

Air pollution Inquiry

Mr Darryl Johnston

YOUR SUBMISSION

Submission:

I write in support of the call to phase out wood burning in residential areas.

I live in the Tuggeranong Valley in Canberra. Tuggeranong has a population of about 90,000 and sits about 580m above sea level. As its name suggests, Tuggeranong sits in a valley. In the cooler months of the year it is not unusual for temperatures to drop below zero and for The Brindabella Mountains and surrounding hills to be capped with snow.

Tuggeranong was laid out in the 1980's when slow combustion wood heaters were popular but not emissions rated. As such, Tuggeranong has long suffered a residential wood smoke problem. In fact, it was rated by the CSIRO as one of the two most heavily polluted residential areas in Australia in winter. The other was Launceston in Tasmania. According to the ACT Government fine particle air pollution in Tuggeranong increases threefold in winter due to wood smoke generated by household slow combustion wood heaters. The Bureau of Statistics reports that less than 9 per cent of Canberra households rely on wood to heat their homes, yet wood heaters are responsible for more than two thirds of Canberra's fine particle air pollution while cars are responsible for less than 10 per cent. For many people in the Tuggeranong Valley and across Canberra generally wood heaters are a secondary form of heating or comfort heating. Their wood heaters supplement electric or gas heating or are simply used for ambiance.

Residential wood smoke is not a problem that occurs only in the three months of winter. Smoke fills our neighborhoods for seven months of the year and begins when temperatures start to drop in mid- April. It doesn't start to clear until early, mid- October when warmer weather sets in.

Due to Tuggeranong's topography and location in a valley, residential wood smoke builds up and is regularly trapped under a layer of cold air. My house is surrounded by over 25 active slow combustion wood heaters. These houses are connected to electricity and most are connected to natural gas. Most wood heaters are over 30-years old and do not meet past or current air pollution standards.

I have an air pollution monitor in my backyard. It is part of a network of about 20 monitors in Canberra and surrounding areas. I regularly measure the highest air pollution readings in Canberra. The wood smoke pollution is so bad that I have been forced to spend hundreds of dollars sealing my home. If I forget to close a window the smoke will seep into my home and set off the internal smoke alarm. My wife and I are unable to enjoy our garden or deck which is bathed in afternoon sunshine and are also forced indoors when our neighbors fire up their wood heaters. We usually have to retrieve our washing on the way otherwise we are forced to wash it all again to get rid of the smoky smell. We live near a park and it is not unusual to see some of our neighbors removing trees and collecting branches for their wood heaters. They also collect wood from the roadside and our reserves. This wood provides homes for some of our wildlife. I also see piles of old oil and chemical soaked wooden pallets, old treated pine logs and railway sleepers and uncovered fire wood in my neighbor's driveways and yards ready to be burnt. The smoke they generate makes my neighborhood smell like an industrial zone.

I have been forced to spend hundreds of dollars sealing my house to keep the wood smoke out. We are forced to close every window and door because if the smoke seeps in it can set off our internal smoke alarms. As a result our indoor air quality is poor for most of the year and this also makes us more susceptible to colds and other infections.

We had a slow combustion wood heater in our home when my wife and I first moved to Tuggeranong in 1990. We removed it on the advice of our GP when both our children were hospitalized, one after the other, with serious chest infections. Each spent ten days in an oxygen tent. Our doctor said living in a house with a

wood heater was like living with a packet a day cigarette smoker.

My wife had bilateral pneumonia last year and was advised by her doctor to exercise her lungs by walking around our neighborhood. We could only do it around mid-day when most of the wood heaters had died down and before they were relit otherwise she could not breathe or continue her exercise. Then we were restricted where we could go because some wood heaters were still active. I have met people in worse situations. They are imprisoned in their homes in the cooler months of the year because of neighborhood wood smoke. It seems unimaginable that someone living in a modern Australian city cannot walk out their front door and enjoy their own garden because their neighbor is polluting their air. Like my friend Rusty. She had a heart and lung condition and spent the cooler months of the year imprisoned in her home because if she stepped out the door she would end up in hospital. She has since passed away but she was one of many people in Canberra, and Australia for that matter, who are seriously impacted by residential wood smoke pollution.

I hope Victoria will take a lead in protecting public health by phasing out slow combustion wood burning heaters in all large residential areas. Wood heaters are fine if you live on a rural property in the country but they are not suitable for our large towns and cities. If Victoria phase out wood burning in residential areas then I hope Canberra will follow.

Therefore, I call on the Inquiry to recommend phasing out of wood burning in residential areas for the following reasons:

- Wood heater smoke is a major source of air pollution: 2006 Port Phillip region data shows air pollution 32% wood heater smoke, 28% vehicles and 22% industry.
- Only 10 percent of people use wood heaters, but they affect the health of other 90 percent who don't
- The damaging health impacts of particle pollution (PM2.5) from wood smoke are significant and well known – including that for every new modern wood heater per hectare there is a 7% increase that a child under 3 years will end up in emergency; the health costs of wood heater smoke is estimated as \$8 billion over the next decade.
- People on low incomes are most at risk as they are more likely to have health conditions and live in areas with higher numbers of wood heaters/wood burning. Children are particularly vulnerable to the impacts of smoke.
- The Victorian Auditor General report 2018 found that EPA's limited air quality monitoring is failing to detect the true levels of localised air pollution impacting on residents.
- Studies have shown that wood heater standards do not reduce emissions. In real life wood heaters produce far higher emissions - individuals can burn damp or painted wood and allow heaters to smolder overnight.
- Local council responses to wood smoke have proven to be ineffective. Wood heater/fireplace use often occurs in evening or weekends when council officers are unavailable. The burden of monitoring smoke levels falls on neighboring residents, often resulting in conflict and disputes, and little to no reduction in smoke levels.
- Burning wood contributes to speeding up global warming and climate change.
- The public are uninformed about the health harms, resulting in increasing numbers of heaters being installed.

I ask that the Inquiry recommend the following:

1. No new wood heaters: Legislation to prevent wood heaters/fireplaces being installed and remove existing wood heaters/fireplaces upon the sale of a house. This costs the taxpayer nothing and helps to clear our air.
2. Replacement scheme: Introduce a scheme to phase out existing wood heaters/fireplaces and ensure they are replaced with sustainably sourced electric heating (cost efficient heat pumps), with the help of a rebate scheme.

Support the above with a widespread public education campaign - about the risk to health posed by wood smoke

Signature:

Darryl Johnston