Anonymous, 3149

Submission to the Inquiry into the Environment Protection Authority (EPA)

Introduction

I wish to address the matter of wood smoke pollution from domestic wood heaters, and how the system involving the EPA fails to delivery justice for neighbours of wood smoke heaters. One test that could be used to evaluate the success of this inquiry is if it can delivery better justice for people and communities affected by pollution. Part of this justice must be a recognition of the facts, the fact that even wood heaters that comply with the industry driven standards adopted by the government, and that are operated correctly, are still far too polluting to discharge their emissions close to sensitive residential land because it is likely to lead to neighbours experiencing far worse air quality than is characteristic for their area and likely far worse than the polluter experiences themselves and the health dangers seems well recognized. If this inquiry can not recommend changes that give effect to an effective ban on wood heaters in urban areas then it will be a failure, and will have failed another generation. I offer my experience trying to deal with wood smoke pollution from neighbours and experience with the government systems while trying to stop the pollution and to understand the laws. I offer as input into the inquiry some suggestions on the possible problems in the systems and laws, and offer the following suggestions to help restore some justice.

- Help polluted people and communities obtain the scientific facts on their pollution exposure and the health dangers of pollutants.
- Help polluted people and communities understand the laws and the government system, rather than running interference.
- If the EPA is to have a role then it needs to be independent and appropriately funded, and the principles of the EP Act changed to reflect a scientific and health based approach, in particular the principle of 'integration of economic, social and environmental considerations' does not appear compatible with a scientific and health based approach or with justice.
- Extend the Public Health and Wellbeing (PHAW) Act to allow individuals to take statutory nuisance cases to court even if their council has investigated, or fund cases that challenge council investigations to establish precedents that make it clear what an investigation needs to consider.
- Provide significant legal assistance to affected people and communities where there are no clear precedents, or where the state of affairs has changed such as an improved understanding of the health dangers or improved understanding of pollution exposure. Having clear precedents might lower the barrier for people to take action themselves and reduce the risk for everyone.
- As technologies change, and some become unable to meet improving standards such as wood heaters, they should be phased out where other technologies are available, and not placed on separate protected tracks.

Experiences of neighbours of wood heaters

I have experienced having a neighbour use a wood heater in an urban area and I do not believe Australians should have to endure the pollution from them. My neighbours wood heater, and its installation, appear to comply with the standards that the Victorian government has adopted, and many appeals have been made to them to address the smoke problem, and they claim to be responsible people who know how to correctly operate a wood heater. The smoke from this wood heater is still not something that I believe people should have to endure, that my children should have had to endure from before birth. The smoke pollution is far out of proportion to other nuisances we accept in the give and take of having a neighbour. When I walk the streets I

occasionally pass a stream of wood smoke, and often it is too remote to even easily identify the source, but the air is bad and not characteristic of the area and not air quality that people should have to endure. My measurements of the smoke around my own home and a few other residents shows that the concentration can be much higher close to the source of emission, many times higher, so if I smell smoke on the street and the source is not nearby then some neighbour is surely experiencing very bad smoke pollution.

We called the EPA to complain and the response was what I would call hostile. The EPA even claimed that wood heaters were legal, which seems an extraordinary claim for an authority responsible for upholding the principles of the EP Act. Protecting the beneficial uses of land, including peoples health, is a principle of the EP Act, and emitting pollution is an offence under the EP Act. Emissions that are noxious or dangerous to peoples health are also an offence under the nuisance provisions of the PHAW Act, and under the local laws of many councils, and people can take individual action under the common law - hardly legal.

The EPA refereed us to our local council, who we assumed would act in good faith, but it became clear that they made a limited and token response, which I allege was just to avoid liability under the PHAW Act. There seems little point detailing the long history of token actions and misinformation, rather I will note the current position of the council teased out of them by another resident. I followed another resident who had issues with a wood heater installed in a garage. The flue is low and only around 10 meters from one neighbour and around 20 meters from the other neighbour which is a multi-story apartment block. The resident submitted medical opinions, and a scientists reports on the toxics in the wood smoke, to the council with little progress, and obtained some written responses that seem to set out the councils position, the first below from the Mayor and the second a final response from the Monash council. I will paraphrase parts of the Monash councils responses to communicate the main points.

Council response: The Mayor replied to a complaint and noted the dates of visits by the council health officers. In particular it was claimed that the council once visited the resident after visiting the wood heater operator and claimed that the resident stated that they could not smell smoke and the council claimed that it was actually in use. The Mayor acknowledged that the levels of smoke can vary and be more apparent in certain circumstances, such as different wind conditions, but claimed it was operating as they expected. The Mayor claimed that the council had contacted a number of other councils and that their actions were consistent, and that the council would require officers to witness evidence first-hand. The Mayor claimed that the council had considered the submitted medical documents and a scientists report on the toxics, but claimed that the PHAW Act only allows it to deal with it as a nuisance. The Mayor claimed that the council does not have legislative responsibility to approve the use of wood heaters, and that wood heaters are a legal and legitimate form of heating and that the council is not able to persuade people to change their heating if it is being used in a compliant manner. The Mayor claimed that wood heaters are a legitimate form of heating and so the council believes that it is far more appropriate for the State Government to regulate their pollution. Finally the Mayor wrote that if the wood heater continued to operate as observed then there was nothing the council could do, and that it was not a nuisance under the PHAW Act at present.

Council response: The Monash council claimed to have made a considered and thorough investigation under the PHAW Act, and noted they had conducted a number of inspections over a period of a year. They noted that when they visited they could not detect smoke inside the affected residence. The council claims to have observed low levels of smoke, and claim this is reflective of normal operation. The council did stop the use of the SFH while the flue was raised a little (it is still only about the height of the eves of the closest neighbour) and the council claimed this was to reduce the amount of smoke. The council claimed to have considered all relevant matters and

determined that it is not a nuisance, and stated that they will not be involved further. Some of the factors that the council claims to have considered are: 1. their investigation and observations; 2. the lack of evidence; 3. the PHAW Act principle that the most effective use of resources be used to promote and protect public health and wellbeing, and that decisions should be based on evidence, and that actions taken should be proportionate to the health risk. The council also claim that the PHAW Act does not specify the requirements for a nuisance investigation and thus claim it is not required to conduct scientific tests or obtain expert reports, and finally the council claims that investigations and their decisions as to whether a nuisance exists are entirely in their discretion.

To my knowledge the Monash Council have no instruments to objectively measure the smoke, or the wind direction. The resident disputes some of the council claims when visiting.

I visited this site and observed the wood heater being used from early afternoon, and I mapped the smoke concentration at shoulder height which was drifting over the street fence and into a multi-story unit across the street. It should have been obvious to anyone investigating that the smoke would not disperse harmless away from sensitive land and that it could badly affect immediate neighbours, if not more distant neighbours. The house was only a few hundred meters from a major road yet the measured smoke concentration was many times greater that the upwind background air quality blowing from the direction of this major road.

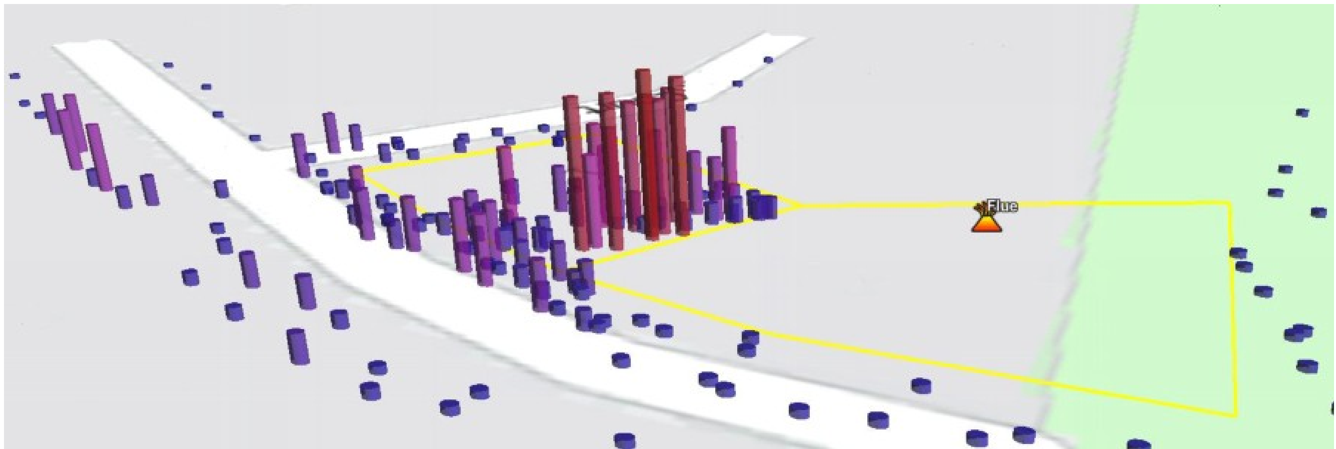
This residents experience and the position of the Monash council is consistent with my own experience: there were limited visits, and they were not on call to witness events, they insisted they could not act without witnessing the smoke, and they claimed that what smoke they did witness was not unexpected and not a nuisance. The council made a determination that the smoke we experience is not a nuisance without even stepping foot onto our property or entering our house, and did not deliver the determination until months after it was made. We had a similar experience with the council using a visit in which we could not smell the smoke against us, although there was probably a good explanation - wind direction was not even measured and the neighbour claims to have been forewarned and we don't know when it was started as we were out earlier. Appeals to the Health Minster for help resulted in an acknowledgement of the councils determination and a suggestion to make a complaint to the Ombudsman if not happy with the councils decision. Generally my experience seeking help from the council was that they were obstructionist and hostile, and I fail to see how they could possibly objectively and competently investigate a smoke nuisance claim.

Monash has local laws that the council could use, but refuse to use and appear to have never used: '*81. A person must not: 81.1 burn; or 81.2 cause or permit to be burned any substance, if the burning of the substance is likely to: 81.3 cause a nuisance; 81.4 be dangerous to the health of any person; or 81.5 be offensive to any person.*'

In the Monash councils defence, I have been told of occasions on which they acted promptly to stop the burning of train track sleepers. [redacted] did visit after hours to witness the smoke and reported back to the council. I have omitted a lot of details.

Note that some Melbourne councils do appear to stop the use of wood heaters. Stonnington Council local laws state: '*Chimneys: 706 The owner and occupier of any land must not: (a) cause a nuisance; or (b) knowingly allow or suffer a nuisance to exist or emanate, from any Chimney.*' A Stonnington Council Local Law Officer noted in a personal conversation that they believe they have the authority to stop people using wood heaters when the smoke is a nuisance to neighbours by using their local laws, irrespective of the PHAW Act or the EPA Policies. It's not clear if they would deem an appropriately operated wood heater a nuisance, but they do seem to have a different position to the Monash council.

This year we were better prepared and I can now map the concentration of the smoke around houses which helps a lot understanding our experience. You can see from plot below that we experienced high concentrations of wood smoke compared with the street level concentration on this occasion, and much worse air quality than was characteristic for the area. In this case a slight wind is blowing the smoke from the right to the left of the image, and we are up hill from the neighbour. The height of the columns is the indicative particle counts, and the colour transitions from blue to red with increase counts. There is a good case that the counts are proportion to the smoke PM and most of the wood smoke is PM2.5. The neighbours house is large and the air might be sucked down a little as it blows past. The upwind air had good quality and I could not smell any smoke. There was some smell of smoke up the street, but it was much reduced from the smoke in the back yard.



The Tasmania EPA have made similar measurements and published some, for example '*BLANkET Technical Report 28 PM2.5 levels at a residence in Invermay, Launceston, Tasmania – July 2014: The signature of individual smoke plumes Air Section, EPA Division, March 2015*' which notes: '*It is clear however from the July 2014 monitoring that the specific area of the Invermay residence where the station was deployed experiences very poor winter–time air quality, poorer on average than is recorded at Ti Tree Bend or South Launceston. The nature of the data suggests much of the signal comes from one or a small number of plumes from nearby individual flues. ... Monitoring at a property in the residential area of Invermay, Launceston in July 2014, showed the site is subject to frequent short duration elevated PM2.5 concentrations as well as more extended intervals of poor to very poor air quality. The short duration elevations appear consistent with impacts from nearby, distinct, smoke plumes, almost certainly originating from residential woodheaters. ...The average air quality at Invermay during the approximately fortnight long sampling interval was significantly worse than measured at Ti Tree Bend air station, 1 km to the northeast, during this time. The presence of localised, relatively small sources, most likely distinct smoke plumes from individual residential woodheaters, appears to be the most viable interpretation of the occurrence of much poorer air quality at Invermay compared to Ti Tree Bend.*'

A significant point demonstrated here is that wood smoke pollution is not just a problem in some communities with high usage of wood heaters, but also for neighbours of wood heaters in urban areas with only sparse usage or wood heaters. For people in both situations the wood smoke pollution is an environmental justice issue.

For neighbours the impact is not just the wood smoke, but also being forced to close up their home out of fear of the extreme peaks of wood smoke concentration when the SFH is started or stoked or misused, and this leads neighbours to endure poor air quality due to sources within their home too. That is their air quality exposure is poorer than even a monitoring station outside would measure.

I do not believe this is just a case of a council with limited resources being unable to obtain the necessary evidence – they were completely uninterested in evidence apart from the health officers observations. Rather the problem seems to be the councils position that an appropriately operated wood heater can not be a nuisance, or a position that the smoke from such a wood heater is not an unreasonable interference. These positions seem to be held irrespective of the height of the flue or the clearance to neighbouring sensitive land or the topology, and also no matter how often it is used. The council might hold, or have adopted, a position that echoes the EPA's policy, which will be discussed below, that explicitly supports a claimed cultural value of wood heater. Thus this matter can not be resolved by better resourcing of the councils alone.

The Public Health and Wellbeing Act 2008

The core reason for the failure of the statutory system seems to be the claimed discretion that the EPA and councils have in interpreting the principles of the statutory laws combined with their support for the claimed cultural significance of wood heaters which has given wood heater pollution a protected untouchable position. At the local government level this discretion enters via the claimed absolute discretion that councils claim to have in how to investigate a nuisance complaint and to make a nuisance determination under the PHAW Act. The councils claimed discretion limits investigations leading to a lack of evidence and combined with a refusal to consider the health dangers leads them to be able to use the PHAW Act principles of evidence based reasoning and proportionality to support their position to not require the abatement of the wood smoke pollution. Councils have also claimed that they do not have legislative responsibility to approve the use of wood heaters and that wood heaters are a legal and legitimate form of heating, which seems to be a deferral to the EPA's discretion which in the EP Act seems to enter via the principle of '*integration of economic, social and environmental considerations*' and the claimed cultural significance of wood heaters is claimed to be a 'social' consideration in this principle.

When a council lacks the resources or resolve to take action, it might have been hoped that the PHAW Act could be used by affected residents, and that the costs might have been more favourable restoring some balance to justice, but the PHAW Act appears to only allow residents to take action if a council has not investigated, see: '*63 Failure of Council to investigate complaint. (1) If the Council does not, within a reasonable time of being notified of an alleged nuisance, investigate the subject matter of the notification, the person who notified the Council may take a complaint to the Magistrates Court of the existence of the alleged nuisance.*' On the face of it an investigation by a council might extinguish the residents right to use the PHAW Act to help them if their council does not have the resources or resolve to deal with the matter. Further the PHAW Act gives councils a big incentive to investigate, see '*(3) If the Magistrates Court is satisfied that the person making a complaint under this section had reasonable ground for doing so, the Magistrates Court may order the Council to pay and costs and expenses incurred by the person.*' So councils have a big incentive to investigate and defend their investigation to avoid a liability and at the same time this seems to extinguish residents right to take action under a statutory nuisance case. The net effect appears to be that when residents are affected by wood smoke pollution and their council has investigated, which might just be to hand out EPA pamphlets, and failed to abate the smoke, that their only legal option is common law.

The UK Public Health Act seems to anticipate a lack of resources or resolve by a council and includes the provisions: '*82 Summary proceedings by persons aggrieved by statutory nuisances. (1) A magistrates court may act under this section on a complaint made by any person on the ground that he is aggrieved by the existence of a statutory nuisance.*' I do not know how effective this might be, but it might be something that the EPA inquiry could explore as a change to the PHAW Act.

It seems unreasonable for individual residents who are being polluted by wood smoke to be expected to take on councils and mount legal action that would help create precedents that could define what 'investigate' means and what constitutes an 'investigation' for the purposes of the PHAW Act. If the government can not amend the PHAW Act to resolve this issue then it could fund a number of cases to help create some precedents in this area that might clarify it.

Even if this were resolved, the risk of having to pay the costs of the polluter if a case were unsuccessful would still be a big and unproportional burden, especially when the matter could likely have been resolved by the installation of a reverse cycle air conditioner in agreement to stop using the wood heater - probably a cost around $2000 which would most likely be much less than the legal costs of seeking justice in the courts. Vulnerable people in the community without the resources to take their neighbours to court are left to suffer the health damage caused by wealthy neighbours getting their kicks burning wood, and there is no environmental justice.

Some of the principles of the PHAW Act seem much better aligned to protect peoples health from pollution than the EP Act. For example, the PHAW Act includes the principle of evidence based decision-making which is absent from the EP Act: '*5 Principle of evidence based decision-making. Decisions as to— (a) the most effective use of resources to promote and protect public health and wellbeing; and (b) the most effective and efficient public health and wellbeing interventions— should be based on evidence available in the circumstances that is relevant and reliable.*' It's not clear to me what '*available in the circumstances*' means, and it might mean to exclude the requirement to undertake specialized measurements, but if so then this would be a problem with the PHAW Act. Assuming this includes making measurements and is applicable to nuisance investigations then I believe the health offices in my case made their determinations without following this principle - that their observations were not 'relevant and reliable'.

For example, people's nose might not be a great method of measuring wood smoke objectively, and is certainly not an Australia approved method of measuring PM. In my experience the perception of smell can be affected by prior exposure. For example, that you can notice smoke when coming from a cleaner environment but if it creeps up on you then there is little contrast to differential the smell, and also it seems hard to gauge levels objectively. I also notice what might be a link between peoples visual observations and their sense of smell. For example, if you can't see the smoke well due to bad viewing conditions in daylight, so that the air look clean, then it seems to influence an opinion of the smoke concentration as being slight, but smelling in the dark can give a different view. I have seen two health officer stand less than 10 meters down wind of a flue as a wood heater was started, looking at the flue with a bright blue sky behind, and with the sun behind them so that the smoke is almost invisible, and claim that although they can smell the smoke but that it is not bad - I expect if they witnessed this in the dark that their response would be different, but then you might miss the smoke blowing in a different direction. Based on published scientific measurements of the emissions from a standards compliant wood heater being started I would be very sceptical if the air they witnessed were at all health.

An interesting precedent, from the UK, is R (Hacknet LBC) v Rottenberg, a statutory nuisance case, '*27. In R v Stockwell [1993] 97 Cr App R 60, this court made clear that a court is not bound to accept uncritically the evidence given by a witness, even an expert. The fact that the environmental health officers called by the Council thought there was nuisance noise in this case was not determinative of the issue.*' Similarly the opinion of a health officer on what constitutes a wood smoke nuisance might still need to be examined critically by the courts, and the courts might still demand evidence beyond the officers opinion. Perhaps a council not gathering such evidence in an investigation has not made a good faith investigation with any chance of success in court, and by not taking cases to court the courts can not make these decisions.

Most significantly the PHAW Act does not include the EP Act principle of the '*integration of economic, social and environmental considerations*' which has been used as an excuse to trade off the protection of peoples health from wood smoke against the emotional need of some people to burn wood - this seems a very significant point because I understand common law nuisance considers what reasonable people would conclude rather than emotional irrational people, for example see this wood smoke nuisance judgement in which the judge stated the there was no utility using a wood heater because other forms of heating were available: '*d) There is no utility in the defendant heating his garage by burning wood as opposed to using any other method available to him.*' http://burningissues.org/car-www/pdfs/HAM_LAW-2-08.pdf Also notable is that the judge did not even consider the cost effectiveness that is claimed as a utility of SFH in the WMP SFH - I believe people living next to neighbours should be expected to bare the cost of other forms of heating which are likely modest, and that even if the investment cost of changing the form of heating is considered that an offer to pay for a reverse cycle air condition should overcome this too.

Perhaps also noteworthy is that the PHAW Act applies the precautionary principle to the health risk whereas the EP Act applies a precautionary principle to long term damage to the environment. Neighbours of a SFH would be more concerned for there health than long term damage to the environment.

The need for the scientific and health facts and sound evidence

Wood smoke should be actionable as a private nuisance, irrespective of the statutory system. I have heard of only one court case in Australian, but it was in South Australia and I still have not heard back from the resident if they used a common law case or if they used the South Australia EP Act - but it was reported to have been adjourned due to a lack of scientific evidence. I have asked the Minister for a list of related court cases in Victoria, and I understand that the EPA should have been notified of any, but none have been produced, so it seems fair to conclude that the balance of justice is tilted strongly towards the polluters.

Whether councils or individuals take action under the nuisance provisions of the PHAW Act, or individuals use common law, or the EPA were to take action under the EP Act, I presume that facts and evidence would be needed and it seems that scientific evidence would be needed on the exposure to toxics and the health dangers. Government help researching and investigating might help lower the barrier, either via a body to undertake this work, or via funding cases that pay for this work and create precedents.

I suggest scientific and health based bodies separate from the the EPA and councils as these could be tasked with delivering these objective facts without being compromised by other political objectives. Victoria could cooperate with national work in this area, as the facts are not likely to vary across the country, but it would at least need a local monitoring and investigative role. Any existing duplicate roles that the EPA or DHHS have in this area could be moved to these new bodies. These new bodies could serve the EPA, DHHS, local government, and the public. Local government appears to have no capability to undertaker such work. The principles of the EP Act do not appear to make the EPA an appropriate body to do this, and their history on the wood smoke problem makes this clear - the EPA is compromised by the need to trade off health and environment concerns for social and economic considerations, and they seem to have a very limited capacity a present. While the PHAW Act appears to make the DHHS more appropriate they have no record of helping on the wood smoke issue so it is probably outside their capability too.

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The Environment Protect Authority

The Waste Management Policy (WMP) for Solid Fuel Heating (SFH) claims support for wood heaters in the community and their cost-effectiveness, it states: '*7. Intent of the policy. The policy sets a framework for protecting our air environment from wood smoke pollution. Solid fuel heating is important to the community as a cost-effective form of heating and for its cultural value. In some regions of Victoria, where alternative forms of heating are limited, it is the only feasible form of heating. In recognition of these social and economic considerations, the policy enables improvement in air quality by setting a framework to assist the community and the solid fuel heater industry to better protect Victoria's air environment.*' I assume that the 's*ocial and economic considerations*' is referring to the EP Act principle of the '*integration of economic, social and environmental considerations*', see:

'*1B Principle of integration of economic, social and environmental considerations*
(1) Sound environmental practices and procedures should be adopted as a basis for ecologically sustainable development for the benefit of all human beings and the environment.
(2) This requires the effective integration of economic, social and environmental considerations in decision making processes wit the need to improve community wellbeing and the benefit of future generations.
(3) The measures adopted should be cost-effective and in proportion to the significance of the environmental problems being addressed.'

The EPA reiterates the claimed cultural value in the Policy Impact Assessment (PIA) WMP SFH: '*Wood combustion is an important source of heating for some sectors of the community due to cost and limited availability of other options... This policy reflects the broad community, industry and government expectations with respect to the role of wood heating in Victoria.'*, and '*However, wood heaters are a popular form of heating (demonstrated by comments in box 2). They are valued by many in the community for aesthetic reasons and in some regional areas wood heating may be the only feasible source of heating available. Firewood is also seen as an inexpensive fuel.*', and '*Inspection of individual houses and prohibiting open fires also does not consider the high cultural value placed on wood heating by the Victorian community. As such, EPA has not assessed these measures in detail.*', and '*3.2.3 Policy intent. ... A key intent of the policy is to establish a framework that minimises the generation of wood smoke pollution while recognising that solid fuel heating is important to the community as a cost effective form of heating and for its cultural value.*'

However on the other hand it also noted: '*The number of Victorians using wood heating indicates that many people also value the aesthetic atmosphere of a wood heater. EPA acknowledges this, however, given the rising amenity and health impacts, there is a need for a cultural shift from a reliance on wood heating.*'

As the common law nuisance case noted above shows, such cultural values are not considered and the claimed 'cost effectiveness' of SFH was not relevant. I believe this casts the EP Act as a tool to distort justice, to achieve an outcome that would not be supported by common law, by considering the interests of emotional and irrational people and trivial economic matters above justice for people being poison in their own home by their neighbours. I believe this is a very shameful position from the government of Australia at all levels. The extent of these acts are absolute, there was not even a ban on the installation of open fireplaces which I believe the vast majority of Victorians would support even if they happen to use a SFH, and councils across NSW are banning the installation of open fireplaces now if not all SFH.

The WMP SFH was required under the EP Act to have been reviewed before 27 July 2014. I have

heard nothing of such a review, and if the EPA considered community values and expectations had changed or that it had drawn poor conclusions then this would have been an opportunity to change the policy, but it does not appear to have been modified - so it does not appear to be legacy policy but the governments current thinking.

I believe the interpretation that the EPA applies here to the '*Principle of integration of economic, social and environmental considerations*' also makes it problematic for the EPA to effectively work with external bodies on technical or scientific matters because it is compromised by the need to balance the facts and justice against emotional social and economic factors - it could never sit at a technical or scientific table and claim to be acting in good faith, rather people would have to consider that it is running interference and pushing social and economic agendas because that is its duty.

Lets look at some of the EPAs comments in the PIA WMP SFH:
'*Correct use of appropriately designed wood heaters produces very low levels of wood smoke and, subsequently, significantly reduces the level of pollution produced.*' - even a correctly designed and operated SFH is very polluting.

'*Executive Summary: ... Research has demonstrated that exposure to the pollutants contained in wood smoke, particularly particles (the main component of wood smoke), is associated with adverse health effects such as exacerbation of symptoms of respiratory illness and heart disease. Wood smoke pollution also impacts on people's ability to enjoy the outdoors.*' - the known health dangers of wood smoke do not appear to be limited to exacerbating existing illness, and the referenced Environment Australia publications lists many toxins in wood smoke produced by a well operated wood heater meeting adopted design standards.

'*1.1 Fire, smoke, wood heating and air quality - what's the problem? ... Additionally, research by Environment Australia found correlations between PM10 and PM 2.5 and adverse human health impacts. It was noted that the hazardous impacts of wood smoke are believed to be less than for vehicle emissions and moderate compared to cigarette smoke.*'

The above seems a very significant admission, casting the health dangers of wood smoke as '*less than for vehicle emissions and moderate compared to cigarette smoke*'. If this was the belief used to decide on the principle of proportionality then I believe it was extremely misguided. To the extent that this is a justification for doing little, I believe it is shameful propaganda. The community do not accept that people need to endure passive smoking and burning many kilograms of wood is far more polluting than a gram of tobacco. The referenced Environment Australia publication noted in the same paragraph that '*Mutagenicity was detected outside when the open fireplace or the wood heater was used, but not when electric heating was used.*' and the '*moderate*' claim was for '*indoor mutagenic activity*' which might be expected if the wood smoke is vented away from the operator. Even if the health dangers of an equal concentration of vehicle emissions were similar to that of wood smoke, the fact is that wood heaters are far more polluting than vehicles and people would not expected to endure vehicles emitting pollution into their back yard and living area in the same concentrations.

The creation of the WMP SFH places by far the most polluting form of heating on a separate track for air quality improvement to other forms of heater. This removes competition between SFH and other forms of heater, giving SFH an unfair advantage in the market. That is, SFH need not be designed to give comparable levels of emissions.

The EPA wrote in the PIA WMP SFH: '*The SEPP (AQM) is not the best mechanism for the management of emissions from wood heaters because it cannot set detailed requirements for wood*

heater manufacturers.' The SEPP AQM would have at least required the EPA to consider the separation distance, something absent from the WMP SFH, which would have effectively banned SFH in urban areas: '*17. Separation Distance. (1) The Authority will develop a protocol for environmental management in accordance with this policy on the provision of separation distance between sources of emissions to the air environment and land uses that are sensitive to the potential impacts of those emissions on local amenity. ...*' The WMP SFH appears to allow a neighbour to discharge SFH emissions meters from your children's playing area with impunity.

The requirements could have been set in terms of the emissions or air quality, in competitive terms along with other forms of heating. The fact that this would have made wood heaters uncompetitive is beside the point of the EP Act. What has happened is that wood heaters have been protected by a separate WMP where they have been set separate targets.

Placing the most polluting form of heating, SFH, on a separate track defies the EP Act principles 1F and 1K, which are also noted as a principle on which the WMP is based:

'*1F Principle of improved valuation, pricing and incentive mechanisms*
(1) Environmental factors should be included in the valuation of assets and services.
(2) Persons who generate pollution and waste should bear the cost of containment, avoidance and abatement.
(3) Users of goods and services should pay prices based on the full life cycle costs of providing the goods and services, including costs relating to the use of natural resources and the ultimate disposal of wastes.
(4) Established environmental goals should be pursued in the most cost effective way by establishing incentive structures, including market mechanisms, which enable persons best placed to maximise benefits or minimise costs to develop solutions and responses to environmental problems.'

'*1K Principle of enforcement*
Enforcement of environmental requirements should be undertaken for the purpose of--
(a) better protecting the environment and its economic and social uses;
(b) ensuring that no commercial advantage is obtained by any person who fails to comply with environmental requirements;
(c) influencing the attitude and behaviour of persons whose actions may have adverse environmental impacts or who develop, invest in, purchase or use goods and services which may have adverse environmental impacts.'

But for placing SFH on a separate track they would have had to include their emission disposal cost in their pricing by being designed to meet competitive emission levels, and the people who still choose to use them would have had to '*bare the cost*' of disposing of their emission safely, and this would have given an incentive for people to choose less polluting forms of heating, and this would have been the most effective way to pursue environmental goals. Further, SFH would have been met with 'enforcement' as it is by far the most polluting form of heating, and it would not be so competitive if it had to meet competitive emissions standards, and 'enforcement' would have sent a clear message to people to choose cleaner forms of heating. With SFH placed on a separate track it can be argued that some design cost has been included, however the WMP fails to even stop new installations of open fireplaces, a complete disregard for these principles.

Placing the most polluting form of heating, SFH, on a separate track defies the EP Act principle '*1I Principle of wastes hierarchy. Wastes should be managed in accordance with the following order of preference-- (a) avoidance; (b) re-use; (c) re-cycling; (d) recovery of energy; (e) treatment; (f) containment; (g) disposal.*' This principle dictates that the wood smoke waste emissions should be

firstly managed by 'avoidance'. But for placing SFH on a separate track it would be clear that the SFH waste can be best avoided by using cleaner forms of heating, rather than creating a separate track in which it can be argued that reduction of the emissions avoids some of the waste. Further the WMP fails to even stop new installations of open fireplaces, which except for a token education effort is a complete disregard for even a reduction in emissions at the local level.

This inquiry needs to ensure that as technologies change, and some become unable to meet improving standards such as SFH, that they are phased out where other technologies are available, and not placed on separate protected tracks.

The EP Act also include the Principle of accountability:
'*1L Principle of accountability*
(1) The aspirations of the people of Victoria for environmental quality should drive environmental improvement.
(2) Members of the public should therefore be given--
(a) access to reliable and relevant information in appropriate forms to facilitate a good understanding of environmental issues;
(b) opportunities to participate in policy and program development.'

As a person affected by a neighbours wood smoke I have found it very difficult to get straight answers on the current state of affairs, and investigations are still ongoing after years of work. I have requested the EPA include me as a representative on their Community Reference Group but to this date I have not even received a response. While there are a few other groups that might be able to represent neighbours of SFH, communications with them suggest they are more focused on the health of the environment at large, climate change etc, than the health of neighbours of wood heaters and they do not have the necessary practical experience.

The EPA claim on their website '*If your neighbour's wood heater is producing smoke or odour that is affecting the enjoyment of your property, you can do something about it.*' In light of the response from Monash Council above this can be seen to be a misleading statement in general. The EPA should know full well which councils stop wood heaters and which councils run interference. While it might put pressure on more councils to act by sending residents to their council, it is still somewhat misleading - people should not be used as unknowing pawns, particularly when their health is at stake.

I would also add that by the EPA directing residents to councils this might also reduce the number of complaints that the EPA record. I would also note the the EPA's new online system for reporting pollution did not allow me to file a complaint of wood smoke pollution caused by a residential or small business sources, rather directing people to their local council.

The EPA inquiry discussion paper noted only 3% of pollution reports received by the EPA in 2013-2014 were for 'smoke', and given the reported 12005 pollution reports this amounts to 360 smoke reports, but in light of the redirection of most reports to councils this figure might not represent complaints from wood heaters and other local wood fire sources but perhaps only from burn off activity thus giving the inquiry a distorted view of the problem.

The inquiry discussion paper figure 4 notes an EPA function for air pollution as: '*Responding to complaints regarding smoke from wood-burning heaters*'. The EPA certainly does not investigate many such complaints, although I have had reports that they have responded to people burning non-wood materials, and that they have visited some residents but without enforcement action.

The inquiry discussion paper in the section '*Protecting public health*' notes: '*Air pollution: The EPA*

has sole responsibility for managing air quality in Victoria.' Councils appear to have a responsibility too under the PHAW Act, and the nuisance provisions are explicitly noted as an *additional* law see: '*59 Effect of Division. … (2) This Division is in addition to, and does not prejudice, abridge or otherwise affect any right, remedy or proceeding under any other provision of this Act, or under any other Act, or at common law.*' People also have common law rights and I assume the government has a responsibility to uphold justice.

The inquiry discussion paper in the section '*Regulatory approaches:Diffuse sources'* claims that this includes 'wood heaters'. If you see my plot above it is clear that the pollution that a neighbour experiences is a not a 'diffuse source' as defined here but rather a point source, please don't be mislead on this point. Of course if it is measured away from point sources then it become a diffuse pollution, but it can be measured locally and attributed to a point source.

Building Codes

There is a standard for the installation of SFH - '*AS/NZS 2918 - 2001, Australian/New Zealand Standard. Domestic solid fuel burning appliances – Installation'.* While it was dictated by industry it does include some mandatory clauses that might help protect neighbours: '*4.9 External Requirements. … The flue exit shall be located outside the building (see Figure 4.9) in which the appliance is installed so that - … (d) no part of any building lies in or above a circular area described by a horizontal radius of 3 m about the flue system exit; … (f) there is no forseen risk of penetration of flue gases through nearby windows or other openings, fresh air inlets, mechanical ventilation inlets or exhausts, or the like.*'

The Victorian Building Authority (VBA) publication 'Technical Solution Sheet 7.01 7: Mechanical Services (Including Duct Fixing) Solid Fuel Heaters' notes '*The Plumbing Regulations 2008 states that the construction, installation, replacement, repair, alteration, maintenance, testing or commissioning of a solid fuel heater is Mechanical Services Work. This work must comply with AS/NZS 2918 Domestic solid fuel burning appliances – Installation.*' and it also includes a figure showing a 3m required clearance to an adjacent building. Three meters is very little, and I wouldn't leave an animal this close, but it's better than nothing, and I have seen low flues about this close to neighbouring buildings and living areas.

The EPA PIA WMP SFH also noted: '*2.4.2 Legislation. Installation of wood heaters is regulated by the Plumbing Industry Commission (PIC). The Plumbing Regulations 1998 require wood heaters to be installed by a licensed plumber in accordance with AS/NZS 2918, which sets installation requirements for safety criteria. To ensure that plumbers are acting in accordance with the relevant regulations, 5 per cent of wood heater installations are audited by an independent auditor. Plumbers also supply a certificate of compliance to the householder stating that the installation occurred in accordance with relevant legislation and Australian standards.*' BTW I have seen so many non-compliant flues that I have to wonder what ever happened to this '*independent auditor'* and could they possibly clarify some of these matters?

If you explore the building codes what you find is that this standard has been adopted only to meet a performance requirement that appears to apply only '*in the building containing the heating appliance*' potentially making the above protective clauses inoperative. That is, even where there is an Australia Standard, the government appears to have not adopted it, rather adopted it in part to avoid limiting the installation of SFH. See:

'*NCC Volume 2.*
P2.3.3 Heating appliances
A heating appliance and its associated components within a building, including an open fire place,

chimney, or the like, must be installed—
(a) to withstand the temperatures likely to be generated by the appliance; and
(b) so that it does not raise the temperature of any building element to a level that would adversely affect the element's physical or mechanical properties or function; and
(c) so that hot products of combustion will not - (i) escape through the walls of the associated components; and (ii) discharge in a position that will cause fire to spread to nearby combustible materials or allow smoke to penetrate through nearby windows, ventilation inlets, or the like in the building containing the heating appliance.'

'Part 3.7.3 Heating Appliances.
3.7.3.0 Performance Requirement P2.3.3 is satisfied for a heating appliance if it is install in accordance with one of the following manuals: ... (b) Domestic solid-fuel burning appliances are install in accordance with AS/NZS 2918.'

I have asked the [redacted] building surveyor to help understand this matter but did not even get a reply. It may well be that the VBA publication is wrong and misleading. Such is the distortion field around SFH that nothing can seem to stop them, not even a protection in a standard dictated by industry.

My neighbour and council have claimed that the neighbours wood heater installation meets requirements in an argument to justify doing nothing more, even adding that 'engineers' have looked at it. There seems to be no requirement that a municipal surveyor have an engineering qualification and importantly no requirement that they be a practising profession engineer who would have to follow a code of conduct demanding a high level of integrity, and I have seen job advertisements for other related positions within the council that did not require an engineering qualification.

You can see from the councils response noted earlier for another resident that the council had the flue height raised, probably to meet the AN/NZS 2918 flue height requirements, and the council claimed it was to reduce the smoke. I don't believe the flue was raised to a height that they had any reason to believe would solve the smoke pollution problem, that no engineer had designed a height to address the issue. Rather the council used a height from this standard, a height that I believe they know full well is only intended to meet safety requirements for the building in which it is installed.

A further local resident, who I hope will also make a submission to the inquiry, claimed they met with the Monash Council in relation to their smoke nuisance complaint under the PHAW Act and that the council included representatives from the council building department in the meeting along with the health officers. The resident claims the [redacted] suggested they were over sensitive, suggested not to contact other neighbours as they had seen these things turn nasty, enquired if the resident was living alone, and volunteered that they owned a SFH and would not like people telling them not to use it. The written response from the council health officer shown to me notes that information was referred to the councils building department and that their feedback was that the flue height would comply with the building codes.

If the building codes really have nothing to say about the safety for neighbouring buildings then making such a claims, or conflating the matter of the building codes in a nuisance complaint, is I believe misleading and obstructionist and it should not be a consideration when making a nuisance determination.

It is hard to blame the councils. The safe clearances should be a matter that the Commonwealth or States determine for councils to follow. The Commonwealth delegates air quality to the States and local government, and the Victoria EPA has produced no safe clearances for SFH. You can not get a building permit in Victoria without showing that you can dispose of the waste, yet people are

allowed to dump the toxic emissions from SFH next to neighbouring sensitive residential land with no required statutory clearance.

Another resident challenged his council that the neighbours SFH flue was within one a meter from an evaporative cooler inlet on the neighbours roof and lower than it – more of a safety concern for the neighbour, but still a technical point, and the low height might impact dispersal of the smoke. Their council just retorted that the inlet was not part of the building, eventually claiming they were just making trouble and closing the case!

The latest news I see is the agreement statement from the meeting of environment ministers, 15 July 2015 which stated: '*Ministers agreed in - principle to reduce air pollution from wood heaters by working with business to ensure compliance with tougher new Australian Standards for new wood heaters and adopting effective measures to reduce emissions from existing wood heaters*.' You might think from the tone of this that something effective was being done, but that would be completely wrong, and the proposal as I last saw it was to simply revise a design standard for SFH, *AS/NZS 4013 – Domestic Sold Fuel Appliances – Method of determination of flue gas emissions*, to lower the emissions a little, yet this standard makes absolutely no claim to ensuring that the emission are safe.

Also note that the mentioned 'Australian Standards' are not Commonwealth developed standards but rather a branding used by the company Standards Australia Limited ABN 85087326690 who describe themselves as 'the peak non-government standards development body in Australia'. A recent Senate inquiry noted:

'*6.16 Each Standard is developed through the work of a technical committee, which 'is a balanced and representative group of specific users, industry, government, community and other interested parties'.[24] The process followed includes the establishment of a committee, the release of a draft for public comment, consideration of revisions, and ultimately a ballot of the committee. The balloting aims at consensus, and thus the rules governing adopt of a new standard are:*
a) A minimum of 67% of those eligible to vote have voted affirmatively; and
b) A minimum of 80% of votes received are affirmative; and
c) No major interest involved with the subject of the Standard has collectively maintained a negative vote.'

I contacted Standards Australia Limited and explained that neighbours are badly affected and that they should have been represented on the committee, and should have been recognized as a '*major interest'* and I requested these standards be vetoed. All I received was a patronising thank you for making a public comment. The Senate inquire also considered the lack of progress in reducing emissions in this standard and noted that the reason for the lack of progress was that 'T*wo of the four manufacturing representatives were recorded as being opposed to the measure and it did not proceed further, as this violated the requirement that consensus include no 'major interest' maintaining its opposition*.' Let's be clear, these are standards dictated by industry, and neighbours were excluded from the committee and have been refused a veto.

As far as I am aware there are no 'e*ffective measures to reduce emissions from existing wood heaters*'. A recent Australian study in Perth, issued a catalytic device, Smartburn(R), to 80% of identified wood heater uses of Perth, and the post-intervention air quality was worse! What 'e*ffective measures'* are the Environment Ministers proposing? Neighbours of SFH deserve environmental justice, and propaganda from the government does not promote justice, and it seems clear that justice can not be left up to the government to deal out via discretionary statutory laws.

The Victoria EPA were not noted on the committee for the installation standards AS/NZS

2918:2001, the same committee is responsible for AS/NZS 4013, yet the EP Act seems to give them a duty to represent Victoria on such committees.

The same VBA publication also notes '*The Public Health and Well Being Act 2008 took effect on 1 January 2010. In accordance with the Act, a Council has a duty to remedy as far as is reasonably possible all nuisances existing in its municipal district. Complaints related to wood smoke are generally referred to an Environmental Health Officer of the relevant local council.*' However in practice not all councils fulfil such a duty, or only up to a the limited extent of not stopping the use of the SFH leaving very polluted air for neighbours, so I believe the tone of such claims is misleading.

I would note that the South Australia *Environment Protection (Solid Fuel Heaters) Policy 2015* seems to require observance of AS/NZS 2918:2001 without qualification, so these protective clauses should now apply in SA, and I see NSW councils adopting it too without qualification. This could potentially prevent the installation of a SFH where there is a risk of the smoke entering nearby openings which would surely including neighbouring buildings which could effectively ban new installations in urban areas, or perhaps someone just overlook this complexity and it will be amended, see: '*5—Installation of solid fuel heaters. … (3) AS/NZS 2918:2001 Domestic solid fuel burning appliances - Installation published jointly by Standards Australia and Standards New Zealand, as in force at the commencement of this policy applies in relation to the installation of a solid fuel heater to the extent that the standard contemplates requirements that are expressed as recommendations in relation to the installation of solid fuel heaters of that model.*'

If nothing else the lack of understand on even the building codes, which should be very prescriptive, and after years of exploring this topic, illustrates the difficulty in understanding the state or affairs.