From: Prakash Sonar
To: Mailroom Mailbox

Subject: Submission from Glen Dimplex NZ Ltd on the Proposed Canterbury Air Regional Plan

**Date:** Friday, 1 May 2015 3:19:53 p.m.

Attachments: GD Submission on ECAN Air Plan 2015.pdf

To,

The Proposed Canterbury Air Regional Plan Environment Canterbury Christchurch

Please find attached submission on the Proposed Canterbury Air Regional Plan. We request ECAN to acknowledge the receipt of it.

## Regards,

# Prakash Sonar

# **Engineering Manager**

Glen Dimplex New Zealand Ltd

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# Submission on the Proposed Canterbury Air Regional Plan

FOR OFFICE USE ONLY
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

Full Name: PRAKASH SONAR	Phone (Hm):
Organisation*: TLEN DIMPLEX NEW ZEALAND LTD  * the organisation that this submission is made on behalf of	Phone (Wk): 09 - 2748265
Postal Address: 38, HARRIS ROAD, EAST TAMAKI	Phone (Cell):
MANUKAU, AUCKLAND - 2013	Postcode: 2013
Email: prokashs @glendimplex. (0.17.	Fax:
Contact name and postal address for service of person making submi	ission (if different from above):
Trade Competition	
Pursuant to Schedule 1 of the Resource Management Act 1991, a perso competition through the submission may make a submission only if direct policy statement or plan that:  a) adversely affects the environment; and b) does not relate to trade competition or the effects of trade competition.	tly affected by an effect of the proposed
Please tick the sentence that applies to you:	
I could not gain an advantage in trade competition through this submis	ssion; or
I could gain an advantage in trade competition through this submission select one of the following:	on. If you have ticked this box please
☐ I <u>am</u> directly affected by an effect of the subject matter of	the submission
I <u>am not</u> directly affected by an effect of the subject matter	of the submission
Signature: Da	te: 3oth April 2015
(Signature of person making submission or person authorised to sign on behalf of person making the submi	ission)
Please note: (1) all information contained in a submission under the Resource Management Act 1991, including names a	and addresses for service, becomes public information.
R I do not wish to be heard in support of my submission; or	

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

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

submission at any hearing

Glen Dimplex New Zealand is the largest manufacturer of wood heaters for NZ & Aus. As a part of Glen Dimplex's continued commitment to the sustainable home heating and support to ECAN's various initiatives for the good quality environment. We are forwarding this submission in response to ECAN's proposed Canterbury Air Regional Plan. GDNZ is a very active member of main industry body-NZ home heating association. GDNZ also supports ECAN's ULEB concept and regularly participate at ULEB IWG and ULEB stakeholders meetings.

ECAN's ULEB con	cept and regularly participate at ULEB IWG and ULEB stakeholders meetings.	
The Specifics of the	Our Submission is :	We seek Following
proposal that our		decisions /actions from
submission relates to -		ECAN
Our submission relates	Our submission is to oppose this proposed air plan document.	Referring to section 1.3 of
to the entire proposed		our submission -
Air Plan document.	1.1 Background	We recommend ECAN
	Most of the technical documents that ECAN has published in support of proposed air plan highlight only peaks of pollution observed during winter season and concludes home heating as a major contributor. It is undeniable that wood heating contributes to overall emission but the focus on only winter peaks and lack of summer emissions comparison, results in a misleading perception of wood heaters and their impact to PM levels. This is becoming more evident from the comments made by Parliamentary Commissioner Dr. Jan Wright, in her report on The State of Air Quality in New Zealand and the latest GNS report on apportionment of particle matter at Woolstan.	to ask Ministry of Environment to review NESAQ before finalizing and implementing this Air Plan.
	<ul> <li>1.2 Issues</li> <li>Parliamentary Commissioner's report highlights the fundamental issue/mistake in New Zealand's air quality regulation. This report strongly recommends to focus on WHO's most important guideline of governing long-term exposure to PM<sub>2.5</sub> instead of governing short term exposure to PM<sub>10</sub>. This report also questions the need for PM<sub>10</sub> short-term rule.</li> <li>In June 14, ECAN's Air Plan Review document reported home heating contributing 67% total PM<sub>10</sub> pollution to Christchurch air shed. GNS draft report made public on 24<sup>th</sup> April 15 on source apportionment study at Woolston CHCH, reports only 31% biomass burning contribution to total PM<sub>10</sub> emissions and 46% biomass burning contribution to PM<sub>2.5</sub> emissions.</li> <li>Our own analysis of daily reading of PM<sub>10</sub> &amp; PM<sub>2.5</sub> at St. Albans, Woolstan and Timaru monitoring stations (refer Appendix A) show that summer emission levels are very close to threshold levels prescribed by WHO and reinforces need to look at long term exposure factors.</li> </ul>	<ul> <li>We recommend, indepth scrutiny of various technical reports with focus on long term PM2.5 emissions and revise scientific data using latest tools like GNS reports.</li> <li>Review and update various policies based on this latest information.</li> </ul>
	The above reports and findings raises number of vital questions and issues, which in our opinion need to be answered before any policy decisions are taken.	

- Is it appropriate for any regional council to draft and make decision on vital issue of air quality when fundamentals of environmental standard itself are in question or under serious scrutiny?
- Biomass combustion referred in GNS report, can consists of emissions from different sources of
  domestic log burners, rural & outdoor burning, coal/wood/chip/pellet burners used in industry and
  large scale emission sources like hospitals, schools and electricity generators. We are still awaiting
  answers from ECAN/GNS officials to understand the fundamental question of contribution from
  different biomass combustion sources. (Refer Appendix B) This can change the perceived %
  contribution due to home heating and other sources dramatically.
- GNS report also highlights large proportion of PM contribution from natural sources like sea spray, dust & pollen which was not considered or addressed in any of the supporting technical reports.
- Analysis of pollution levels excluding the winter month period of May-Aug, show that during remainder period of the year, 75-80% of the WHO threshold is reached due sources other than domestic fires. It is highly likely that during winter months this base level pollution gets escalated due to weather conditions that are prone to inversion layer formation. There is no current research that has been carried out in this direction.
- While researching the evidence it was found that ECAN has not yet published vital information on industry and vehicle emissions used in their supporting technical reports. (Refer Appendix B).
- Further we are seeking this information from ECAN which is not yet been published and we feel is vital to calculations of emission inventory. This further could lead to additional submission for this air plan at later date.

#### 1.3 Conclusions:

- We understand that the primary objective of the proposed air plan is to achieve level set nationally by NESAQ. As per recent comments and recommendation by Dr Jan Wright (PCE), the NESAQ objectives may well be under scrutiny resulting in major changes. If so, then this whole Air Plan exercise could be brought into question in order to achieve ultimate goal of finding long term sustainable solution that is affordable to entire community of Canterbury region. In this context it is important to note the recent request from Auckland Regional council to ministry to review the regulation before they could make any decisions about Auckland's air quality
- The latest information and knowledge gained by apportionment analysis also highlight the deficiencies of current technical reports that focus on short term PM<sub>10</sub> emission levels. Further these figures can effectively change all the scientific calculations of emission inventories from different sources that affects long term exposure of PM<sub>2.5</sub> particles. This could potentially lead to major changes to policies and rules for space heating, outdoor burning, industrial, large scale emissions & vehicles too.

 Release addition information which was requested and needed to make informed comments. Also if needed, allow to amend this submission with additional comments at later date.

# Appendix - A:

# 2013 & 2014 PM10 & PM2.5 Emissions at St Albans, Woolstan & Timaru

#### Notes:

- This analysis is based on daily average data obtained from ECAN
- Seasonal averages are calculated using following logic
  - 2 x 3 month periods of Feb-Apr and Sep-Nov are considered as summer when weather is warm or moderate.
  - 4 month period of Apr-Aug are considered as winter when weather is cold.

    Month of Dec and Jan need to considered separately because due to school and various holidays the overall
  - industrial and vehicle activities far less compared to other months of the year

## **Yearly Averages**

		St Albans Woolstan		stan	Timaru		
		2013	2014	2013	2014	2013	2014
PM <sub>10</sub>	Max	134	71	146	76	121	103
	Avg	20	19	24	22	27	27
	No of Days >50	13	11	17	14	32	42
	Summer Avg	16	15	22	19	21	20
	Winter Avg	27	26	31	28	40	41
PM2.5	Max	119	62	101	51	93	82
	Avg	11	12	11	9	16	17
	No of Days>25	24	30	22	13	68	78
	Summer Avg	8	8	8	6	10	11
	Winter Avg	19	19	17	13	29	31

## **WHO Guidelines**

		Annual
	Daily average	average
	concentration	concentration
PM <sub>10</sub>	50	20
PM2.5	25	10

**Monthly Averages** 

		St Al	bans	Woolstan		Timaru	
		2013	2014	2013	2014	2013	2014
	JAN	16	15	19	22	21	17
	FEB	17	13	22	18	22	18
	MAR	17	14	22	19	21	17
	APR	17	14	21	18	20	22
0	MAY	25	24	26	28	33	38
<b>PM</b> <sub>10</sub>	JUN	24	32	25	33	43	53
6	JUL	33	25	42	28	47	41
_	AUG	25	21	32	23	38	31
	SEP	18	19	22	23	25	28
	ОСТ	14	16	23	22	18	21
	NOV	14	13	20	16	20	14
	DEC	15	17	17	17	15	20
	JAN	6	6	7	6	8	7
	FEB	7	7	7	6	9	8
	MAR	8	7	0*	5	9	9
	APR	10	9	10	6	11	13
LO.	MAY	18	18	16	13	24	26
<b>PM</b> <sub>2.5</sub>	JUN	19	25	17	18	33	43
2	JUL	24	18	22	12	33	31
	AUG	13	15	12	10	24	22
	SEP	10	12	9	8	14	16
	ОСТ	7	8	8	6	8	11
	NOV	6	6	7	4	8	7
	DEC	7	7	6	6	7	10
	* Data not available						

<sup>\*</sup> Data not available

**Seasonal Averages** 

Seasonal Averages									
			St Albans Woolstan				Timaru		
			2013	2014	2013	2014	2013	2014	
	JAN	Holiday	16.0	15.0	19.0	22.0	21.0	17.0	
	FEB	ıer	17.0		21.7	18.3		19.0	
	MAR	Summer		13.7			21.0		
	APR	ns							
	MAY							40.8	
<b>PM</b> <sub>10</sub>	JUN	Winter	26.8	25.5	31.3	28.0	40.3		
	JUL	Wir	26.8	25.5			40.3		
	AUG								
	SEP	ıer	15.3	16.0	21.7	20.3	21.0	21.0	
	ОСТ	Summer							
	NOV								
	DEC	Holiday	15.0	17.0	17.0	17.0	15.0	20.0	
	JAN	Holiday	6.0	6.0	7.0	6.0	8.0	7.0	
	FEB	Summer	8.3	7.7	8.5	5.7	9.7	10.0	
	MAR								
	APR								
2	MAY		18.5	19.0	16.8	13.3	28.5	30.5	
<b>1</b> 2.	JUN	Winter							
PM <sub>2.5</sub>	JUL								
	AUG								
	SEP	er		8.7		6.0	10.0	11.3	
	ОСТ	Summer	7.7		8.0				
	NOV	Su							
	DEC	Holiday	7.0	7.0	6.0	6.0	7.0	10.0	

# **Appendix B:**

# A. Unpublished reports

Following reports referred in supporting technical document for the Air Plan have not been published yet.

- Salomon, V. 2014. Industrial emissions 2014 update draft Sep 2014 v2. Unpublished report for Canterbury Regional Council.
- Smithson, J. 2014. 2014 update on wood burner numbers for Christchurch, Timaru, Rangiora, Kaiapoi, Ashburton, Geraldine and Waimate. Unpublished report for Canterbury Regional Council.
- Mallett, T. 2014. Calculating an average wood burner emission factor. Unpublished report for Canterbury Regional Council.
- Scarrott, C. 2012. PM10 concentration modelling for Christchurch: What is the likelihood of meeting the (revised) NES air quality targets on PM10 concentrations? Unpublished report prepared for Canterbury Regional Council.

## B. Technical questions related to GNS report

Following key questions have been raised with ECAN officials that are related to GNS report. We are waiting for the answers from concerned officials.

- Does Biomass combustion figures given in this report include emissions from various sources of domestic log burners, rural burning, rubbish burning, pellet fires and industrial wood/chip or pellet burners?
- Also can coal burning emission be differentiated using this tool?
- What are the limitation of this tool and uncertainties involved? We assume that this report being at draft stage, these things are missing at this stage.