

Ministerial Advisory Committee for the Inquiry into the Environment Protection Authority  
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31 October 2015

## Response to the Discussion paper the Independent Inquiry Examining the Future Task of Victoria's Environment Protection Authority

Dear Ministers

Thank you for the opportunity to make a submission to the Inquiry. This response provides comment on the EPA's current and future role and response to wood smoke pollution (pertaining to domestic wood heaters). This submission includes a personal account of our family's attempt over twelve years to address wood smoke pollution from two neighbouring wood heaters.

### Facts about wood smoke pollution

- According to the ABS (2008) one in ten Australian households use a wood heater as their main source of heating. Victoria's use is slightly above the national average.<sup>1</sup> This equates with over 200,000 wood heaters in Victoria.
- According to the EPA sixty percent of the smog over Melbourne in the winter months is attributable to wood smoke.
- The National Environment Protection Council released a discussion paper in 2010 on ambient air quality that reported that there is no safe level of wood smoke in the same way there is no safe level of asbestos and tobacco smoke.<sup>2</sup>
- The U.S. EPA study concluded that the cancer risk from lifetime exposure to wood smoke estimated to be twelve times greater than that from equal amounts of tobacco smoke.
- The Children's Health Study a major large scale, longitudinal study of air pollution on children's lung development found that children exposed to higher levels of particulate matter, had significantly lower lung function at age 18, an age when the lungs are nearly mature and lung function deficits are unlikely to be reversed.<sup>3</sup>
- A National Audit of wood heaters in 2004 found that 7 out of the 12 most popular brands of wood heaters failed the standard pollution test.<sup>4</sup>

### Our story

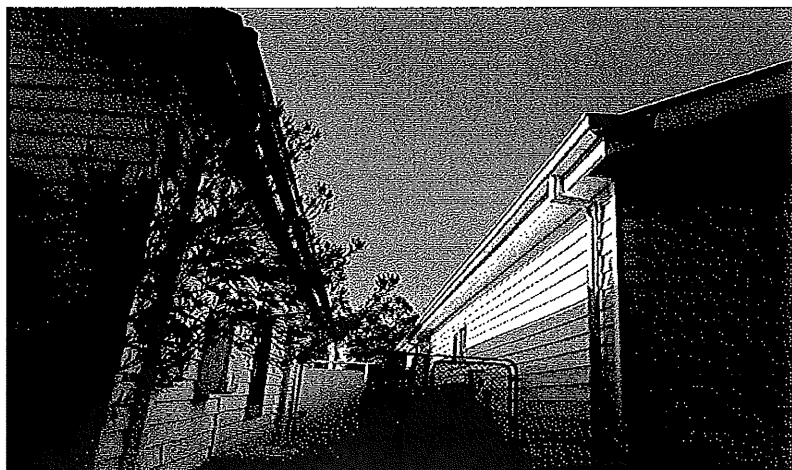
We live in an inner suburb of Melbourne and have two immediate neighbours who both use wood heaters as their sole source of heating. Below is a photo of our house (left) and our closest neighbour (right) – our houses are only metres apart. Unfortunately we are downwind of the wood heaters – which means that we live with a considerable level of wood smoke pollution in and around our home. When our neighbours light their wood heaters the smoke travels across their roofs and settles along the side of our house. We rarely use our back yard and even with the doors and windows shut it is common to smell smoke in our house.

<sup>1</sup> <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/2EA631CAE897D1DECA25750E00109166?opendocument>

<sup>2</sup> [http://www.ephc.gov.au/sites/default/files/AAQ\\_DiscPpr\\_Review\\_of\\_the\\_AAQ\\_NEPM\\_Discussion\\_Paper\\_AQ\\_Standards\\_Final\\_2010\\_07.pdf](http://www.ephc.gov.au/sites/default/files/AAQ_DiscPpr_Review_of_the_AAQ_NEPM_Discussion_Paper_AQ_Standards_Final_2010_07.pdf)

<sup>3</sup> <http://www.arb.ca.gov/research/chs/chs.htm>

<sup>4</sup> <http://www.environment.gov.au/atmosphere/airquality/publications/audit-program.html>



Over the last 12 years we have made many attempts to try to reduce the amount of wood smoke. Our first action was to try talking to our neighbours. Unfortunately both our neighbours considered wood smoke harmless and have never seen the need to change their practices. We are sympathetic to people struggling with the high cost of heating, however while our neighbours save money on their heating, unfortunately they do this at a cost to the local air quality and lung health of the community. Our neighbours source much of their wood from railroad sleepers, rather than paying a larger sum for clean, dry firewood.

We have two children, 8 years and 10 years. Both our children have developed asthma and one of our children (10 years) has suffered ongoing respiratory problems resulting in five operations (grommets, adenoids, tonsils), three burst ear drums from repeat ear infections, and last year an emergency ambulance trip for a very serious asthma attack. This asthma attack came on following two weeks of heavy smoke from our neighbour's wood heaters. Our child has a respiratory specialist, attends countless appointments, and has been a patient of the specialist asthma clinic at the Royal Children's Hospital. Despite these serious health issues - we live in a situation where both our children are regularly exposed to wood smoke, including in their own bedrooms at night.

#### **The local council response**

After realising that our neighbours could not be convinced we had any cause for complaint about the wood smoke we next approached our local council. A council officer came and spoke with both our neighbours and instructed them in correct operation of their wood heaters. But as the months passed, the levels of smoke continued just the same. The smoke from our neighbour's house often begins around 8am, and the fire can be relit a number of times during the day and evening. If it is a still winter day, the smoke sits like a fog around our house.

Following our initial contact with our local council in 2007 another council officer was sent out. This officer again instructed our immediate neighbour in correct operation. The council advised us that if the wood smoke continued they could issue an abatement notice.

One officer did agree to try and use the abatement system. He suggested we call him every time our neighbour's chimney started smoking. However the officer was difficult to contact and often took hours to arrive (by which time the smoke had abated). Our immediate neighbour often re-lights his wood heater at 11pm at night then reduces the air to the fire, so that it smoulders overnight. The council are not available after hours. Additionally the council changed their definition of excessive smoke during the course of dealing with them. Initially they said that if the chimney emitted thick

smoke for more than 15 minutes to call them out. This time limit expanded to 20 minutes, 30 minutes, to 45 minutes.

We arranged to meet with the [REDACTED] of the council to try and get further assistance. We explained that because our neighbours don't believe there are health problems associated with wood smoke they couldn't see the justification for reducing the smoke. We asked if the environmental officers could explain the health effects of wood smoke to our neighbours. The [REDACTED] explained that this was not their role and that they were instructed by the Victorian EPA not to do this – instead their function was solely about correct operation of wood heaters.

The council was not able to help any further, and unfortunately the [REDACTED] took offence at what he viewed as criticism of their response, and became defensive and difficult. We stopped requesting their involvement. We got the impression that they would have marked this down as another 'case solved' in their reporting on the issue. The Council have no 'next step' when the education fails to result in correct operation. They simply repeat the same response. In a situation where a wood heater operator is not concerned about wood smoke pollution (such as both our neighbours), and do not believe that wood smoke is in any way harmful, education on correct operation as a strategy has minimal impact. All that the Council was achieving in our case was to aggravate our neighbours and erode any good will we had built up with them to encourage them to voluntarily change their habits.

#### **The standards, monitoring and regulation of wood smoke by the EPA**

In Victoria local council enforcement officers are empowered through EPA regulations to respond to local complaints of wood heater smoke pollution. Unfortunately because the issue is not given any priority by the EPA in Victoria, the council officer are generally the least experienced, most junior staff, with little or no training in effectively dealing with neighbourhood issues. They have the power to issue abatement notices, but according to our local council this has never occurred in Victoria.

#### **The EPA's response**

In 2008 we wrote to the Minister for the Environment and Climate Change, who was then Gavin Jennings (Victoria). As a result of our letter a meeting was organised with the Environment Protection Authority (EPA) in Victoria.

We met with two EPA policy officers who acknowledged that wood smoke pollution was a concern but glibly informed us that there was nothing that they could do. According to the EPA officers the government is not interested in the issue and as they said 'given the general public indifference' it is unlikely that there would be any pressure to review the current approach to wood smoke. They suggested that if they were in our situation they would move house. They also confirmed that the Australian Home Heating Association (AHHA) the peak representative body for manufacturers of wood heaters is at different times represented on EPA committees. The EPA officers did not agree with us that this potentially represents a conflict of interest.

#### **Our actions to reduce the smoke**

We have organised and paid for our neighbour's wood heater be inspected and the chimney flue to be cleaned. We have organised to have the height of his flue extended – again at our cost. We appreciate that our neighbour has stopped allowing the fire to smoulder overnight. We believe that our neighbour's wood heater and operation of his heater (with the exception of the overnight smouldering) complies with the current Australian standards. Unfortunately this is little comfort when we live with ongoing emissions. It is also stressful to have to be in the position of tackling our



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TWA Start Time	17:03:03	17:03:03	17:03:03	17:03:03	17:03:03	17:03:03	17:03:03	17:03:03	17:03:03
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### Current EPA regulations relating to wood heaters

One of the things we have discovered about the regulation of wood smoke emissions is that there is no written agreement or instructions from the Victorian EPA to local councils - this means local councils are not bound to deal with this issue to any particular standard. There is no evaluation of their policies, and there doesn't appear to have ever been any independent evaluation of the effectiveness of their current policies.

In addition:

- People with wood heaters are not informed about the health harms associated with wood smoke. This means that it is left to the effected neighbour to explain why they are concerned about wood smoke.
- There is no pressure on councils as to how they deal with this issue and there is no scrutiny of the adequacy of their response.
- The council officer who visits the neighbour does not have to have any expertise in wood heater design or mechanics. This means that he or she cannot assess if the wood heater or the flue is faulty, or even if it has ever been serviced. It means they cannot assess as to why the heater may be producing excessive smoke. Instead all they do is provide a small brochure to neighbours on correct operation which includes advice such as only using dry wood.
- The council officers do not view the wood that the neighbour has for burning, how it is stored or whether it is damp etc.
- Councils do not follow up on complaints to find out if the neighbour has complied with their instructions – instead they leave it to the complaining neighbour to make another complaint.
- There is no system or strategy for how council officers should deal with situations where their attempts to reduce wood smoke emissions fails – there is no stepped up response, or warning system, instead the officer can only continue to offer the same response – instruction in correct operation.
- The option of dispute resolution is promoted on the EPA's website as a way to deal with this issue. Our neighbours refused to go to dispute resolution. Unfortunately without the back up of any laws, authority or standards to pressure our neighbour to do the right thing – any negotiations have no real weight.
- We are also aware that there is nuisance legislation that could be enacted under the Health Act. We were advised by our local council that because our neighbour made attempts to comply with council instructions and showed some willingness to change how he uses his wood heater – it is unlikely a magistrate would find him guilty of nuisance and instead would instruct us to go to mediation.
- There are also very limited resources in terms of council staffing, strategies and expertise to address the issue, and addressing it adequately would require more resources than the government has so far appeared willing to commit.

### Wider education is needed

There needs to be a wider education campaign on the health effects of wood smoke. The EPAs current education approach is limited to information on their website and in the form of pamphlets.

The low public awareness about the health impacts of wood smoke pollution plays a major role in being able to address the issue. People have a right to know. They have a right to know they could be damaging their children's health by using a wood heater, that they could be exacerbating their own health problems and that they could be contributing to health problems in their neighbourhood. The EPA has a duty to inform the public about the effects of pollution. If the EPA wishes to have an effective response to wood smoke emissions now and in the future then it cannot continue to support an education 'strategy' that consists entirely of a couple pamphlets.

There needs to be a broader education campaign to ensure the health issues associated with wood smoke becomes general knowledge. Changing people's behaviour requires informing them of the reason for why they should change their behaviour. This understanding is reflected in many areas of public health such as drink driving, using seat belts and tobacco smoking. If the public are not informed about the health risks of wood smoke, any measures to address wood smoke emissions are unlikely to receive adequate levels of compliance.

The lack of public awareness of the health impacts of wood smoke will undermine the effectiveness of government initiatives in this area. In addition without broader public knowledge of the harmful effects of wood smoke there is no social or cultural pressure on wood heater operators to change their behaviour and do the right thing in terms of their operation of their wood heater. Any such campaign must tackle the level of scepticism in the community to the notion that wood smoke could be harmful. The idea that wood is natural (and the cosy log fire image it conjures up) and therefore harmless is very ingrained in people and this level of belief would need to be tackled in order for the education to be effective.

#### **Education alone is ineffective.**

Education must be backed up with a properly supported penalty system for incorrect operation. The workforce that implements this system must be well trained, skilled and empowered to effectively deal with the issue. The Victorian system is not adequately supported by their workforce or their penalty system.

The EPA should also consider *proactive* education and interventions (as has been done in other states) – which would include things such as smoke patrols and a smoke pollution hotline. A smoke pollution hotline could help to not only provide an easy to access mechanism for dealing with smoke pollution for the public, but it would also provide an avenue to collect data on the problem. A proactive approach to education could also shift the focus away from viewing wood smoke pollution as 'a dispute' between neighbours and towards seeing it for what it is – a community health issue to be addressed by the community.

#### **Incentives and 'nudges' are not enough**

Programs that provide an incentive or a 'nudge' for behaviour change are likely only to work with people who are already more likely to change their behaviour, and even then should not be done without other measures, such as tighter emission controls, common definition of excessive smoke etc.

Our neighbours have been 'nudged' to change their behaviour in a number of ways over the past twelve years (our visits to them, council visits, information we have provided them with etc). And yet as recently as last week our neighbour turned down the air to his wood heater, emitting excessive smoke overnight so that our bedrooms all smelled of smoke. There is no pressure on our neighbours to change their behaviour, no authority provides any monitoring of their operation of their wood heater and they suffer no penalties for continued incorrect operation of their wood heaters.

### Benefits to Victoria in phasing out wood heaters

The EPA and the Victorian Government should aim to phase out wood heating over time, particularly in high density areas and areas where the topography contributes to temperature inversions.

Other areas have begun phasing out wood heaters (such as Dublin, Montreal and regions of New Zealand). Many years ago London banned wood heating, along with soft coal fires with their *Clean Air Act 1956*. Phasing out wood heating was an option considered in Western Australia and advocated by Victoria's Commissioner for Environmental Sustainability in its 2008 *State of the Environment report* in which it recommended that the government should investigate the option to restrict or phase out the sale and use of wood heaters and encourage householders to switch to alternative and more sustainable heating options (rec: A3.8). The report also found that 24% of all wood commercially harvested from Victorian forests is for fuel wood (i.e. wood heaters and open fires). Fuel wood removal from Victorian forests is at a rate of 1.5 to 2.5 million tonnes per annum, compared to wood chipping at 1 million tonnes per annum. The report also concluded that wood heaters are not carbon neutral.

One of the barriers to phasing out wood heating would likely be poor acceptance from wood heater users. However this could be addressed in a number of ways. The phasing out could be done over many years, allowing people considerable time to change over their heating, and the industry to adjust their manufacturing and production. Phasing out wood heaters would provide economic benefit to the state – saving countless health dollars related to asthma attacks, heart attacks and strokes.

The EPA and the Ministerial Committee must consider the plight of direct and near neighbours of households who use wood heaters as their sole source of heating. We believe that our situation is far from isolated and is repeated many thousands of times over around Victoria. Many people don't know who to go to, or that anything can be done. Or they go to their local council and find the response inadequate. Or perhaps they assume like many people that the smoke is harmless because it comes from a natural source. So they simply live with it, unaware of the potential long term damage to their health.

Children should have the right to clean air where they live and play. Currently at our children's school, there is a house close by with a wood heater that blows smoke over the playground where the children run around and play. There is also a house with a wood heater that blows smoke over the grounds of local childcare centre and another over a small children's playground. In Victoria we have some of the tightest regulations around tobacco smoke. People can no longer smoke a single cigarette within 10 metres of places where children play. However smoke coming out the top of a wood heater is barely regulated, despite being similar in chemical composition, and of vastly higher concentrations than cigarette smoke. The Victorian EPA can and must do better when it comes to wood smoke pollution.

Thank you for the opportunity to provide this submission.

  
Melbourne, Victoria.

**In summary we recommend:**

That the role of the EPA in relation to wood smoke pollution from domestic wood heaters be enhanced to include:

**1. A public education campaign**

- *The EPA inform the public about the health harms associated with wood smoke pollution through a public education campaign as a first step in changing the culture that leads to localised unhealthy levels of wood smoke pollution.*

**2. Phasing out over the long term**

- *The EPA consider the phasing out of wood heaters over the longer term. This could be done through a variety of incentives, and accompanied by a public education campaign. This would save Victoria millions of health dollars. As our population continues to soar and more and more wood heaters are installed, wood smoke pollution will only get worse unless more effective measures are introduced.*

**3. An independent evaluation of the effectiveness of the current response**

- *The government contract an independent evaluation of the current effectiveness of the EPA and local council's response to wood smoke pollution complaints. That evaluation should follow up on the hundreds of people that local councils report are satisfied with their response. Such an evaluation should also consider the instructions provided by the EPA to local councils, the consistency of the response provided across the state, and the skills, effectiveness and support provided to the local council officers who respond to local complaints. In addition such an evaluation could measure the level of wood smoke pollution in neighbours houses as a result of a nearby wood heater.*