

Victorian Air Pollution Inquiry
Date: 24 March 2021

Dear Parliamentary Committee members:

My name is Thomas Ellis and I live in Traralgon. I am writing this submission as I am extremely concerned about air pollution in Traralgon and in the Latrobe Valley in general. I have been badly affected by air pollution in this area, and continue to be so from time to time.

As you are aware, we had dreadful bushfires in 2019 which affected nearly all of south-eastern Australia. The air was so unbreathable that I eventually had to board in a house in greater Melbourne for two months. Of course no individual or corporate entity could be held responsible for this, but this event turned out to be not the main problem.

The main problem is that once the fires started to come under control, farmers started to burn off the stubble from their previous crops, and loggers started burning the waste (called *slash*) from coupes in surrounding forests. As one drove down from Melbourne, one could look down on this sheet of smoke which covered the whole valley. Eventually I could no longer afford to live away from home, so was obliged to re-enter this mix of toxic gasses and particulate matter. When I entered my house, the smell of smoke and of the toxic gasses was everywhere. The situation was a nightmare. Naturally, I could not go outside to “get a breath of fresh air”, and had no way of getting rid of the smoke inside the house either as the gasses and smoke seep through the tiniest apertures.

Eventually, at great expense, I bought a special electric-powered filter which could filter the air for just one room (which was my bedroom). This filtered out the particulate matter, but not the gasses, in particular ozone, the various oxides of nitrogen (usually designated NOx), and the various oxides of sulphur (usually designated SOx). All of these gasses are highly toxic and have enormously adverse effects on human (not to mention animal) health. In particular, they affect the cardiovascular system. When I breathed them in, the sulphur dioxide combined with water to form sulphuric acid, and the nitrogen dioxide combined with water to form nitric acid. As you are no doubt aware, sulphuric acid and nitric acid are the two most powerful mineral acids that exist.

These had two effects on me: one is that it left a continuous taste of acid in my mouth, and the second was that it caused a blockage of the Eustachian tubes, which was extremely uncomfortable. When I presented myself at the doctor with these conditions, he said that there was nothing he could do for me. The only solution was that I should leave the area.

On one occasion, as I passed a park, I saw a team of 13 to 14 year old boys gathered around their football coach listening to his advice. It was not possible to see the other side of the park because of the smoke, and yet these children were at their most vulnerable age¹. I can never forget that scene.

I repeat that *this* pollution was not due to the bushfires, but was deliberately caused and so was completely avoidable.

Another major cause of pollution in the Latrobe Valley is the burning of wood for home heating. The smoke from these (in winter in particular) cloaks the area in a thin haze, even when there is no visible pollution from other sources. Smoke from burning wood is extremely carcinogenic². The particles are generally divided into two categories, PM10 and PM25. The former are those which have a diameter of 10 micrometres (microns) or less, and the latter have a diameter of 2.5 microns or less. The danger of PM25 particles has been pointed out by the Victorian Environment Protection Authority (EPA) itself³. They are so small that they can enter the blood stream directly upon inhalation. Unfortunately my brother (who lives in Tasmania) has contracted cancer because of smoke from wood-fired heaters in his neighbourhood, and whether he will recover or not is still an open question.

According to an inquiry carried out by the Australian Broadcasting Corporation (ABC), Traralgon and surrounds (in particular postcode 3844) is the most polluted area in Victoria and the fourth most polluted area in Australia⁴. In its study, the Australian Conservation Foundation (ACF) also allocated the same rating for this area⁵. With the air pollution from Australian Paper Mills in Maryvale, from the coal-fired power station in Yallourn, from smoke due to the burning of stubble by farmers and of waste from coupes by loggers, and from the burning of wood for home heating, it is little wonder.

I have complained in person to the Gippsland branch of the EPA and to the Latrobe City Council (LCC) about these matters and was treated patronisingly by both. Neither seemed to be concerned. The Latrobe City Council (which authorizes burn-offs) even tried to convince me that the “country air” here was good for you, and was a great deal better than what it was in Melbourne. However, the figures show the exact opposite: I would much sooner stroll down Collins St in Melbourne than Argyle St in Traralgon.

The irony is that the EPA *does* investigate the dumping of waste into rivers, lakes, streams and other waterways^{6 and 7}. Clearly it believes that waterways can no longer be considered as open sewers as they used to be in the 19th century and earlier. After all, we need to **drink the water** and to protect aquatic life. However, we also need to **breathe the air** and, in doing so, protect human (and animal) life.

The crux of the problem is that, although we have stopped using our waterways as open sewers, we still treat our atmosphere as an open sewer, and this has got to stop.

Setting fire to crop stubble and slash from forestry coupes is performed solely because of profit margins. It costs less for a farmer to set fire to the stubble from previous crops than it would cost to plough it in; and it costs less for loggers to burn the slash from coupes than it would cost to cart it away and turn it into wood chips or use it in some other way. Whether it be true or not, their claim that burning it creates an ash bed for later generations of trees is simply a ploy. If it costs more to plough in stubble and remove slash, then the increased price of crops, timber and paper would reflect the true cost of these items.

According to the Department of Land, Water, Environment and Planning (DELWP), the cost to human health caused by air pollution in Victoria collectively costs billions of dollars per year⁸. But how does one put a price on a person’s health, on their life, or on their decreased longevity and enjoyment of life? Human life, human health and human enjoyment of life must come first.

I have made no mention of the effect that smoke has on animals, but one can be sure that if the environment is healthy for humans, then it will be healthy for animals as well.

I should like to make the following recommendations. Some of these would make Victoria a leader, and I believe Victoria (and Australia in general) should be a leader, not a follower.

- 1 Ban stubble burning as it has been in the United Kingdom and China, and is strongly discouraged elsewhere⁹.
- 2 Ban the burning of slash from coupes. The material must be removed to where it could be used to make wood chips or other wood products such as hardboard. If there was any surplus which had to be burnt, this could be done in a furnace in which *all* of the particulate matter (smoke particles) would have to be trapped in filters, then buried.
3. Phase out all coal-fired power stations and use renewable energy sources (such as solar power, wind power and hydro-electric power).
- 4 Ban the use of wood-burning and coal-burning heaters. For those who already have them, offer a financial incentive to switch to gas-fired or electric heaters. In the meantime, do not allow wood-burning or coal-burning heaters to be installed in new houses. (This would not be a precedent: In certain built-up areas of the United Kingdom, wood-fired and coal-fired heaters are banned.) To further encourage the switch, a cut-off date should also be introduced after which time they would not be allowed to be used at all.

Some of these may be controversial and strongly resisted, but human (and animal) health, as well as the Earth itself, have to come first.

As I write this, a letter to the editor appeared in the Herald Sun¹⁰ complaining about the fact that on Saturday March 20, the Marysville area was shrouded all day in yellowish smoke emanating from VicForests' burning of several denuded local logging coupes, and that locals had to remain indoors. However, I should add that remaining indoors will not help in the long run unless the house is hermetically sealed and has air conditioners with very fine filters to remove the smoke particles; otherwise, the smoke will eventually seep in, and the occupiers left with nowhere to go.

Few people seem to realize just how small and fragile our atmosphere is. If the Earth were the size of an apple, the atmosphere would be only as thick as the skin. And if the whole of Earth's atmosphere were compressed and cooled into a liquid state (liquid nitrogen, liquid oxygen, etc), then it would fit into a basin the size of the Mediterranean Sea (but to a depth of 1600 metres).¹¹

The pollution of Earth's atmosphere comes mostly from burning organic matter, whether it be in solid form (as with wood and coal), in liquid form (as with petrol and jet fuel), and gas (such as coal gas and natural gas).

Anthropologists have determined that early man started using fire for heating and cooking as much as 1.5 million to 2 million years ago. This means that by burning materials for the same purpose, we are still using Stone-Age technology.

We look back in horror at how our forefathers poured raw sewerage and toxic waste into rivers and streams, making the water unfit to drink and killing all aquatic life. I feel that if we continue with what we are doing, our children and grandchildren will also shake their heads in disbelief at what we are doing right now to the very air which we breathe.

As aborigines say, we do not own the land; we are just the caretakers for the next generation.

Clearly, the laws as they stand, and the apparent apathy of the EPA and local governments in relation to air pollution, do not protect the individual whose health and wellbeing seem to count for nothing. The suggestions made above would rectify this, and any increased prices which resulted would simply reflect the true cost of the items concerned.

In general, Man must end his primitive fascination with fire, of setting things alight, whether they be in solid, liquid or gaseous form. This should be our ultimate goal, the direction in which we should be moving.

No *truly* advanced culture would ever set fire to anything, by any means.

Thomas Ellis
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- 1 <https://www.lung.org/clean-air/outdoors/who-is-at-risk/children-and-air-pollution>
- 2 <https://epa.tas.gov.au/epa/air/air-quality-in-tasmania/reducing-air-pollution/harmful-substances-in-wood-smoke>
- 3 <https://www.epa.vic.gov.au/for-community/environmental-information/air-quality/pm25-particles-in-the-air>
- 4 <https://www.abc.net.au/news/2018-11-16/australian-pollution-mapped-by-postcodes/10478620?nw=0#mostpolluted>
- 5 <https://www.latrobevalleyexpress.com.au/story/5803595/union-presses-epa/>
- 6 <https://www.abc.net.au/news/2015-07-07/paper-mill-spills-waste-into-latrobe-river/6600234>
- 7 <https://www.miragenews.com/sth-gippsland-water-told-no-discharging-to-514175/>
- 8 Final-Health-costs-of-pollution-in-Victoria.pdf (available from climatechange.vic.gov.au).
- 9 https://en.wikipedia.org/wiki/Stubble_burning
- 10 Herald Sun, Tuesday March 23, 2021. Page 22
- 11 Calculation available upon request