# S. Brunker (CFMEU Mining & Energy Division) submission to the Coal Workers' Pneumoconiosis Select Committee, 23 August 2017.


Callide Power Station early 2016, coal being conveyed into "slot bunkers" in readiness for conveying into the Station Mills.

1. **Introduction**; I am a District Vice President (DVP) of the CFMEU Mining and Energy Division Queensland, my experience includes 28 years in the Black Coal Industry in Queensland which included 18 years at North Goonyella underground Coal Mine where I worked as a Development and Longwall Operator. Since late 2010 I have worked as a DVP based in Dalby, as part of my role I have carriage for the industrial and safety interests of all Coal Fired Generators and the Brisbane Coal Port.

   In addition, I am a "Work Health and Safety Permit Holder" for the CFMEU, I have conducted many Site inspections of the Coal Generation Units in Queensland. I must state for the record this has been an extremely frustrating process as all of the management Teams regardless of which Generator or Coal Port they come from are ignoring the "workers" concerns on dust related matters. I am of the strong view that the Coal Dust exposure in areas of the Coal (Fuel) systems of the Generation Units is boarding on being as bad as the underground environment. I have not worked with "fly ash" before but from my limited research of safety papers and material safety data information it is of great concern to me the carefree attitude the Generation Company's take towards this issue.

2. **Coal Fired Generation**; there are three (3) areas of concern within a coal fired generator relating to contributing factors for coal mine lung dust disease, firstly is the fuel handling section, secondly is the pulverised fuel (pf) and thirdly is the waste from the combustion process commonly called "fly ash".

   2.1 Fuel system of a coal fired generator include stockpiles, and belt systems, by the time the coal has reached the Generators it has been exposed to many process including re-sizing, crushing, milling, transportation (various methods including belts, rail, and or trucks) all of which affects the composition of the coal.

2.2 Pulverised Fuel ("pf"), this area is of most concern to me given the risk of exposure to "workers" and the potential for explosion. The coal once at the Generator under goes a milling process to pulverise and pressurise the fuel (pf) which in my words is fine respirable coal dust powder pressurised for injection into the Burner Fronts for combustion. At most Generators, you can see these fine dust clouds drifting through the Plant I will provide evidence in this submission of "pf" leaks.

Potential for a fire or an explosion is more likely where this dust is airborne. The "pf" leaks are almost always under pressure and therefore at least some of the "pf" dust is airborne. The "pf" is exposed to > 200 degrees Celsius Primary Air in the mill (the pulveriser). Hot PA at a rate of approximately 30kg/s is forced into the mill to help dry and transport the PF to the burner fonts. The "mill' outlet temperature is 85deg C and the heating of the "pf" will increase the likelihood of a "pf" explosion. I have witnessed is hot embers dropping out under the mill table in the same area the "pf" is released. I have video footage to assist the Committee.

2.3 Fly Ash; coal combustion processes are the chief part of electricity generation and results in the production of vast quantities of by-products. It poses an intrinsic threat to human and environmental health in its raw form and a source of contact and inhalation hazards. I am of the strong view there is a mismanagement and poor regulation of this material at Queensland Power Generators and the Generators actions are exposing "workers" to its hazardous side effects.

The Material Safety Data Sheet (MSDS) for "fly ash" states as follows; in general, the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

From my experience, most of the Generators are lacking maintenance which is a hangover from LNP Newman Government sell off strategy which has led to significant backlog in preventative maintenance on equipment at the Generation Units. I will state some of the management Teams are attempting to address the maintenance issues currently but the few years of neglect has been telling.

Generators representatives acknowledge the issue in conversations yet still only rely on PPE as a control measure for the "workers" health, I have been bashing my head against the wall trying to get "real time" dust monitoring and health checks done to no avail. The extremely fine "pf" dust particles and "fly ash" are allowed to blow around the Plants with the potential to cause respiratory illness to "workers". When maintenance workers are working on the mill next to the leaking mills their exposure could be up to 12 hour a day for 1 to weeks at a time. This exposure time is significant. To my knowledge there are currently no instruments in use to measure the level of "pf" or "fly ash" in these areas or dust suppression methods utilised.

In addition, when I notify a Generator Station Managers that I am coming to Site (in accordance with WH&S legislation 24 hours' notice) for an Inspection the management Team hastily organise a clean-up by the industrial cleaners, management forget the cleaners are our members also and I am tipped off and conduct spot clean ups and within a couple of days the Station returns back to the same standard. I regularly witness Production and Maintenance workers going about their daily duties at Generators oblivious to the dangers of the "pf" and "fly ash" leaks.

3. **Coal Port**;

(i) **Train unloading**; the current operator's cabins don't have positive pressure sealing, most door seals and hinges fail to seal the rooms, there is always dust on work surfaces and window sills. Some have Air conditioner which are just a window rattler style that has black staining around the intake and cool air blow area. I have one report of a cabin which was just a "lean to" against the wall inside the shed that had a window rattler style air conditioner that drew its air from inside the shed. It had zero dust seals and was always dusty inside.

Previous to this "workers" were unprotected inside the unloading shed, minimal dust suppression was used, this doesn't stop dust, it merely reduces it and only functions when the operator initiates it. It's not unusual to open a coal wagon door and have the shed fill with dust.

(ii) **Coal Stockpiles**; during 1990's and into the 2000's extended stockpile dozing was required due to increase Port "through put" at most sites and often with open cab Bulldozers in the early years. The pushing out and pushing in resulted with very dry and dusty coal. There are occasions when pushing coal stockpiles when the dozer comes across a dry or warm pocket in the coal that large amounts of dust are sucked up and blown up through the radiators of the bulldozers. Some of the bulldozers are fitted with high pressure air systems but they are often not functional. In more recent times we now see dust suppression systems in the newer conveyors and Stacker/Reclaimers. But the more remote locations do not have any stockpile area dust suppression. Some sites attempted to use a water truck on stockpile access roads during windy periods with little success.

(iii) At another site I visit the coal stockpiles have water sprays along each side to attempt to keep the dust down. These sprays are connected to a local weather station and run in sequence along the stockpiles on windy days. They can also be turned on manually on very dry windy days although not all sprays can run together as the pump station does not have sufficient capacity. The roadways along the conveyors still become dusty when vehicles are driving along them as the water sprays only wet the stockpiles.

(iv) **Conveyor systems;** "workers" are exposed to dusty situations in conveyor galleries and tunnels, from cleaning up spillage and maintenance work. Coal dust layering is visible on cable trays, buildings/structures and electrical junction boxes. In addition, some sites use open cab Bobcats to clean drains and conveyor transfer stations.

4. **Inspection reports**, I have attached several of my site inspection reports which will demonstrate managements denial of the issues at their sites. I will speak to these in my verbal submission.

**Conclusion**, to assist the Committee in its deliberations I would respectfully suggest the following actions be considered for inclusion in the Committee`s recommendations please;

(i) Education of the "workers" to the hazards of coal dust and "fly ash" exposure.

(ii) Improved risk assessment training for "workers".

(iii) Consultation with "workers" and their Safety Representatives in accordance with the WH&S Act, Division 2, section 47.

(iv) Use the Recognised Standard from the *Coal Mining Safety and Health Act 1999* for monitoring respirable dust as the template for the development of a new Code of Practice "monitoring respirable dust" to underpin the *Work Health and Safety Act 2011*.

(v) Stronger enforcement provisions for "Entry Permit Holders", i.e. the ability to issue "provisional enforcement notices".

(vi) Positive pressure air stream helmets for "workers".

(vii) Positive pressure cabins on equipment and buildings in the immediate exposure areas.

(viii) Real time dust monitoring made compulsory at Coal Fired Generators and Coal Ports.

(ix) Independent Government Body to conduct and administer Dust sampling.

(x) All chest X-rays taken are to be dual read using the International Labour Organization (ILO) International Classification of Radiographs of Pneumoconioses (ILO classification). They will need to be a trained and component B-reader (NIOSH) . Note: Under this model X-rays are to be dual read to the ILO classification by radiologists who have successfully completed an ILO training program (the NIOSH B-reader program).

(xi) All spirometry to be undertaken by respiratory laboratories accredited by Thoracic Society of Australian and New Zealand (TSANZ) medical facilities accredited specifically for spirometry Any person conducting these tests under the Health Scheme should complete approved initial and on-going training in spirometry. All spirometry testing is undertaken as part of a quality control program consistent with the American Thoracic Society/European Respiratory Society standards.

In closing I must place on record my gratitude to the Committee Members for their initiative in expanding the enquiry to take in Power and Port workers. From my previous work history and knowing the controls that should be in place for respirable dust it has been an extremely frustrating process for me as all of the management Teams regardless of which Generator or Coal Port they come from are ignoring the "workers" health and safety on dust related matters.

I am of the strong view that the Coal Dust exposure in areas of the Coal (Fuel) systems of the Generation Units is boarding on being as bad as a dusty underground mine. I have not worked with "fly ash" before but from my limited research of safety papers and material safety data information it is of great concern to me the carefree attitude the Generation Company's take towards the "fly ash" issue.

I thank you for the time to put this submission to the Committee.