



## AUSTRALIAN HOME HEATING ASSOCIATION INC

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Supporter of



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

Re: Senate Committee Inquiry:

The impacts on health of air quality in Australia

- **Particulate matter, its sources and effects**

### Particle emissions

Coal-burning power plants release fine particles of sulphate, nitrates, ammonia, sodium chloride, carbon and mineral dust, smaller than the width of a human hair, that penetrate deep into the lung. Breathing these fine particles can decrease lung function, aggravate asthma and contribute to cardiovascular disease. They cause thousands of premature deaths. As the particles are so small, they are more likely to escape the cleaning mechanisms of coal power stations.

Every year, in the US alone, fine particle emissions from power plants are believed to cut short the lives of 30,000 people. Every year, 38,000 heart attacks, 12,000 hospital admissions and an additional 550,000 asthma attacks are a result of power plant pollution.

In India, a study in 2001 found that the inhabitants of 14 of India's 20 largest cities breathe air the government deems "dangerous". Particle emissions from coal power stations are a major contributor to the poor air quality.

Burning Fossil Fuels has been a major contributor to the increased levels of carbon in the atmosphere. Burning fossil fuels releases carbon that has been trapped for thousands or millions of years, burning wood releases carbon that has been trapped for tens of years.

As an industry we recognize 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 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.



Black Saturday bush fires



Black Saturday bush fire as seen from space



Cityflyer		Departures			08:56	
Flight	Destination	Depart	Board	Gate		
JQ6419	Melbourne	CANCELLED				
Flight Cancelled Due Volcanic Ash Hazard						
QF 512	Brisbane	FLT CLOSED				2
JQ6421	Melbourne	CANCELLED				
Flight Cancelled Due Volcanic Ash Hazard						
QF1471	Canberra	09:40	09:20	17		
QF 741	Adelaide	09:45	09:25	7		
QF 423	Melbourne	CANCELLED				
Flight Cancelled Due Volcanic Ash Hazard						
QF 516	Brisbane	10:05	09:45	6		
AA7299	Perth	10:10	09:35	10		



Chillian Eruption caused a massive ash cloud which covered Southern Australia and disrupted flights.



Firefighters monitor a controlled burn near Bonesilla, Victoria

## ABC News reports: Concerns controlled burns not protecting communities – 17 Feb 2012





## *Draw a line in the sand. Say NO WAY to New Coal*

A secret document by the Baillieu Government has revealed plans to allocate billions of tonnes of brown coal to big polluting companies. And it exposed a taxpayer-funded PR campaign to promote the benefits of brown coal - the most polluting fossil fuel in Australia - to the Victorian community and to investors



*Coal-fired power stations such as the Loy Yang plant in the Latrobe Valley produce 90 per cent of the state's electricity.*

Victoria likes to promote itself as a clean, green state, leading the way on environmental initiatives. But the truth is much grubbier.

In fact, Victorians are among the worst greenhouse gas polluters on the planet.

*Source: The Age: The dirty state we're in, February 14, 2005.*

Poor operation of wood heating appliances can cause concerns with air quality in specific areas.

Any wood smoke management initiative by necessity will rely on user awareness and education to achieve its objectives.

In general, the main issues with incorrect use of wood heaters include:

- Using wet or unseasoned timber
- Overloading heaters with fuel
- Shutting down the primary air supply before the firebox reaches efficient burning temperature, as a means to extend burn times through the night
- Burning household refuse
- Poor maintenance practices



Providing education is the key to ensure the community is afforded the knowledge on how to operate their wood heater correctly.

We would encourage government to work with the AHHA in providing this valuable education and would welcome a joint education initiative to ensure the message is heard and supported by both industry and government.

- **Those populations most at risk and the causes that put those populations at risk;**

Asthma is very common in Australia, affecting as many as one in five children and one in ten adults. The relationship between damp houses and asthma and other ailments is well established.

A properly heated home will significantly reduce dampness. Wood heating for many sections of the population represents the only economic and practical means of providing enough heat inside the home to achieve this.

Clearly there has been a tendency to underestimate the health benefits of living in a warm, dry indoor environment, especially when the outside environment is cold and damp.

Comment received by homeowner in response to possible changes in Legislation regarding wood heating in the ACT

**have received...**

Am 73 year old, know how to operate a wood fire without being unkind to neighbours, love the unparalleled superiority of wood heaters, had a wood heater all my life. Heat and smoke from wood has been mankind's best friend since stoneage man. Ban cars because they cause deaths? What will be next? Cars are not all good or all bad and woodheaters are not all good or all bad and both have their place on our planet.

- **The standards, monitoring and regulation of air quality at all levels of government;**

As the peak body which represents the Solid Fuel Heating industry, we have put forward a proposal to Standards Australia to have the National Standard for wood heating appliances changed from 4g/kg of particulate matter per kilo of wood burnt to reduce this down to 2.5g/kg. This change comes at a significant cost to the industry, with 48% of units requiring research and development work and then re-testing at a cost of over \$5 million dollars. Non-the-less the industry feels it is an important step towards improving air quality and is prepared to take this step forward. The manufacturing members of the AHHA will introduce this initiative from December 2013.

This initiative was approved by Standards Australia and the CS062 Standards Committee is working towards these changes.

Representation on this committee by EPA NSW, EPA WA and the Commonwealth Department of Sustainability, Environment, Water Population and Communities have yet to agree to these recommendations.



Should the government departments represented on the CS-062 Committee agree to these recommended changes, the emission level will reduce from the current National Standard of 4g/kg to 2.5g/kg with an efficiency requirement of 55% enforced by May 2015 and then further reduced to 1.5g/kg and 60% by 2019. This we believe will ensure progress on reducing these levels and providing sufficient time to industry to undertake research and development work and testing requirements.

In recent times and in the past we have tried to communicate with the Environment Protection Authority in relation to non-conformances of solid fuel heaters. Our office has provided all the details in relation to the companies involved and links to web sites, unfortunately these sales still continue.

All wood heating appliances sold, not only in Victoria but most States are required to be tested to the Australian/New Zealand Standards AS/NZS 4012 and AS/NZS 4013. In addition, these units should hold a Certificate of Compliance, although some state government bodies do not enforce this.

[REDACTED]

The City of Casey takes the opportunity to utilize our services in assisting to settle any disputes/issues regarding wood smoke in the area. Very few councils will call for assistance from the AHHA.

In the many years of offering this free service, we have reduced the number of complaints by a large margin. Most of the time it will be operator error or poor fuel, these are easily corrected and advice is provided to the homeowner. 99% of the time the problems have been corrected.

The current certification scheme administered by the AHHA has been in place since 2001, when the previous administrator of 7 years, Energy Information Centre South Australia, advised they were no longer able to continue the service.

The scheme provides for certification of wood heaters once they have been tested to AS/NZS4013 and AS/NZS4012 at one of the two NATA Accredited laboratories.

The scheme also provides for Design Specification Tests every 3 years, where an audit is carried out on a certified heater to ensure that units produced are equivalent to the design which was certified. Manufacturers or importers of heaters which fail the audit are advised and given an opportunity to bring their heaters back to a compliant state.

Any certification scheme is effective only to the extent that it is legally enforced. This is clearly a major opportunity for improvement.

The AHHA has been concerned for some time at the lack of regulatory enforcement of the current woodheating certification scheme. There are several documented cases where we have notified the state EPA of woodheaters for sale that have either not been certified or which



substantially differ from their certified design. In each case we either do not receive a reply, or are told there simply isn't the resource to investigate and follow up.

By comparison, the domestic gas appliance industry relies heavily on the state technical regulators such as Energysafe Victoria to provide retail level surveillance, incident investigation and most importantly legal enforcement of relevant standards compliance. The activity of these bodies provides a substantial disincentive to the supply of nonconforming product.

- **Any other related matters**

## Coal Power Plants

Background - April 15, 2010 – Greenpeace International

Once coal has been mined and processed, the vast majority of it is sent to power plants. This is the second major phase in the dirty life cycle of coal. Coal burning power stations continue to speed up global warming by filling the atmosphere with vast amounts of carbon dioxide. Coal burning leads to acid rain and smog, and emits more than 60 different hazardous air pollutants such as a variety of toxic metals, organic compounds, acid gases, sulfur, nitrogen, carbon dioxide and particulate matter.



BEIJING - People refused to venture outdoors and buildings disappeared into Beijing's murky skyline on Sunday as the air quality in China's notoriously polluted capital went off the index.

Source: [http://azstarnet.com/news/science/environment/air-pollution-in-beijing-is-so-bad-it-s-off/article\\_f6b96f74-facd-5b34-8401-6424b254453f.html](http://azstarnet.com/news/science/environment/air-pollution-in-beijing-is-so-bad-it-s-off/article_f6b96f74-facd-5b34-8401-6424b254453f.html)

## Conclusion

As an industry we encourage dialog with government departments to enable progress to occur with fair legislation and policies and for the development and manufacture of products. We do not however, support or encourage changes to legislation or local policies that are detrimental to small business and the industry as a whole. In some areas in NSW, local councils are imposing their own requirements in relation to the installation of wood heating appliances, to the point where it is out of reach for most.

As an example, Camden Council will determine the cost of your application fee on the cost of the installation of your solid fuel appliance. As an example, if the installation cost is \$450, Camden Council will charge the homeowner \$689.15 application fee.

As you can see from this, the cost is prohibitive to most. On top of this, Camden Council are now introducing a local policy based on poor air quality, which they have advised, is sweeping over the township from the Sydney area, and claiming these issues to wood heating. Camden Council are also restricting approvals to only units that comply with a 1g/kg and have a 65% efficiency rating, the National Standard is 4g/kg with no efficiency requirement.



The industry initiative is 2.5g/kg and a 55% efficiency rating, we would encourage all forms of government to support this initiative.

The AHHA would like to see a nationally consistent level of emission requirements, rather than break-away councils requiring individual emission levels in specific areas.

In Australia there are over 300 models available for sale to the public, of these, only four imported models would comply with the reduced emission limits of 1g/kg and 65% efficiency, effectively completely eliminating Australian manufactured products.

Air quality is affected by many things, the solid fuel industry is working towards the development of cleaner burning wood heating appliances.

909,000 Australians enjoy wood heating as their primary source of heating, to remove or seriously restrict this, will force them to use fossil fuels, which most can ill afford and would have multiple effects not only the community itself but put additional demand on gas and electricity supplies.

Demi Brown  
General Manager

