

**RECOMMENDATIONS OF HEARING COMMITTEE  
Chapter 3 AQL V13**

**25 June 2009**

***ON***

**PROPOSED VARIATION 13  
OF THE PROPOSED CANTERBURY NATURAL RESOURCES  
REGIONAL PLAN:**

**Chapter 3 – Air Quality: Plan provisions relating to the  
management of PM<sub>10</sub> contaminant in Ashburton**

**Hearing Committee: Cr McKay (Chair), Cr Little and Cr Kilworth**

**Date of the Hearing:  
14 April 2009, 9am to 12.30pm at the Ashburton District Council  
Chambers, Ashburton**

R09/50-2  
ISBN 978-1-86937-984-1

## 1.0 Introduction

- 1.1 Chapter 3 (Air Quality) of the Proposed Natural Resources Regional Plan (PNRRP) was notified on 1 June 2002 and deals with air quality. Air pollution from fine particulate matter (PM<sub>10</sub>) is a concern in several of Canterbury's towns and cities during the winter. It is associated with health issues such as asthma, irritation of the respiratory system and the aggravation of chronic lung and heart conditions. When Chapter 3 of the PNRRP was notified in 2002, it included specific provisions to address PM<sub>10</sub> concentrations in Christchurch, and indicated that the issue would be addressed in other towns in Canterbury, including Ashburton, following further investigations and monitoring.
- 1.2 In 2004, the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations (NESAQ) set air quality standards for all of New Zealand. The standard for PM<sub>10</sub> is 50 µg (micrograms) per cubic metre expressed as a 24-hour mean, with one permissible exceedence over any 12-month period. Under the Regulations, if this standard is not achieved by 1 September 2013 in an area, the Canterbury Regional Council (Environment Canterbury) will not be able to grant resource consents for discharges of PM<sub>10</sub> in that area.
- 1.3 Environment Canterbury has a permanent monitoring station in Ashburton which records PM<sub>10</sub> concentrations. Since 2005, there have been between 13 and 25 exceedences of the NESAQ for PM<sub>10</sub> each winter. Emission inventories, which are surveys of pollution sources, show that over 80% of PM<sub>10</sub> emissions in Ashburton come from domestic solid fuel burning, mainly open fires and older wood burners. Future projections indicate that the natural turnover of old appliances will not be sufficient for the Ashburton urban area to meet the NESAQ by 2013.
- 1.4 Variation 13 was notified on 16 August 2008 in order to improve air quality in Ashburton and to meet the health-based PM<sub>10</sub> standard set by the NESAQ. The provisions focus on reducing emissions from domestic solid fuel burning, but also seek to ensure that emissions from other sources, such as large scale boilers and outdoor burning, do not undermine the reductions made by the domestic sector.
- 1.5 The period for lodging submissions closed on 22 September 2008. There were six submissions received on the Variation. The summary of decisions requested was notified on 18 October 2008. The period for further submissions closed on 21 November 2008. Two further submissions were received on the Variation.
- 1.6 On 29 January 2009, Environment Canterbury appointed Regional Councillors McKay and Little to hear submissions on Variation 13 and recommended that an Ashburton District Councillor was appointed to the Hearings Panel; District Councillor Kilworth was appointed by the Ashburton District Council. Cr McKay was subsequently appointed to chair the hearing. The hearings panel was granted delegated authority to recommend decisions on submissions to Council for decision.
- 1.7 Council officers prepared a report under Section 42A of the Resource Management Act 1991 (the Act) making recommendations as to how particular submissions and further submissions could be dealt with. All submitters wishing to be heard were provided with copies of the relevant Officer reports. Copies of all submissions and further submissions were made available to us and we have read and considered them accordingly. Submitters and further submitters who wished to be heard were advised of the hearing dates and invited to notify Environment Canterbury of their interest so that an appropriate time could be made available for their respective appearances.
- 1.8 The hearings took place on 14 April 2009 at the Ashburton District Council. The hearing opened at 9.00 am. At the start of the hearing, Environment Canterbury reporting officers presented material to explain the process that had been followed in preparing Variation 13, the submissions received and the officers' recommended amendments to the provisions.
- 1.9 The Hearing Committee then heard from each submitter or further submitter who wished to be heard.
- 1.10 Appearances were made by;
  - Submitter 1 - Mr and Mrs Goodwin, representing themselves; and,
  - Submitter 4 - Mrs Baker and Dr Pearce, representing Solid Energy
- 1.11 In response to questioning and for points of clarification on a range of issues raised by the Hearing Committee through the hearing process, Regional Council officers, who had prepared reports, provided verbal advice.

- 1.12 Horticulture New Zealand (submitter 5) elected to file supplementary written submissions rather than appear. In addition Federated Farmers (Mid Canterbury Province) did not attend the hearing; however they have provided written evidence which was received by Council Officers on 16 April 2009 and subsequently sent on to us. We have read and considered this supplementary material on 13 May 2009. In accepting this material we considered whether or not any other party was unduly prejudiced. We believe that, since the points raised in their additional evidence were within the scope of their original and further submissions, it would have been unreasonable for us not to consider this additional information.
- 1.13 Submitter 1 identified at the hearing that one of the decisions that they had requested had been omitted from the summary of submissions. We have investigated what occurred in this situation and have identified that Council Officers wrote to the submitter requesting clarification of their decisions requested. When no response was forthcoming, Officers included their assessment of the decisions requested by the submitter into the summary of decisions requested. In our examination of the original submission we agree that the submitter did request that there needs to be some exemption provision for character homes in Ashburton, which was not reflected in the summary of decisions requested and the s42 Officer Report. Before deliberating over this request we considered whether or not any other party would be adversely affected. We have decided in this case that no party would be prejudiced in any way by granting the relief requested by the submitter. We have therefore discussed this request made by the submitter in this decision under Part 4.
- 1.14 In making our recommendations, we are cognisant of Environment Canterbury's statutory and legal duties to meet the NESAQ. While we consider that Variation 13 is the most appropriate means of achieving the NESAQ in Ashburton, we would like to point out that achieving its requirements (in particular 50 µg per cubic metre expressed as a 24-hour mean, with one permissible exceedence over any 12-month period) by 2013 is, in our opinion, unrealistic. We will discuss this issue in more depth in Part Two of this decision when discussing Objective AQL6.
- 1.15 We have dealt with the submissions by topic as follows:
- Part 2 General Submissions
  - Part 3 Objective AQL6.
  - Part 4 Discharges from small scale fuel burning devices (Policy AQL38 - 41, Rules AQL96 and AQL99-102).
  - Part 5 Exemptions and emergency provisions (Policy AQL44 and Rule AQL98).
  - Part 6 Provisions for large scale solid fuel burning devices (LSSFBD) (Policy AQL45/46 and Rules AQL103-105).
  - Part 7 Wintertime outdoor burning in Ashburton Clean Air Zone 1 (CAZ1) and Clean Air Zone 2 (CAZ2) (Policy AQL47 and Rule AQL97).
- 1.16 In promulgating Variation 13 Environment Canterbury undertook an evaluation of the objective, policies, rules and other methods in accordance with the requirements of Section 32(1), 32(3) and 32(4) of the Act, and summarised this in a report which it made available for public inspection as required by Section 32(5) and 32(6) of the Act. As such, the Hearing Panel is satisfied that at the time of public notification of Variation 13, Environment Canterbury had met its statutory obligation as set out in Section 32 of the Act.
- 1.17 The Hearing Committee is mindful of Environment Canterbury's obligation to undertake a further evaluation pursuant to Sections 32(3), and 32(4) of the Act, as set out in Section 32(2)(a) of the Act. Section 32(2)(a) states:
32. *Consideration of alternatives, benefits, and costs –*  
 ...  
 (2) *A further evaluation must also be made by-*  
 (a) *a local authority before making a decision under clause 10 or clause 29(4) of the First Schedule; and*  
 ...
- 1.18 In our deliberations we, the Hearings Committee, have considered the relevant parts of the original Section 32 report of Environment Canterbury, all the above submissions and evidence. The Section 32 evaluation required at the time of decision on submissions is achieved in the Panel's evaluations and recommendations that follow.

- 1.19 The recommended changes to the Variation are shown at the end of the report to clearly identify the overall effect of the recommendations. Strikeout and underlining are used to show the amendments. Footnotes are used to identify which submission each amendment relates to.

## 2. General issues

### 3-0-0 Delete each separate provision

3-0-0	2.1	Roger M Vessey	Delete each separate provision of Variation 13.	R
-------	-----	----------------	---	---

### Evaluations and reasons

#### 2.1. Changes requested

2.2. Submission 2.1 requests the deletion of each separate provision of the Variation. The submitter gives no reasons and does not provide alternatives. Technically, this submission opposes each individual provision of the Variation. However, we feel that it is appropriate to deal with this submission under 'General' rather than dealing with it separately for each provision of the Variation, because the submitter has given no reasons or alternatives. We note that submitter 2 has also made individual comments on small scale solid fuel devices and outdoor burning which we discuss in Sections 3 and 6 of this decision.

2.3. We believe that if the whole Variation was deleted, there would be no provisions to address health effects from PM<sub>10</sub> pollution in Ashburton. As a result, statutory obligations under the Act and the NESAQ would not be met and Environment Canterbury would not give effect to the Canterbury Regional Policy Statement (RPS). Therefore, deleting the Variation is not an appropriate option in order to achieve the purpose of the Act.

2.4. For these reasons Submission 2.1 should be rejected.

### Recommendation

Submission 2.1: Reject

### Amendment

Nil

### 3-0-0 General

3-0-0	1.3	Brian and Shirley Goodwin	Adopt Variation 13 only once the Government can guarantee constant, sustainable and affordable power supply.	R
3-0-0	1.4	Brian and Shirley Goodwin	Reduce or ban the use of coal as a starting measure and see what the effect is, instead of using blanket bans of solid fuel burners.	R
3-0-0	1.6	Brian and Shirley Goodwin	Implement measures to prevent pollution from the burning of unsuitable materials (e.g. rubbish) in approved solid fuel burning devices.	AIP
3-0-0	4.1	Solid Energy NZ Ltd and Solid Energy Renewable Fuels	Retain the Variation as proposed, with the exception of rules relating to large scale fuel burning devices. (See submission point 4.2 to 4.4.)	AIP
	F101.2	Horticulture New Zealand	<i>Oppose in part</i>	AIP
	F102.2	Federated Farmers - Mid Canterbury Province	<i>Oppose in part</i>	AIP

## Evaluations and reasons

### 2.5. **Changes requested**

### 2.6. **Submission 1.3: Government to guarantee power supply before Variation 13 takes effect**

2.7. As we understand it, the submitters have based their request on the expectation that the phasing out of older solid fuel burning devices would lead to an increased reliance on electric heating devices.

2.8. We also share the concerns of the submitter about rising power prices and the certainty of supply of electricity to homes that have changed their form of heating from solid fuel to electricity. However the guaranteeing of an electricity supply is outside the scope of Variation 13 and is outside of both Regional and District Council functions under the Act. Therefore we have no choice but to reject Submission 1.3.

### 2.9. **1.4: Ban the use of coal as starting measure**

2.10. The submitter has suggested a coal ban to start with before introducing a “blanket ban” of solid fuel burning. It should be pointed out that the provisions in Variation 13 do not ‘blanket ban’ fires. They regulate the phasing out of older devices, such that they are replaced either with low emission burners, or non-solid fuel options.

2.11. The provisions have been developed to be ‘fuel neutral’ in that they regulate *discharges* rather than the fuel type, so as not to discriminate against manufacturers who may in future produce clean burning coal ranges or develop some other device that reduces the level of PM<sub>10</sub> emissions from existing devices. In this way the Variation can encourage technical advances to create more environmentally friendly solid fuel devices. To ensure that Variation 13 and Chapter 3 of the PNRRP as a whole continue to be fuel neutral we recommend that submission 1.4 is rejected.

### 2.12. **4.1, F101.2, F102.2: Retain/do not retain Variation 13**

2.13. We recommend accepting in part Submission 4.1 and thank them for their support for the majority of Variation 13.

2.14. In the written evidence received by Council during the further submissions period (submitter F101 and F102), submissions were received opposing a general comment made by an original submitter supporting the adoption of the Variation as proposed. It is our understanding that the submitters were opposing the general support for the Variation as proposed because of their opposition to the outdoor burning provisions. Submitter F102 has since clarified in their additional written evidence, received by Council on 16 April 2009 and considered by us on 13 May 2009, that they merely did not support the provisions for outdoor burning contained in the Variation (this issue is discussed later in this decision). Therefore we recommend that submissions F101.2 and F102.2 are accepted in part.

### 2.15. **1.6: Prevent burning of unsuitable material in solid fuel burning devices**

2.16. There are provisions within Chapter 3 of the PNRRP to address this issue. Policy AQL1 and Rule AQL5 prohibit certain materials from being burnt in small scale fuel burning devices, including any plastics, metals, synthetic materials and many other materials found in household rubbish. These provisions already apply to the Ashburton urban area and were not contained in the Variation. Therefore, submission 1.6 is accepted in part but we do not recommend any changes as a result of this submission.

## Recommendation

Submissions 1.6, 4.1, F101.2, F102.2: Accept in part  
Submissions 1.3, 1.4: Reject (because rules already exist)

## Amendment

Nil

### 3. Objective AQL6

#### 3-5-1 Objective AQL6 PM<sub>10</sub> ambient air quality in Ashburton Clean Air Zones 1 and 2

3-5-1	1.5	Brian and Shirley Goodwin	Lower the compliance requirements for Ashburton to account for its cold climate and extreme weather.	R
3-5-1	6.1	Federated Farmers - Mid Canterbury Province	Retain Objective AQL6.	A
	F101.3	Horticulture New Zealand	<i>Support in part</i>	AIP

#### Evaluations and reasons

##### 3.1 Changes requested

##### 3.2 **1.5, 6.1, F101.3:** *Lower/retain the NESAQ compliance requirements for Ashburton*

3.3 Submitter 1 seeks to lower the compliance requirements for Ashburton, by allowing more than one breach of the PM<sub>10</sub> standard prescribed in the NESAQ. This point was discussed in some depth by the submitter at the hearing.

3.4 Objective AQL6 defines how much ambient air quality in Ashburton will be improved under Variation 13. As such, any substantive change to this Objective should have a flow on effect to the policies and rules. With the Objective as a starting point, a lengthy debate was held on whether or not the Variation could be implemented later to give the public more time to convert their homes to cleaner forms of heating, and what the effects of this type of approach would be both to individuals and to the wider economy. The submitters clarified at the Hearing that they wished to delay the enforcement of the rules for small scale solid fuel burning devices in Variation 13 for five years, until 31 August 2018.

3.5 As individuals we disagreed with the stringent timeframe outlined under the NESAQ and question whether it is possible for townships such as Ashburton to realistically comply with the Standard by 2013. But as a Hearings Panel established under the Act we are required to develop a plan that is consistent with achieving the Standard and we would be remiss in our obligations to the community if we recommended a course of action that could lead to Environment Canterbury not being able to grant discharge consents in Ashburton. As such we believe that Objective AQL6 should be retained as notified and recommend that submission 1.5 be rejected, submission 6.1 be accepted, and submission F101.3 be accepted in part.

3.6 It should be noted that as a Hearings Panel we feel that the concerns laid out by submitters are real concerns and that both the Regional and District Council should be advocating strongly to central government to extend the timeframe for compliance, moving from a 1 exceedence per 12 month period to a more realistic number of exceedences under the NESAQ. As such, we have attached an open letter to this decision that we hope both Councils will endorse and forward on to central government as part of an ongoing process of advocacy.

#### Recommendation

6.1: Accept  
 F101.3: Accept in part  
 1.5: Reject

#### Amendment

Nil

## 4. Small Scale Solid Fuel Burning Devices

### 3-8-1 Policy AQL38 Avoid discharges from open fires in the Ashburton Clean Air Zones 1 and 2

3-8-1	2.2	Roger M Vessey	Do not phase out open fires in the Ashburton urban area.	R
3-8-1	3.1	Emily Symons	Do not ban open fires through Policy AQL38. Consider practical rather than draconian control to address emissions from open fires, such as encouraging (even financially) tarpaulins and woodshed covers to promote drier firewood.	AIP

### 3-9-1 Policy AQL39 Emissions from enclosed burners in the Ashburton Clean Air Zone 1

3-9-1	1.1	Brian and Shirley Goodwin	Extend timeframe for phasing out and replacing older solid fuel burners.	R
3-9-1	1.2	Brian and Shirley Goodwin	Retain provisions regarding domestic solid fuel burners for new houses and replacement burners.	AIP
3-9-1	2.3	Roger M Vessey	Do not phase out older wood burners in the Ashburton urban area.	R

### 3-23-1 Rule AQL100 Open fires existing on the date of public notification of Variation 13 in the Ashburton Clean Air Zone 1 - non-complying activity

3-23-1	3.2	Emily Symons	Do not ban open fires through Rule AQL100. Consider practical rather than draconian control to address emissions from open fires, such as encouraging (even financially) tarpaulins and woodshed covers to promote drier firewood.	AIP
--------	-----	--------------	--	-----

### Schedule AQL4(d) Exemption Heritage Buildings in Ashburton

	1.8	Brian and Shirley Goodwin	Consider including Category B heritage buildings into Schedule AQL4	A
--	-----	---------------------------	---	---

### Evaluations and reasons

**Please note that submissions 1.1 and 1.2 are evaluated here although they were originally coded 3-0-0 and listed under Part 1 'General'.**

#### 4.1 Changes requested

#### 4.2 **1.1: Extend timeframe for phasing out old solid fuel burners**

4.3 The submitters requested that the timeframe for phasing out old solid fuel burners be extended by a certain period, which they clarified at the hearing to be five years. However, as discussed above, we do not believe that this is possible while achieving compliance with the NESAQ. We understand the proposed rules have been designed so that under full compliance, ambient air quality in Ashburton could be compliant with the NESAQ by 1 May 2011. In theory, it is therefore possible to delay the introduction of rules for small scale solid burning devices until the winter of 2013.

4.4 In practical terms however, immediate and full compliance with the rules is unlikely. In the course of our deliberations we considered the rate of turnover of open fires and non-compliant solid fuel burners and recognised that there is currently a level of inertia present in the community when it comes to replacing these devices. Due to the slow rate of turnover we agree that it is necessary to allow for a safety margin before the 2013 deadline under the NESAQ, and it is appropriate that there is a form of rule structure in place to compliment incentives such as the Clean Heat Programme (which has only been running for one year in Ashburton).

4.5 We are concerned that if the timeframe for replacing old domestic solid fuel burners is extended significantly beyond that which is proposed in the Variation, it would be highly unlikely that the requirements under the NESAQ would be met by the prescribed deadline. Therefore, as per our recommendation for Objective AQL6, we recommend that the submission be rejected.

- 4.6 **1.2: Retain provisions for new and replacement burner**
- 4.7 The submitter notes that it is “prudent to put controls on new houses and replacement log fires”. This submission point should be accepted in part insofar as it requests retaining the provisions in the Variation for new and replacement burners. However, if the Variation only covered new and replacement burners, modelling indicates that the NESAQ would not be met in the required timeframe. Therefore, we recommend rejecting the remainder of the submission.
- 4.8 **2.2, 2.3, 3.1, 3.2: Do not phase out open fires and wood burners in the Ashburton urban area**
- 4.9 If the use of open fires and old wood burners is not phased out in the Ashburton urban area, Environment Canterbury’s projections indicate that the PM<sub>10</sub> concentrations set by the NESAQ and the associated health benefits will not be achieved. Environment Canterbury’s emission inventory and modelling exercises have established that open fires and older wood burners are responsible for the majority of PM<sub>10</sub> emissions in the Ashburton urban area. As a consequence, Variation 13 proposes that the use of these appliances should be phased out, and that households should switch to using cleaner devices, including low emission wood burners. We agree with the principle reason for the phase out of these appliances and as such recommend that the submissions be rejected (submissions 3.1 and 3.2 should be accepted in part for the reasons listed in the following paragraph).
- 4.10 **3.1, 3.2: Encourage dry firewood**
- 4.11 Rule AQL5 within Chapter 3 of the PNRRP applies across Canterbury and prohibits the burning of wood with a moisture content greater than 25% dry weight. This rule is enforced through response to complaints and relies significantly on education. We believe that a continuing education programme for good burning practices including dry firewood is one of the components to achieving the reduction in PM<sub>10</sub> required under the NESAQ and recommend that both Councils actively promote this by way of an advertising campaign using a variety of advertising mediums.
- 4.12 With regard to the Variation itself, the region-wide promotion of the use and storage of dry firewood is already covered within Chapter 3 under Method AQL1(a). These methods cover the Ashburton area, so including further provision within Variation 13 would have no material effect. We do not recommend any changes as a result of this submission. However, as the intent of the submissions is consistent with Environment Canterbury’s policies, we recommend accepting them in part.
- 4.13 **1.8: Permit Category B Heritage Homes to Continue to Use Existing Open Fires**
- 4.14 Submitter 1 highlighted at the hearing that they felt that all heritage homes should be able to continue to use their open fire. Upon questioning we identified that the submitter’s home was classed as a category B historic place in the Ashburton District Plan. Therefore including the homes identified as Category B heritage buildings (as defined in the Ashburton District Plan) would meet the submitters concerns.
- 4.15 We considered the effect on ambient air quality of including Category B historic places into ‘Schedule AQL4 – Exempt Heritage Buildings in Ashburton’ and decided that the number of additional buildings was likely to have a less than minor effect on the air quality within CAZ1 and would not contribute in any material way to Objective AQL6 not being met. Therefore we recommend that the submission is accepted and Policy AQL42 is updated accordingly and Category B heritage buildings as defined in the operative Ashburton District Plan are included in Schedule AQL4.

#### **Recommendation**

- 1.8 Accept
- 1.2, 3.1, 3.2: Accept in part
- 1.1, 2.2, 2.3: Reject

#### **Amendment**

Include the words 'or B' in Policy AQL42 as shown below:

**Policy AQL42                      Small scale solid fuel burning device exemptions  
in the Ashburton Clean Air Zone 1**

**In the Ashburton Clean Air Zone 1, allow the discharge of PM<sub>10</sub> from any small scale solid fuel burning device that is located in a heritage building meeting all of the following criteria:**

- (a)        located in a building that is listed as a heritage building in Appendix A.3.1 Category A or B of the Ashburton District Plan; and**
- (b)        the device and chimney are original features of the building.**

Include in Schedule AQL4 category B heritage buildings as shown below:

<b>DP No.</b>	<b>Name</b>	<b>Address</b>	<b>Legal Description</b>
101	House	22 Aitken St, Ashburton	TS 565 CT 27A/619
103	Former House of Dr McBean Stewart	4 Beach Rd, Ashburton	Lot 3 DP 11060
104	House	Buckleys Terrace, Ashburton	Lot 23 DP 1494
105	Arcade Building	Burnett/Tancred Streets, Ashburton	Lots 10/11 DP 12044
106	Former House (now offices)	73 Burnett St, Ashburton	Lot 2 DP 36616
107	Residence/ Offices	96-100 Burnett St, Ashburton	TS 146 Pts 136/137 & 147
108	Former Anglican. Vicarage	86 Burnett St, Ashburton	Lot 1 DP 61939
109	62 Cox St (former Malvern Home)	Cnr William & Cox Streets, Ashburton	TS 790
110	Cottage	54 Eton St, Ashburton	Lot 1 DP 58990
111	House	42 Havelock St, Ashburton	Lot 1 DP 28103
112	Dr Baker's House	60 Peter St, Ashburton	Pt TS 757
113	House	34 Short St, Ashburton	Lot 1 DP 12239 CT 481/197
114	House	44 Short St, Ashburton	Lot 2 DP 12308 CT 6B/155
115	House	113 Walnut Ave, Ashburton	Lot 9 DP 23494 CT 3A/1475
116	House	117 Walnut Ave, Ashburton	Lot 10 DP 23494
117	House	172 Walnut Ave, Ashburton	TS 1278
118	House	4 Wilkin St, Tinwald	Lots 441-4 DP 91
119	House	69 Walnut Ave, Ashburton	Lot 2 DP 23688
120	Brigadoon	22 Carters Terrace, Ashburton	Lot 2 DP 40234 CT 18A/856
121	Bleak House	Cross St, Ashburton	Lot 5 DP 24777
122	House	7 Rapley St, Ashburton	Lot 5 DP 1995
123	Former Dr Trevor's House	32 Trevors Rd, Ashburton	Lot 1 DP 29348
124	House	57 Harrison St, Ashburton	Lot 59 DP 430
125	Court House	122 Cameron St (Baring Square West), Ashburton	TS 224 & 225
126	Old Glassworks	Cnr Bremners/Glassworks Rd, Ashburton	Lot 1 DP 9084
128	Coldstream Stables	Ealing – Coldstream Rd RD 3, Ashburton	Lot 1 DP 14206 Lots 1 3 4 Pt 2 DP 8841 Blk I IV Coldstream SD

# Emergency Provisions

## 3-12-2 Policy AQL44 Emergencies in the Ashburton Clean Air Zone 1

3-12-2	1.7	Brian and Shirley Goodwin	Change emergency provision to account for the fact that chimneys that have not been used for years, if used in an emergency, could be a safety hazard.	R
3-12-2	3.3	Emily Symons	Consider high power usage to be classified as an emergency and help reduce overall electricity usage by using cleaner burning open fires and log burners, including wetbacks.	R
3-12-2	6.7	Federated Farmers - Mid Canterbury Province	Include an exception for emergencies similar to that found in Policy AQL44 in Clean Air Zones 1 and 2 for the use of open fires for Rule AQL96.	R

## Evaluations and reasons

### 5.1 Changes requested

5.2 **1.7:** *Provide for safety of unused chimneys for devices kept for emergency use*

5.3 It is generally accepted that it is the responsibility of the owner of any small scale solid fuel burning device to keep the device in a safe operating condition, be it in use or not. The need to maintain solid fuel burning devices for emergency purposes is equivalent to the need for regular maintenance for any sort of emergency equipment. It is considered impractical to introduce mandatory provisions on how to keep a largely unused solid fuel burning device in working order. Therefore we recommend that the submission be rejected.

5.4 **3.3:** *Classify high electricity use an emergency*

5.5 Policy AQL44 is intended to ensure that households can keep warm when they have no other way of heating their home. The policy therefore provides certainty of heating supply in cases of real emergency (in accordance with Section 18(2) of the Act). It is not intended to alleviate any increase in demand on the electricity network. To do so, would mean that all of the existing open fires or older wood burners could be used, more frequently than in emergency situations. This would mean an increase in PM<sub>10</sub> emissions in the Ashburton urban area, which could lead to a breach of the level set in Objective AQL6 and the NESAQ. Therefore, we recommend that the submission be rejected.

5.6 We note that there is no rule framework that specifically 'turns off' Rules AQL 100 or AQL 101 in cases of emergency. However, we understand that Environment Canterbury is aware of this issue and has resolved to address it by way of a variation or plan change at a later point in time.

5.7 **6.7:** *Include emergency provisions for new open fires in CAZ1 and CAZ2*

5.8 The submitter requests that the emergency provisions should cover open fires under Rule AQL96. Currently, Policy AQL44 allows emissions from any small scale solid fuel burning device in CAZ1 in an emergency. The definition of small scale solid fuel burning device in Chapter 1 includes open fires. This means open fires installed before the notification of Variation 13 can be used in an emergency in CAZ1. There are no rules to control the use of existing open fires in CAZ2, therefore, these old open fires can be used in CAZ2 all the time.

5.9 Rule AQL96 requires new open fires installed in CAZ1 or CAZ2 to obtain resource consent as a non-complying activity. The submitter requests that these open fires be covered by emergency provisions so that they can be used in an emergency in CAZ1 and CAZ2. Any consent obtained under Rule AQL96 would provide consent to discharge in both CAZ1 and CAZ2. This consent would allow discharges at any time. As such, it is not considered necessary to include additional provisions for these appliances. We recommend rejecting the submission.

**Recommendation**

1.7, 3.3, 6.7: Reject

**Amendment**

Nil

## 5. Large Scale Solid Fuel Burners

### 3-14-1 Policy AQL46 Emissions from large scale fuel burning devices in the Ashburton Clean Air Zone 2

3-14-1	5.7	Horticulture New Zealand	Retain Policy AQL46.	A
--------	-----	--------------------------	----------------------	---

### 3-26-1 Rule AQL103 Combustion of solid fuel or light fuel oil in new, replacement or upgraded large scale fuel burning devices in the Ashburton Clean Air Zones 1 and 2

3-26-1	4.2	Solid Energy NZ Ltd and Solid Energy Renewable Fuels	<p>Add a new provision for the replacement of existing large scale solid fuel burning devices with a combined heat output greater than 40kW and less than or equal to 500kW, with large scale wood pellet burning devices with a combined heat output greater than 40kW and less than or equal to 500kW, in Ashburton CAZ 1 and 2, as a controlled activity.</p> <p>Suggested text for a new rule based on or similar to the Christchurch Clean Air Zone, as follows:</p> <p><b><u>Activity:</u></b>  <i><u>Notwithstanding Rules AQL18, AQL18A and 18D, and except where prohibited by Rule AQL12, the discharge of contaminants into air from burning of wood pellet fuel in the Christchurch Clean Air Zones 1 and 2 in any large scale wood pellet burning devices having a net combined heat output capacity within one property of greater than 40 kilowatts and less than or equal to 500 kilowatts is a controlled activity.</u></i></p> <p><b><u>Standards/Terms</u></b></p> <ol style="list-style-type: none"> <li><i><u>Any discharge to air from a large scale wood pellet burning device shall be in replacement of discharges to air from a large scale fuel burning device burning solid fuel of the same or greater heat output capacity which was legally established and operating up to the time of replacement.</u></i></li> <li><i><u>Any discharge of contaminant into air shall not be of a greater rate or quantum than which could have been lawfully discharged on 1 September 2008.</u></i></li> <li><i><u>The concentration of total suspended particulate in combustion gas discharged from all emission stack(s), measured according to the requirements described in <b>Schedule AQL6</b>, shall not exceed 125 milligrams per cubic metre of air adjusted to 0 Celsius, dry gas basis, 101.3 kilopascals, and 8% oxygen or 12% carbon dioxide.</u></i></li> <li><i><u>The discharge into air shall occur via a emission stack at a height of at least 7 metres above ground level and at least 3 metres above the ridge line of the roof of</u></i></li> </ol>	A
--------	-----	--	--	---

			<p><u>any building, land or other substantial structure within a distance of five times the height of that building, land or structure.</u></p> <p>5. <u>The discharge shall be directed vertically into air and shall not be impeded by any obstruction above the stack which decreases the vertical efflux velocity, below that which would occur in the absence of such obstruction.</u></p> <p>6. <u>The discharge shall only be a result of the combustion of wood pellet fuel meeting the criteria in AS/NZS 4014.6:2007 (except that pellets may be made from wood sawdust or wood shavings containing a minor or incidental amount of antisapstain chemicals).</u></p> <p>7. <u>The opacity of the discharge at the emission exit shall not be darker than Ringelmann Shade No. 1, as described in New Zealand Standard 5201:1973, except:</u></p> <p><u>(a) in the case of a cold start for a period not exceeding 30 minutes in operation; and</u></p> <p><u>(b) for a period not exceeding a total of four minutes in each succeeding hour of operation.</u></p> <p><b><u>Restriction of discretion</u></b></p> <p><u>Environment Canterbury will reserve control over the following matters in imposing any conditions:</u></p> <p>1. <u>Localised adverse effects from the discharge of contaminants to air relating to odour, suspended particulate and deposited particulate</u></p> <p>2. <u>The extent to which the best practicable option in relation to the concentration of total suspended particulate in combustion gas discharged is or should be adopted to prevent or minimise localised adverse effects and adverse effects on ambient air quality.</u></p> <p>3. <u>The fuel burning rate.</u></p> <p>4. <u>Any measures necessary to ensure the ability of the equipment to disperse contaminants, including chimney height, chimney design and emission velocity.</u></p> <p>5. <u>Any steps to be taken to ensure maintenance of the fuel-burning equipment.</u></p> <p>6. <u>Carrying out of measurements, samples, analyses, surveys, investigations, or inspection, including:</u></p> <p><u>(a) monitoring contaminant concentrations;</u></p> <p><u>(b) monitoring the opacity of the discharge;</u></p> <p><u>(c) recording of the quantity of fuel used;</u></p> <p><u>(d) monitoring the emission rate of</u></p>	
--	--	--	--	--

			<p><u>contaminants; and</u></p> <p><u>(e) analysing the cumulative effects of the discharge, in combination with discharges from other sources.</u></p> <p><u>7. Provisions of information to the consent authority at specified times.</u></p> <p><u>8. Compliance with monitoring, sampling and analysis conditions at the consent holder's expense.</u></p> <p><u>9. Duration of consent.</u></p> <p><u>10. Review of conditions of consent and the timing and purpose of the review</u></p> <p><u>Notification</u></p> <p><u>In accordance with section 94D(2), an application for resource consent required by this rule does not need to be notified, and in accordance with section 94D(3), notice of such an application does not need to be served."</u></p>	
3-26-1	4.3	Solid Energy NZ Ltd and Solid Energy Renewable Fuels	<p>Add a new provision for the replacement of existing large scale solid fuel burning devices with a combined heat output greater than 500kW to 1MW, with large scale wood pellet burning devices with a combined heat output greater than 500kW to 1MW, in Ashburton CAZ 1 and 2, as a restricted discretionary activity.</p> <p>Suggested text for a new rule based on or similar to the Christchurch Clean Air Zone, as follows:</p> <p><b><u>Activity:</u></b>  <u>Notwithstanding Rules AQL18, AQL18A and 18D, and except where prohibited by Rule AQL12, the discharge of contaminants into air from burning of wood pellet fuel in the Christchurch Clean Air Zones 1 and 2 in any large scale wood pellet burning devices having a net combined heat output capacity within one property of greater than 500 kilowatt and less than or equal to 1 megawatt is a restricted discretionary activity.</u></p> <p><b><u>Standards/Terms</u></b></p> <p><u>1. Any discharge to air from a large scale wood pellet burning device shall be in replacement of discharges to air from a large scale fuel burning device burning solid fuel of the same or greater less heat output capacity which was legally established and operating up to the time of replacement.</u></p> <p><u>2. Any discharge of contaminant into air shall not be of a greater rate or quantum than which could have been lawfully discharged on 1 September 2008.</u></p> <p><u>3. The concentration of total suspended particulate in combustion gas discharged</u></p>	AIP

			<p><u>from all emission stack(s), measured according to the requirements described in <b>Schedule AQL6</b>, shall not exceed 125 milligrams per cubic metre of air adjusted to 0 Celsius, dry gas basis, 101.3 kilopascals, and 8% oxygen or 12% carbon dioxide.</u></p> <p><u>4. The discharge into air shall occur via a emission stack at a height of at least 7 metres above ground level and at least 3 metres above the ridge line of the roof of any building, land or other substantial structure within a distance of five times the height of that building, land or structure.</u></p> <p><u>5. The discharge shall be directed vertically into air and shall not be impeded by any obstruction above the stack which decreases the vertical efflux velocity, below that which would occur in the absence of such obstruction.</u></p> <p><u>6. The discharge shall only be a result of the combustion of wood pellet fuel meeting the criteria in AS/NZS 4014:6:2007 (except that pellets may be made from wood sawdust or wood shavings containing a minor or incidental amount of antispain chemicals).</u></p> <p><u>7. The opacity of the discharge at the emission exit shall not be darker than Ringelmann Shade No. 1, as described in New Zealand Standard 5201:1973, except:</u></p> <p><u>(a) in the case of a cold start for a period not exceeding 30 minutes in operation; and</u></p> <p><u>(b) for a period not exceeding a total of four minutes in each succeeding hour of operation.</u></p> <p><b><u>Restriction of discretion:</u></b></p> <p><u>Environment Canterbury's discretion is restricted to the following matters:</u></p> <p><u>1. Localised adverse effects from the discharge of contaminants to air relating to odour, suspended particulate and deposited particulate</u></p> <p><u>2. The extent to which the best practicable option in relation to the concentration of total suspended particulate in combustion gas discharged is or should be adopted to prevent or minimise localised adverse effects and adverse effects on ambient air quality.</u></p> <p><u>3. The fuel burning rate.</u></p> <p><u>4. Any measures necessary to ensure the ability of the equipment to disperse contaminants, including chimney height, chimney design and emission velocity.</u></p> <p><u>5. Any steps to be taken to ensure maintenance of the fuel-burning</u></p>	
--	--	--	---	--

			<p><u>equipment.</u></p> <p><u>6. Carrying out of measurements, samples, analyses, surveys, investigations, or inspection, including:</u></p> <p><u>(a) monitoring contaminant concentrations;</u></p> <p><u>(b) monitoring the opacity of the discharge;</u></p> <p><u>(c) recording of the quantity of fuel used;</u></p> <p><u>(d) monitoring the emission rate of contaminants; and</u></p> <p><u>(e) analysing the cumulative effects of the discharge, in combination with discharges from other sources.</u></p> <p><u>7. Provisions of information to the consent authority at specified times.</u></p> <p><u>8. Compliance with monitoring, sampling and analysis conditions at the consent holder's expense.</u></p> <p><u>9. Duration of consent.</u></p> <p><u>10. Review of conditions of consent and the timing and purpose of the review.</u></p> <p><u>Notification</u></p> <p><u>In accordance with section 94D(2), an application for resource consent required by this rule does not need to be notified."</u></p>	
3-26-1	4.4	Solid Energy NZ Ltd and Solid Energy Renewable Fuels	<p>Add a new provision for new large scale wood pellet burning devices with a combined heat output less than or equal to 500kW, and large scale wood pellet burning devices with a combined heat output less than or equal to 500kW replacing existing large scale non-solid fuel burning devices, in Ashburton CAZ 1 and 2, as a controlled activity.</p> <p>Suggested text for a new rule based on or similar to the Christchurch Clean Air Zone, as follows:</p> <p><b><u>Activity:</u></b></p> <p><u>Notwithstanding Rule AQL18 and AQL18A, except where subject to Rules AQL18B and AQL18C, and except where prohibited by Rule AQL12, the discharge of contaminants into air from burning of wood pellet fuel in the Christchurch Clean Air Zones 1 and 2 in any large scale wood pellet burning devices having a net combined heat output capacity within one property of less than or equal to 500 kilowatt is a restricted discretionary activity.</u></p> <p><b><u>Standards/Terms:</u></b></p> <p><u>1. The concentration of total suspended particulate in combustion gas discharged from all emission stack(s), measured according to the requirements described in <b>Schedule AQL6</b>, shall not exceed 72 milligrams per cubic metre of air adjusted to 0 Celsius, dry gas basis, 101.3 kilopascals, and 8% oxygen or 12%</u></p>	AIP

			<p><u>carbon dioxide.</u></p> <ol style="list-style-type: none"> <li><u>2. The discharge into air shall occur via a emission stack at a height of at least 7 metres above ground level and at least 3 metres above the ridge line of the roof of any building, land or other substantial structure within a distance of five times the height of that building, land or structure.</u></li> <li><u>3. The discharge shall be directed vertically into air and shall not be impeded by any obstruction above the stack which decreases the vertical efflux velocity, below that which would occur in the absence of such obstruction.</u></li> <li><u>4. The discharge shall only be a result of the combustion of wood pellet fuel meeting the criteria in AS/NZS 4014:6:2007 (except that pellets may be made from wood sawdust or wood shavings containing a minor or incidental amount of antisapstain chemicals).</u></li> <li><u>5. The opacity of the discharge at the emission exit shall not be darker than Ringelmann Shade No. 1, as described in New Zealand Standard 5201:1973, except:</u> <ol style="list-style-type: none"> <li><u>(a) in the case of a cold start for a period not exceeding 30 minutes in operation; and</u></li> <li><u>(b) for a period not exceeding a total of four minutes in each succeeding hour of operation.</u></li> </ol> </li> </ol> <p><b><u>Restriction of discretion:</u></b></p> <p><u>Environment Canterbury's discretion is restricted to the following matters:</u></p> <ol style="list-style-type: none"> <li><u>1. In the context of Policy AQL19, existing and predicted PM<sub>10</sub> ambient air quality, including the achievement of any relevant national environment standard.</u></li> <li><u>2. Localised adverse effects from the discharge of contaminants to air relating to odour, suspended particulate and deposited particulate</u></li> <li><u>3. The extent to which the best practicable option in relation to the concentration of total suspended particulate in combustion gas discharged is or should be adopted to prevent or minimise localised adverse effects and adverse effects on ambient air quality.</u></li> <li><u>4. Any offset of the PM<sub>10</sub> emissions related to the large scale wood pellet burning device.</u></li> <li><u>5. The number of the large scale wood pellet burning devices sought to be authorised in relation to the projected demand over the next 24-month period for the installation of that type of device or the equivalent to ten 300 kilowatt large scale wood pellet burning devices, whichever is the greatest.</u></li> </ol>	
--	--	--	--	--

			<p>6. <u>The fuel burning rate.</u></p> <p>7. <u>Any measures necessary to ensure the ability of the equipment to disperse contaminants, including chimney height, chimney design and emission velocity.</u></p> <p>8. <u>Any steps to be taken to ensure maintenance of the fuel-burning equipment.</u></p> <p>9. <u>Carrying out of measurements, samples, analyses, surveys, investigations, or inspection, including:</u></p> <p>(a) <u>monitoring contaminant concentrations;</u></p> <p>(b) <u>monitoring the opacity of the discharge;</u></p> <p>(c) <u>recording of the quantity of fuel used;</u></p> <p>(d) <u>monitoring the emission rate of contaminants; and</u></p> <p>(e) <u>analysing the cumulative effects of the discharge, in combination with discharges from other sources.</u></p> <p>10. <u>Provisions of information to the consent authority at specified times.</u></p> <p>11. <u>Compliance with monitoring, sampling and analysis conditions at the consent holder's expense.</u></p> <p>12. <u>Duration of consent.</u></p> <p>13. <u>Review of conditions of consent and the timing and purpose of the review.</u></p> <p><u>Notification</u></p> <p><u>In accordance with section 94D(2), an application for resource consent required by this rule does not need to be notified, and in accordance with section 94D(3), notice of such an application does not need to be served if the application is for more than one large scale wood pellet burning device located on more than one property at yet to be determined locations."</u></p>	
--	--	--	--	--

**3-27-1 Rule AQL105 Large scale fuel burning devices burning solid fuel or light fuel oil that do not meet the standards set by Rules AQL103 and AQL104 in the Ashburton Clean Air Zones 1 and 2**

3-27-1	5.8	Horticulture New Zealand	Include a permitted activity rule to provide for existing large scale burning devices in Ashburton Clean Air Zone 2.	R
--------	-----	--------------------------	--	---

**Evaluations and reasons**

- 6.1 **Changes requested**
- 6.2 **5.7: Retain Policy AQL46**
- 6.3 Submission 5.7 should be accepted.
- 6.4 **4.2, 4.3, 4.4: Relax rules for new/replacement large scale pellet-fired boilers**
- 6.5 The submitter seeks to introduce to Ashburton similar provisions for large scale wood pellet burning devices to provisions discussed during the mediation on rules for Christchurch. At the

time of the Hearing, the mediated provisions were still with the Environment Court and had to be treated without prejudice. However, following a Consent Order from the Environment Court dated 9 April 2009, new rules addressing large scale wood pellet burning devices in Christchurch have now been inserted into Chapter 3 of the PNRRP.

- 6.6 Rule AQL103 proposes to make any new or replacement large scale solid fuel burning device in Ashburton CAZ 1 and 2 a discretionary activity. The submitter's request for CAZ 1 and 2 is to make any large scale wood pellet burning device that is replacing an existing large scale solid fuel burning device a controlled activity if it is 40kW-500kW and a restricted discretionary activity if it is 500kW-1MW. The submitter also requests controlled activity status for new large scale wood pellet burning devices (<500kW) and those that replace a non-solid fuel large scale fuel burning devices (<500kW). This would add Rules AQL103A, 103B and 103C to the provisions in Variation 13.
- 6.7 We were informed by Council officers during the hearing that in Ashburton, coal and wood burning boilers are the primary sources of particulate matter discharged from the industrial and commercial sector and are responsible for around 15% of all PM<sub>10</sub> emissions. It is expected that the industrial sector in Ashburton will grow over the life of the plan, meaning that emissions from this sector will increase in the future if emission control measures are not implemented. Because the PNRRP is expected to achieve a marked reduction in emissions from the domestic sector, the proportional impact of industrial and trade emission sources will increase in the future.
- 6.8 We accept and agree with the evidence presented by the submitter and the advice provided by the reporting officer that large scale pellet burning devices can achieve a significant reduction in emissions in comparison to other types of large scale solid fuel burning devices. We agree that, because of the lower emission profile of large scale pellet burning and the greater certainty around the effects, a more permissive and certain activity status is appropriate. However, we also accept that for a restricted discretionary activity status to be appropriate there needs to be a robust set of conditions developed. We believe that the conditions presented to us in the s42A report and endorsed by the submitter at the hearing are appropriate.
- 6.9 We therefore recommend that the suggested alterations as proposed by the officer and accepted by the submitter should be made to Variation 13 and submission 4.2 should be accepted and submissions 4.3 and 4.4 should be accepted in part.
- 6.10 **5.8:** *Make explicit that existing large scale solid fuel burning devices are permitted in CAZ2*
- 6.11 The submitter seeks to insert a rule that explicitly permits existing large scale solid fuel burning devices (LSFBD) in CAZ2. Under Chapter 3 of the PNRRP, Rule AQL24, existing and new large scale solid fuel burning devices <1MW are permitted under a set of specific conditions throughout Canterbury (except for Christchurch). Variation 13 proposes to make existing large scale solid fuel burning devices discretionary in Ashburton CAZ1 only. This means, existing LSFBD in Ashburton CAZ2 fall under PNRRP Rule AQL24 and are permitted. To highlight this, a note was inserted in Rule AQL105 explaining that existing large scale solid fuel burning devices in Ashburton CAZ2 would not be covered by the Rules in Variation 13. Inserting a permitted activity rule would duplicate Rule AQL24 in Chapter 3. The explanatory note is considered sufficiently explicit. No change is recommended and submission 5.8 is rejected.

### Recommendation

- 5.7, 4.2: Accept  
 4.3, 4.4: Accept in part  
 5.8: Reject

### Amendment

Amend Rule AQL103 as follows:

*Rule AQL103 Combustion of solid fuel or light fuel oil in new, replacement or upgraded large scale fuel burning devices in the Ashburton Clean Air Zones 1 and 2 – discretionary activity*

Activity	Standard	Discretion	Cross Ref.
Notwithstanding Rules AQL24, AQL26 and AQL27, and except as prohibited by Rule AQL12 or controlled by Rules <u>AQL12A</u> , <u>AQL103A</u> , <u>AQL103B</u> and <u>AQL103C</u> , the discharge of contaminants into air in the Ashburton Clean Air Zones 1 and 2 from	The concentration of total suspended particulate in combustion gas discharged from all emission stacks, measured according to the	Unlimited	Policies: <b>AQL45</b> <b>AQL46</b>

<p>the burning of solid fuel or light fuel oil in any new, replacement or upgraded large scale fuel burning device installed after the date of public notification of this variation to the NRRP is a discretionary activity.</p>	<p>requirement described in Schedule AQL6, shall not exceed 250 milligrams per cubic metre of air adjusted to 0° Celsius, dry gas basis, 101.3 kilopascals and 12% carbon dioxide.</p>		
---	--	--	--

Insert new Rules AQL103A, B and C as follows:

**Rule AQL103A Replacement of existing large scale fuel burning devices burning solid fuel with a combined heat output of 500 kW or less with large scale wood pellet burning devices burning wood pellet fuel with a combined heat output of 500 kW or less in the Ashburton Clean Air Zones 1 and 2 – controlled activity**

<b><u>Activity</u></b>	<b><u>Standards / Terms</u></b>	<b><u>Restriction of Discretion</u></b>	<b><u>Cross Ref.</u></b>
<p><u>Except where prohibited by Rule AQL12, the discharge of contaminants into air from burning of wood pellet fuel in the Ashburton Clean Air Zones 1 and 2 in any large scale wood pellet burning devices having a net combined heat output capacity within one property of greater than 40 kilowatts and less than or equal to 500 kilowatts is a controlled activity.</u></p>	<ol style="list-style-type: none"> <li>1. <u>Any discharge to air from a large scale wood pellet burning device shall be in replacement of discharges to air from a large scale fuel burning device burning solid fuel of the same or greater heat output capacity which was legally established and operating up to the time of replacement.</u></li> <li>2. <u>Any discharge of contaminant into air shall not be of a greater rate or quantum than which could have been lawfully discharged on 1 September 2008.</u></li> <li>3. <u>The concentration of total suspended particulate in combustion gas discharged from all emission stack(s), measured according to the requirements described in <b>Schedule AQL6</b>, shall not exceed 125 milligrams per cubic metre of air adjusted to 0 Celsius, dry gas basis, 101.3 kilopascals, and 8% oxygen or 12% carbon dioxide.</u></li> <li>4. <u>The discharge into air shall occur via an emission stack at a height of at least 7 metres above ground level and at least 3 metres above the ridge line of the roof of any building, land or other substantial structure within a distance of five times the height of that building, land or structure.</u></li> <li>5. <u>The discharge shall be directed vertically into air and shall not be impeded by any obstruction above the stack which decreases the vertical efflux velocity, below that which would occur in the absence of such obstruction.</u></li> <li>6. <u>The discharge shall only be a result of the combustion of wood pellet fuel meeting the criteria in AS/NZS 4014:6:2007 (except that pellets may be made from wood sawdust or wood shavings containing a minor or incidental amount of antisapstain chemicals).</u></li> <li>7. <u>The opacity of the discharge at the emission exit shall not be darker than Ringelmann Shade No. 1, as described in New Zealand Standard 5201:1973, except:</u></li> </ol>	<p><u>Environment Canterbury will reserve control over the following matters in imposing any conditions:</u></p> <ol style="list-style-type: none"> <li>1. <u>Localised adverse effects from the discharge of contaminants to air relating to odour, suspended particulate and deposited particulate</u></li> <li>2. <u>The extent to which the best practicable option in relation to the concentration of total suspended particulate in combustion gas discharged is or should be adopted to prevent or minimise localised adverse effects and adverse effects on ambient air quality.</u></li> <li>3. <u>The fuel burning rate.</u></li> <li>4. <u>Any measures necessary to ensure the ability of the equipment to disperse contaminants, including chimney height, chimney design and emission velocity.</u></li> <li>5. <u>Any steps to be taken to ensure maintenance of the fuel-burning equipment.</u></li> <li>6. <u>Carrying out of measurements, samples, analyses, surveys, investigations, or inspection, including:</u> <ol style="list-style-type: none"> <li>(a) <u>monitoring contaminant concentrations;</u></li> <li>(b) <u>monitoring the opacity of the discharge;</u></li> <li>(c) <u>recording of the quantity of fuel used;</u></li> <li>(d) <u>monitoring the emission rate of contaminants; and</u></li> <li>(e) <u>analysing the cumulative effects of the discharge, in combination with discharges from other sources.</u></li> </ol> </li> <li>7. <u>Provisions of information to the consent authority at specified times.</u></li> <li>8. <u>Compliance with monitoring, sampling and analysis conditions at the consent holder's expense.</u></li> <li>9. <u>Duration of consent.</u></li> <li>10. <u>Review of conditions of consent and the timing and purpose of the review.</u></li> </ol> <p><b><u>Notification</u></b></p>	

<u>Activity</u>	<u>Standards / Terms</u>	<u>Restriction of Discretion</u>	<u>Cross Ref.</u>
	<p>(a) <u>in the case of a cold start for a period not exceeding 30 minutes in operation; and</u></p> <p>(b) <u>for a period not exceeding a total of four minutes in each succeeding hour of operation.</u></p>	<p><u>In accordance with section 94D(2), an application for resource consent required by this rule does not need to be notified, and in accordance with section 94D(3), notice of such an application does not need to be served.</u></p>	

**Rule AQL103B Replacement of existing large scale fuel burning devices burning solid fuel with a combined heat output of greater than 500 kW to less than or equal to 1MW with large scale wood pellet burning devices burning wood pellet fuel with a combined heat output of greater than 500 kW to less than or equal to 1MW in the Ashburton Clean Air Zones 1 and 2 – restricted discretionary activity**

<u>Activity</u>	<u>Standards / Terms</u>	<u>Restriction of Discretion</u>	<u>Cross Ref.</u>
<p><u>Except where prohibited by Rule AQL12, the discharge of contaminants into air from burning of wood pellet fuel in the Ashburton Clean Air Zones 1 and 2 in any large scale wood pellet burning devices having a net combined heat output capacity within one property of greater than 500 kilowatt and less than or equal to 1 megawatt is a restricted discretionary activity.</u></p>	<ol style="list-style-type: none"> <li>1. <u>Any discharge to air from a large scale wood pellet burning device shall be in replacement of discharges to air from a large scale fuel burning device burning solid fuel of the same or greater heat output capacity which was legally established and operating up to the time of replacement.</u></li> <li>2. <u>Any discharge of contaminant into air shall not be of a greater rate or quantum than which could have been lawfully discharged on 1 September 2008.</u></li> <li>3. <u>The concentration of total suspended particulate in combustion gas discharged from all emission stack(s), measured according to the requirements described in <b>Schedule AQL6</b>, shall not exceed 125 milligrams per cubic metre of air adjusted to 0 Celsius, dry gas basis, 101.3 kilopascals, and 8% oxygen or 12% carbon dioxide.</u></li> <li>4. <u>The discharge into air shall occur via an emission stack at a height of at least 7 metres above ground level and at least 3 metres above the ridge line of the roof of any building, land or other substantial structure within a distance of five times the height of that building, land or structure.</u></li> <li>5. <u>The discharge shall be directed vertically into air and shall not be impeded by any obstruction above the stack which decreases the vertical efflux velocity, below that which would occur in the absence of such obstruction.</u></li> <li>6. <u>The discharge shall only be a result of the combustion of</u></li> </ol>	<p><u>Environment Canterbury's discretion is restricted to the following matters:</u></p> <ol style="list-style-type: none"> <li>1. <u>Localised adverse effects from the discharge of contaminants to air relating to odour, suspended particulate and deposited particulate</u></li> <li>2. <u>The extent to which the best practicable option in relation to the concentration of total suspended particulate in combustion gas discharged is or should be adopted to prevent or minimise localised adverse effects and adverse effects on ambient air quality.</u></li> <li>3. <u>The fuel burning rate.</u></li> <li>4. <u>Any measures necessary to ensure the ability of the equipment to disperse contaminants, including chimney height, chimney design and emission velocity.</u></li> <li>5. <u>Any steps to be taken to ensure maintenance of the fuel-burning equipment.</u></li> <li>6. <u>Carrying out of measurements, samples, analyses, surveys, investigations, or inspection, including:</u> <ol style="list-style-type: none"> <li>(a) <u>monitoring contaminant concentrations;</u></li> <li>(b) <u>monitoring the opacity of the discharge;</u></li> <li>(c) <u>recording of the quantity of fuel used;</u></li> <li>(d) <u>monitoring the emission rate of contaminants; and</u></li> <li>(e) <u>analysing the cumulative effects of the discharge, in combination with discharges from other sources.</u></li> </ol> </li> <li>7. <u>Provisions of information to the consent authority at specified times.</u></li> </ol>	

<u>Activity</u>	<u>Standards / Terms</u>	<u>Restriction of Discretion</u>	<u>Cross Ref.</u>
	<p><u>wood pellet fuel meeting the criteria in AS/NZS 4014:6:2007 (except that pellets may be made from wood sawdust or wood shavings containing a minor or incidental amount of antisapstain chemicals).</u></p> <p>7. <u>The opacity of the discharge at the emission exit shall not be darker than Ringelmann Shade No. 1, as described in New Zealand Standard 5201:1973, except:</u></p> <p>(a) <u>in the case of a cold start for a period not exceeding 30 minutes in operation; and</u></p> <p>(b) <u>for a period not exceeding a total of four minutes in each succeeding hour of operation.</u></p>	<p>8. <u>Compliance with monitoring, sampling and analysis conditions at the consent holder's expense.</u></p> <p>9. <u>Duration of consent.</u></p> <p>10. <u>Review of conditions of consent and the timing and purpose of the review.</u></p> <p><b><u>Notification</u></b></p> <p><u>In accordance with section 94D(2), an application for resource consent required by this rule does not need to be notified.</u></p>	

**Rule AQL103C New large scale wood pellet burning devices with a combined heat output of 500 kW or less, or large scale wood pellet burning devices with a combined heat output of 500 kW or less replacing existing large scale fuel burning devices not burning solid fuel, in the Ashburton Clean Air Zones 1 and 2 – restricted discretionary activity**

<u>Activity</u>	<u>Standards/Terms</u>	<u>Restriction of discretion</u>	<u>Cross Ref.</u>
<p><u>Except where prohibited by Rule AQL12, the discharge of contaminants into air from burning of wood pellet fuel in the Ashburton Clean Air Zones 1 and 2 in any large scale wood pellet burning devices having a net combined heat output capacity within one property of less than or equal to 500 kilowatt is a restricted discretionary activity.</u></p>	<p>1. <u>The concentration of total suspended particulate in combustion gas discharged from all emission stack(s), measured according to the requirements described in Schedule AQL6, shall not exceed 72 milligrams per cubic metre of air adjusted to 0 Celsius, dry gas basis, 101.3 kilopascals, and 8% oxygen or 12% carbon dioxide.</u></p> <p>2. <u>The discharge into air shall occur via an emission stack at a height of at least 7 metres above ground level and at least 3 metres above the ridge line of the roof of any building, land or other substantial structure within a distance of five times the height of that building, land or structure.</u></p> <p>3. <u>The discharge shall be directed vertically into air and shall not be impeded by any obstruction above the stack which decreases the vertical efflux velocity, below that which would occur in the absence of such obstruction.</u></p> <p>4. <u>The discharge shall only be a result of the combustion of wood</u></p>	<p><u>Environment Canterbury's discretion is restricted to the following matters:</u></p> <p>1. <u>In the context of Objective AQL6, existing and predicted PM<sub>10</sub> ambient air quality, including the achievement of any relevant national environment standard.</u></p> <p>2. <u>Localised adverse effects from the discharge of contaminants to air relating to odour, suspended particulate and deposited particulate</u></p> <p>3. <u>The extent to which the best practicable option in relation to the concentration of total suspended particulate in combustion gas discharged is or should be adopted to prevent or minimise localised adverse effects and adverse effects on ambient air quality.</u></p> <p>4. <u>Any offset of the PM<sub>10</sub> emissions related to the large scale wood pellet burning device.</u></p>	

<u>Activity</u>	<u>Standards/Terms</u>	<u>Restriction of discretion</u>	<u>Cross S Ref.</u>
	<p><u>pellet fuel meeting the criteria in AS/NZS 4014:6:2007 (except that pellets may be made from wood sawdust or wood shavings containing a minor or incidental amount of antisapstain chemicals).</u></p> <p>5. <u>The opacity of the discharge at the emission exit shall not be darker than Ringelmann Shade No. 1, as described in New Zealand Standard 5201:1973, except:</u></p> <p>(a) <u>in the case of a cold start for a period not exceeding 30 minutes in operation; and</u></p> <p>(b) <u>for a period not exceeding a total of four minutes in each succeeding hour of operation.</u></p>	<p>5. <u>The number of large scale wood pellet burning devices and their total size in kilowatts, per consent application.</u></p> <p>6. <u>The fuel burning rate.</u></p> <p>7. <u>Any measures necessary to ensure the ability of the equipment to disperse contaminants, including chimney height, chimney design and emission velocity.</u></p> <p>8. <u>Any steps to be taken to ensure maintenance of the fuel-burning equipment.</u></p> <p>9. <u>Carrying out of measurements, samples, analyses, surveys, investigations, or inspection, including:</u></p> <p>(a) <u>monitoring contaminant concentrations;</u></p> <p>(b) <u>monitoring the opacity of the discharge;</u></p> <p>(c) <u>recording of the quantity of fuel used;</u></p> <p>(d) <u>monitoring the emission rate of contaminants; and</u></p> <p>(e) <u>analysing the cumulative effects of the discharge, in combination with discharges from other sources.</u></p> <p>10. <u>Provisions of information to the consent authority at specified times.</u></p> <p>11. <u>Compliance with monitoring, sampling and analysis conditions at the consent holder's expense.</u></p> <p>12. <u>Duration of consent.</u></p> <p>13. <u>Review of conditions of consent and the timing and purpose of the review.</u></p> <p><b><u>Notification</u></b></p> <p><u>In accordance with section 94D(2), an application for resource consent required by this rule does not need to be notified, and in accordance with section 94D(3), notice of such an application does not need to be served if the application is for more than one large scale wood pellet burning device located on more than one property at yet to be determined locations.</u></p>	

Amend Rule AQL105 as follows:

**Rule AQL105 Large scale fuel burning devices burning solid fuel or light fuel oil that do not meet the standards set by Rules AQL103, AQL103A, AQL103B, AQL103C and AQL104 in the Ashburton Clean Air Zones 1 and 2 – non-complying activity**

Activity	Cross Ref.		
Notwithstanding Rules AQL24, AQL26 and AQL27, and except as prohibited by Rule AQL12 or controlled by Rule AQL12A, the discharge of contaminants into air in the Ashburton Clean Air Zones 1 and 2 from the burning of solid fuel or light fuel oil in a large scale fuel burning device that requires resource consent under Rules AQL103, <u>AQL103A</u> , <u>AQL103B</u> , <u>AQL103C</u> and AQL104 but does not meet the standards of those rules, is a non-complying activity.			Policies: AQL45 AQL46

Note:

Rule AQL105 applies only to:

- (i) existing large scale fuel burning devices burning solid fuel or light fuel oil in the Ashburton Clean Air Zone 1; and
  - (ii) new large scale fuel burning devices burning solid fuel or light fuel oil in the Ashburton Clean Air Zones 1 and 2;
- which do not comply with the conditions set out in Rules AQL103 and AQL104. Existing large scale fuel burning devices in the Ashburton Clean Air Zone 2 are not covered by Rule AQL105. For the purposes of this rule, new devices are those installed after the date of notification of Variation 13.

Insert explanation and principal reasons for new Rules AQL103A, B and C as follows:

**Rules AQL 103A, B and C New and replacement large scale wood pellet burning devices replacing existing large scale fuel burning devices**

While the contribution from these appliances to ambient PM<sub>10</sub> concentrations in winter is estimated to be only approximately 15% at present, this contribution will increase in the future if emission control measures are not implemented. Because the NRRP is expected to achieve a marked reduction in emissions from the domestic sector, the proportional impact of industrial and trade emission sources will increase in the future.

The most simple and cost-effective method of reducing industrial particulate emissions is to generally require compliance with a particulate emission concentration limit of 250 mg/m<sup>3</sup>. Small (less than or equal to 1MW) large scale wood pellet fuel burning devices are able to achieve significantly less particulate emissions, in part because of the wood pellet fuel burned. Where such large scale wood pellet burning devices are replacing existing large scale fuel burning devices combusting solid fuel, a minimum emission standard of 125 mg/m<sup>3</sup> is currently readily achievable. Further, where large scale wood pellet fuel burning devices are purpose built and have a heat output of less than 500 kilowatt a minimum emission standard of 72mg/m<sup>3</sup> is currently readily achievable. In the future, less particulate emission may be achievable, and become the best practical option technology. As this occurs, it is expected that devices considered in resource consent application processes will be subject to tighter emission standards. Rules AQL103A to AQL103C recognise and provide for this less emitting technology. The change in resource consent application activity status for

replacement large scale wood pellet fuel burning devices for those 500 kW or less, and those between 500kW and 1MW, reflects the increased potential for the larger devices to create localised adverse effects on air quality, resulting in different resource consent application outcomes.

By 'existing' what is meant is that as of 16 August 2008 (the date of public notification of Variation 13) the large scale fuel burning devices were legally existing and operating, and continue to be legally operated at the time a resource consent application is made and considered under this rule. At that time these devices form an accepted part of the environment. When replacement resource consent is sought for these devices the consent authority is to consider localised adverse effects on the environment. Further, the consent authority is also to consider the extent to which the proposal adopts the best practical option to prevent or minimise both localised adverse effects on the environment and the contribution of the large scale fuel burning device to ambient air quality within Ashburton, particularly PM<sub>10</sub> ambient air quality.

It is possible that under Rule AQL18D resource consent applications may be made for more than one large scale wood pellet burning device located on more than one property at yet to be determined locations (a global resource consent application). The rule anticipates this may occur. Any such resource consent application will need to demonstrate that localised adverse effects and adverse effects on ambient air quality can be appropriately controlled at any property the resource consent may be exercised upon. In addition, it is important to ensure that a short term 'allocative' approach is taken to the authorisation of emissions from these large scale wood pellet burning devices. This is necessary in order to carefully manage the overall achievement of Objective AQL3 and Regulations 17, 17A, 17C and 18 of the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations 2004. Such a short-term allocative approach is the most effective and efficient way of controlling cumulative effects of individual resource consents and managing uncertainty.

## 6. Outdoor Burning

### 3-15-1 Policy AQL47 Restrict discharges to air from outdoor burning in the Ashburton Clean Air Zones 1 and 2

3-15-1	2.4	Roger M Vessey	Do not restrict outdoor burning in and adjacent to Ashburton.	AIP
	F102.1	Federated Farmers - Mid Canterbury Province	<i>Support in part</i>	AIP
3-15-1	5.1	Horticulture New Zealand	Amend Policy AQL47 to provide for outdoor burning in Clean Air Zone 2 between May and September when the circumstances will not contribute to PM <sub>10</sub> levels in Clean Air Zone 1.	A
	F102.3	Federated Farmers - Mid Canterbury Province	<i>Support</i>	A
3-15-1	5.2	Horticulture New Zealand	Replace Policy AQL47(a) with " <u>where there is diseased material that needs to be destroyed by burning</u> ".	AIP
	F102.4	Federated Farmers - Mid Canterbury Province	<i>Support</i>	AIP
3-15-1	5.3	Horticulture New Zealand	Replace Explanation and Reasons for Policy AQL47 with " <u>Outdoor burning in the Ashburton Clean Air Zones 1 and 2, if not managed appropriately, could contribute to PM<sub>10</sub> levels. The policy establishes a framework for such burning to be managed appropriately</u> ".	AIP
	F102.5	Federated Farmers - Mid Canterbury Province	<i>Support</i>	AIP
3-15-1	6.4	Federated Farmers - Mid Canterbury Province	Amend Policy AQL47 to allow for small amounts of plastic and/or treated wood, and diseased vegetation and animal carcasses to also be burned during the period of May to September.	AIP
3-15-1	6.5	Federated Farmers - Mid Canterbury Province	Clarify Policy AQL47(d) such that it is clear how farmers will know whether or not Objective AQL6 has been met.	A
3-15-1	6.6	Federated Farmers - Mid Canterbury Province	Clarify Policy AQL47(e) such that it is clear how farmers will know whether or not Objective AQL6 has been met.	A

### 3-20-1 Rule AQL97 Outdoor burning in the Ashburton Clean Air Zones 1 and 2 - non-complying activity

3-20-1	5.4	Horticulture New Zealand	Delete Clean Air Zone 2 from Rule AQL97.	AIP
	F102.6	Federated Farmers - Mid Canterbury Province	<i>Support</i>	AIP
3-20-1	5.5	Horticulture New Zealand	Amend Rule AQL97 to a restricted discretionary activity, state the matters over which discretion is sought and include provision that applications be considered without notification or the need to obtain written approval from affected parties.	R
	F102.7	Federated Farmers - Mid Canterbury Province	<i>Oppose</i>	A
3-20-1	5.6	Horticulture New Zealand	Add a new permitted activity Rule AQL97A as follows: "Outdoor burning may be undertaken between May and September as follows: 1. The material to be burned is vegetation from production land in	AIP

			<p>Ashburton Clean Air Zone 2.</p> <p>2. The amount of material to be burned on one property at any one time shall have a footprint not greater than 4 metres by 4 metres and shall not be piled higher than 2 metres from ground level.</p> <p>3. The discharge shall not occur from the combustion of material with a moisture content of more than 25% dry weight, or if the moisture content cannot be determined, the material shall have been left to dry for at least six weeks prior to burning and within the two days prior to burning there shall have been less than 5mm of rainfall.</p> <p>4. The discharge shall not occur outside the hours of 8am to 2pm.</p> <p>5. The discharge shall not occur when the wind causes particles such as smoke to move towards Ashburton Clean Air Zone 1.</p> <p>6. The discharge shall only occur if the wind speed is not less than 5 metres per second, measured at 1 metre above ground level.</p> <p>7. The dispersal or deposition of particles shall not cause an objectionable or offensive effect beyond the boundary of the property where the discharge originates.</p> <p>8. The burn shall be supervised at all times.</p> <p>9. Written records of burning shall be kept. The records shall include:</p> <ul style="list-style-type: none"> <li>(a) Condition of the material burned</li> <li>(b) Size of the burn</li> <li>(c) Time of the day of the burn</li> <li>(d) Duration of the burn</li> <li>(e) Wind speed and direction during the burn</li> <li>(f) Supervisor present</li> </ul>	
	F102.8	Federated Farmers - Mid Canterbury Province	<i>Support in part</i>	AIP
3-20-1	6.2	Federated Farmers - Mid Canterbury Province	<p>Make outdoor burning from May to September in Clean Air Zone 2 a permitted activity subject to the following conditions:</p> <p>1. The material to be burned is vegetation or animal carcasses from production land in Ashburton Clean Air Zone 2. This includes diseased vegetation and diseased animals.</p> <p>2. The amount of material to be burned on one property at any one time shall have a footprint not greater than 4 metres by 4 metres and shall not be piled higher than 2 metres from ground level.</p> <p>3. The discharge shall not occur from the combustion of material with a moisture content of more than 25% dry weight, or if the moisture content cannot be determined, the material shall have been left to dry for at least six weeks</p>	AIP

			<p>prior to burning and within the two days prior to burning there shall have been less than 5mm of rainfall.</p> <p>4. The discharge shall not occur when the wind causes particles such as smoke to move towards Clean Air Zone 1.</p> <p>5. The discharge shall only occur if the wind speed is not less than 5m/s, measured at 1 metre above ground level.</p> <p>6. The dispersal or deposition of particles shall not cause an objectionable or offensive effect beyond the boundary of the property where the discharge originates.</p> <p>7. The burn shall be supervised at all times.</p>	
3-20-1	6.3	Federated Farmers - Mid Canterbury Province	As an alternative to submission point 6.2, retain the provision allowing Ashburton District Council to promulgate a bylaw for outdoor burning.	R
	F101.4	Horticulture New Zealand	<i>Support</i>	A

## Evaluations and reasons

### 7.1 **Changes requested**

#### 7.2 **2.4: Do not restrict outdoor burning in CAZ1**

7.3 Submitter 2 opposes the rules restricting outdoor burning in CAZ1 and CAZ2. Outdoor burning is a known contributor to ambient PM<sub>10</sub> concentrations. If this source is not controlled during the winter months, emissions from outdoor burning in CAZ1 mean that there is a significant risk that Objective AQL6 may not be met. This would be detrimental to human health and fail to meet statutory obligations under the NESAQ. It would also reduce the effectiveness of the proposed restrictions on domestic solid fuel burning appliances. Such an approach would not achieve the purpose of the Act. We recommend rejecting the part of the submission which relates to CAZ1.

#### 7.4 **2.4, F102.1, 5.4, F102.6: Do not restrict outdoor burning in CAZ2**

7.5 We acknowledged that there may be some circumstances where outdoor burning of vegetative material is necessary during the winter months. This is discussed below (Submissions **5.1, F102.3, 5.2, F102.4, 5.3, F102.5, 5.6, F102.8, 6.2, 6.3, F101.4, 6.4**). However, the absence of controls on outdoor burning within CAZ2 would result in an unnecessary risk that PM<sub>10</sub> emissions from outdoor burning in CAZ2 could contribute to ambient concentrations of PM<sub>10</sub> in CAZ1. This would undermine the ability to achieve the health outcomes sought in Objective AQL6 and potentially breach the standards in the NESAQ. We do not believe that this would achieve the purpose of the Act.

7.6 During the monitoring period (1999 – 2008), zero exceedences have been recorded in Ashburton for the month of September – although on a few days PM<sub>10</sub> concentrations were very close to the NESAQ threshold. Therefore, outdoor burning in September appears less likely to result in breaches of Objective AQL6 or the NESAQ, than during the May-August period. Consequently, removing September from the restricted outdoor burning period may be possible, without significantly increasing the risk of breaching Objective AQL6. For Variation 11 (Rangiora) and 12 (Kaiapoi), the Council found that the risk of not meeting the objectives and the NESAQ was minor in September as there had been no exceedences in the two towns in September during the monitoring period. Given that the situation is similar in Ashburton, we believe that the same argument can be applied. We therefore recommend permitting outdoor burning during the month of September and subsequently recommend accepting the submissions in part.

#### 7.5 **5.3, F102.5: Reflect in Explanation to Policy AQL47 that Policy AQL47 establishes a management framework for outdoor burning in winter**

- 7.6 The submitter suggests inserting the following text into the Explanation and reasons to Policy AQL47: "*Outdoor burning in the Ashburton Clean Air Zones 1 and 2, if not managed appropriately, could contribute to PM<sub>10</sub> levels. The policy establishes a framework for such burning to be managed appropriately*". Since we are recommending to insert a permitted activity rule for limited outdoor burning in winter, it would also be appropriate to insert a statement regarding good management for wintertime outdoor burning. We recommend adding to the Explanation wording that expresses the necessity for limited wintertime outdoor burning while establishing that it can only occur if managed appropriately within certain conditions. The wording we are recommending is identical to the wording in the Council Decisions for Variations 11 (Rangiora) and 12 (Kaiapoi) to ensure consistency in Chapter 3 of the NRRP. Therefore, the submissions should be accepted in part, in recognition of the fact that the Explanation to Policy AQL47 needs to reflect the management framework for wintertime outdoor burning.
- 7.7 **5.5, F102.7:** *Amend/do not amend Rule AQL97 to a restricted discretionary activity*
- 7.8 Submission 5.5 seeks to amend outdoor burning in the Ashburton CAZ1 and CAZ2 in the winter months from a non-complying to a restricted discretionary activity. Submission F102.7 opposes this, stating that the activity should be permitted. The submitter argues that a non-complying activity rule for outdoor burning is over-regulatory, and that Rule AQL97 should be amended to a restricted discretionary activity, without notification or the need to obtain written approval from affected parties. Essentially, the submitter seeks a relaxation of the planning framework in situations where resource consent is required. We recommend a new permitted activity rule for outdoor burning of vegetative matter under certain conditions. It is hoped that this will alleviate Submitter 5's concerns by enabling, as of right, some outdoor burning activities to occur. However, we believe that for those activities failing to meet the conditions of the new permitted activity rule (as outlined below), a non-complying activity status is most appropriate to ensure that the outcomes sought in Objective AQL6, and that the standards of the NESAQ, are met.
- 7.9 It is recommended to reject submission 5.5 and accept submission F102.7.
- 7.10 **5.1, F102.3, 5.6, F102.8, 6.2, 6.4:** *Provide for outdoor burning in CAZ 2 during the winter months under certain conditions/amend Policy AQL47 to provide for wintertime outdoor burning*
- 7.11 Several submitters requested that Environment Canterbury consider provisions specifying conditions such as material drying time and meteorological conditions under which outdoor burning can take place. The rationale is that burning can be managed over the winter period so as to avoid contributing to breaches of the ambient PM<sub>10</sub> concentration specified in Objective AQL6 (and the NESAQ). Submission 5.6 seeks the insertion of a new permitted activity rule to allow wintertime outdoor burning in Ashburton CAZ2 based on a set of thresholds and conditions including weather conditions, type and condition of material, time of day and lack of alternative disposal techniques.
- 7.12 Permitting any outdoor burning within CAZ2 over the winter months increases the risk of breaching Objective AQL6 (and the NESAQ). Under the proposed Policy AQL47, this risk would be managed through the resource consent process on a case-by-case basis.
- 7.13 In considering whether or not to include a permitted activity rule to mitigate the increase in risk of higher PM<sub>10</sub> levels in CAZ1, we considered a number of generic conditions so that those who wished to continue their burning practices (as an integral part of their rural land use) could do so. If outdoor burning was to be a permitted activity under Variation 13, the conditions of the new rule would need to minimise the risk of the activity contributing to PM<sub>10</sub> concentrations in CAZ1 at times when Objective AQL6 (and the NESAQ) may be breached. There are a number of contributing factors to this risk, and our consideration of these risks is discussed below.
- **Type of material:** Restricting the material allowed to be burnt in winter to only that which originates from production land will reduce the amount of material which can be burnt. We also considered whether or not we should be restricting burning in winter to only diseased vegetation, however we eventually concluded that any vegetative material could be burnt so long as it originated from within CAZ2.
  - **Amount of material:** Reducing the amount of material burnt on one property at any one time, reduces the risk of high emissions of PM<sub>10</sub>. We believe that this could be achieved by specifying a maximum footprint of the material to be burnt. We agree with the suggestion by submissions 5.6 and 6.2, to specify the maximum size being 4 by 4 by 2 metres in height.

- **Weather conditions:** High ambient PM<sub>10</sub> concentrations are generally recorded in Ashburton during temperature inversions. These form under cold, still conditions when wind speeds are low. They can develop from 2-3pm and can last until 11am the following day. We have therefore recommended three conditions broadly relating to the weather, listed as follows;
    - That the discharge should not occur outside the hours of 9am – 3pm. In the course of deliberations we needed to balance the need to be realistic with the length of time that was needed for burning and the risk that an inversion layer would form
    - That the discharge should not occur when the wind causes particles to move towards CAZ1. In this way the risk of PM<sub>10</sub> levels rising within CAZ1 is minimised
    - That the discharge should not occur when the wind speed is less than 15k/m per hour or 4m/s. We understand that this may be difficult for an average farmer to comply with due to the need to have specialist wind measuring equipment. However we are in agreement that there is a need for the condition to be certain, hence the inclusion of 15km/h. For the avoidance of doubt, the Beaufort scale describes this wind speed as gentle breeze, with leaves and twigs in trees in constant motion (this has been included in the recommended explanation to the rule), in essence, enough wind to ensure that the smoke from the outdoor burn is quickly dispersed.
  - **Sensitive Activities:** Beside from health effects, PM<sub>10</sub> from outdoor burning can have nuisance effects. Therefore, we believe that a setback from other dwellings, residential areas, or other places of assembly is appropriate. As a result, we recommend a setback of 100m upwind and 50m in any other direction from any 'sensitive activity' to be maintained for outdoor burning.
  - **Condition of material:** The moisture content of the material to be burnt can have a significant impact on the PM<sub>10</sub> emissions. Submissions 5.6 and 6.2 suggest a maximum moisture content of 25% (dry weight); however, this may be difficult to measure in practice. As a consequence, we have also recommended a drying time of 6 weeks before the burn and that there shall have been less than 5mm of rainfall in the two days prior to the burn.
  - **Supervision:** As suggested by Submissions 5.6 and 6.2, burning should be supervised at all times by a suitable person, capable of extinguishing the fire quickly (e.g. within 30 minutes) if the conditions for discharge (e.g. wind direction, wind speed, time of day) are not met. To support this, appropriate fire control (and if necessary wind measuring) equipment should be present on site.
- 7.14 We believe that after considering all the aspects above we can effectively develop a permitted activity rule which will effectively manage the risk of outdoor burning in CAZ2 increasing PM<sub>10</sub> levels to unacceptable levels in CAZ1, and ensure that Objective AQL6 is met. On that basis we recommend accepting submissions **5.1**, and **F102.3**, and accept in part submissions **5.6**, **F102.8**, **6.2** and **6.4**.
- 7.15 **5.2, F102.4:** Amend *Policy AQL47 to allow burning of diseased material*
- 7.16 The burning of diseased material was requested to be added to Policy AQL47. However because we have recommended Outdoor burning in CAZ2 as a permitted activity it is suggested that including a clause of this nature into the Policy is unnecessary. However we do consider it prudent to include some of the wording suggested by the submitter to provide a policy link between Policy AQL47 and Rule AQL97A. Therefore we recommend that the submissions are accepted in part and Policy AQL47 (a) is reworded as follows  
 (a) *where the discharge results from the outdoor burning of vegetation from primary production on production land.*
- 7.17 **6.3, F101.4, 5.2, F102.4:** Retain provision allowing a bylaw for outdoor burning/delete Policy AQL47(a)
- 7.18 The need to have a bylaw promulgated by the Ashburton District Council has been resolved by our decision to have a permitted activity status for outdoor burning with specific conditions. It should be noted however, that Ashburton District Council still has the right to develop a bylaw to address the public health, safety and nuisance effects of outdoor fires. Therefore we recommend rejecting submission **6.3** and accepting **F101.4**. We recommend accepting in part submissions **5.2** and **F102.4** for the reason that we have modified Policy AQL47 to remove the bylaw provision but have not introduced the exact wording recommended by the submitter as discussed above.
- 7.19 **6.5, 6.6:** *Clarify how farmers will know whether or not Objective AQL6 has been met*
- 7.20 The submitter would like additional clarification for Policy AQL47 (d) and (e) so that farmers will have a clear understanding as to when outdoor burning is allowed. Objective AQL6 is at most risk

of being breached under inversion conditions on calm winter days. As originally notified, under Rule AQL97 any wintertime outdoor burning in CAZ1 or CAZ2 would need resource consent. As such, consent conditions would clearly specify when burning can take place so as not to jeopardise meeting Objective AQL6 in CAZ1. The conditions may be very location specific, depending on distance from CAZ1 and predominant wind directions.

- 7.22 The recommended new permitted activity Rule AQL97A contains conditions which clearly identify the circumstances whereby outdoor burning could take place, including meteorological conditions where the risk of breaching Objective AQL6 would be minimal. This would give certainty to people wishing to burn outdoors as to when Objective AQL6 will likely not be met.
- 7.23 As for Policy AQL47(d) and (e), it appears the submitter assumes that both must be met at the same time. This is not the intention. The intention is that Policy AQL47(e) would have to be met even if outdoor burning under (a) to (d) was allowed. It is acknowledged that the wording of the Policy may cause confusion in this respect. We recommend that the wording should be modified by removing the (e) and decrease the indent to bring it inline with the beginning of the paragraph. We recommend accepting submissions **6.5** and **6.6**.

### Recommendation

5.1, 6.5, 6.6, F101.4, F102.3, F102.7: Accept  
 2.4, 5.2, 5.3, 5.4, 5.6, 6.2, 6.4, F102.1, F102.4, F102.5, F102.6, F102.8: Accept in part  
 5.5, 6.3: Reject

### Amendment

Amend **Policy AQL47** as follows:

**Policy AQL47                      Restrict discharges to air from outdoor burning in the Ashburton Clean Air Zones 1 and 2**

**Policy AQL47                      Restrict discharges to air from outdoor burning in the Ashburton Clean Air Zones 1 and 2**

In the Ashburton Clean Air Zones 1 and 2, restrict the discharge to air of contaminants associated with any outdoor burning, where such discharges occur between May and ~~September~~ August inclusive, except where such discharges occur in the following circumstances:

- (a) ~~in accordance with a bylaw, promulgated by the Ashburton District Council under the Local Government Act 2002, which controls outdoor burning at that location, with the purpose of protecting public health from high ambient concentrations of PM<sub>10</sub>; or~~
- (b) where the discharge results from the outdoor burning of vegetation from primary production on production land; or
- (c) where it is impracticable to remove vegetative material because of unsuitable access, and such vegetative material will result in a fire risk if not removed or will damage structures if not removed; or
- (d) where the financial implications of the alternatives to burning vegetative material are prohibitive; or
- (e) when rural fire restrictions prevent burning vegetative material during March and April;

and (f) where the outdoor burning can be undertaken so as not to contribute to the ambient PM<sub>10</sub> concentrations in the Ashburton Clean Air Zone 1 during the time when Objective AQL6 may not be met.

### Explanation and principal reasons

Outdoor burning in the Ashburton Clean Air Zones 1 and 2 has the potential to significantly elevate PM<sub>10</sub> concentrations in the Ashburton Clean Air Zone 1. The adverse effects of outdoor burning on PM<sub>10</sub> concentrations that would result in Objective AQL6 not being achieved are to be avoided, particularly where other practicable and cost efficient waste disposal methods exist.

~~A bylaw, promulgated by the Ashburton District Council under the Local Government Act 2002, could provide more flexibility in allowing outdoor burning to take place under conditions when the emissions from this activity would not contribute to breaches of Objective AQL6 or the National Environmental Standard for PM<sub>10</sub> within the Ashburton Clean Air Zone 1.~~

It is recognised that occasionally, during the winter months, horticultural and agricultural activities require some types of vegetative matter arising from primary production activities to be disposed of by burning. In these situations, when the storage of the material (until after winter) poses a threat to production processes and there is no viable alternative disposal technique, it is recognised that some provision should be made for burning to occur. However, this should only be permitted in Clean Air Zone 2 and tightly controlled as set out in the conditions to Rule AQL97A to prevent PM<sub>10</sub> emissions from contributing to ambient PM<sub>10</sub> concentrations in Clean Air Zone 1.

Amend **Rule AQL97** as follows:

**Rule AQL97 Outdoor burning in the Ashburton Clean Air Zones 1 and 2 – non-complying activity**

<u>Activity</u>	<u>Cross Ref.</u>
<p>Notwithstanding Rules AQL28, AQL29, AQL32, AQL33 and AQL34, and <u>except as permitted by Rule AQL97A or prohibited by Rules AQL36 and AQL37</u>, the discharge of contaminants into air in the Ashburton Clean Air Zones 1 and 2 from outdoor burning during the months of May, June, July, <u>and August and September</u>, is a non-complying activity.</p> <p><del>This rule shall have effect at any time that a bylaw, promulgated by the Ashburton District Council under the Local Government Act 2002, specific to controlling outdoor burning during the months of May to September August for all of the Ashburton Clean Air Zones 1 and 2 with the purpose of protecting public health from high ambient concentrations of PM<sub>10</sub>, does not exist.</del></p>	<p>Policies: <b>AQL47</b></p>

Introduce new **Rule AQL97A** as follows:

**Rule AQL97A Outdoor burning of vegetation in winter in the Ashburton Clean Air Zone 2 – permitted activity**

<u>Activity</u>	<u>Conditions</u>	<u>Cross Ref.</u>
<p><u>Notwithstanding Rule AQL97, and subject to Rules AQL36 and AQL37, during the months of May, June, July and August, the discharge of contaminants into air in the Ashburton Clean Air Zone 2, from outdoor burning of vegetation is a permitted activity provided it complies with all the following conditions.</u></p>	<ol style="list-style-type: none"> <li><u>1. The material to be burnt is vegetation from production land in Ashburton Clean Air Zone 2.</u></li> <li><u>2. The amount of material to be burnt on one property at any one time shall have a footprint not greater than 4 metres by 4 metres and shall not be piled higher than 2 metres from ground level.</u></li> <li><u>3. The discharge shall not occur outside the hours of 9 am to 3 pm.</u></li> <li><u>4. The discharge shall not occur when the wind causes particles such as smoke to move towards Ashburton Clean Air Zone 1.</u></li> <li><u>5. The discharge shall not occur if the wind speed is less than 15 kilometres per hour (4 metres per second), measured at 1 metre above ground level at the site of the burn.</u></li> <li><u>6. The discharge shall not occur within 100 metres upwind, or 50 metres in any other direction, from any sensitive activity that is not located on the property where burning occurs.</u></li> <li><u>7. The discharge shall not occur from the combustion of material with a moisture content of more than 25% dry weight, or if the moisture content cannot be determined, the material shall have been left to dry for at least six weeks prior to burning and within the two days prior to burning, there shall have been less than 5mm of rainfall on the site.</u></li> </ol>	<p>Policies: <b>AQL47</b></p>

	<p><u>8. The dispersal or deposition of particles shall not cause an objectionable or offensive effect beyond the boundary of the property where the discharge originates.</u></p> <p><u>9. The burn shall be supervised at all times.</u></p> <p><u>10. Equipment shall be present on the site in order that the fire can be extinguished within a maximum time of 30 minutes by the person supervising the burn.</u></p>	
--	--	--

Insert explanation and principal reasons for new Rules AQL97A as follows:

Amend **3.5.9.7 Regional rules for discharges in Ashburton Clean Air Zones 1 and 2** as follows:

**Rule AQL97A Outdoor burning of vegetation in the Ashburton Clean Air Zone 2 in winter – permitted activity**

Occasionally, during the winter months, rural activities require some types of vegetative matter to be disposed of by burning. In these situations, when the storage of the vegetative material (until after winter) poses a threat to rural activities and there is no viable alternative disposal technique, it is recognised that some provision should be made for burning to occur. However, this should only be permitted under tightly controlled conditions which reduce the risk of PM<sub>10</sub> emissions from contributing to ambient PM<sub>10</sub> concentrations in the Ashburton Clean Air Zone 1.

The conditions set out within Rule AQL97A seek to prevent emissions from contributing to ambient PM<sub>10</sub> concentrations in the Ashburton Clean Air Zone 1, by (i) minimising the amount of material burnt at any one time on one property; and (ii) ensuring that burning does not take place at times when inversion layers can develop and when ambient concentrations of PM<sub>10</sub> are at their highest. As such, burning may only occur between 9 am and 3 pm, when the wind is blowing away from the Ashburton Clean Air Zone 1 and when wind speeds are greater than 15 kilometres per hour (4 metres per second). For ease of interpretation, a wind speed of 15 kilometres per hour (4 metres per second), being approximately 3 on the Beaufort Scale, is the 'speed at which leaves and twigs are in constant motion'.

Burning should be supervised at all times by a suitable person, capable of extinguishing the fire, if the conditions for discharge (such as wind speed, wind direction) are not met. The necessary equipment must be available in order that, if required, this person can extinguish the fire within a maximum time of 30 minutes, so that there is no continued discharge to air.