

**Submission
No 12**

**INQUIRY INTO PROTECTION OF THE ENVIRONMENT
OPERATIONS AMENDMENT (CLEAN AIR) BILL 2021**

Name: Mr Colin Brodie

Date Received: 28 June 2021

NSW Parliamentary Enquiry into the Clean Air Bill (2021)

Submission

About 20 years ago, my family (my wife, 20 year old son and myself) relocated to a rural property, at Mandalong, in order to achieve an unpolluted lifestyle (among other things). About ten years ago, after experiencing some severe health concerns, I had some tissue analysis done, to determine what level of chemical substances were present. To my shock and dismay, I was found to have very high concentrations of a range of heavy metals, including Aluminium, Cadmium, Lead, Titanium, Copper, Zinc and Zirconium. There being no prospect that exposure to these substances could have been work-related, I arranged for my wife and son to be tested, with very similar results.

We have also been experiencing a very considerable presence of fine particulate residues depositing on floors and windows on our property, which have been laboratory tested – also revealing significant concentrations of these heavy metals.

In order to explore potential environmental sources of these metals, I researched the local and regional industries and their emission details via the National Pollutant Inventory (NPI) and internet searches.

My attention was immediately drawn to the emission of particulates from coal fired power stations, and in particular the Eraring Power Station, which is located about 10 kilometres from us. According to the NPI, Eraring had consistently reported an atmospheric discharge of the order of 1 million kilograms of PM10 particulates per year (about half of which is PM2.5). This has since been reduced to about 300,000 kg per year, of very fine dust powder being discharged into the air – about 900 kg per day. I have formally sought information from the EPA regarding the chemical composition of these particles, and I was told “they could contain almost anything”, and that if I wanted more information I should contact the Power Station operator – which I did – and was told “they were not required by the EPA to have that information”.

In view of the fact that we routinely experience light winds which mostly come from the direction of this horrendous point source of pollution, (as clearly confirmed by the very detailed monitoring project carried out by Todoroski Air Sciences – commissioned by the NSW EPA), I researched further the typical chemical composition of these particulates, and found a very close correlation – although as there does not seem to have been any specific analysis undertaken of this particular waste stream, I am unable to categorically claim that these residues are from power station emissions.

My son is now experiencing chronic health issues – asthmatic / bronchial – which can also be attributed to power station emissions.

It is particularly disconcerting that there is no apparent interest being directed towards the potential (or actual) impact of this extraordinarily large point source of toxic emission. I would be most grateful if your inquiry would resolve this issue.

Yours Faithfully,
Colin Brodie

The following submission relates to the NSW Parliamentary Enquiry into Health Impacts of Exposure to Poor Levels of Air Quality.

Submission Re: Eraring Power Station Emissions

My family and I are resident on a rural property several kilometres from the Eraring Power Station.

We are very aware of the enormous quantity of variously toxic pollutants discharged into our air space, as permitted by current EPA Licences.

We are especially concerned about the discharge of particulates – up to 3,000 Kg per day of sub 10 micron particles have been released into the air from Eraring Power Station, with permission from the EPA.

On previous occasions I have sought information from the EPA regarding the chemical composition of these particles, and I was told “they could contain almost anything”, and that if I wanted more information I should contact the Power Station operator – which I did – and was told “they were not required by the EPA to have that information”.

I have also sought information from the EPA regarding where these particles fall to the ground, and was told that an air quality monitoring station was operating at Wyong, and it was claimed that this location was representative of likely fallout.

However, my own observations, together with the weather data provided in the Todoroski Air Sciences “Lake Macquarie – Wyong Review of Monthly Ambient Air Quality Data” commissioned by the NSW EPA, categorically demonstrate that there is virtually no likelihood of Eraring discharges finding their way to Wyong (sustained north to south air flow is rare), and that a large percentage of the time, air flow and air speed are very low – leading to a reasonable conclusion that a large percentage of particle fallout will be occurring within relatively close proximity to the point of discharge – such as my family home.

We are aware of a great deal of evidence of very light grey solid residue around my home. However, we are not able to confirm whether this fallout is from Eraring because the NSW EPA is allowing its identification (by way of particle characterisation / chemical composition) to remain secret.

We regard this situation to be a serious breach of duty of care and due diligence on the part of the NSW EPA, since some generic power station particle chemistry concludes that there is a very high potential for serious health and environmental harm being caused by these emissions.

We regard it as imperative, therefore, for the NSW EPA to make all necessary arrangements to determine what is in these particles, and where they land – and to impose new Licence requirements to significantly reduce the allowable emissions (in accordance with world’s best practice).

Yours Faithfully,

Colin Brodie

12/03/2020