

COAL WORKERS' PNEUMOCONIOSIS SELECT COMMITTEE

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Helen Gibson

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EXECUTIVE SUMMARY

The long term health risk to workers in almost all aspects of the coal mining industry exploration, extraction, processing and transportation (including “bystanders”) has, in my opinion, not been identified, recognised nor acknowledged fully by the owner/operator companies, the regulators (inspectorate, various State and Federal Government departments), medical profession and the unions.

The inhalation of rock dust within coal mining and other mining operations (including quarrying, metalliferous, and other mines) may also result in silicosis being diagnosed in the workers in these places and should be considered in partnership with CWP. Research indicates that CWP and silicosis are most commonly identified in those that mine, process and transport or ship coal. Once contracted research shows that these diseases cannot be cured and that prevention is the only option. Early recognition, diagnosis and appropriate treatment of complications are vital.

The development and implementation of control technologies can only lead to success in the protection of workers if the controls are implemented in full, maintained in full and monitored strictly. Self regulation of working conditions does not appear to have resulted in the elimination of health risks associated with working with coal and it would appear that all parties associated with the industry have been slow to close the door to the risks.

Although underground mine workers would be the workers most likely to be at the greatest risk of contracting CWP for obvious reasons, the recent diagnosis of an open cut worker (ex Moranbah) with early onset CWP should ring alarm bells with all aspects of the industry – owner/operator companies, State and Federal Government regulators, medical professionals, transport operators and others – that the system has failed all parties involved. This latest diagnosis has confirmed what I have always suspected that any person who has been exposed to any phase of the coal mining industry is at risk of being negatively impacted upon by exposure to dust (coal or rock) that is part of this industry.

A study undertaken for the Hunter region in NSW (published Coal Mining Review, October 2012) included a key finding that “There are clear indications from the international health research literature that there are serious health and social harms associated with coal mining and coal-fired power stations for people living in surrounding communities.” This would extend the potential “impact zone” well beyond the coal mine and, in my opinion, should be the subject of a detailed study as a matter of priority for the government.

Recent reports indicate that longwall mining operations are generating unacceptably elevated dust levels in and around the machinery and so miners located in that area of the mine would be at greater risk. It is understood that the majority (possibly 80+%) of the underground coal mines that operate in Queensland are extracting coal using longwall mining methods and so this would place a

higher number of underground coal miners at risk of increased coal and other dust inhalation.

It is considered that it is time that the owner / operators of the coal mines, the relevant State Government Departments and other relevant parties (e.g. unions, etc) take immediate positive action in order to ensure that

- the health of every worker that is involved with coal be checked and monitored on a regular time frame (preferably a minimum of annually). The workers would include drilling crews, geologists (on site with rigs, in open cut and underground mines), surveyors (open cut and underground), Mining Engineers (open cut and underground), machinery operators (open cut and underground), mechanics (open cut and underground), truck drivers (mainly open cut), washing plant and associated machinery, mines inspectors (State Government), railway staff (QR, etc), “bystanders” or people who live adjacent to, or in proximity to, transport corridors and coal stockpiles and workers who operate machinery to load coal onto ships for export at the coal ports.
- the regulation, monitoring and control of dust levels in all aspects of the exploration, extraction (underground and open cut), treatment, transport and storage of coal be a strict requirement for all mine owner /operators with reporting on a weekly basis to the Queensland State mines inspectorate or more frequently if required.
- the development of a code of practice for dust emissions and their control for surface mines, quarries and exploration sites if it is not already addressed.
- the Queensland State mines inspectorate also undertake independent monitoring of dust levels in all aspects of the coal industry on a regular basis (perhaps fortnightly) as a cross check on results obtained by the owner/operators and that all results and analysis being published.
- the medical practitioners who are used to provide health checks on coal workers should be specifically trained and skilled in diagnosis of CWP, through the use of appropriate radiological methods, interpretation, etc in order to identify the early onset of CWP.
- the medical practitioners who are used to provide health checks on coal workers should be entirely independent and not employed by the coal companies.
- appropriate methods to suppress and eliminate dust (coal, and other) throughout the coal mining process be researched and implemented immediately as a matter of urgency. This would include processing, transport, stockpiles, loading at port facilities, etc.
- consideration of a levy per tonne (of coal produced) on mine owner/operators within Queensland to part fund the monitoring of the entire coal mining process by the State mines inspectorate.
- the establishment in Queensland of an accredited, world recognised training facility to provide training of relevant staff to undertake the monitoring of the coal mine-to- end user process.
- The establishment of a CWP reference group to oversee the development and implementation of a mining code of conduct, maximum permissible dust levels, monitoring of in-mine dust readings and analysis, the implementation of appropriate health monitoring and associated leading training of medical staff, monitoring of confirmed CWP sufferers and analysis of all records relevant to this medical condition. The reference group should be

made up of representatives from the coal mining industry, transport providers, coal fired powerhouse operators, coal port operators, relevant health professionals, State mines inspectorate, relevant union(s), and relevant members of the public.

An extension of this investigation should be the impact of inhalation of rock dust by miners and other staff in open cut and underground mines within Queensland including quarries, metalliferous and non-metalliferous mines.

PERSONNEL CONSIDERED TO BE AT RISK OF C.W.P

It is my belief that workers in all sectors of the coal industry from the exploration stage through to the production, transportation and utilisation or export of the resource from Australia are at risk from exposure to coal dust during their time at their respective workplaces. They have the potential to have been exposed to dust levels that will have a negative impact on their health as well as those who are “bystanders” to the process (adjacent to transport corridors, etc).

The statements expressed in this document on risks imposed on workers directly and indirectly involved in the mining operations, the transport of the product and also “bystanders” are the result of personal observations made while I was directly associated with the coal industry as well as personal observations and research in the years since I changed my employment direction. I have outlined the potential risks for many of the employment roles below.

The length of time that a worker has been exposed to the coal and similar dusts during their working day and employment period in the industry will obviously directly impact on the potential for them to succumb to CWP. That is, some workers are more likely to display CWP symptoms than others due to the time that they have been exposed to the dust levels. However it is my belief that all workers in the industry from exploration through mining, processing, transportation (including adjacent corridors), utilisation, stockpiling and export of coal should be considered at risk. As a result I have outlined the employment areas that I believe should be considered at risk.

Miner – Underground. This worker would be at greatest risk of succumbing to CWP as he/she is working in a confined space with constant machinery activity. Ventilation is required of the underground space but dust particles (coal, rock) would be at a level that would require appropriate masks to be worn in order to provide a suitable air quality and minimise inhaling coal and other dust particles. The other hidden risk (not visible) for underground coal miners is the gas emissions (carbon dioxide, methane, etc) that could be inhaled.

Recently information was released that indicated (until 2015) eight (8) out of 14 underground mines in Queensland had been operating with recorded dust levels above the maximum permissible levels. It is also important to note that the permissible levels in Queensland are higher than those under NSW legislation,

American research (National Institute for Occupational Safety and Health / NIOSH, Information Circular, 2010) indicates that longwall mining operations may have difficulty in maintaining consistent compliance with required dust standards. Continuous mining operations are also likely to have difficulty as well. The study quotes that “.....x-ray surveillance data for 2000-2006 show an increase in CWP cases. Nearly 8% of examined underground coal miners with 25 or more years of experience were diagnosed with CWP. ‘Continuous miner operator’ is the most frequently listed occupation on death certificates that record silicosis as the cause of death.”

The same report states that, following the introduction of a coal workers health surveillance program in 1969 (including a free voluntary chest x-ray) the rate of CWP declined through 1999. Unfortunately 2008 data indicated that the decline had stopped and rates had increased again to almost double for miners with 25 or more years in coal after 2000. Of great concern was the fact

that CWP was also showing up in younger miners and the disease was progressing at a faster rate. (NIOSH Information Circular 2010).

Perhaps the increase in CWP can be correlated with the increase in the operation of longwall mining within Queensland and the higher dust levels that are associated with that method of coal extraction.

I have personally (1960s) seen a dust haze in the in ventilated parts of underground coal mines. At no time was I advised that there may be a problem and advised to wear a mask or take other precautions. I recall being warned about possible gas emissions when visiting a NSW underground mine (1960s) and the only advice given was to ensure that there was no metal item taken underground within a specific part of that mine.

Miner – Open Cut. This worker would be exposed to both coal dust and rock dust as a result of blasting, excavation by dragline and other machinery, loading of trucks, truck movements, etc. Until recently the risk to Open Cut Miners of contracting CWP was not recognised nor realised. However the diagnosis of CWP in a miner from an open cut operation in the Goonyella/Moranbah area has at last raised the alert level for workers in this type of operation.

Dust levels in open cut operations are in part controlled by the watering (including surfactants, etc) of haul roads but the availability of water, weather conditions, etc can make this control method not effective unless it is undertaken frequently.

Nitrogen dioxide can be a component of the dust generated by the use of ammonium nitrate explosives and is considered to be toxic to human health.

I can recall seeing a constant dust haze of varying intensity in and over open cut operations in the Moura area as well as in the Ipswich area and parts of the Hunter Valley when working or visiting those areas. The dust would have been generated by scheduled blasting, dragline operations, vehicle movements, etc and subject to weather conditions.

Driller – Surface Exploration. Extensive exploration drilling programs are undertaken in order to establish the extent of a coal resource, including seam thickness, coal quality, weathering profile, mining challenges (faulting, dip, etc) prior to the operation of an underground and an open cut mine. During the process of drilling the operators of the rig may be subjected to constant exposure to rock dust as well as coal dust. This is particularly the case when the depth of the weathering profile of the overburden and coal seam need to be accurately determined in order to plan the open cut location, the impact on the coal resource, etc.

I recall seeing the drilling rig crews being enveloped in rock and coal dust during such programs at Theodore, Moura and the Nebo area. I do not recall seeing the crew wearing masks, nor them being advised to wear masks when at risk of this happening. I do recall that many used a handkerchief tied across their nose and lower face in an effort to minimise the impact of the dust (rock and coal) when they inhaled.

Driller – Underground. It is envisaged that this worker would fall into the same risk category as the Miner – Underground.

Geologist – Surface Exploration. The exploration geologist undertaking the initial ground/surface mapping work for a coal resource would not be at risk.

However an exploration geologist who is managing and overseeing drilling rigs in order to ascertain the size and quality of a coal resource, delineation of the base of the weathered zone, etc may be at the same level of risk as the Driller – Surface Exploration because they too are exposed to the same level of coal and rock dust conditions.

I can recall being enveloped in rock and coal dust during some exploratory drilling programs such as a program undertaken near Goonyella when the purpose of that program was to define the base of the weathered zone in order to accurately predict the volume of coal available within one company's lease area that abutted another company's lease area. The drilling crew and I were enveloped in coal and rock dust each day. I recall that the owner of the property at which I was staying (there was no single female accommodation at Moranbah in 1970) was appalled at my appearance at the end of each work day and requested that she hose me down before I entered the house area. I also recall that a lady who owned and operated a business in Nebo (1970) asked me if it was possible for me to find "a more dignified job" when I, covered in coal dust, entered her store one day.

I do not recall ever being warned of the dangers to my health of exposure to coal and rock dust but I certainly had personal concerns about the potential dangers of the situation and at all times endeavoured not to inhale it. It was an accepted part of that aspect on my job and so I endeavoured to minimise the risk while undertaking my job in a professional manner.

Geologist – Underground. A geologist who worked underground in a coal mine would have been exposed to similar levels of coal dust as an underground miner but the duration of the exposure would be considerably less than that of the miner.

Surveyor – Underground. A surveyor who worked underground in a coal mine would have been exposed to similar levels of coal dust as an underground miner but the duration of the exposure would be considerably less than that of the miner.

Engineer – Underground. An engineer or Mining Engineer who worked underground in a coal mine would have been exposed to similar levels of coal dust as an underground miner but the duration of the exposure would be considerably less than that of the miner.

Mechanic – Underground. A mechanic who worked underground in a coal mine would have been exposed to similar levels of coal dust as an underground miner but the duration of the exposure would be considerably less than that of the miner.

Machinery Operators – Open Cut. Most machinery operators (including dragline operators) in open cut pits would be working in closed air-conditioned cabins and are likely to experience minimal exposure to coal or rock dust during their working hours. However the recent CWP diagnosis of

an open cut miner may mean that any worker in an open cut coal mine operation is also at risk and that additional precautions should be mandatory.

Truck Drivers – Open Cut. Most truck drivers working in open cut pits would be working in closed air-conditioned cabins and are likely to experience minimal exposure to coal or rock dust during their working hours. However the recent CWP diagnosis of an open cut miner may mean that any worker in an open cut coal mine operation is also at risk.

Washing Plant. Workers in washing plants associated with coal mines would be likely to be exposed to coal and rock dust in the early stages of the process after the mine product is transported to the washing plant.

Inspector – Mine (State). A Mines Inspector would be expected to spend periods of time underground in a coal mine and would have been exposed to similar levels of coal dust as an underground miner but the duration of the exposure would be considerably less than that of the miner. During visits to open cut mines they would also be exposed to coal and rock dust but also the duration of exposure would be considerably less than that of the miner.

Railway staff. Railway staff who have worked with

- haulage of the coal mine product from a mine to storage and unloading facilities,
- use of coal as a source of power for steam engines (such as Firemen, associated engine cabin crew, etc), and
- loading of coal wagons that were part of the coal fired steam locomotive and coal wagon units

would have been subjected to considerable exposure to coal dust during their employment in these positions. It is understood that workers whose employment exposed them to coal dust were not advised of the dangers of exposure to that hazard, nor were they advised of the health risks nor offered any protective items.

The impact on these workers is not known and most likely has been not recorded.

Transport Corridor. Populations that live adjacent to, or in the vicinity of transport corridors that are used for the transport of coal from the mine to the point of usage of that product (power house, export port facility, etc) have been at risk of exposure to coal dust. The impact of the transport of coal by road and rail along specific transport corridors went unacknowledged by operators and authorities for many years despite reports of coal dust accumulating on the exterior and interior of homes adjacent to coal transport corridors – mainly rail corridors. Wind erosion of the surface of loaded coal wagons, leakage from wagon doors, spilled coal along the rail corridor and other parts of the train are acknowledged as sources of coal dust in this environment.

The emptying of coal wagons (pre 1970s) at the Rockhampton rail yards generated considerable volumes of dust as the coal was released from the elevated wagons and it is understood that the dust was experienced at houses that were located approx 50m from the operation.

Power House Storage / Stockpiles. People who work in and around these coal stockpiles would have been continuously exposed to coal dust during the delivery of the coal, the manouvering of the material and the maintenance of the area. Coal fired powerhouses require a stockpile of coal to be maintained in case of an emergency such as loss of production at a source mine, industrial disputes, etc. A stockpile would hold enough coal to maintain a supply that would allow operation of the powerhouse for a period of approx seven days.

Port Storage / Stockpiles. Areas allocated to stockpiling coal at ports until loaded aboard a ship for export can be considerable (e.g. approx 17 hectares at the Port of Brisbane in 2013) and also may be a source of coal dust exposure to people who work with in the facility as well as those in adjacent areas downwind unless appropriate mitigation processes are undertaken and maintained. Potential sources of coal dust at these facilities are likely to be from the rail receival station, covered conveyor systems, stackers, use of bulldozers, site traffic and while loading onto the ships.

MONITORING OF THE INDUSTRY

MONITORING – MINE OWNER/OPERATORS

Past- Underground and Open Cut Mines. It is understood that past (e.g pre 1960s) operators of coal mines were required / expected to monitor coal dust levels within their underground operations at a set frequency per shift, records maintained and these open for inspection. The manner in which this information was recorded, the frequency of recordings and the reporting of the observations is not known.... nor if it was enforced.

Present – Underground and Open Cut Mines. Present operating mines, including underground and open cut coal mines, would be required to monitor dust levels in their operating coal mines under strict guidelines and codes of practice (State mining Acts, Safe Work Australia, etc) in order to provide a safe workplace, protect workers' health, etc. It is understood that the approved code of practice (2011) on ventilation of underground mines applies to anyone who has a duty of care as described in the code. The code applies to all underground mines, in particular operating metalliferous and coal mines and includes activities during the life of the mine such as exploration, construction, operation, decommissioning and mine closure. It is concerning that surface mines, quarries and exploration sites do not appear to be within the scope of this code.

There has been a noted adoption of proactive environmental management at mines and associated industries (e.g. ports) in recent years and this has been driven by public awareness, increasing environmental standards, technology and requirements by governments as reported in an AIMM paper in 2015. (Fitzmaurice and Aberton). As a result ongoing dust monitoring is part of mining project approvals.

It is hoped that all currently operating underground and open cut coal mines are subject to strict dust monitoring, recording and reporting (to the relevant State Government authorities) requirements so that work place, health and safety standards are able to be maintained. It is understood that New South Wales has undertaken this code of practice for many years and as a result has achieved outstanding results in the elimination of CWP. The introduction of a personal dust monitor for all employees in and around coal mining operations would provide valuable reliable data within the monitoring network.

It was noted that a report published in August 2013 (Australian Coal Association Research Program website) advised that a study indicated that a new dust monitoring method was found to be reliable and sensitive but also indicated that “..... operators struggle to remove greater than 30% of both respirable and inhalable dust produced on their operating longwalls. It is envisaged that a greater than 50% reduction in both respirable and inhalable dust can be achieved with best practice engineering, which will have a direct reduction in exposure levels to workers on the face and significantly reduce the risk of lung disease in employees.” (Ren, Plush, Aziz – University of Wollongong).

Exploration. To the best of my knowledge there was no monitoring of exposure to coal dust by people involved with exploration programs such as drilling contractors, geologists, field assistants,

etc by companies or State Government authorities prior to 1970 when I left field operations in this workplace.

I note with interest that Safe Work Australia in conjunction with the National Mine Safety Framework Steering Group developed a code of conduct (Ventilation of Underground Mines, July 2011) that was intended to cover all activities during the life of a mine and specifically included “exploration”. I am not aware of the process of monitoring and recording of exposure to coal dust that has been introduced under this code.

Coal Stockpiles. The dispersal of dust from coal stockpiles at mine sites, coal fired powerhouses, ports, etc had been of considerable concern to communities that were affected due to wind dispersal in the past. It would appear that this hazard is now relatively well managed through environmental controls by the responsible authorities. However monitoring of these areas should not be reduced.

Careful consideration should be given to any request by a mining company, freighter, etc for the location of a future coal stockpile and strict environmental and development conditions must be imposed upon the site so that there is no potential for the facility to affect any nearby area of urban or industrial development.

In the mid 1980s a proposal was submitted to Caboolture Shire Council for the construction of a rail haulage line from the Darling Downs to the Caboolture area as the developer proposed an off-shore, deep water port coal loading facility off Bribie Island in order to export the coal from the Darling Downs. As part of this proposal there was a large area of the mainland to be cleared and used as a coal stockpile area..... with another stockpile area proposed on Bribie Island. The coal would be transported by conveyor belt from the mainland stockpile to the port area. Fortunately this proposal was refused by Caboolture Shire Council. The original proposal was the subject of a speech by the then MP for Caboolture D. Frawley MP (Hansard 18.08.1982)

MONITORING – COAL TRANSPORT

Past. As previously stated in this document it is understood that monitoring of coal dust emissions from all forms of coal transport was minimal or possibly even non-existent in Queensland until the late 1960s at the earliest.

Present. In more recent years all aspects of the coal mining industry, coal haulage, stockpiles and associated port facilities have been subjected to greater scrutiny by the community, environmental groups, workplace health and safety and the State Governments as a whole. The tightening of dust monitoring, records and reporting procedures should be constantly kept under review in order to ensure that best practice is maintained within all aspects of the industry. The adoption of a code

of practice (as well as updating that code) by the industry should improve the outcomes for all involved.

Transport Corridors. The Qld Dept of Environment and Heritage state in a report dated 2013 that “Air quality monitoring and reported observations have shown that coal dust is emitted from coal trains during transit and from coal terminal stockpiles. Impacts are generally limited to suburbs in close proximity to such railways and coal terminals.” The same report also states “Coal dust generally comprises a small component of total dust in air near coal railways and coal terminals.”

In recent years coal dust management plans have been developed and implemented by haulage operators, coal miners and terminal operators in order to minimise the impact of coal dust on areas that are adjacent to their operations, in particular the covering/veneering of loaded wagons, covered conveyors, etc.

Detailed monitoring of all corridors (road, rail) that are used for the transport of coal must be undertaken closely and constantly in order to ensure that there is minimal or no coal dust dispersed from these corridors into adjacent and nearby land. All loaded coal wagons should be covered by a veneer before leaving the source mine and that this remain intact until the product arrives at its stockpile or unloading facility. It would also be ideal if the unloaded empty wagons were washed prior to them being returned through the transport corridor to the source mine – thus eliminating further coal dust dispersal.

The transportation of Darling Downs and West Moreton coal through urbanised areas to the Port of Brisbane had a major impact on the adjacent urban areas. However a marked decrease in coal dust was observed around the transport corridor from the New Acland Mine to the Port of Brisbane since the introduction of veneering of wagons was introduced at the mine. It is understood that there are four (4) dust monitoring sites are located along the corridor. (Department of Environment and Heritage Protection report, updated 17.10.16).

The increasing transport of coal from the inland areas of Central Queensland to ports on the coast via rail corridors is likely to have had a major coal dust impact on those communities and their residents. It has been reported that by the end of 2013 all mines in Central Queensland should have veneering systems installed at their load-out facilities. This needs to be monitored by a Government authority in order to ensure that all wagons are covered and to also monitor other leakages of coal dust from the wagons.

The proposed transport corridors between proposed mines in the Galilee Basin to their export ports will pose additional dust emission risks to new areas within the State – both rural and urban. It is hoped that appropriate conditions have been included in the approval documents for these mines and associated infrastructure that specifically target and eliminate these potential risks.

Port stockpiling and Ship Loading. Port stockpiling facilities, including train unloading facilities, are now monitored and should all be covered by management plans such as the Port Of Brisbane Pty Ltd Coal Dust Management Plan (December 2013). It is considered that these management plans should be revised on a regular basis in order to ensure that best practice is being undertaken. The

maintenance of coal stockpiles and coal loading facilities should be the subject of regular inspections by a Government authority and dust monitoring undertaken.

All ports should be monitored by a Government authority in order to ensure that the conditions of approval, codes of conduct and other environmental requirements are being adhered to as required.

MONITORING – STATE GOVERNMENT (ENVIRONMENT, MINES, HEALTH)

Past. It is likely that minimal monitoring was undertaken by State Government authorities and mine operators in and around open cut and underground coal mines in Queensland. This would most likely have reflected the requirements under relevant Acts and also the perceived need at that time to test sample the then operating mines.

It would be interesting know what was the frequency of Government sampling of dust levels in the coal mines, the recording of owner/operator information/data that were supplied to the State Government mines inspectorate and what level of monitoring of all reports was undertaken

Present. The increase in recent years of longwall mining throughout the underground coal mines in Queensland has been documented and has increased efficiency and output of coal. Unfortunately it has also been demonstrated that high dust levels are recorded in and around the machinery that undertake this form of extraction. It is hoped that owner/operator and State Government monitoring of dust levels in those mines has been elevated in order to effectively record the situation. It is understood that the recorded cases of CWP may reflect a higher incidence from such mines. The increase in shifts worked, length of shifts and changed mining methods in recent years (from approx 1990 to today) would have increased exposure to dust for miners and so may have also increased the potential for future CWP incidents.

Extensive research on the automation of longwall mining has been undertaken by the CSIRO at the Queensland Centre for Advanced Technologies (QCAT) at Pullenvale over many years. This work has enabled safety to be improved with the operation of longwall mining. If full automation of underground coal mining and extraction could be achieved this should significantly reduce the exposure of miners to coal dust in the future.

Reports indicate that there are marked differences in the accepted maximum level of dust in mines in Queensland and NSW. I understand that Queensland currently accepts a maximum dust level of 3.0mg/cubic metre. This is above the NSW maximum accepted level of 2.5mg/cubic metre and twice the maximum level accepted in the USA of 1.5mg/cubic metre (recently reduced from 2.0mg/cubic metre). It is considered that Queensland should reduce the permissible maximum level of dust in its mines to that required in the USA that is 1.5mg/cubic metre in the interests of worker health and also mine safety.

Way Forward. It is considered that there are opportunities for the State Government and the coal mine owners/operators within Queensland to move forward in the best interests of the industry as a whole, their workers and other workers in associated parts of the industry and the State Government by

- reducing the maximum acceptable dust level to 1.5mg/cubic metre (as approved in the USA),
- require all owners/operators of current and future underground coal mines to use automated longwall extraction methods in order to minimise the exposure of workers to coal dust,
- to enforce the requirements for monitoring of dust levels in all mining operations by owner/operators, and the immediate forwarding of results to the relevant State Government departments,
- ensure that full records are kept and analysed on a regular basis by appropriately qualified and experienced personnel,
- ensure that all workers in the coal industry and associated participants as listed are monitored by suitably qualified person in Queensland Health on a regular basis (eg. annually or bi-annually), and that they receive appropriate treatment as required.

Reports All reports associated with dust monitoring in open cut and underground mines should be made available to the public within 48 hours of the information being obtained. This would enable miners and other staff working in each mine to be aware of what conditions that had been present during a shift.

MONITORING – UNIONS

It would be expected that the relevant unions that represent any or all people who may have been exposed to coal dust emissions during their employment would be participating in any proposal or program to assess the impact of that exposure may have had as well working with interested parties to eliminate the continuation of that risk.

MONITORING – MEDICAL / HEALTH OFFICERS

Medical Monitoring – Past. It has been reported that monitoring of coal miners by medical practitioners was minimal, and if it was undertaken the radiography, etc was sent to the USA for interpretation and diagnosis due to the lack of suitably experienced medical officers. It has also been reported that, in some cases, the medical information was forwarded to the State mines inspectorate, and it was filed without any analysis or diagnosis being undertaken. It has also been reported that many miners were not provided with the opportunity to undergo regular medical assessments which may have recognised the early stages of CWP. If any of these reported scenarios are correct then questions need to be asked why this was the case, and also why this matter was not raised as an area of concern prior to the recently diagnosed cases of CWP. The role of legislation in this matter should also be investigated.

Medical Monitoring – Future. It is obvious that the current situation must be addressed as matter of urgency. A number of suggestions are made that would improve the apparent shortcomings of previous years and include

- medical practitioners who are used to provide health checks on coal workers should be specifically trained, accredited and skilled in diagnosis of CWP through the use of appropriate radiological methods, interpretation, etc in order to identify the early onset of CWP;
- medical practitioners who are used to provide health checks on coal workers should be entirely independent and not employed by the coal mine owners/operators;
- the establishment in Queensland of an accredited, world recognised training facility to provide training of relevant staff to undertake the monitoring coal-mine-to-end-user process;
- the establishment of a secure database of all relevant information from each mine within the State including company provided dust records, State mines inspectorate dust records, CWP diagnoses, and any other relevant data in order that the information may be analysed and outcomes attained; and
- participation in the suggested CWP reference group to oversee the development and implementation of a mining code of conduct, maximum permissible dust levels, monitoring of in-mine dust readings and analysis, the implementation of appropriate health monitoring and associated leading training of medical staff, monitoring of confirmed CWP sufferers and analysis of all records relevant to this medical condition.

SELF REGULATION .V. GOVERNMENT LEGISLATION

Under no circumstances is it considered to be advisable for the monitoring , recording and reporting of coal dust and other dust levels associated with all aspects of the coal mining industry be allowed to be carried out under self regulation by the owners and operators of the mines, transport facilities, port facilities and association infrastructure.

It is considered that the best interests of the miners and workers in other associated sectors, the owner/operators and the State Government will be best served by insuring that the regulations be overseen by independent persons. This would ensure that the confidence of all parties involved is maintained and that they can work cooperatively together to achieve a common goal.

CONCLUSIONS

The Queensland Government is to be congratulated on the establishment of the Coal Workers' Pneumociosis Select Committee inquiry. It is sincerely hoped that this matter will be successfully examined, answers found and a way forward be detailed so that CWP can become a health issue that is under control and eventually becomes an issue of the past. Unfortunately the conditions that result in CWP were still present in coal mining and associated service sectors until relatively recentlyand may still be occurring in all sectors to this day.

As a result I believe that there will be cases of CWP yet to be found and diagnosed for some years to come.

Helen Gibson

11th November 2016

AUTHOR

Helen Gibson

Background experience

- Studied Geology at Pymble Ladies College (1959-1963); gained First Class Honours 1963.
- BSc from Sydney University, (1964 – 1966); Olga Marion Browne Prize (Fieldwork) 1965. Major in Economic Geology, specialising in coal geology.
- Member of the Geological Society of Australia, Australian Institute of Mining and Metallurgy and Australian Institute of Geoscientists from approx 1964 until approx 1994.
- Joint Coal Board NSW (November 1964 – February 1965) - logging coal and non-coal core.
- Kennecott Explorations Australia Pty Ltd (November 1965 – February 1966) – coal resource research.
- Kennecott Explorations Australia Pty Ltd (November 1966 – February 1967) – base metal resource research.
- Coal Section, Geological Survey of Qld (April 1967 – mid 1970) – Geologist; extensive fieldwork, coal drilling programs at Ipswich, Theodore, Moura, visited Moura No.1 underground.
- Kennecott Explorations Australia Pty Ltd (mid 1970-mid 1972) – Geologist; base metal research; coal exploration drilling program Nebo, Moranbah, Poitrel area (1970).
- Research Resources Pty Ltd (1974-1985) – Principal Geologist; coal resource research including for tenders (Winchester South, Gregory South, etc).
- Caboolture Shire Council (1985-1994) – Shire Councillor.
- Community not-for-profit organisation (1994-2002) – volunteer and Projects Manager; generation and completion of tenders for funding, government liaison.
- Qld State Government (2002-2012) – Administration, office management.
- Retired (2012 to present).