| From: | Neil Tapsell |
| :--- | :--- |
| To: | Mailroom Mailbox |
| Cc: | NZHHA Office; Nadeine Dommisse; Rapunzel De Leon |
| Subject: | Submission on the Proposed Canterbury Air Regional Plan |
| Date: | Friday, 1 May 2015 4:15:17 p.m. <br> Attachments: |
|  | image002.pna |
|  | Canterbury Air Plan Form 5 submission - NZHHA.pdf |

Good afternoon,

To whom it may concern, please find attached a submission to the proposed Canterbury Air Regional Plan from the New Zealand Home Heating Association.

Regards,

Neil Tapsell

NZHHA Manufacturers Committee
Chairman

## Submission on the Proposed Canterbury Air Regional Plan

## Form 5: Submissions on a Publicly Notified Proposed Policy

 Statement or Regional Plan under Clause 6 of Schedule 1 of the Resource Management Act 1991Return your signed submission by 5.00 pm , Friday 1 May 2015 to:
Freepost 1201
Proposed Canterbury Air Regional Plan.
Environment Canterbury
PO Box 345
Christchurch 8140

## A <br> Full Name: <br> GAVIN EDWARDS

Organisation*: NEW ZEALAND HOME HEATING ASSOC. * the organisation that this submission is made on behalf of

Postal Address: P.O Box 6 642
AWAPUN: PALMERSTON NORTH
Email: INFO O HOMEHEAT.CO.NZ

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

## C-NZHHA SECRETARY

## 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
$\square$
I could gain an advantage in trade competition through this submission. If you have ticked this box please select one of the following:
$\square$ I and directly affected by an effect of the subject matter of the submission
Iamhot directly affected by an effect of the subject matter of the submission


Date:


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

B $\quad \square$ 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

| C (1) The specific provisions of the proposal that my submission relates to are: (Specify page number and subsection numbering for each separate provision). | (2) My submission is that: (State concisely whether you support or oppose each separate provision being submitted on, or wish to have amendments made and the reasons for your views.) | (3) I seek the following decisions from Environment Canterbury: (Please give precise details for each provision. The more specific you can be the easier it will be for the Council to understand your concerns.) |
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## Submission on the Proposed Canterbury Air Regional Plan (pCARP), April 2015

| To: | Environment Canterbury <br> The Proposed Canterbury Air Regional Plan <br> PO Box 345, Christchurch, 8140 <br> mailroom@ecan.govt.nz |
| :--- | :--- |
|  | Submitter: |
|  | New Zealand Home Heating Association <br> PO Box 6042, Awapuni <br> Palmerston North, 4445 |
| Contact: | NZHHA Secretary <br> Tracy Edwards |
|  | 06 354 1696 <br> infonzhha@gmail.com |
| Date: | $1^{\text {st May, 2015 }}$ |

## Submission on the proposed Canterbury Air Regional Plan Section 32 Report, March 2015.

## 1. Introduction

1.1 The New Zealand Home Heating Association (NZHHA) welcomes the opportunity to make a submission \& comment on the proposed Canterbury Air Regional Plan (pCARP), March 2015.
1.2 The NZHHA is a non-profit trade organisation established in 1985 \& is representing the interests \& views of associated members across New Zealand in our industry encompassing Manufacturers, Retailers, Installers, Service providers \& fuel suppliers.
1.3 We note that the pCARP must conform to regulations as set out in the Ministry for the Environment "National Environmental Standard for air quality" (NESAQ).
1.4 The NZHHA promotes clean air standards \& energy \& resource conservation.

## 2. Specific Submissions

2.1 The NZHHA supports or opposes certain aspects of the document (pCARP) as detailed hence with.

If details are not stated it can be assumed the NZHHA is in support of the points \&/or initiatives.

| Part | Page | Support/Oppose | Point or Reason | Recommendation |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Oppose | Promoting technology which isn't accredited or ratified with acceptable test methods. | Continue to push NZ's current low emission burners developed continuously over the last few years. |
| 1 | $\begin{aligned} & \hline 1-4 \\ & 1-5 \\ & 1-6 \\ & \hline \end{aligned}$ | Support | Non-regulatory programmes. | Continue to push \& educate the public on better burning tips in home heating \& reinforce the Good Wood message. |
| 4 | 4-11 | Oppose | Use of as listed appliances only in Home Heating | The ULEB framework is far from complete \& domestic liquid or gas appliances have not been proven not to be less hazardous than any other form of heating. Low emitting enclosed burners should be or continue to be an option for home heating. |
| 4 | 4-11 | Support | Correct operation of solid fuel burners \& avoid use of open fires in Clean Air Zones. |  |
| 5 | 5-1 | Support | Objectives. |  |
| 6 | 6-2 | Support | Outdoor burning | Particularly 6.16, 6.17 \& 6.18. |
| 6 | 6-3 | Oppose | Space heating Region wide. | 6.27. The ULEB framework is far from complete \& domestic liquid or gas appliances have not been proven not to be less hazardous than any other form of heating. Low emitting enclosed burners should be or continue to be an option for home heating. |
| 6 | 6-3 | Support | Space heating in Clean Air Zones. | 6.29. Provide for low emitting technology. |
| 6 | 6-3 | Oppose | Space heating in Clean Air Zones. | 6.32. The ULEB framework is far from complete \& domestic liquid or gas appliances have not been proven not to be less hazardous than any other form of heating. Low emitting enclosed burners should be or continue to be an option for home heating. |
| 6 | 6-3 | Oppose | Rangiora, Kaiapoi or Ashburton. | $6.36,6.37,6.38$. Include/allow the home heating option of Low emitting enclosed burners. |
| 6 | 6-4 | Oppose | Christchurch or Timaru. | 6.39 \& 6.42. Include/allow the home heating option of Low emitting enclosed burners. |
| 7.4 | 7-1 | Support |  |  |
| 7.8 | 7-3 | Support |  |  |
| 7.12 | 7-4 | Support |  |  |
| 7.31 | 7-11 | Oppose |  | This should be a prohibited activity to align with similar rules in the plan. |
| 7.76 | 7-24 | Support | Space heating. | The ULEB framework is far from complete \& domestic liquid or gas appliances have not been proven not to be less |


|  |  |  |  | hazardous than any other form of heating. Low emitting enclosed burners should continue to be an option for home heating. |
| :---: | :---: | :---: | :---: | :---: |
| 7.77 | 7-24 | Oppose | Space heating. | Domestic liquid \& gas fuel burning devices do not have an equivalent proven test method \& are unknown PM10 \& PM2.5 emission contributors. |
| 7.86 | 7-25 | Oppose | Low emitting enclosed burner installation end date | To say no low emitting enclosed burners can be installed after $1^{\text {st }}$ January 2019 is short sighted as the air results show the continuous swap out while including these low emitting heating options is improving the air results \& these appliances have a track record of ongoing/continuous emission improvements. |
| 7.87 | 7-25 | Oppose | Low emitting enclosed burner installation end date | To say no low emitting enclosed burners can be installed after 1st January 2019 is short sighted as the air results show the continuous swap out while including these low emitting heating options is improving the air results \& these appliances have a track record of ongoing/continuous emission improvements. <br> It should also be noted properties over 2 Ha in area are exempt from the NESAQ regulation therefore point 1 cannot be relevant. |
| 7.90 | 7-26 | Oppose | Low emitting enclosed burner installation end date | To say no low emitting enclosed burners can be installed after 1st January 2019 is short sighted as the air results show the continuous swap out while including these low emitting heating options is improving the air results \& these appliances have a track record of ongoing/continuous emission improvements. <br> It should also be noted properties over 2 Ha in area are exempt from the NESAQ regulation therefore point 1 cannot be relevant. |
| 7.93 | 7-27 | Support |  |  |
| $\begin{aligned} & \hline 7.86 \\ & 7.87 \\ & 7.90 \end{aligned}$ | $\begin{aligned} & 7-25 \\ & 7-25 \\ & 7-26 \end{aligned}$ | Oppose | Full ban on wood burners after ${ }^{\text {st }}$ January 2019. | 42\% of Christchurch wood burners are non-compliant to NES \&/or ECan regulations. Allow \& encourage people to swap out non-compliant wood burners to current low emission burners in all clean air zones. No preferred option to improve emissions will result in a reluctance to conform/change. The trend of air reports shows the existing format is working \& allows for low emitting wood burners to |



## 3. Further Submissions

3.1 In the recently released GNS Science consultancy report 2015/21 on the analysis \& source apportionment of particulate matter at Woolston, Christchurch it attributes only $31 \%$ of the collected PM10 towards Biomass combustion. Home heating is not $100 \%$ of this ( $31 \%$ ) number. Therefore the previous ECan released numbers of up to $80 \%$ of Christchurch's PM10 being contributed to by home heating is in dispute \& ECan statements such as "Most of Canterbury's winter air pollution comes from home heating..." is misleading. Data now shows that solid fuel combustion home heating has been inaccurately targeted by weight \&/or disproportionate ratios in contribution to the PM10 records. This is not the only example of uncertainty in reports/estimates/assumptions or other pertaining to home heating emissions in a given airshed. To quote a statement within the Air quality status report Christchurch airshed, Report No. R14/116 in 5.1.2 "Further work is needed to produce more accurate estimates of home heating emissions in specific Canterbury towns". The proposed forced ban on wood burners needs to be rethought \& if not eliminated then at the very least the short term end date for installation of the 1st of January 2019 needs to be extended while this additional data is quantified.
3.2 As has been previously communicated to ECan the NZHHA does not agree with the ultra-low emission (ULEB) concept or the Canterbury Method 1 (CM1.5) testing. There has not been anywhere near enough work done to confirm the validity of this proposed test method. It has been agreed by the Industry Working Group of which ECan is a participating contributor too that this proposed test method is still in a prototype format. A few tests or trials do not constitute a basis for an approved \&/or valid test method particularly as a key component of the current AS/NZS test standards are being completely changed, namely test fuel regulation.
3.2.1 Does ECan have the technical \& scientific expertise \& resources to provide the necessary focus on a test method development project?
3.2.2 Does the NES legally allow for additional test methods to be implemented in the "not less stringent" allowance of the regulation?
3.2.3 The NZHHA believes if there are better alternatives to the current accepted standards that any such project should be handled by an independent scientific body such as Standards AS/NZS.
3.3 The NZHHA does not agree with the current test method, Canterbury Method v1.5, as this is still deemed a "prototype" method as agreed by ECan. Comments from other parties within the "Industry Working Group" pertaining to this test method have expressed concerns of this being a lottery in the current form. We note that the US EPA wants to introduce real life testing for wood burners but after the recent Wood fire Decathlon and Workshop on new generation wood burners it has determined that the agency does not yet have sufficient data to require woodstoves to be tested using fires that burn cordwood (split wood) i.e. real life test, at this time. They have changed their current parameters \& these will be mandatory after 5 years. For a regulation purpose, the test remains the same with current clean wood \& crib method. The US EPA will allow \& encourage cord wood (real life) testing but it has to be approved by US EPA on case to case basis. Only when enough appliances are available will the US EPA think of bringing any ULEB style rule based on proven data and technological advances. Compared to the US EPA thinking, ECan's approach and methodology on the ULEB concept is we deem random \& unscientific.
3.4 ECan should be conducting "real life" testing on other heating appliances such as Diesel fires \& Pellet burners. It is only assumption that these appliances operate as tested in real life. Liquid \& gas appliances are included in an ultra-low emission category yet don't have a test regime nor data to real life to prove they belong there. Testing should be completed prior to absolute inclusion.
3.5 It is surely unwise to cement into the Canterbury Air Regional Plan, only a ULEB device(s) \& test method, which is clearly in unproven territory at the expense of current popular choice heating options. The NZHHA proposes that the current low emitting enclosed burners \& audit process be included as a viable heating choice for all Cantabrians.
3.6 The Air Quality improvement trends are a positive indication of the current approach which allows low emitting enclosed burners to be installed by home owners as a viable choice of heating, improvement example being; The Tim Mallet report (R14/116) which states 2013 PM10 winter average of $27 \& 31 \mu \mathrm{~g} / \mathrm{m}^{3}$ at two Christchurch monitoring stations, it also states in 5.4 .3 that "...emissions from home heating have fallen significantly further than that, meaning home heating emissions now contribute a smaller proportion of overall PM10 emissions than in previous years." Confirmation in the GNS 2015/21 report of the much lower percentage contribution to PM10 of wood burners against previous estimates suggests the whole calculation is flawed \& this form of heating is unfairly targeted.
3.7 Investigations by the United Nations Environment Programme (UNEP), says globally up to 90 percent of air pollution in cities... is attributed to vehicle emissions. In the pCARP Introduction statement on Motor Vehicles it concludes "While motor vehicles are a contributor to poor air quality in polluted air sheds, the Air plan cannot effectively address them". We find it hypocritical that a known contributor be excluded from this document while home heating is targeted based on estimates \& assumptions. The same GNS report alluded to above reported actual vehicle emission contributions of $24 \%$ to the total PM10 particulate analysis
3.8 It cannot be discounted that the potential health outcomes of removing wood burners from Canterbury as a heating choice all points to poorer physical \& mental health, including respiratory \& cardiovascular health issues \& an increase in fuel poverty. New Zealand unfortunately has a sad record of internal home temperatures not meeting the WHO guidelines of at least 18 degrees Celcius.
3.9 It is also a known observation that the health impact statements on PM10 are all based on estimates. In fact the official statement from the Ministry for the Environment on premature deaths attributed to Wood smoke \&/or PM10 is that they "cannot identify whether a death was caused by exposure to PM10". Reference http://www.nzcpr.com/govt-fabricating-deaths-in-woodburner-scare-tactics/\#more-13411
3.10 It must be highlighted that a total ban of wood burners within Canterbury will have a direct negative impact on existing businesses \& employment in the industry/region.
3.11 As detailed in our submission to the previously proposed Air Plan Review (APR) in June of 2014 up to 80\% of the current recorded emissions within that proposal document statistics are being emitted from open fires \& non-complying wood burners. Both are well documented as being high percentage contributors to the $\mathrm{PM}_{10}$ levels. By changing these appliances alone in the current clean air zones it will make a huge impact on reducing current recorded levels. It is well known that government departments such as EECA are pushing for the installation \& use of NZ's current low emission \& highly efficient solid fuel heaters to help keep the population warm, dry \& healthy while lowering their energy costs therefore providing all round positive benefits.

| ECan document est. of <br> PM $_{10}$ contribution. | Rangiora | Kaiapoi | Christchurch | Ashburton | Geraldine | Timaru | Waimate |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Open Fires | $4 \%$ | $14 \%$ | $2 \%$ | $13 \%$ | $6 \%$ | $9 \%$ | $12 \%$ |
| Non-complying <br> Burners | $39 \%$ | $14 \%$ | $55 \%$ | $48 \%$ | $66 \%$ | $59 \%$ | $72 \%$ |
|  | $\mathbf{4 3 \%}$ | $\mathbf{2 8 \%}$ | $\mathbf{5 7 \%}$ | $\mathbf{6 1 \%}$ | $\mathbf{7 2 \%}$ | $\mathbf{6 8 \%}$ | $\mathbf{8 4 \%}$ |

3.12 ECan should consider tougher local legislation or penalties for the continuous bad emitters. These emitters are apparently in small numbers but contribute to a large percentage of the total volume. Therefore, if they are not prepared to change or help then stiffer penalties must be put in place.
3.13 Will ECan consider other options adopted in other countries? For example; Dual heating in new home builds being compulsory, still night warnings \& selective nonuse nights, stricter controls on fuel supply \& use.
3.14 Will ECan join the NZHHA in lobbying the MfE on the stringent target of just a single occurrence? There are WHO ratified limits in other OECD \& similar countries, particularly within Europe, that also have the $\mathrm{PM}_{10}$ limit of $50 \mu \mathrm{~m} / \mathrm{m}^{3}$ but have associated targets with far more common sense. Namely an annual average limit for $\mathrm{PM}_{10}$ of $40 \mu \mathrm{~m} / \mathrm{m}^{3} \&$ an annual total occurrence level of 35 exceedences. All of NZ including Christchurch etc. fall well below these OECD targets thereby highlighting our current clean air status. Surely there is an exceedence level or annual average target between these two parameters, Europe V's NZ, which strives to push the clean air improvements we are all after while allowing heating options across all available sources.
3.15 ECan has used the Christchurch Earthquake Recovery Act to implement the non-ratified parameters around any supposed ULEB \& the relevant CM test method. This is certainly NOT the intention behind CERA \& is legally dubious at best. CERA was put in place to assist with \& help expedite the initial short term rebuild of Christchurch not enforce long term policies pertaining to air emissions
3.16 Are the fixed monitoring stations a fair representative of the air quality within Canterbury or should these stations be mobile at as agreed times \& routes?
3.17 ECan should be considering the benefits of wood burners as a necessity for Civil Defence emergencies \&/or natural disasters etc.
3.18 The NZHHA will request from ECan as a separate, but as part of this submission process, for more data pertaining to parts within this document \& AQL. Particularly in relation to; actual PM ${ }_{10}$ \& health connection, Air Domain Report 2014 \& mathematical modelling of health figures rather than actual records, cold related health issues/deaths in Canterbury, PM $_{2.5}$ from transport, Diesel fires, $\mathrm{PM}_{10}$ captured composition analysis, Stubble burning.

## 4. Conclusion

The NZHHA understands \& is behind initiatives to clean up the air in New Zealand, particularly its worst affected areas, in addition we are also about providing product to ensure we as New Zealander's have a suitably warm, dry \& healthy internal environment to come home to \& live in, particularly in winter which we all know within New Zealand ranges from the very cold, to very wet \& in certain parts relatively mild. It is not an unknown fact that the World Health Organisation (WHO) recommends "in home" temperatures in winter to be no less than 18 degrees Celsius, especially bedrooms \& importantly where the young, old \& unwell are present

Wood heat is proven to be an economical, affordable, generous \& sustainable solution for whole home heating. This form of heating is a much loved \& preferred way to heat a home by hundreds of thousands of New Zealanders. Used correctly with the suitable fuels available, the current low emission burners are again proven to be providing a more than suitable solution to cleaning up the air in some of our worst known air sheds whilst continuing to provide the home owner with enough heat to meet the WHO guideline.

NZHHA manufacturing members have spent considerable time \& effort improving the available solid fuel wood heaters to exceed the current NES regulations \& allow New Zealander's access to the low emission appliance stocks. As a nation we now have some of the cleanest burning \& highest efficiency appliances tested \& approved to acceptable, repeatable \& measurable testing methods available on the planet. This should be supported rather than abolished \& removed from the options of those who choose such a home heating option.

It is the firm belief of the NZHHA that the current low emission burners developed since the NES implementation combined with proactive swap out programmes \& the excellent initiatives of public education \& the recent good wood scheme, that we, as a combined interest group are providing excellent \& improving results. Low emitting enclosed burners are a proven \& acceptable alternative to existing solid fuel combustion.
Again, we repeat, it is surely unwise to cement into the Canterbury Air Regional Plan only a ULEB device(s) \& test method which is clearly in unproven territory at the expense of current popular choice heating options. The NZHHA proposes that the current low emitting enclosed burners \& audit process be included as a viable heating choice for all Cantabrians.

Do not substitute low emission wood heating options based on assumption \& estimate data for cold damp homes known to be actual health issues. This will have a negative effect on the Canterbury population. It will increase cold related health issues \& further add to a known increase in fuel poverty.

## Important note:

Some of these initiatives are very recent updates \& in a targeted audience such as home heating these improvement's need time to make an impact. The NZHHA is whole heartedly helping \& supporting ECan on such good wood, clean burning initiatives \& accredited installers relevant to current low emission burners, not only for the benefit of the Canterbury (ECan boundary) region but to push for implementation on a national level.
By trusting \& pushing forward with this continuous improvement approach we believe we will see further improvements \& benefits for society as a whole rather than a big stick approach that could have other dire effects on health \& other aspects of life due to the elimination of a reliable source of home heating.

## Submitted for \& on behalf of the New Zealand Home Heating Association.



Neil Tapsell
NZHHA Executive Committee member

New Zealand Home Heating Association Inc

