COMMENTS ON THE CONSULTATION REGULATION IMPACT STATEMENT FOR REDUCING EMISSIONS FROM WOOD HEATERS

SECTION 2

ARE THERE SPECIFIC ASPECTS OF THE WOODHEATING INDUSTRY IN AUSTRALIA THAT NEED ATTENTION? There is no health-based standard for woodheaters. The estimated cost of PM emissions reported in the CRIS (\$265 per kilogram for large capital cities and \$112 per kilogram for smaller capital cities and regional cities such as Armidale) show that the estimated health costs of every new heater in these areas amounts to thousands of dollars per heater per year. This is totally unacceptable. A moratorium on the installation of new heaters in urban areas is therefore required until a new standard has been developed to guarantee much lower health costs of emissions.

This problem became evident following the adoption of the 1.5g/kg standard in New Zealand in 2005, Aus Stds Committee in 2007 proposed to reduce the emission standard in Australia from 4 to 2 g/kg. The proposal was vetoed by the wood heating industry representatives. There is clearly a need for a better way to regulate the woodheating industry that puts the protection of health first. The emissions from woodheaters haven't changed significantly (the average emission rating in 2011 was 2.5 compared with 2.6 in 2006), and without effective regulation, the woodheaters is needed to drive changes in the industry. The discrepancy between the published emission ratings and actual in-use emissions means that policies based on the current standard are ineffective and practically meaningless.

SECTION 3

DO YOU CONSIDER WOOD HEATER EMISSIONS TO BE A SIGNIFICANT ISSUE RELATIVE TO OTHER FORMS OF AIR POLLUTION?

A recent review of the health effects of air pollution (Review of evidence on health aspects of air pollution – REVIHAAP Project: Final technical report, WHO 2013) highlights the risks from even low levels of pollutants, including wood fires, and suggested the health effects have previously been underestimated. Another recent study (reported in <u>http://www.abc.net.au/science/articles/2013/07/10/3800159.htm</u>) concluded that there was an unmistakeable link between long-term exposure to particulate matter and the risk of lung cancer: "Every increase of five micrograms per cubic metre of PM2.5 drove the risk of lung cancer up by 18 per cent."

Air pollution from woodheaters is a major source of fine particles and carcinogens affecting air quality in both capital cities and many rural towns. The cost to health of wood smoke emissions across urban, regional and rural areas of NSW alone has been estimated at \$8.1 billion over the next 20 years (AECOM 2011, Economic Appraisal of Wood smoke Control Measures,

<u>www.environment.nsw.gov.au/woodsmoke/smokecontrolopts.htm</u>). In Sydney the NSW EPA has estimated that domestic heating (mainly woodheating) is responsible for 75% of PM2.5 in mid-winter (http://www.epa.nsw.gov.au/woodsmoke/). Another report (Particulate pollution in Australian Rural Towns, K. Parton, ed., 1997) estimated that on a cold night in Armidale, up to 2 tonnes of particulate matter is emitted by woodheaters.

A recent Australian study shows the link between woodsmoke and cardiovascular and respiratory mortality: Evaluation of interventions to reduce air pollution from biomass smoke on mortality in Launceston, Australia: retrospective analysis of daily mortality, 1994-2007." Johnston FH, Hanigan IC, Henderson SB, Morgan So I definitely consider wood heater emissions to be a highly significant issue.

ARE THERE OTHER VARIABLES THAT HAVE NOT BEEN CONSIDERED OR NOT BEEN ATTRIBUTED SUFFICIENT

WEIGHT IN THE DISCUSSION?

Estimates of the overall health costs of current woodheater emissions are not available in the discussion. Surely these are needed to measure the effectiveness of the proposed policies.

SECTION 4.

DO YOU AGREE THAT THE CURRENT POLICY MEASURES FOR THE ABATEMENT OF WOOD HEATER EMISSIONS ARE NOT SUCCESSFUL IN REALISING THE POLICY OBJECTIVES? CAN YOU PROVIDE OTHER EVIDENCE TO SUPPORT THIS?

Most definitely. The most recent example is Armidale's woodsmoke reduction policy, where there is no evidence of any reduction in air pollution levels (eg http://www.guardian.co.uk/world/2013/jul/03/fire-smoke-wood-stoves-burning).

WHICH POLICY DELIVERY METHOD DO YOU BELIEVE SHOULD BE ADOPTED BY GOVERNMENT AND WHY? A national agreed test method for woodheater emissions would seem to deliver the most consistent approach to regulating woodheaters. This must be combined with a moratorium on the installation of new woodheaters, and measures to remove all existing woodheaters with estimated health costs of more than a few hundred dollars per year.

SECTION 5

Do you agree that the policy measures listed for the abatement of wood heater emissions will be successful in realising the objectives? If not, please provide your reasons including supporting evidence. Are there other measures that are not listed in the document that should be considered?

I would rank the following policy measures in order of importance. It is essential that the measures can be implemented as soon as possible because of the accumulating health costs.

- New emission standard based on total real-life particulate emissions an order of magnitude improvement in current standard ie less than 0.5g/kg actual emissions (achievable by modern pellet heaters). Woodheaters can be installed within metres of neighbours, and can be in use for 15 years or more, so a new standard now should set a stricter emission limit.
- 2. Moratorium on the installation of new heaters until an effective standard is determined. With the high estimated health costs of woodheaters it would be difficult to justify the installation of current woodheaters, especially in new, well-insulated houses.
- 3. Consultation with neighbours before installation of heaters.
- 4. Phase-out of older heaters, eg more than 10 years old, or badly installed heaters, eg in dense urban areas or where poor topography aggravates the emission problem.
- 5. Effective labelling of woodheaters, with warning of health effects
- 6. Education programs
- 7. Incentives for replacement of existing heaters
- Requirement for removal of heaters when houses are sold. Our neighbouring house has changed owner 3 times, and each time the new owner has been unable to operate the woodheater without causing large amounts of woodsmoke. Removing the woodheater would have been the sensible option.

SECTION 6

Which of the listed policy combinations do you favour in addressing a reduction in wood heater emissions? Why do you favour these measures?

The main problem with the policies presented is that they have so little effect in relation to the magnitude of the health costs from woodsmoke pollution. There has been so much delay and neglect by government at all levels that the policies suggested are just too little too late.

New Zealand set the 1.5g/kg emission standard in 2005. The policies outlined wouldn't achieve this until 2020, after a 6-year phase-in period. If there is going to be such a long phase-in period for a new emission standard, and considering that woodheaters can be in operation for 15 years or more, and 1.5 g/kg has not achieved acceptable air quality in New Zealand, it would be better to have a more significant new standard based on a new emissions test that measures real-life emissions.

SECTION 7

HAVE ALL HEALTH, ENVIRONMENTAL, ECONOMIC AND SOCIAL IMPACTS BEEN IDENTIFIED? IF NOT, PLEASE SUGGEST OTHERS THAT NEED TO BE INCLUDED. HAS SUFFICIENT WEIGHT BEEN GIVEN TO THESE IMPACTS WITHIN THEIR RELATIONSHIP TO THE POLICY OPTIONS BEING PROPOSED? The overall health costs from woodheater air pollution haven't been identified clearly.

SECTION 8

DO YOU AGREE WITH THE CONCLUSIONS? IF NOT, PLEASE PROVIDE REASONS.

In the conclusions it states that all options examined are estimated to provide significant net benefits to the Australian community. However they don't achieve a significant reduction in the size of the problem being addressed, with the best option only achieving an 18% reduction over 20 years. It's not clear why so much effort has been put into considering the 9 options presented when there are only relatively minor differences between them, and not trying to deal more effectively with this major health burden to the community.