

NEIL WHITTAKER. BLACKLUNG SUBMISSION

It is hard to know where to start really, but, I think I will tell my story from the start of my career. I will try to stick to the subject, Coaldust, and I will try to describe where the industry came from with dust problems, where it is at the moment, and where we all need to be. I will try to be objective but it will be hard not to pass technical comment when I have experienced so much within this industry, but I feel this will not be much use to the layman, however, there is not a subject in here that I cannot greatly expand on technically.

- 1976 National Coal board. N.C.B.

I started with the N.C.B. as an apprentice fitter, not too much underground to start with but eventually a slow introduction to the underground environment. I did not see any dust masks in use apart from on the really dusty jobs, drilling without water, (commonplace), machine driving. These masks were really hot, sweaty and heavy. Not much fun to wear for ten minutes never mind the 12 hour rosters that are worked now, (the UK was 7 hour shifts when I was there). Most Coal mines were inherently dusty and it was just viewed as an occupational hazard, water would be used to suppress the dust but as always, the water creates other issues when used.

As the drive for productivity increased the “dust make” increased with it. Pneumoconiosis and Silicosis were known industrial diseases, and miners were compensated for its health effects by the NCB (the miners still died from it, just a bit more wealthy!) as the claims for compensation increased, a greater emphasis was put on dust control, and the start of the paper dust masks began to be introduced. These were more widely used, slightly more comfortable, and convenient as they were more easily stored, eg: in you hard hat.

Over the next ten years I spent my time underground on the faces (Longwalls) of the Barnsley area as a fitter, often fixing dust suppressio systems that had become faulty or not enough water etc. As mentioned previously the drive for production and increased mechanization was once again increasing the dust make. I spent time at Houghton Main colliery where a new multi motor coal cutter (shearer) had been installed; it was very fast and powerful for its time, and consequently very dusty. The manufacturer (Anderson Strathclyde) had installed the latest technology cutting drums, with a system for removing the dust as the machine cut the coal (R.A.C.). This is an example of companies using technology to assist with reducing the dust make. This was all good and an improvement, but within this improvement is a flaw which will show up repeatedly. The longwall is a mixture of different machines, generally all made by different companies, or certainly different divisions within companies, and the longwall has to harmonise as a single machine. Unfortunately the different components do not gel well together to focus on dust reduction.

- 1987. Anderson Strathclyde.

By this time I had become a Service Engineer for Andersons, I travelled globally as a Service Engineer, my role was commissioning and trouble shooting

equipment issues, shearers in particular. It was easy to see that different countries had different systems to manage dust and their focus on this varied, France and Germany were really good, and, Australia showed great awareness of the dust issue, but once again it was easy to “put a band aid” on things, such as, increased water, ventilation baffles, Dust helmets (airstream) rather than fix things at source.

As a person who’s job it was to troubleshoot it was always apparent to me that it is better to fix at source.

- a) don’t create dust.
- b) Suppress any dust make at source so that no dust is accumulated which would only be disturbed later.

This all sounds fine, but how to do it? It needs to be in the **design**, from scratch, integrated into the system, not fitted as an optional extra, and not be readily bypassed (turned off) .

As an example of this FACT: My last ten years has been spent on the design modification of prototypes of shields (roof supports) they ALL have some sort of dust suppression system. There is not a mine in Australia that fully utilizes it. A bold statement; but a fact.

- From 1987 to Date.

I spent the next 30 years working for various industry leaders; Anderson Strathclyde, Longwall International. Joy Global, D.B.T. Bucyrus and most recently Caterpillar; rarely witnessing any integration of the systems to reduce dust make, only when it became, what was deemed, a real issue (eg: can’t see where we are cutting because of the dust !). It never gets seriously addressed, despite being discussed in the design risk assessments which I have been part of. This is because the main design had already happened when these risk assessments were taking place.

Only a holistic approach to dust reduction in the mining of coal will fix this issue. The modern longwall is a highly technical complicated machine with multiple companies producing it, and multiple departments at the mine running it. (Someone else to blame).

Addendum.

Just a quick Q and A to finish with, not in any order of priority.

- Why cut dry coal? (methane drainage from the coal seam makes for a very dusty product)
- Why do some people still not wear dust masks (hot, sweaty uncomfortable.) cannot breath through a wet dustmask,
- Why do workers do 12 hour (and more) shifts. Lifestyle ? its probably safer to do shorter shifts. Time weighted average factors etc.

- Who wears the dust monitors ? usually not the people exposed to the highest levels.
- Who is accountable for ensuring the equipment is as good as it can be for the effective control of dust. Everyone.