

## Senate Committee Inquiry into the Impacts of Air Quality on Health.

Submission by  
John Kaye

### Introduction

In September 2006 I was diagnosed with Myelodysplasia Megakaryocytic Myelosis, a Myelodysplastic Syndrome MDS otherwise known as “smouldering leukaemia”. Workers in the coal mining, painting and embalming professions are “at risk’ for the Development of MDS.

The arrangement to mine coal should be between the state, the mining company, and *the community*. But the state has marginalised the local community to the point where we have NO voice. Letters and petitions sent to our local state member leave little doubt that our community is being marginalised, the replies to these letters is trivial. The process of granting an exploration licence excludes community consultation.

There is currently a ‘hole’ in the Upper Hunter Air Quality network. Denman, a town that is looking at having two large mines on either side of town, does not have an air quality meter.

The impacts of dust have been trivialised by the State Government. Mines do not practice best practice to reduce dust emissions.

The Senate Committee Inquiry members need to make a trip up to the Upper Hunter to see the extent of the problem themselves.

## **Myelodysplasia Megakaryocytic Myelosis**

In September 2006 I was diagnosed with Myelodysplasia Megakaryocytic Myelosis. This is one of the Myeloid Dysplastic Syndromes, MDS, otherwise known as “smouldering leukaemia”. The cause is Epigenetic, meaning that an ‘insult’ from the environment is acting at the genetic level. The expression of genes at the DNA level is altered so that specific tumour suppressing genes are not expressed. This means that my body was no longer able to clean up tumours in my bone marrow. Some people inherit a disposition to developing MDS, its like a hidden bomb waiting to go off if the right chemical trigger is applied.

In 2007 the treatment that came close to a “cure” for MDS in Australia was a bone marrow transplant. Luckily I had two sisters who were a match for a transplant. In 2007, at the age of 42, I underwent myeloablative chemotherapy to wipe out my MDS bone marrow and it was replaced with my donor’s marrow. I took me eight months to recover to the point where I could resume work. Now, in 2013, I have low blood counts (Refractory Anaemia). My Haematologist has told me that not all that MDS bone marrow has been wiped out and that I have to undergo further treatment to keep it under control. Hopefully I don’t have to have another transplant.

This illness hasn’t only affected me. My illness impacts all my family. The cost of a bone marrow transplant to the health system is about \$300,000. When I think about the cost of going to see the haematologist every two months, and subsequent treatment, I am glad that I have private health insurance and that I live in a country that provides decent cancer treatment. If I lived in one of our neighbouring countries, like Indonesia, I’d be dead.

Little is known about the triggers for MDS. Overseas research by the Myeloid Dysplastic Syndromes Foundation (USA) indicates that workers in the coal mining, painting and embalming professions are “at risk” for the Development of MDS and Acute Myeloid Leukaemia. For more information about the disease the MDS Foundation website is <http://www.mds-foundation.org/what-is-mds/>.

I cannot say definitively that exposure to coal dust has caused my MDS. My Haematologist is not interested in the cause of my MDS, he is interested in the treatment and cure. From 1997 to 2001 I lived in close proximity to the Ulan rail line that is used to transport coal. I lived next to one of the steepest parts of the rail line between Ulan and Newcastle. Trains would struggle to get up the hill going to Newcastle. Going back to Ulan, as the train moved over the crest of the hill, the carriages would bang together as the carriages dragged behind accelerated down the hill and suddenly caught up with the carriage in front. I image that this would impact shake free any coal dust they carried.

MDS could be a hidden time bomb in our community. Are we going to see this illness more prevalent in the wider community as a result of the industry move to open cut mining? How many community members are going to develop this illness later in life as a result of exposure to open cut coal mine dust in their youth? Open cut coal mining has recently grown to overtake underground coal mining as the main method of mining in the last thirty years. As the disease mainly occurs in people aged in their sixties, this illness may not become apparent in the wider community for many years. And it may be difficult to trace geographically, as most people will have moved from the communities in which they were exposed to the coal dust. This could be a ticking time bomb in the same way that asbestos was. I hope the enquiry considers my personal story in their enquiry.

**The current policy of granting exploration licences without any community consultation privatises the profits and socialises the costs.**

The process of granting exploration licences needs a complete overhaul. The process of granting an exploration licence excludes community consultation.

The arrangement to mine coal should be between the state, the mining company, and *the community*. But the state has marginalised the local community to the point where we have NO voice. Letters and petitions sent to our local state member, George Souris, leave little doubt that our community is being marginalised. His replies to these letters and petitions are trivial.

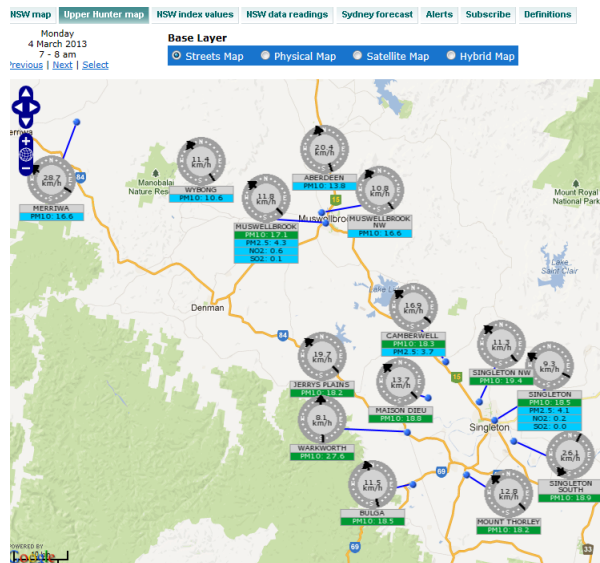
I suggest the process for the grant of exploration licences to be changed so that:

- Publically accountable guidelines are established for the selection of locations of exploration leases, prior to sale of the lease.
- A transparent due diligence process that investigates the social, environmental and economic impacts of the mine prior to sale of the lease. This includes:
  - An economic benefit analysis that takes into account the productive loss of the land for the life of the land (not the life of the mine), impacts on existing businesses, loss of future opportunities for sustainable industries.
  - A social benefit analysis that takes into account impacts on the existing communities and existing public infrastructure.
  - Environmental analysis and a protection of offset areas from subsequent mining.
- Water resources are protected beyond the life of the mine
- Productive land, including alluvial river flats, is quarantined from mining, both underground and open cut
- Aquifers are not mined.

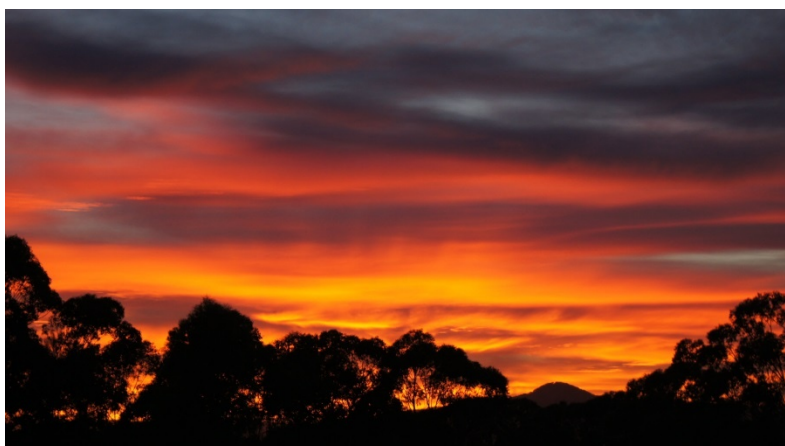
## Air Monitoring

What chemicals are in the coal dust that showers over the Upper Hunter? Nobody really knows. It's time that the composition of coal dust was thoroughly researched. Until this is known, there should be no more open cut mines approved and existing mines should be forced to follow industry best practice for reducing dust.

There is currently a 'hole' in the Upper Hunter Air Quality network. Denman, a town that is looking at having two large mines on either side of town, does not have an air quality meter. It should have an air quality meter. The map below shows the location of present air quality monitors.



The impacts of dust have been trivialised by the State Government. Mines do not practice best practice to reduce dust emissions, even though they are aware of what constitutes best practice. There is no enforcement of dust emissions by the State Government. Below is a photo of a beautiful sunrise taken from my back verandah, which faces towards Muswellbrook. Coal dust makes for beautiful sunrises and sunsets. Lovely to look at but it's an indication of a nasty air quality problem.



There needs to be consistency in what particle size is monitored. The most dangerous and smallest particles need to be monitored. These are the particles that are small enough to pass into the body by the lungs and blood stream.

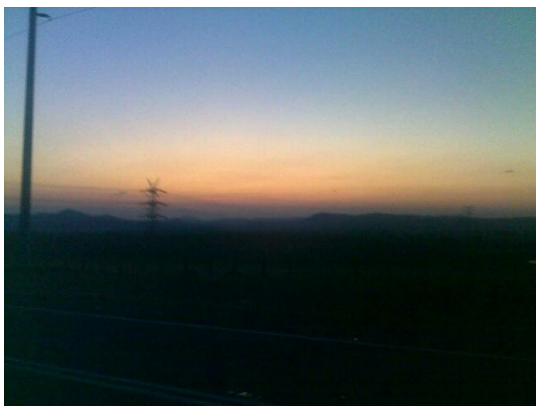
**Best Practice to reduce Dust is not practiced by the Mining Industry.**

Best Practice to reduce Dust is not practiced by the Mining Industry. Dust from coal mining is pollution. There is no infringement notices issued when dust levels are fair or poor. The cumulative impact of all these mines is like a scrambled egg that you can't unscramble, making it difficult to prosecute individual mines. More mines will just add to the problem. It's time to call a halt to any new mines.

Below is a photo of our Upper Hunter power stations. The haze of dust is very noticeable. I took this photo taken eight years ago. With more open cut mines in production, the haze is a now a lot worse.



Below is a recent photo taken from the Denman road looking towards the Mangoola Mine. The dust haze is very noticeable. This is a regular occurrence. If the mines put best practice dust management into place we would see less of this.



Summary. Air pollution from coal mining and power generation is having as significant impact on the air quality in the Upper Hunter. The Senate Committee Inquiry members need to make a trip up to the Upper Hunter to see the extent of the problem themselves.