policy as follows:

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, the effects of the discharge shall be reduced where this represents the best practicable option. ~~it is anticipated that within a defined time frame the activity giving rise to the discharge will reduce effects or relocate.~~

The section 42A report recommends that Policy 6.8 be retained as notified. I recommend that the policy be amended in accordance with the WWB submission as follows:

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

The section 42A report recommends that Policy 6.19 be amended. I recommend some further changes to that wording as follows:

6.19 "Enable discharges of contaminants to air associated with large scale fuel burning devices, industrial and trade activities and nationally and regionally significant infrastructure, in locations where the discharge is compatible with the ~~surrounding land use pattern~~ underlying zoning and while ensuring that activities on air quality are minimised."

Rules

The section 42A report proposes that Rule 7.14 as notified be deleted and replaced with a new rule. I recommend some further amendments to that new rule as follows:

7.14 Any discharge of PM₁₀ into air that would be likely, at any time, to increase the concentration of PM₁₀ (calculated as a 24-hour mean) by more than 2.5µg/m³ in any part of a polluted airshed other than the site on which the discharge occurs, is a restricted discretionary activity provided the following condition is met:

- 1. ~~100%~~ The portion of the discharge which results in the exceedance will be off-set within the polluted airshed in accordance with Regulation 17 of the Resource Management (National Environmental Standards for Air Quality) Regulations 2004.*

The exercise of discretion is restricted to the following matters:

- 1. The proposal to off-set 100% of the emissions within the polluted airshed to ensure that there is no net increase of PM10 emissions; and*
- 2. The matters set out in rule 7.2.*

Note: when an application is for a renewal of an existing consent, this rule does not apply unless the amount or rate of PM₁₀ discharge to be expressly allowed by the proposed consent is greater than under the existing consent.

The section 42A report recommends that Rule 7.19 be retained as notified. I recommend that Rule 7.19 be amended in accordance with the WWB submission as follows:

7.19 The discharge of contaminants into air from the combustion of liquefied petroleum gas or compressed natural gas in any large scale external combustion device with a net energy output of less than or equal to 5MW is a permitted activity provided the following conditions are met:

- 1. The discharge is directed vertically into air and is not impeded by any obstruction above the emission stack which decreases the vertical efflux velocity below that*

which would occur in the absence of such obstruction;
and

2. Except for a period not exceeding two minutes in each hour of operation, the opacity of the discharge is not darker than Ringelmann Shade No. 1, as described in Schedule 5; and
- ~~3. There are no buildings higher than five metres above natural ground level within a 25m radius of the emission stack, unless the building, land or other structure is on a different property to the stack and was not established or anticipated at the time the stack was established; and~~
4. The fuel burning equipment is maintained in accordance with the manufacturer's specifications at least once every year by a person competent in the maintenance of that equipment and a copy of each maintenance report is held for three years and made available to the CRC on request; and
5. The following emission stack height must be met for the device net energy output specified below:

Net energy output (kilowatts)	Emission stack height
41-500	1m above any building, land or structure within 15m of the emission stack
501-5000	7m above natural ground level and 3m above any building, land or structure within 35m of the emission stack

I also recommend the inclusion of a new rule 7.19A as follows:

7.19A The discharge of contaminants to air from the combustion of liquefied petroleum gas or compressed natural gas in any large scale combustion device with a net energy output of less than or equal to 5MW that does not comply with one or more of conditions 1-5 in Rule 7.19 is a restricted discretionary activity.

The exercise of discretion is restricted to the purpose of the condition(s) that is not complied with, and the BPO for the discharge.

The section 42A report recommends that Rule 7.24 be retained as notified. I recommend that Rule 7.24 be amended in accordance with the WWB submission as follows:

7.24 The discharge of contaminants into air, for the purpose of emergency electricity generation, maintenance and peak electricity network load management, from the combustion of diesel, petrol, liquefied petroleum gas or compressed natural gas in any stationary large scale internal combustion device with a net energy output capacity up to and including 300kW is a permitted activity provided the following conditions are met:

...

- 4. The sulphur content of the ~~fuel~~ diesel burnt does not exceed 0.001% by weight, and the sulphur content of the petrol burnt does not exceed 0.001% 0.005% by weight; and*

...

The section 42A report recommends that Rule 7.25 be retained as notified. I recommend that Rule 7.25 be amended in accordance with the WWB submission as follows:

7.25 The discharge of contaminants into air, for the purpose of emergency electricity generation, maintenance and peak electricity network load management, from the combustion of diesel, petrol, liquefied petroleum gas or compressed natural gas in any stationary large scale internal combustion device with a net energy output of:

- 1. 301kW to 1MW within a Clean Air Zone; or*
- 2. 301kW to 2MW outside a Clean Air Zone*

is a controlled activity provided the following conditions are met:

...

- 3. The sulphur content of the ~~fuel~~ diesel burnt does not exceed 0.001% by weight, and the sulphur content of the petrol burnt does not exceed 0.005% by weight; and*

...