



AUSTRALIAN HOME HEATING ASSOCIATION INC

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Supporter of



23rd April 2013

Dr Ian Holland
Committee Secretary
Senate Standing Committees on Community Affairs
PO Box 6100
PARLIAMENT HOUSE
CANBERRA ACT 2600

Dear Dr Holland,

Thank you for the opportunity to respond to adverse comments made about the Australian Home Heating Association's representation of data.

Our 200 members appreciate the opportunity to respond to claims made by Dr Dorothy L. Robinson of the Australian Air Quality Group and we would like to make the following clarifications that relate directly to the Association:

Claim

"The AHHA, representing the Australian wood heating industry, are creating considerable confusion and misleading people by their claim: "On completion of the change-out program, Libby, Montana, has improved its air quality by more than 80%". 'Truth in Advertising' legislation is needed to prevent those who profit from wood heater sales from misrepresenting the truth."

AHHA response

The US Environment Protection Agency conducted a massive change out program in Libby, Montana after the township suffered significant wood smoke problems. The EPA replaced older non compliant wood heating appliances with new, low emission wood heaters. This was a joint initiative conducted with the administrators in the town of Libby, the USEPA and the manufacturers of wood heating appliances in the United States.

On completion of the change out program, air quality in Libby improved its air quality by more than 80%. The full report, *Clearing the Smoke: The Wood Stove Change out in Libby, Montana*, clearly states that the program had a significant effect:

"While all new stoves and fireplace inserts old in the U.S. are certified to be low-particulate emitting according to strict standards set by the U.S Environmental Protection Agency (EPA), most Libby homeowners installed their stoves long before the standards took effect in 1992.



“These older, uncertified stoves can release from 15 to 30 grams of smoke per hour, while new EPA-certified stoves produce only 2 to 5 grams, a 65 percent to 90 percent reduction. Though the University of Montana report identified the major source of the problem – older stoves and fireplaces – a fix seemed elusive.”¹

The report also states that as a result of the two-phase, two-year program, Libby residents are now “breathing significantly cleaner air – both outdoors and inside their homes”.²

“By 2007, average wintertime fine particulate levels in the outdoor air decreased by nearly 30 percent. The results are even more dramatic for indoor air quality with initial research by the University of Montana finding indoor air more than 70 percent cleaner in homes with new, EPA-certified stoves.

“The scale of the Libby change out – 1,130 wood stoves in a little over two years – makes it the premiere example of a successful change out program.

“... The Libby experience demonstrates that a wood stove change out can significantly and cost-effectively reduce harmful emissions.”³

Claim

Regarding the implementation of a National Wood smoke Education Campaign:

“The wood heating industry makes many misleading claims e.g., “In addition to being the most cost effective form of domestic heating, later model wood heaters emit fewer particles and have the lowest greenhouse emissions when compared with heating alternatives. Today, you can choose a cleaner and greener wood heater that exceeds the most stringent Australian Standards.”

AHHA response

Burning of fossil fuels is a major cause of increasing atmospheric CO₂, which in turn is a major cause of global warming. Burning firewood releases greenhouse gases during combustion.

However, burning firewood that has been grown in sustainable wood production systems can significantly reduce greenhouse gas emissions, compared to emissions from non-renewable energy sources. This is because unlike fossil fuels, biomass is a renewable resource and the CO₂ released from burning biomass can be re-sequestered in subsequent rotations.⁴

¹ http://www.woodstovechangeout.org/fileadmin/PDF/Libby_Report-Final.pdf

² http://www.woodstovechangeout.org/fileadmin/PDF/Libby_Report-Final.pdf

³ http://www.woodstovechangeout.org/fileadmin/PDF/Libby_Report-Final.pdf

⁴ http://www.homeheat.com.au/pdf/Heating_Greenhouse_Gas.pdf



The AHHA is committed to improving air quality through continued reduction in the emissions of wood smoke. This can be achieved through improved technology and informing users of correct operation of their wood heater.

Australia has some of the toughest emission standards in the world for wood heating. The AHHA supports the removal of polluting older style wood heaters and open brick fireplaces, but encourages the continuation of wood heating as a viable and environmentally responsible home heating option, through the use of clean-burning wood heaters.

Clean burning wood heaters slow down the exit of smoke through a secondary combustion process. This process generates more heat from each log and reduces the amount of smoke and particles going up the flue and into the environment. New wood heaters with clean burn systems greatly reduce CO2 emissions and require less fuel, gaining more energy out of the wood.

While old open brick fireplaces lose as much as 80% of their heat via the chimney, clean burn systems lose around 15%. Modern controlled combustion (clean burning) wood heaters are more efficient than older wood heaters and open brick fires. There are over 300 controlled combustion (clean burning) models in Australia. These wood heaters are of great economic benefit to families because they can heat an entire house.

Wood heaters in Australia should be manufactured to all the rigorous Australian Standards applicable to wood heaters. All wood heaters manufactured since 1992 must adhere to AS/NZS 4013 – the Australian Standard for emissions. This ensures they are clean-burning and environmentally responsible.

Most new wood heaters for sale in Australia are tested to determine their output, energy efficiency and particle emissions levels under Australian/New Zealand Standards AS/NZS4012 and AS/NZS4013.

The Australian Home Heating Association wants to ensure that Australia continues to produce sustainable forests. In order to do this AHHA is a financial supporter of Landcare Australia. Through our support to Landcare programs we have planted over 40,000 trees and continue to be involved in farm forestry projects. We also contribute funds to Landcare from every wood heater sold by an AHHA member.

Claim

“The National Education campaign should correct misleading information from AHHA, and others who make money from selling new heaters.”

AHHA response

The AHHA has always maintained, on behalf of its members, that the industry needs regulation. The emissions standard currently in force for wood smoke emissions is 4g/kg. This is why AHHA members are moving down the path of self regulation by reducing wood smoke emissions through a co-operative approach between industry and control authorities. The industry initiative which will be launched in December 2013 is reducing



the current National Standard AS/NZS 4013 from 4g/kg to 2.5g/kg and introducing an efficiency requirement of 55%.

More than 900,000 Australian households use firewood for heating. Substantial technological advances have led to modern wood heaters that produce only a small fraction of the smoke and particle pollution that earlier models did.

The AHHA recommends the following control measures, which would reduce the emission of particles from wood heaters by over 80% within 10 years.

- Uniform National application and enforcement of AS/NZS4013.**
- Effective community education on correct use of wood heaters.**
- Restricted resale of second hand, uncertified heaters.**
- Support for an industry change-out program of older heaters.**
- Targeting of the worst performing heaters and open fires for removal.**
- Code of Practice for installation of heaters to aid smoke dispersion.**
- Maximum allowable firewood moisture content through a fuel-wood standard.**
- Warning of poor dispersion days and voluntary no-burn periods for non-complying heaters.**

The AHHA is concerned that exaggerated impacts of wood smoke are being presented that fail to acknowledge the roll that technology and education will play in the next decade.

Wood smoke is a problem that can be solved without destroying an important Australian industry. The AHHA seeks acknowledgment of this view, and looks forward to working closely with pollution control authorities to improve urban air quality throughout Australia.

The AHHA is committed to improving urban air quality through technology and better informed and educated users of wood heaters. The technical advances in the Australian industry over the past years have been extremely impressive. We suggest that few other sectors of Australian business have achieved what we have in this time. The products now on the market that comply with the Australian Standard, AS/NZS4013, are cleaner burning and more efficient. Given that there are hundreds of different models on the market, this is a significant achievement in a relatively short period.

If the industry is to continue this product development and, through ongoing research and development, produce still cleaner and more efficient models of wood heaters it must have the co-operation and support of the pollution control authorities across the country. The industry has clearly demonstrated its willingness to work with pollution control authorities to deal with existing problems. However, we are concerned that the outspoken minority does not provide a constructive foundation for dealing with wood-smoke issue.

As an industry we recognise the poor operation of wood heating appliances can contribute to air quality concerns within certain areas of Australia, particularly those that sit within valleys and often experience inversion layers which traps and holds smog and fine particles close to the ground.



Fine particles, within many areas of Australia are caused by a variety of sources;

- diesel engines
- lawn mowers
- motor vehicles
- industry
- natural bush fires
- controlled, hazard reduction burning.

It is clear that domestic wood heaters in general contribute to these pollutants. However, there are many factors which affect our weather conditions and increase PM10 and PM2.5 readings

The submission portrays AHHA as having a “veto” over the standards applied by Australian Standards.

This is false.

The AHHA works with Standards Australia to ensure that the emission thresholds recommended are safe. Moreover, the industry is working to ensure the manufacture of wood heating appliances complies with strict industry standards that ensure future products on sale across Australia fall below the accepted standard applied by the Commonwealth.

Claim

“The Standards Australia Committee has not met yet to reconsider wood heater standards, after failing to reach a consensus on a new emissions limit. Yet a recent media release the Australian Home Heating Association (AHHA) claimed that wood heaters “exceed the most stringent Australian Standards. This is despite the fact, as shown above, the current Australian standard is considered out of date. Indeed, many wood heaters sold in Australia today would be considered so polluting they would be banned in many parts of the world.”

AHHA response

In August 2011 the industry’s manufacturers and importers of product met to discuss lowering the National emission level from its current 4g/kg to 2.5g/kg and introduce an efficiency rating of 55%.

The cost to the industry to achieve this reduction will be in excess of \$5 million dollars over a very short period of time. The industry will introduce this initiative December 2013, with all member manufacturers/distributors meeting this new level of emissions and efficiency.

This initiative was brought about to ensure that, as an industry, we are progressing and improving product performance, albeit at a significant cost to the industry. Further, the AHHA submitted a project proposal to Standards Australia to have the National Standard changed to reflect the industry’s initiative.



In the preparation of the proposal, the AHHA sought support from each State EPA which was received by most and was very supportive of a move to lower emission levels. The AHHA received notification on the 23rd May 2012 that its proposal had been approved and a project manager would be appointed to ensure the changes are completed to the National Standard within an 18 month period.

This not only provides the forum to ensure the emission levels are reduced nationally, but will require all manufacturers to comply with the lower emission requirements not just AHHA members.

Importantly, we know that most heaters installed and in use in Australia are older, pre-1992 units which do not comply with the emission Standard AS/NZS4013.

In addition, there are still a large number of open brick fireplaces still in use. These open brick fireplaces are highly inefficient and emit in order of magnitude higher emissions than even the older pre-certified slow combustion units of the 1980s.

**Demi Brown
General Manager**

