

**From:** [Wayne Webley](#)  
**To:** [Mailroom Mailbox](#)  
**Subject:** Submission on Proposed Air Plan  
**Date:** Friday, 1 May 2015 3:03:06 p.m.  
**Attachments:** [Submission from Wayne Webley.pdf](#)

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Please find attached my submission on the proposed air plan.

Regards

Wayne Webley

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# Submission on the Proposed Canterbury Air Regional Plan

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Submitter ID:

File No:

Form 5: Submissions on a Publicly Notified Proposed Policy Statement or Regional Plan under Clause 6 of Schedule 1 of the Resource Management Act 1991

Return your signed submission by 5.00pm, Friday 1 May 2015 to:

Freepost 1201  
Proposed Canterbury Air Regional Plan  
Environment Canterbury  
P O Box 345  
Christchurch 8140

**A**

Full Name: Wayne Stephen Webley Phone (Hm): \_\_\_\_\_

Organisation\*: Applied Research Services Ltd Phone (Wk): 03 5477347  
\* the organisation that the submission is made on behalf of

Postal Address: PO Box 687, Nelson, 7040 Phone (Cell): \_\_\_\_\_

Postcode: 7040 Fax: \_\_\_\_\_

Email: waynew@appliedresearch.co.nz

Contact name and postal address for service of person making submission (if different from above):  
 \_\_\_\_\_  
 \_\_\_\_\_

**Trade Competition**

Pursuant to Schedule 1 of the Resource Management Act 1991, a person who could gain an advantage in trade competition through the submission may make a submission only if directly affected by an effect of the proposed policy statement or plan that:

- a) adversely affects the environment; and
- b) does not relate to trade competition or the effects of trade competition.

Please tick the sentence that applies to you:

I could not gain an advantage in trade competition through this submission; or

I could gain an advantage in trade competition through this submission. **If you have ticked this box please select one of the following:**

- I am directly affected by an effect of the subject matter of the submission
- I am not directly affected by an effect of the subject matter of the submission

Signature: W S Webley Date: 1/5/15

(Signature of person making submission or person authorised to sign on behalf of person making the submission)

Please note:  
 (1) all information contained in a submission under the Resource Management Act 1991, including names and addresses for service, becomes public information.

**B**

I do not wish to be heard in support of my submission; or

I do wish to be heard in support of my submission; and if so,

I would be prepared to consider presenting your submission in a joint case with others making a similar submission at any hearing

Submission from Wayne Webley

<b>(1) The specific provisions of the proposal that my submission relates to are:</b>	<b>(2) My submission is that:</b>	<b>(3) I seek the following decisions from Environment Canterbury:</b>
Page 2-6	The term Ultra Low Emissions burner is misleading when applied to appliances certified to meet the 38 mg/MJ limit. The term Ultra Low Emission should be reserved for appliances that achieve a much lower emissions limit.	That the term Ultra Low Emissions be replaced with Very Low Emissions or some other appropriate term.
Page 2-6	We are concerned that the inclusion of the 38 mg/MJ limit in the air plan will limit Ecan's response should this limit prove to be insufficiently low to meet the plan's air quality objectives.	Allow the limit to be set independently of the air plan and provide a mechanism within the plan to determine how the limit will be set and provide a reasonable period between notification and enforcement
Objective 5.6 Page 5-1	We particularly support this objective. Wood is a carbon neutral fuel which when burnt with the right technology has the potential to provide clean and efficient home heating.	
Objective 5.6 Page 5-1	We appreciate that the air plan is not concerned with appliance safety but note that this must be a consideration when an appliance is modified with emissions reducing devices which may compromise the safety of the appliance.	Consider whether consideration of safety issues can be at least indicated in the plan.
Section 6.27 Page 6-3	We particularly support this objective as it relates to low emissions wood burners.	
Section 6.30 Page 6-3	We support this objective. The use of good fuel and operating practices helps minimise the emissions from wood fired appliances.	

6.34 Page 6-3	This objective has the potential to defeat the air plan's overarching objectives. A heritage appliance has the potential to emit many times the levels of particulates that would be emitted from a clean burning appliance. Such appliances can remain in place non-operationally to preserve the characteristics of the building or could be retrofitted with clean burning technologies such as gas or electricity while preserving their character.	Remove this objective.
Rule 7.75 Page 7-24	Domestic Emissions Reduction Secondary Technologies have the potential to compromise the safety and performance of the appliance to which they are fitted. While working well under some conditions they may adversely affect the performance of the appliance under others.	Modify the plan to provide that Domestic Emissions Reduction Secondary Technologies must actually improve the performance of the appliance over the range of reasonable operating conditions (and not degrade it) and must not compromise the safety of the appliance.
Rule 7.75 Page 7-24	It is not clear whether it is intended that Domestic Emissions Reduction Secondary Technologies are to be applied to non-compliant appliances in order to render them compliant and if so what the mechanism is to establish that the secondary technology will deliver acceptable results.	Add clauses which detail the application of Domestic Emissions Reduction Secondary Technologies and a process for their evaluation and approval.
Rule 7.80 Page 7-24	See comments for rule 7.75	See comments for rule 7.75

<p>Test Method Pages 8-32 to 8-33</p>	<p>We are extremely concerned that the test method specified for ultra low emitting burners in the proposed air plan will not deliver appliances that will actually meet the objectives of the plan.</p> <p>Many appliances are subject in real life to a wide range of operating practices and huge variations in fuel quality. There is a danger that the 'normal operating regime' and 'commercially available wood' selected for the test will in fact be the most favourable and that real life emissions will considerably exceed the tested values. The method as written does not seem to adequately canvas these issues.</p> <p>It seems unlikely that the Air Plan can adequately specify the details of a test method that will anticipate all variables for all appliances. We think it would be better to specify some overarching principles that can be applied to determining the range of fuels and operating conditions an appliance or group of appliances need to be subject to during test taking into account: factors such as:</p> <ul style="list-style-type: none"><li>• The range of operating conditions the appliance is likely to be subjected to: including control settings, size of load and point in the burn cycle at which it is refuelled.</li><li>• The range of fuels that is likely to be used in real life.</li><li>• The level of uncertainty in the overall result that can be tolerated while maintaining air quality.</li></ul> <p>The plan should also specify the process by which a test method might be adopted for an appliance or group of appliances.</p> <p>That said, the following sections identify some issues with the method as written in the Proposed Plan.</p>	<p>Replace the existing test method with principles which any test method should follow and a process for considering a proposed test method for an appliance or group of appliances. Some of the factors that might be specified are noted in column 2 of this submission.</p>
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Test Method Page 8-33	The sentence “To be valid, results from each test period phase (high and low output) must be within 10% of the mean value of the tests for this corresponding phase” is unclear. <ul style="list-style-type: none"> <li>• Which results does it refer to ?</li> <li>• What is a test period phase ?</li> </ul>	
Fuel Page 8-33	The method does not adequately describe the range of fuels and number of tests, or the operating conditions that are required to be compassed for each fuel.	
Efficiency Page 8-33	The efficiency should be determined using an approved standard. The Efficiency determination should be made within the range of parameters allowed by the standard (Some standards are only applicable to a certain range of appliance operating conditions)	The plan should provide for Ecan to approve suitable standards and to determine the types of appliance and operating conditions they can be used for.
Efficiency Page 8-33	The accuracy of the test method for efficiency should be specified. Without this there is no certainty that a test result reflects the actual performance of the heater.	The limits on uncertainty of the efficiency determination should be specified. A recognised method of estimating uncertainty should be used such as that specified in the International Standards Organisation Guide to the uncertainties in Measurement.
Efficiency Page 8-33	The last two clauses of this section are repetitive and could be combined.	
Particulate Measurement Page 8-33	The sentence relating to the measurement of particulates that states “This includes filterable particles <u>plus condensables</u> ” is unnecessary. Either the substance is particulate in which case it will be filtered or it is not. Since the substances of concern are the ones which form particulates at 32 °C this is what is required.	Delete the sentence states “This includes filterable particles plus condensables”
Particulate Measurement Page 8-33	The second paragraph of this section needs further thought. Where a method does not determine all the particulates and a scaling factor is to be applied there would need to be good evidence that the scaling factor was valid for the conditions of test.	

Particulate Measurement Page 8-33	The particulates should be determined using an approved standard. The particulate determination should be made within the range of parameters allowed by the standard (Some standards are only applicable to a certain range of appliance operating conditions)	The plan should provide for Ecan to approve suitable standards and to determine the types of appliance and operating conditions they can be used for.
Particulate Measurement Page 8-33	The accuracy of the test method for particulates should be specified. Without this there is no certainty that a test result reflects the actual performance of the heater.	The limits on uncertainty of the particulate determination should be specified A recognised method of estimating uncertainty should be used such as that specified in the International Standards Organisation Guide to the uncertainties in Measurement.