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Standing Council on Environment and Water Secretariat

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### **Consultation on Wood Heater Emissions RIS**

We are making the following submission to the SCEW Secretariat in response to the RIS and the consultation meeting in Launceston.

Wel believe that there is a special case to be made for local standards and stricter compliance where identified environmental and seasonal factors contribute to predictable spikes in particulate levels during winter, as occurs in Launceston.

We wish to initially comment on the meeting process:

- 1. The SCEW web site had announced well in advance that a meeting would be held in Launceston. However, there was only short notice of the actual date of the meeting, less than 10 days.
- 2. The Silverdome venue is a very unusual site for a consultation meeting in Launceston. A venue in the CBD e.g. at the Town Hall, would have been more appropriate and would have allowed more people to attend during the day.

The small attendance should not be taken as an indication of the level of interest and concern around the issue of wood smoke in the Launceston air shed.

## **Australian Wood Heaters**

With increasing power bills and Tasmania's low average income, anecdotal evidence suggests that more people are returning to wood as a source of heat, purchasing heaters or re-firing existing heaters.

In Tasmania, there is a strong culture of collecting and burning wood, where wood collecting is a link to the bush, farms and forests for many people. Tasmanians live in relatively close proximity to wood sources and the traditions of hunting and wood collection have built up over generations. Collecting and burning wood are seen by many as a "traditional right".

This point has made the use of wood heater a political issue. Controls on the access to and use of wood are seen as an attack on the rights of a particular socio-economic group. As an example, the Liberal opposition spokesman Mathew Groom used the issue to score political points when the Launceston City Council (LCC) announced that fines may be required to restrict the emissions of wood heaters. (See attachment)

The problem with replacing wood as a fuel source is that the alternative of gas is not a longterm sustainable alternative and electricity costs are rising. Wood has the potential to be a sustainable source for heating both homes and water.



## Statement of the Problem

The Launceston air shed is particularly vulnerable to particulate pollution due to the inversion layer that occurs. This local phenomenon traps particle-saturated air at residential level, particularly during winter. Unfortunately Launceston is also bordered by three other councils in the air shed, Meander Valley, West Tamar and Northern Midlands, which do not publicly act on reducing particulates and their effects on the rest of urban Launceston, although since the meeting, the Meander Valley Council is running the Burn Brighter campaign.

No-one should have the right to allow into the atmosphere emissions that have proven health and well-being impacts on other members of the community, particularly those who are vulnerable and who experience severe effects from particulates in the air. The fact that there are other sources of wood smoke, such as forestry burns, cannot be an excuse not to fix the problem. If the atmosphere was a river and wood heaters were factories, operators would be prosecuted for the smallest spill or pollution. On the other hand, society allows individuals to pollute the atmosphere with home-operated wood heaters.

The LCC is pleased that it has not pursued one prosecution and has relied on the buyback scheme and education. This collaborative approach has worked relatively well up to the point where we are now left mainly with individuals who declare it as a right to burn wood as they see fit, those who feel they are immune to their obligations to the health of the wider community and those who are ignorant of the fact that they are polluting and the detrimental effects they have.

As a society we need to decide what is an acceptable level of particulate level in the air we breathe. Surely we should be aiming for a level that produces "nil effects"?

Research indicates that "even short-term exposure has impacts on health, particularly for sensitive sub-groups of elderly, young children and those suffering from pre-existent heart or lung disease" (NEPM Discussion Paper 2007 Point 5). Launceston is marketing itself as a "Family Friendly City" and is now seeking endorsement as a "Children Friendly City" – friendly unless you are at risk from wood smoke!

We agree with the conclusions for Chapter 3 of the RIS; that the effects of emissions are underestimated. Relying on the EPA reporting of Standard breaches is a good method of getting base line data and measuring progress but should not be relied on to be the only measure of pollution, particularly as a breach occurs only when the average particulate level is higher than the Standard over a 24 hour period.

This Standard does not therefore cover the peaks of emissions that can occur at critical times when

a) people are more active during winter mornings and evenings and

b) when compliance officers are least likely to be operating, in early morning and late evening; the time when heaters are started up or shut down and are likely to emit smoke.

It should not be assumed that because there are no breaches of the current Standards the problem has been solved.

## **Rationale for Government Intervention**

The LCC has been running a wood heater replacement program that has removed over 2500 wood heaters since 2001. This action has dramatically reduced the measured effects levels of PM10 as reported on the Environment Protection Authourity web site. Although the number of breaches of the NEPC standard has reduced, it is of concern that levels of both PM10 and PM2.5 spike above the Standard of 50 ug/m3 for PM10 and 25 ug/m3 for PM 2.5.

A collaborative approach has worked up to a point but more specific and targeted action is required. The situation is that we still have a "hard core" of wood heater owners, many of whom continue to pollute the atmosphere. The pattern of this pollution spikes as wood heaters are fired up at the beginning of the day and in the evening and are shut down over night, just as many people are undertaking healthy outdoor recreational activities such as walking, running or bicycle riding commuting to and from work.

There is a pattern of particulate levels in the Launceston catchment where we have significantly high "spikes" in recorded levels during the high risk winter months. I believe that there is a special case to be made for local standards and stricter compliance where identified environmental and seasonal factors contribute to these predictable spikes.

An extreme analogy is the removal of feral pests from Macquaire Island – significant effects were achieved initially by broad aerial poisoning. However, the final rats and rabbits were not removed until high input, on-ground hunting operations were conducted to eliminate them, resulting in rapid improvements to the biodiversity and natural environment of the island.

A similar approach is required for the elimination of non-complying wood heaters, with education and standards playing the broad role to improve air quality with a last resort of fines and penalties. The nature of the Launceston air shed is such than one non-complying heater can pollute a whole suburb, as illustrated by the photo at the head of this submission.

The improvement to wood heater operating standards is necessary but will not affect the air quality in the Launceston air shed in the short or even the medium term because

a) the sales of wood heaters are trending downwards, despite a recent increased demand as mentioned above and as evidenced in the RIS and

b) the low replacement rate of existing heaters. This means that effective results will be only achieved by making changes with the existing stock of heaters and operators.

We would suggest that one reason for the nil level of prosecution is the unrealistic evidence requirement under the Environmental Management and Pollution Control (Distributed Atmospheric Emissions) Regulations 2007, which states that "a person who is the occupier of a building or land is not to cause or allow to be emitted, from a heater smoke that:

(a) is visible for a continuous period of 10 minutes or more; and

(b) during that continuous 10-minute period, is visible for a continuous period of 30 seconds or more-

(i) in the case of a heater, fireplace, barbecue, hot water heating appliance or cooking appliance in a building, at a distance of 10 metres or more from the point on the building where the smoke is emitted".

This 10min/10 metre rule makes it virtually impossible to gather reliable evidence particularly at night and when the plume may be only visible from specific directions due to the ambient light.

In order to have an enforceable compliance regime, this regulatory approach needs to change. The offence must change to be either non-emission or "reasonable" emission during start up with no defined plume length. This would possibly be more enforceable than one with specifics that are not in fact realistically measurable.

The reduction of the manageable causal factors in these situations requires a strategic approach co-ordinated across all jurisdictions and the community to bring about a long-term improvement in air quality. Stricter localised standards, education, local weather warnings, awareness and enforcement would enable better planning and action to bring about air quality improvement where ambient air quality is poor for identifiable periods throughout the year.

Specific areas and suburbs need to be targeted. The recent EPA Burn Brighter campaign targeted the East Launceston area, one we would regard as a "soft target" in terms of non-compliance and co-operation. Areas such as West Launceston, St Leonards and Mayfield would have produced more significant results.

The discussion papers and RIS do not appear to address the issue of wood supply. There does not appear to be a standard or Code of Practice which defines the supply and quality of wood from commercial suppliers, although we understand that there have been attempts to implement one in the past. Pellet manufacturers are producing products at consistent moisture content but require a specific wood heater to provide the necessary feed-in etc (a pellet manufacturer has recently established in Tasmania).

It is recognised that the final use of the product is outside the control of the supplier but, as an example, we have standards for the supply of food over which control is lost at the domestic level. Compliance with a Code of Practice for the sustainable supply of high quality wood (as defined around the potential of the fuel to pollute) could be a condition of operation of a wood heater. Such an approach would require strong leadership at a local and state government political level.

Although the market for second hand heaters is probably very small, control on the standard of second hand heaters should be in line with those of new ones.

# Identification and Impact of Feasible Policy Options

The option of a National Environment Protection Measure (NEPM) with mirror legislation and administration and compliance managed at the local level would be the best option to reduce wood smoke pollution, particularly in the Launceston air shed.

The cost: benefit analysis would appear to be a "no brainer" in terms of the returns to the community from a more rigorous approach to education and compliance.

There needs to be more "buy in" by the local community. In Launceston, the Council approach has been low key with only the occasional media releases. The problem is multi-faceted and so needs a wider extension, education, warning and compliance approach so that polluting the atmosphere attracts the same community denunciation as more obvious industrial pollution.

It was interesting to note that in the whole debate about the potential air quality effects on Launceston of the proposed Gunns Ltd pulp mill, there was no reference to the current level of pollution caused by wood smoke. Claims were made regarding relatively low risks of pollution from the mill with high compliance standards while wood smoke swirled around the city.

The community should not bear the health and well-being costs imposed by the private use of inefficient wood heaters. The community is in fact subsidising the true social costs of wood heaters for the benefit of a relatively small number of residents who are not paying the true environmental and health cost of their heating.

We look forward to seeing the future development of the regulations and improved air quality across Australia.

Yours sincerely



# \$1300 fines possible in wood-smoke crackdown

SUN Ex 8/7/12.

HOMEOWNERS who use woodheaters could be slapped with a \$1300 fine if their chimneys are spotted blowing visible smoke for more than 10 minutes.

smoke for more than 10 minutes. Under state pollution control laws, anyone with smoke coming out of their chimneys for this time can expect a visit from an environmental officer, who will instruct them to modify either their heater or chimney within 21 days.

Failure to comply would see the homeowner receive a fine of up to \$1300.

A state government spokesman said the move was the first phase of a wider effort to control domestic woodheater emissions, with Launceston and Hobart the focus for the project.



MONEY SAVER: Is switching back to woodheaters more economical as energy costs rise?

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He said enforcement from fines was a matter for the Launceston and Hobart councils.

State opposition energy spokesman Matthew Groom said it was unfair to threaten people using woodheaters with fines as energy prices skyrocketed.

"At the same time that the (federal) government is imposing an unfair carbon tax on carbonfree hydro power, they are also set to ramp up a campaign to target people using woodheaters to warm their homes," he said.

"They appear to have no understanding of the power price pain people are feeling right now."

The state government spokesman said the program to reduce the effect of smoke from domestic woodheaters across Tasmania was more for education, not enforcement.

"Lessening the smoke from woodheaters is good for the com-

munity's health," the spokesman said

FOR BREAKING NEWS examin

"One of the best ways to achieve this goal is to help people improve the performance of their woodheaters.

"However, it should be clear that education and informal warnings will usually be the first step in implementing the regulations, with formal action taken only where people persist in operating their woodheaters in a way that causes excessive smoke."

Advice on lowering domestic wood-smoke emissions can be found on the Environmental Protection Agency's website: http:/ /epa.tas.gov.au/epa/burnbrighter-this-winter.