

The Secretariat
COAG Standing Council on Environment and Water
GPO Box 787
CANBERRA ACT 2601

Dear Sir / Madam

Re: Regulation Impact Statement for Reducing Emissions from Wood Heaters

As background to my submission, I live in SA, SA, south of Adelaide. It has a population of approximately 14,500 permanent residents, with almost 1/3 (approx 32%) 65 and over years of age. It has a very high usage of wood heaters and emissions collect in some areas.

I make the following comments on the above regulatory impact statement for your consideration during its review.

- The primary concern in the regulation of emissions from wood heaters should be human health.
- The health effects, and their health costs, appear to be based on particulate matter, particularly PM10. This significantly underestimates the adverse health effects and health costs of wood heater emissions as their constituents will have synergistic effects. The emissions are a complex mixture of gases, semi-volatiles and particulates which include irritants and carcinogens. It is acknowledged that these constituents will vary greatly depending on the heater and how it is operated.
- I believe the epidemiology clearly satisfies the Bradford Hill criteria of causation of adverse health effects, particularly of respiratory and cardiovascular effects, by wood heater emissions.
- Hence, I believe that wood heater emissions *cause*, as distinct from being associated with, increased morbidity and mortality.
- This is particularly the case for vulnerable groups in the general population. These groups include the very young, the elderly and those with pre-existing respiratory and cardiovascular conditions.
- When the prevalence of asthma, let alone other respiratory conditions, is taken into consideration, I believe that these vulnerable groups constitute the majority of the population in at least some areas, eg, Victor Harbor.
- It is noteworthy that the Statement's Executive Summary includes that there is no safe threshold for PM10 (NEPC, 2010).
- It is difficult to understand why there is public health concern over passive tobacco smoking, with resulting legislation, but no similar approach to wood heater emissions. Surely, it does not require a campaign similar to that of the anti-tobacco campaigns by NGO's to effect similar change.
- It appears that it is considered acceptable for a householder to subject their neighbours (including children) and the general population to levels of air pollution which places them at significant risk without their consent.

- It appears also that it is considered acceptable for a householder to generate air pollution levels which would not be accepted if the same emissions were the result of a commercial enterprise.
- A consistent approach would be to use the EPA's design ground level concentrations for wood heaters, at least.
- If nothing else, the "blunt" measures used in other jurisdictions (overseas), eg, the removal of non-compliant heaters on the sale of a house and bans on installation in critical air sheds (), must be used.
- One feature which should be included in all wood heater usage is the installation of flues / chimneys which extend above the zone of turbulence of the dwelling. This should apply to existing wood heaters.
- Similarly, emissions should not be allowed to discharge onto other dwellings.
 In sloping terrain, I've seen emissions blow onto (a higher) ground level where there are dwellings.
- The existing controls, including the methods of use, need to be enforced by regulators (which includes local government environmental health officers in SA). It appears to be "too hard" at present.
- Equity is often cited as a reason for not banning wood heaters. The essence of this argument is that such banning would deprive less affluent people of a cheap source of heating. My observation is that it is generally the more affluent people who have wood heaters, particularly in urban areas.
- Government has a duty of care to ensure that the population is protected from foreseeable, preventable and involuntary risks to health. Failure to take the strongest possible actions to minimise these risks means Government (at all levels) is negligent.

Yours sincerely