



The Return of Black Lung Disease in Queensland

**CFMEU submission to the
Senate Select Committee on Health**

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Submitted to the:

Senate Select Committee on Health
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1. Overview

- 1.1. For decades the Australian coal mining industry has boasted of its elimination of black lung disease, or coal workers' pneumoconiosis (CWP). This has been a key part of an occupational health and safety record that Australian mining more broadly has used to portray itself as emblematic of a best practice approach to occupational health and safety.
- 1.2. That boast, and that record, has been destroyed with the recent diagnosis of multiple cases of the disease in Queensland which, along with New South Wales, is home for almost all the black coal mining industry.
- 1.3. The CFMEU hopes that the Senate Health Committee, and other inquiries, will result in an overhaul of both Queensland site dust compliance systems and worker health monitoring so that CWP is prevented, and that workers currently suffering CWP are properly diagnosed, treated, compensated and cared for. Australia's public health system – adequately funded – will be an essential element in this effort.
- 1.4. The recurrence of the disease has exposed a litany of failings in mine site management practices, in regulatory compliance systems, and in the health monitoring system in Queensland. The problems are not replicated in the NSW industry, with its dust monitoring and worker health monitoring overseas by the joint industry body Coal Services Pty Ltd.
- 1.5. We are seeing multiple systemic failures borne of complacency – as if CWP once eliminated would never return, rather than requiring constant vigilance.
- 1.6. Industry and government vigilance in Queensland has been so lacking it is arguable that we do not now possess the tools to address the multiple problems:
 - Queensland lacks the skills for proper diagnosis of CWP.
 - Queensland lacks the review mechanism to ensure diagnoses are correct.

- There is no system for following up coal workers after they leave the industry.
- Queensland has a workers compensation system that fails to recognise that CWP symptoms may take many years to manifest, and therefore denies workers their just compensation.
- Queensland has no system for the long term care and support of CWP sufferers.
- Queensland has a mine safety regulator that is unwilling and probably unable to engage in enforcement of compliance regarding dust levels.
- We have a dust standard that is not world best practice.
- Queensland has a dust sampling regime that fails to acknowledge the potential conflict of interest inherent in the mine operator being the sampler.
- We use dust sampling technology that has failed to keep pace with newer intensive production methods and is no longer best practice.

2. Summary of Recommendations

The CFMEU recommendations are:

2.1. Recommendation 1: *World best practice requires that radiologists seeking to make diagnoses of coal workers pneumoconiosis (black lung disease) should be certified as skilled in the use of the ILO Guidelines. Australian State and Federal Governments in conjunction with the Royal Australian and New Zealand College of Radiologists should develop a certification system equivalent to the B Reader scheme in the USA.*

2.2. Recommendation 2: *That the current Review announced by the Queensland Government be found to be a partial response to the CWP crisis and that further measures are required to provide confidence that CWP will be prevented in the future and that, where it is now being diagnosed or may be diagnosed in the future, coal workers will be adequately compensated and cared for.*

2.3. Recommendation 3: *current and revised screening procedures should apply to surface coal workers as much as underground workers.*

- 2.4. Recommendation 4:** that Australian States introduce a system for the lifelong lung monitoring of coal workers whether or not they are currently employed in the industry.
- 2.5. Recommendation 5:** No State or federal workers' compensation system should have any time limit on the making of a claim in respect of CWP.
- 2.6. Recommendation 6:** That the Queensland Government establish a Coal Dust Disease Board to provide lifelong assistance for workers diagnosed with CWP.
- 2.7. Recommendation 7:** that the Queensland Mines Inspectorate develop and implement a clear compliance and enforcement program, including with respect to dust level regulation, that conveys to all parties that compliance with safety regulation is mandatory and that breaches will result in the ceasing of operations and/or prosecution.
- 2.8. Recommendation 8:** there should be improved transparency in the monitoring, compliance and enforcement regime, with full disclosure of the names of mines that have been inspected, dust levels that have been determined, and any recommendations made or compliance action undertaken.
- 2.9. Recommendation 9:** That the Queensland Mines Inspectorate establish a standing dust committee (similar to that operated by Coal Services Pty. Ltd. in NSW) with the participation of industry stakeholders including unions for the purpose of achieving best practice dust control in mines.
- 2.10. Recommendation 10:** that State coal mine safety regulators take responsibility for dust sampling in coal mines, or at least develop the capacity to supervise dust sampling in coal mines including regular spot-checks to ensure compliance.
- 2.11. Recommendation 11:** that existing State coal dust standards be reviewed to ensure they are upgraded to world best practice.
- 2.12. Recommendation 12:** that State coal dust sampling requirements be reviewed with the goal of adopting best practice technology including real-time monitoring.

3. The scourge of Black Lung – the context

- 3.1. Coal was the fuel that, along with the steam engine, was the basis of the Industrial Revolution that transformed the United Kingdom and the western world from the late 1700s. Even today, with the rapid rise of renewable energy technologies, coal remains the most common source of energy for electricity generation and is a fundamental requirement for the making of iron, steel and cement.
- 3.2. In Australia it is one of our largest export industries, the basis for the vast majority of power generation, and a direct employer of over 40,000 people. Indirectly, via associated industries and dependants, many hundreds of thousands of people rely on the industry.
- 3.3. While energy from coal provided the basis for enormous wealth creation from new industries, ordinary working people took many generations – until well into the twentieth century – to experience large rises in incomes, living standards and health.
- 3.4. This submission is not the place to provide a history of the coal mining industry. But it is critical to note that the industry from its inception was extremely hazardous both in terms of catastrophic risks and longer term health impacts. Until relatively recently it was considered virtually inevitable that coal communities would be blighted – that workers and their families would be poorly paid, work in arduous and dangerous conditions, and they and their families would live in highly polluted and degraded environments.
- 3.5. Coal dust is intrinsic to the hazards of coal mining – coal dust contributes to catastrophic risks through its flammability and explosive potential along with the methane gas that is also intrinsic to coal mining.
- 3.6. Here we are concerned with the long term health impacts of coal dust – its contribution to lung disease through inhalation. CWP was considered endemic to coal mining throughout most of its history – if one worked in the mines long enough, one was almost certain to be victim to the disease.

- 3.7. In most parts of the global coal industry the disease has continued to exist despite the development of mine management systems that reduce the risk. The United Kingdom records that between 1998 and 2004 some 570,000(!) compensation claims were made for lung disease from coal mining.¹ (This included emphysema and bronchitis alongside CWP; the British workers compensation system had long resisted recognising the former two diseases as being possibly work-related, so there was a deluge once the link was accepted.)
- 3.8. In the United States, the incidence of CWP among underground coal miners was 11.2% in 1970-74, and 2% during 1995-99. A study by the Center for Disease Control using 2010-11 records for *open-cut* miners found 2% had CWP.² It is understood that the incidence of CWP has resurged in the United States in recent decades – Professor Robert (Bob) Cohen can testify to the Senate Committee regarding a recent incidence rate of 11%, and that there are around 30,000 current cases in the USA.
- 3.9. The likelihood of the disease becoming more rampant due to declines in management standards was brought home in the Upper Big Branch disaster in the USA in April 2010. While the 29 deaths were due to the extended explosions in a poorly-maintained mine, autopsies found that 86% of the dead had black lung scarring – even two with less than 5 years of employment in the coal industry.³⁴
- 3.10. In Australia we have taken the view that CWP has been eliminated for many decades through regulation and standards aimed at good mine ventilation and other dust control. The discovery in the course of this current crisis that 75 cases of CWP were diagnosed in Queensland

¹ Arthur McIvor and Ronald Johnston (2007), *Miners' lung: a history of dust disease in British coal mining*, Studies in Labour History, Aldershot, Ashgate

² Centers for Disease Control and Prevention (2012), *Morbidity and Mortality Weekly Report, Pneumoconiosis and Advanced Occupational Lung Disease Among Surface Coal Miners — 16 States, 2010–2011*, June issue <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6123a2.htm>

³ Industrial Safety and Hygiene News (2013), *Most Upper Big Branch victims had black lung disease*, 20 May, <http://www.ishn.com/articles/95929-most-upper-big-branch-victims-had-black-lung-disease>

⁴ The Chief Executive of Massey Energy, Don Blankenship – who had openly defied regulators over health and safety at the mine – was finally convicted of conspiring to violate safety standards in December 2015. He has yet to be sentenced, but is unlikely to spend time in jail. <http://www.miningweekly.com/article/former-massey-ceo-found-guilty-of-conspiracy-in-west-virginia-mine-blast-2015-12-04>

back in 1984 was an early warning – ignored – that the Queensland regulatory regime was not achieving all that was expected.⁵

3.11. In NSW a more comprehensive system is in place. Coal Services Pty Ltd – formerly the Joint Coal Board – jointly owned by coal companies and the CFMEU – is responsible for regulating dust levels and worker health monitoring.

3.12. Black lung disease or CWP is a health threat that can never actually be eliminated. It is a threat that can be managed so that no worker suffers the disease – but the requirement is continuing high standards of mine site dust management and health monitoring systems.

3.13. Sadly, Queensland coal mine workers have been let down on both counts.

4. The medical condition and correct diagnosis

4.1. In medical terms there are three primary types of lung disease that are classified as pneumoconiosis – asbestosis, silicosis and coal workers' pneumoconiosis (CWP).⁶ Each caused by the inhalation of that type of dust – asbestos, silica and coal.

4.2. Development of the disease usually requires lengthy exposure to the dust and generally develops slowly. CWP manifests firstly as simple CWP that may produce a cough and sputum. It can be asymptomatic – ie. no obvious symptoms. It appears in the lungs as small (1-5mm) round nodules that appear as “opacities” on x-rays. In a minority of cases there is calcification within the nodules.

⁵ Queensland Coal Board (1984), 33rd Annual Report, Brisbane, page 42

⁶ Centers for Disease Control and Prevention: <http://www.cdc.gov/niosh/topics/pneumoconioses/>



Specimen of lung with simple CWP

Source: <http://emedicine.medscape.com/article/297887-overview>

4.3. Continuing exposure can progress to complicated CWP often known as Progressive Massive Fibrosis (PMF) – large masses of dense fibrosis causing severe shortness of breathe, moderate to severe airway obstruction and consequently severe deterioration in quality of life. There are associated heart problems and it often contributes to early death.⁷

⁷ <http://www.pneumoconiosis.org.uk/coal-workers-pneumoconiosis> and <http://radiopaedia.org/articles/coal-workers-pneumoconiosis-2>



Specimen of lung with Progressive Massive Fibrosis
Source: as above

- 4.4. There is no cure, and treatment consists only of managing the symptoms. Prevention is therefore the only correct way to manage the disease, and correct early diagnosis is essential.
- 4.5. Diagnosis of CWP separately from other lung diseases requires considerable expertise. It is typically detected through chest X-rays or CT scans. Most doctors do not encounter CWP and so are not adept at looking for it.
- 4.6. The problem of correct diagnosis has led to the International Labour Office developing its guidelines for the systematic classification of radiographs of pneumoconioses.⁸ In the USA, the National Institute for Occupational Safety and Health (NIOSH) has developed its “B Reader Program” to certify doctors as being capable of classifying X-ray and CT scan results in respect of pneumoconioses.⁹

⁸ ILO (2011), Guidelines for the use of the ILO international classification of radiographs of pneumoconiosis, Revised edition, Geneva http://www.ilo.org/safework/areasofwork/occupational-health/WCMS_108548/lang-en/index.htm

⁹ <http://www.cdc.gov/niosh/topics/chestradiography/breader.html>

4.7. In Australia there is no equivalent certification scheme. While there are many highly-skilled radiologists in Australia, the rarity of the disease combined with the lack of formal certification means that correct diagnosis of CWP by radiologists cannot be assumed. In NSW expertise is maintained through specialist doctors and radiologists working for Coal Services Pty. Ltd.

4.8. The CFMEU in Queensland has resorted to sending X-rays of suspected cases to the United States for analysis by the CWP expert Professor Robert (Bob) Cohen of Northwestern University, Illinois. This has resulted in diagnoses of CWP in coal miners and former coal miners where there had been no previous diagnosis.

4.9. The CFMEU notes that the now-widespread concern over the veracity of x-ray diagnosis in Queensland has led to the Vale company sending recent worker chest x-rays to the USA for examination by a radiologist that is a certified B reader.¹⁰

4.10. ***Recommendation 1:*** *World best practice requires that radiologists seeking to make diagnoses of coal workers pneumoconiosis (black lung disease) should be certified as skilled in the use of the ILO Guidelines. Australian State and Federal Governments in conjunction with the Royal Australian and New Zealand College of Radiologists should develop a certification system equivalent to the B Reader scheme in the USA.*

5. The time line of events

A rough time line of events shows the slow start to the current crisis, with diagnoses acknowledged but their significance downplayed for many months beginning May 2015.

5.1. 18 May 2015 – the workforce Industry Safety and Health Representatives (ISHRs) sent a Safety Alert (see Appendix) to all Queensland coal mines advising that two cases of CWP had been diagnosed and reminding the companies of the legislative requirements on dust control

5.2. 1 October 2015 – further Safety Alert (see same Appendix) sent by ISHRs to all Queensland coal mines advising that three cases of CWP

¹⁰ Emma McBride (2016), "Black lung signs missed" in Queensland Times, Ipswich, 15 February, page 7

had now been diagnosed and reminding the companies of the legislative requirements on dust control.

5.3.10 November 2015 – the three cases of diagnosed CWP are reported by coal industry online newsletter the International Coal News. The ICN reports that the Queensland Mines Inspectorate views the matter as a key concern and says: “It is recommended that mine operators audit and review the effectiveness and implementation of the site safety and health management system to minimise the risk of lung disease to worker”.

5.4. 10-12 November 2015 – the Central Council of CFMEU Mining and Energy passes a strongly-worded resolution on the Queensland CWP cases:

“Central Council expresses its disgust at the reports, emanating from the Queensland District Report, of the discovery of a developing problem with "Black Lung" in the District. Council congratulates the District for the response to date, but recognises that more needs to be done. To this end, we pledge the maximum amount of support possible to the Queensland District from the National Office and other Districts to aid the District in its fight against this insidious issue.

We condemn those Departmental Officers whose failure to make proper use of the statutory health scheme in place in Queensland, has placed the lives of coal miners at serious risk of contracting an appalling disease and ultimately a premature death.

We demand of the Queensland Government, and in particular the Minister for Natural Resources and Mines, to urgently put in place an advisory group to assist in the development of a program to address and provide redress to the failures in the system that have led to a return to the Coal Industry in Queensland of Pneumoconiosis. Failure of the Government and Minister to act quickly and decisively in this regard will leave the Union with no alternative but to develop and undertake a major political, public relations and industrial campaign to force an acceptable result.”

5.5.1 December 2015 – the CFMEU issues a media release highlighting that miners’ lives are at risk as the black lung disease re-emerges.¹¹ (See Appendix) That night, the issue is featured on ABC TV’s 7.30 current affairs program. The Qld Minister for Natural Resources and Mines, The Hon. Dr Anthony Lynham, announces an urgent review of the process

¹¹ [http://cfmeu.com.au/coalminers'-lives-at-risk-as-deadly-"black-lung"-disease-re-emerges-in-queensland-for-the-first-time](http://cfmeu.com.au/coalminers'-lives-at-risk-as-deadly-)

for reviewing the periodic chest x-rays that coal workers undertake.¹² It emerges there are at least tens of thousands of unreviewed x-rays, and the Qld Department of Natural Resources and Mines admits there is a shortage of medical professionals qualified to review the x-rays.

5.6.14 January 2016 – The Qld Minister for Natural Resources and Mines, The Hon. Dr Anthony Lynham, announces a five point plan to tackle the CWP crisis:

- the aforementioned Review of the existing screening system;
- action on coal mines exceeding regulated dust levels
- improving how information is collected and used to ensure cases aren't missed (to deal with the issue of CWP often appearing after a worker has retired or changed industries)
- investigating regulatory changes; and
- placing the issue on the agenda for the national council of mining ministers.¹³

6. The Queensland Review and its shortcomings

6.1. The review announced in early December 2015, while important and needed, is limited in its scope and cannot hope to adequately address the problem that has emerged in Queensland. Even as part of the Five Point Plan announced in mid-January 2016 it is inadequate.

6.2. The Review will determine:

- the adequacy and effectiveness of the existing medical assessment regime;
- the expertise required to effectively monitor for pneumoconiosis;
- the availability of necessary expertise in Queensland;
- a strategy to ensure current mine workers are effectively screened; and
- recommendations about the current scheme to ensure it is fit for purpose for the detection of occupational lung disease through X-ray, spirometry, respiratory symptoms and other relevant medical information.

¹² <https://www.business.qld.gov.au/industry/mining/safety-health/mining-safety-health/medical/coal-board-medical/pneumoconiosis-screening>

¹³ <http://statements.qld.gov.au/Statement/2016/1/14/action-plan-revealed-on-coal-miners-health-issue>

6.3.Nothing that has been announced to date that ensures that:

- Queensland coal mines will consistently comply with the regulated dust levels for coal mines;
- Queensland coal workers can be confident that dust monitoring is being done consistently and objectively without regard to the commercial imperatives of coal mine owners; and
- Queensland coal workers can be confident that their chest x-rays will be properly assessed, that competent monitoring of their health will continue to occur after they have left the industry and that, if diagnosed, they will be adequately compensated and cared for.

6.4.The Review appears to address only the first part of the last point above.

6.5. *Recommendation 2:* *That the current Review announced by the Queensland Government be found to be a partial response to the CWP crisis and that further measures are required to provide confidence that CWP will be prevented in the future and that, where it is now being diagnosed or may be diagnosed in the future, coal workers will be adequately compensated and cared for.*

7. Towards comprehensive long term health monitoring and management

7.1.The current Queensland system provides for periodic chest x-rays of coal workers with a focus on underground coal mines.

7.2.As the data on CWP for the United States cited above indicates, CWP occurs in open-cut workers too – it can occur in surface workers with prolonged exposure to coal dust. The US experience is that it occurs at significant levels among open-cut workers.

7.3. *Recommendation 3:* *current and revised screening procedures should apply to surface coal workers as much as underground workers.*

7.4.There is no system in place for coal workers who have left the industry – to work in another industry, to retire or whatever – to be regularly monitored. It is known that CWP may take many years to manifest and is often asymptomatic in the early stages.

7.5. The CFMEU understands that in the nuclear power industry in the United Kingdom, workers are monitored for the term of their natural life – once they have worked in the industry they are subject to lifetime monitoring.

7.6. In Australia it is left up to individuals to seek further monitoring. This is thoroughly inadequate, especially in the context where radiologists do not have expertise in the diagnosis of CWP and, in the absence of obtaining a detailed work history, are unlikely to engage in the appropriate examination of X-rays or CT scans.

7.7. *Recommendation 4: that Australian States introduce a system for the lifelong lung monitoring of coal workers whether or not they are currently employed in the industry.*

7.8. There should be no time limits on the diagnosis of CWP or entitlement to workers' compensation resulting from it.

7.9. It is already the case that some of the current cases of CWP are having their claim for workers' compensation rejected (or expect to have it rejected) because they are "out of time" to make a claim.

7.10. Given that CWP is an incurable disease that may take many years to manifest, there is no good reason for there being time limits on the making of claims arising from a diagnosis of CWP.

7.11. *Recommendation 5: No State or federal workers' compensation system should have any time limit on the making of a claim in respect of CWP.*

7.12. CWP is not alone among dust diseases that take a long time to manifest and which have lifelong impacts. There is a need to consider programs or system that are able to manage the lifelong care of people affected with CWP whether or not the workers' compensation system is able to attribute responsibility to a particular employer or insurer.

7.13. In NSW the Dust Diseases Authority (formerly the Dust Diseases Board) provides not only financial compensation, it provides on-going assistance to improve quality-of-life. This includes mobility aids,

personal care, and medication and treatment from health professionals, as well as general assistance such as domestic support and respite care for families.¹⁴

7.14. **Recommendation 6:** *That the Queensland Government establish a Coal Dust Disease Board to provide lifelong assistance for workers diagnosed with CWP.*

8. The Mine Site Dust Catastrophe

8.1. There are two fundamental problems with coal mine dust monitoring in Queensland:

- dust monitoring is not carried out independently and there are likely to be erroneous readings; and
- there is no enforcement of the regulated requirement to operate below specified dust levels and many mines have operated while exceeding regulated dust levels indefinitely.

8.1.1. These problems result from an industry and government practice that relies on self-regulation and a culture of encouraging compliance rather than requiring it.

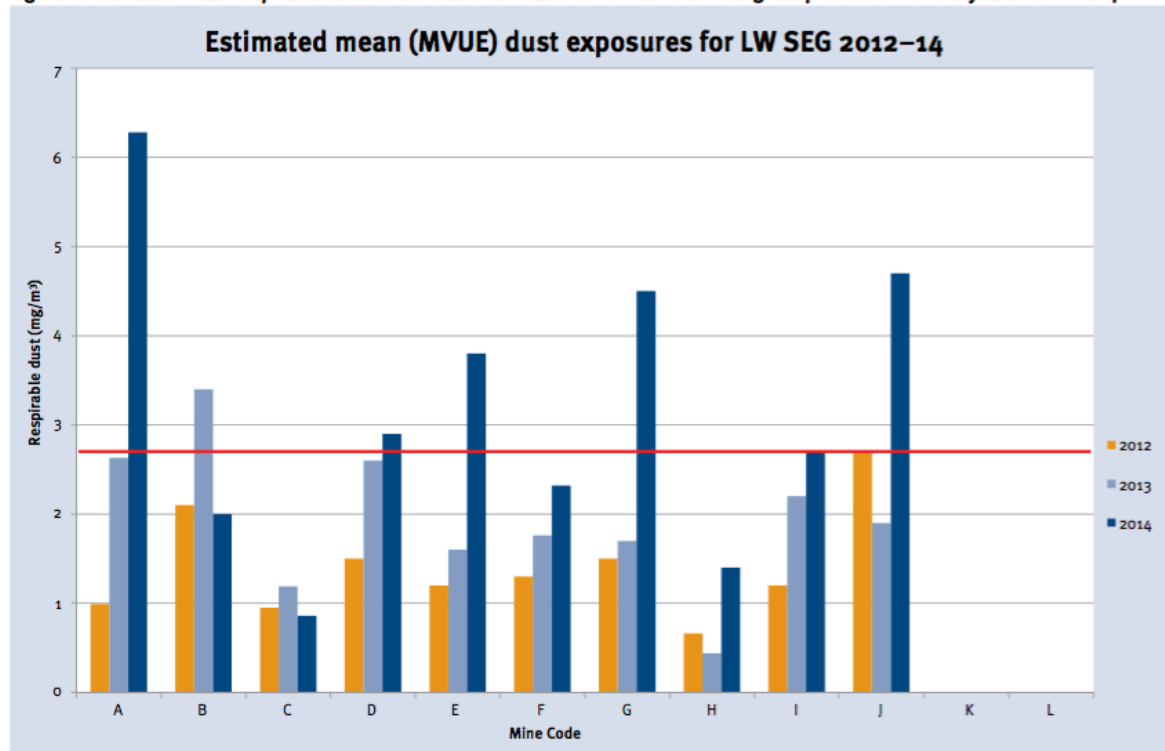
8.2. Light-touch or complacency by the regulator?

8.2.1. The now (in)famous 2014-15 report of the Queensland Mines Inspectorate highlighted the increase of dust levels in mines, including that a large number of underground coal mines were routinely exceeding regulated dust levels.

8.2.2. The report showed that a majority of underground mines were exceeding regulated dust levels. It also showed an overall trend of increasing dust levels.

¹⁴ <https://www.ddb.nsw.gov.au>

Figure 1: Estimated mean respirable dust concentrations measured for workers in longwall production for the years 2012–2014



Notes:

1. The respirable dust (coal dust) exposure limit under the Coal Mining Safety and Health Regulation 2001 is 3 mg/m³. Each coal mine adjusts this regulatory limit where persons work more than eight hours a day or more than 40 hours a week. The most common adjusted exposure limit used in Queensland coal mines is 2.8 mg/m³.
2. Two Queensland underground coal mines did not have an operating longwall during 2012–14 and no data was available for analysis.

8.2.3. The accompanying test is illuminating and worth quoting in full:

“Concern has been raised by the Mines Inspectorate in relation to the exposure of underground coal mine workers to dust generated by mining activities. In response to these concerns, all underground coal mines were requested to provide appropriate personal respirable dust exposure records for statistical analysis. This analysis has shown workers in production areas, particularly development and longwall areas, may be exposed to hazardous levels of respirable dust (Figure 1 and 2). Long term exposure to dust at these levels puts workers at a high risk of developing disabling lung diseases such as coal workers’ pneumoconiosis (black lung).

The first case of coal workers’ pneumoconiosis in a Queensland coal miner in 30 years was reported this year.

Although I am not suggesting that this particular case is linked to the current dust levels, there has been a significant upward trend over the last two years in average dust exposures for longwall and development mining across most sites. Sixty per cent of mines exposed longwall operators to levels equal to or greater than the adjusted regulatory exposure limit during 2014 compared with 10 per cent in 2012. The average dust exposure for longwall operators at one mine

was found to exceed twice the adjusted regulatory exposure limit. The average dust exposure for development operators has risen sharply at a number of mines. In 2012 the average exposure at all mines was below the adjusted regulatory exposure limit compared with 25 per cent rising well above this limit in 2014. Where exceedances in development activities have occurred they have been significant and average exposures have increased by 250 to 450 per cent between 2012 and 2014.

The Mines Inspectorate has been working with mine sites, where groups of workers have been identified as high risk, to reduce worker exposure and achieve compliance with statutory exposure standards. The inspectorate will continue working with industry to minimise worker exposure to hazardous dust levels.”¹⁵

8.2.4. The report relies on readings from the companies – not its own or other independent sources. (More on this later.) A large and growing problem is acknowledged. Widespread and persistent breaches of regulations – regulations that have been adopted as essential to preventing CWP – are acknowledged. That the first case of CWP in 30 years has been diagnosed is acknowledged – but the regulator is reluctant to make the link to dust levels in mines (what else could it have been?). But nowhere in the text does language around mandatory standards enforcement occur. The Inspectorate fails to name the mines associated with the dust levels even though there is clear public interest in knowing which mines are operating in an unsafe manner.¹⁶ The Mines Inspectorate is “working with mine sites” to “reduce workers exposure and achieve compliance”.

8.2.5. If a mine that is operating at twice the regulated safe level is allowed to continue to operate without compliance action – without even being named, it is beyond comprehension as to what level of breach would be required to trigger enforcement action.

8.2.6. As the CWP diagnosis crisis emerged, the role of the Queensland Inspectorate appeared to be to subvert action to prevent the mine site dust problem continuing.

¹⁵ <https://publications.qld.gov.au/dataset/commissioner-for-mine-safety-and-health-queensland-mines-inspectorate-annual-performance-report>

¹⁶ Food safety authorities routinely name restaurants that have been found in breach of food safety standards. It is in the public interest that consumers know which restaurants have problems and whether they have been fixed or are persistent. It follows that coal workers and the public entitled to the same information in respect of unsafe workplaces.

8.2.7. On 21st December 2015, the workforce Industry Safety and Health Representatives issued a notice to all underground coal mines:

“We believe risk from coal mining operations where Coal Mine Worker’s (CMW’s) are being exposed to an atmosphere containing respirable dust levels exceeding an average concentration, calculated under AS 2985, equivalent to the following for an 8-hour period-

- for coal dust—3mg/m³ air;*
- for free silica—0.1mg/m³ air.*

Are operating at an unacceptable level of risk.

Pursuant section 119 (1) (f) of the Coal Mining Safety and Health Act 1999 (CMSHA) We hereby issue you a directive pursuant section 167 of the CMSHA, to suspend any operations where CMW’s are exposed to an atmosphere at the mine containing respirable dust exceeding an average concentration, calculated under AS 2985, equivalent to the following for an 8-hour period-

- for coal dust—3mg/m³ air;*
- for free silica—0.1mg/m³ air.”*

The ISHRs also requested that the mine supply all respirable dust sampling results up until the 1st July 2016. (see Appendix)

8.2.8. The Chief Inspector of Coal Mines, Mr Russell Albury, leapt into action – on 22 December he issued an email to the same underground mines stating:

“Dear SSE (ed: Site Safety Executive)

I have been provided with a copy of a section 167 directive which ISHR Hill and ISHR Woods issued on 22 December 2015 to all operating underground coal mines.

My view is that the directive does not meet the requirements of section 167 because it does not express a belief that risk from operations at any particular mine is currently not at an acceptable level.

Even assuming that the ISHRs had a belief that the risk was not at an acceptable level at each mine when they issued each directive, the directives issued do not state what is required of the mines in order for the suspension to end.

Because I do not think that the directive is valid I do not have power to review the directive nor do I believe it is within the powers of the ISHR to issue.”

8.2.9. A world that prioritised mine safety and compliance with the law would see regulators engaging in enforcement action where safety levels are regularly or severely breached rather than obstructing the actions of others with statutory rights under the law who are seeking compliance with the law.

8.2.10. **Recommendation 7:** *that the Queensland Mines Inspectorate develop and implement a clear compliance and enforcement program, including with respect to dust level regulation, that conveys to all parties that compliance with safety regulation is mandatory and that breaches will result in the ceasing of operations and/or prosecution.*

8.2.11. **Recommendation 8:** *there should be improved transparency in the monitoring, compliance and enforcement regime, with full disclosure of the names of mines that have been inspected, dust levels that have been determined, and any recommendations made or compliance action undertaken.*

8.2.12. **Recommendation 9:** *That the Queensland Mines Inspectorate establish a standing dust committee (similar to that operated by Coal Services Pty. Ltd. in NSW) with the participation of industry stakeholders including unions for the purpose of achieving best practice dust control in mines.*

8.3. Industry self-regulation of dust monitoring

8.3.1. Dust sampling is carried out by the mine companies themselves, as indicated in the previously quoted annual report of the Queensland Mines Inspectorate.

8.3.2. This self-regulation is done in the name of efficiency and cost-effectiveness, as mine operators are on-site and have the equipment and the capacity to do the monitoring.

8.3.3. But it also opens up opportunities for manipulation of data. Samples may be taken on shifts when production is not occurring, or in respect of workers who are not in the sections of the mines that are likely to be the most dusty for the entirety of their shift.

8.3.4. In the USA, there was a major scandal over the manipulation of dust samples in the early 1990s, and there continue to be examples of dust sampling fraud in recent years.¹⁷ There were 185 convictions for dust sampling fraud in the USA between 1980 and 2002, most of them from the early 1990s.

8.3.5. While mining companies always say that safety is their top priority, there should be an acknowledgement that there is either a conflict of interest, or a potential conflict of interest, in coal mining companies being responsible for dust monitoring in their own mines.

8.3.6. Either the safety regulator or its specialist provider SIMTARS should be responsible for the conduct of dust sampling in mines, or at least supervising and regular spot-checking of the process.

8.3.7. ***Recommendation 10:*** *that State coal mine safety regulators take responsibility for dust sampling in coal mines, or at least develop the capacity to supervise dust sampling in coal mines including regular spot-checks to ensure compliance.*

8.4. The appropriateness of the dust regulation level and the technology used

8.4.1. The Qld coal dust standard, as cited in the Mines Inspectorate annual report above, is 3 milligrams per cubic metre for an 8 hour exposure. Where shifts are longer – and they usually are – the standard is adjusted accordingly, with 2.8mg per cubic metre being common.

8.4.2. The United States has revised its standard down from 2 to 1.5mg per cubic metre. This occurred in 2014 with a 2 year phase-in period.¹⁸ The USA has tens of thousands of cases of CWP, but it is in the process of imposing a dust standard that is far more stringent than the Queensland standard. Do we think that Australian coal dust is healthier than US coal dust? Why is Queensland applying a standard that is weaker than that of another major developed

¹⁷ http://www.huffingtonpost.com.au/entry/black-lung-disease-kentucky-coal-dust_n_5368878.html

¹⁸ Associated Press (2014), Obama administration tightens coal dust rules to reduce black lung cases, 24 April

nation that has a large coal industry and a widespread CWP problem?

8.4.3. Recommendation 11: *that existing State coal dust standards be reviewed to ensure they are upgraded to world best practice.*

8.4.4. All coal mine production has become more intensive or high output, including underground coal mines via the use of longwalls, and now with top-caving being added. Dust sampling technology and methods have failed to keep pace with this intensification of production that is likely to result in higher dust levels.

8.4.5. The USA is moving to the technology of real-time monitoring of dust exposure.¹⁹ The potential for dust sampling fraud is reduced (though not eliminated) and workers and management receive earlier notice of high dust levels.

8.4.6. Recommendation 12: *that State coal dust sampling requirements be reviewed with the goal of adopting best practice technology including real-time monitoring.*

¹⁹ Ibid

Appendix 1

CFMEU Media Releases

MEDIA RELEASE



1 December 2015

Coalminers' lives at risk as deadly "Black Lung" disease re-emerges in Queensland for the first time in decades

Three cases of Black Lung have been detected in three months at coal mines in Queensland, in what could be the tip of the iceberg for a disease that had been wiped out in Australia half a century ago.

Black Lung, or Coal Workers Pneumoconiosis, is caused by a build up of coal dust in the lungs due to inadequate ventilation and health standards in coalmines.

While a regulatory system was set up to monitor and detect a range of health issues affecting coalmine workers, which included providing regular x-rays, the miners union believes the system has not been maintained and is compromised.

CFMEU Queensland District President Stephen Smyth confirmed the new cases, sparking fears the deadly disease had re-emerged in unknown proportions.

"It's appalling that companies and regulatory bodies have let health standards deteriorate, putting the lives of workers at serious risk," said Mr Smyth.

"This is a disease that takes hold gradually and we're extremely concerned that recent diagnoses are just the tip of the iceberg,

"Of great concern is that Australian health and regulatory frameworks are no longer equipped to deal with the disease."

A report from the Queensland Government's Health Improvement and Awareness Committee, shows that local authorities do not have the required qualifications to read and interpret x-rays of coal mine workers, leading to a backlog of 100,000 x-rays to be reviewed.

Mr Smyth said specialists from the United States had to be used by the men recently diagnosed because local expertise simply didn't exist anymore.

"There is no way to judge the size of the problem affecting coalmine workers in Queensland, or for how long it has been an issue because the regulatory system has broken down and the medical specialists don't exist in Australia to deal with it.

"There is a real possibility that many more current and ex-mine workers are living and working in Queensland with the disease undiagnosed.

"Failure to detect Black Lung early means that miners will continue to work in the coalfields at a devastating cost to their health."

The CFMEU welcomes the Queensland Government's decision to conduct a review and is seeking urgent action from government and industry to address this issue. The union has made a number of recommendations that need to be enacted as a matter of urgency.

Stand up. Speak out. Come home.

The CFMEU Mining and Energy Division is seeking:

- Obtain and process all exposure data for 2015.
- Consider the establishment of an industry database for coal mines to monitor all personal exposure data.
- Ensure that suitably qualified “B Readers” review all x-rays taken of coalmine workers for dust disease, not just medical conditions.
- Identify other at-risk workers by randomly sampling those with 15-20+ years service in the industry and performing checks.
- Implement a system to clear the backlog of 100,000 outstanding worker medicals.
- Implement a community outreach process to encourage people in Ipswich, Collinsville, Blackwater and Moura to come forward and get checked.
- With Black Lung developing later in careers or during retirement it is vital that healthcare and screening extends beyond the employment of a worker to ensure they receive the support they need when they need it.
- That chest x-rays be mandatory and regular for mine workers, as well as on termination.
- Communicate to the wider industry the risks given the three confirmed cases of Black Lung.

Contact: Tim O’Halloran 0409 059 617

Stand up. Speak out. Come home.

MEDIA RELEASE



24 December 2015

New cases of deadly Black Lung disease emerge as new campaign launches to protect miners

A total of nine cases of Black lung disease are either confirmed or feared in Queensland, with one new case confirmed and another four cases awaiting official diagnosis. It follows four cases reported in November, bringing the total to nine.

CFMEU Queensland Mining and Energy division President Steve Smyth said with more than one case per week being diagnosed in the last two months, the Union's worst fears were starting to be realised and they expect many more diagnosed cases in coming months.

"We can't put a figure on it because the regulatory system that is meant to detect problems has been asleep for decades, but it could be a big number," Mr Smyth said.

"They haven't had specialists, who are known as 'B -readers', checking miners X-rays and according to data reported by mining companies themselves, dust levels have been 5-10 times the legal limit. That has to change."

A new campaign was today launched aimed at improving health checks, dust inspections and other government regulation. *Dust to Dust; Make Black Lung History* will seek a public inquiry into the re-emergence of the disease and six clear commitments from the Queensland Government.

- New legislation requiring dust levels to be monitored and publicly reported by an independent statutory body – identifying individual mines by name and company.
- Ensure suitably qualified "B Readers" review all x-rays taken of coalmine workers and fund a training programme in industry best practises for coal dust controls.
- Immediately clear the backlog of 100,000 outstanding worker medicals.
- Healthcare and screening to be extended into workers' retirement.
- Identify other at-risk workers by randomly sampling those with 15+ years service in the mining industry and performing checks.
- A community information and outreach program to encourage people in mining communities to be checked.

Percy Verrall was the first miner to be diagnosed with Black Lung disease in Australia in decades, uncovering a major health crisis and he has encouraged other miners to come forward and share their own stories and dust related health issue via a new information hub at www.blacklung.com.au.

"Percy is an incredibly brave man and has opened up in a short film to be released soon, but thousands of other mine workers continue to work in conditions with dust levels well above the legal limit and tens of thousands of X-rays remain unchecked," Mr Smyth said.

"Workers are concerned, families are worried, and the community wants to lend a hand, but there has been no easy way to get information or get involved.

"If people are concerned about their health or just want more information, we recommend they visit the site to sign up to the campaign and register their health issue and story.

"It's appalling that companies and regulatory bodies have let health standards deteriorate, putting the lives of workers at serious risk.

"The Queensland Government's Sims Review is a welcome start, but we must give people a chance to have their say and make public submissions through an open and transparent process. I hope the Government opens its review up and we stand ready to work with them if and when they do."

Media contact: Tim O'Halloran 0409 059 617 / Richard Mehrtens 0434 956 362



MEDIA RELEASE



25 January 2016

Wrong advice exposing miners to greater Black Lung danger

The CFMEU has raised concerns that health professionals assigned to review lung x-rays of the mining workforce are not qualified for the task, amidst division between the claims of Government and the relevant health 'college'.

The Chief Inspector of Coal Mines told workers in December that radiologists in Queensland are trained to the required standards, and wrote to workers to that affect.

Understandably workers are relying on this advice as they search for a medical practitioner who can test them for Black Lung disease.

However in correspondence to its own members, the Royal Australian and New Zealand College of Radiologists has made clear that only a fraction of local radiologists are qualified, setting out four key criteria.

"Radiologists should only report on screening chest radiographs for CWP if they have experience in reporting screening radiographs for pneumoconiosis, are familiar with the ILO Classification, are willing to report using the Classification and have sufficient caseload of referrals to maintain their competence in this area."

CFMEU Mining and Energy District President Steve Smyth said confusion in the past has put peoples lives at risk and authorities now need to embrace "the whole ugly truth".

The questions are: Who is checking the x-rays and are they qualified and why did the Department write to workers in December stating that all Queensland radiologists are qualified to carry out checks.

"In correspondence to its own members, RANZCR has made it clear that Australian radiologists are not all qualified to identify Black Lung, nor does the college seem to know how many of their members would actually meet the rigorous requirements.

"The RANZCR has said that a register of qualified radiologists would be available shortly and the union supports the establishment of such a register, but it must be a list of individuals qualified to the ILO standard.

"The union wants to work constructively with the government and stakeholders on this register and other policy change, but we have to be honest with each other and with mining workers and Black Lung victims because lives are at stake.

"The CFMEU is calling for a public clarification so the issue can be dealt with on the facts – which radiologists are trained to the ILO standard?

"Incorrect information provided to workers should be redacted and clarified, as this information is relied upon by workers seeking medical attention.

"In developing the register, the union wants to see documentation from RANZCR which confirms that the right level of training is provided to individuals on the list, and for the college to detail just what that training involves.

"And we call on the Queensland Government to outline their plan for ensuring that all x-rays are assessed against the ILO standards by a qualified B-Reader and how they will provide these assurances to workers."

Media contact: Tim O'Halloran 0409 059 617 / Richard Mehrtens 0434 956 362



MEDIA RELEASE



12 February 2016

National Public Inquiry into Black Lung disease welcomed

The campaign to Make Black Lung History took a big step forward this week with a Senate Inquiry into Black Lung disease announced by the Senate Standing Committee on Health.

CFMEU Mining and Energy division General President Tony Maher said the combination of a national public inquiry and the Queensland Government's reviews on the issue gave him confidence all governments would work together to come up with a solution to the growing health crisis.

"This national inquiry allows victims and experts to have their say in an open public forum, make submissions and get all the issues out in the open," Mr Maher said.

"Australia's coal miners deserve the safest possible conditions at work and if mining companies are not properly managing dust levels that must be addressed by government as an urgent priority."

"We also need to make sure the workers, including those who have retired, are given the health and other support they need to live the most comfortable life possible under the circumstance.

"People like Percy Verrall and his family deserve all the help and support they need at a tough time, just as the victims of asbestos deserved the support they eventually received."

CFMEU Mining and Energy division General Secretary Andrew Vickers said he expected mining companies and regulators to cooperate with the Senate Inquiry and called on all involved to work cooperatively in the interests of workers affected by the disease.

"This is an opportunity for all of us to come together as a mining community and solve this problem to protect the health of current and future generations of coal miners," Mr Vickers said.

"We've already had six victims diagnosed and our members are concerned right across the country – in Victoria, New South Wales, Tasmania, Western Australia where mining is a key industry. They deserve to know they are safe when they go to work.

CFMEU Queensland District President Stephen Smyth said the CFMEU had a number of key reforms they were seeking and a national inquiry was an opportunity to look at successful approaches in other jurisdictions and part of the world.

"In Queensland, we've seen six cases diagnosed and many more miners are currently being checked. At the end of the Queensland Government's reviews and this national Public Inquiry, we want Queensland to get world's best practice regulation and oversight of the disease.

"The current Queensland Government have inherited this problem, but it's not time to clean up the mess left behind by previous governments."

The campaign *Dust to Dust; Make Black Lung History* is seeking six clear commitments from Government.

- New legislation requiring dust levels to be monitored and publicly reported by an independent statutory body – identifying individual mines by name and company.
- Ensure suitably qualified "B Readers" review all x-rays taken of coalmine workers and fund a training programme in industry best practises for coal dust controls.
- Immediately clear the backlog of 100,000 outstanding worker medicals in Queensland.
- Healthcare and screening to be extended into workers' retirement.
- Identify other at-risk workers by randomly sampling those with 15+ years service in the mining industry and performing checks.
- A community information program to encourage people in mining communities to be checked.

Information is available at www.dusttodust.com.au.

Media contact: Tim O'Halloran 0409 059 617



Appendix 2

Queensland Industry Health and Safety Representatives

Safety Alerts issued in 2015 re Black Lung



**Construction, Forestry,
Mining & Energy Union**
Mining and Energy Division
Queensland District Branch
ABN 73 089 711 903

Brisbane
P.O. Box 508, Spring Hill Qld 4004
Level 2, 61 Bowen Street, Spring Hill 4000
P 07 3839 8588 **F** 07 3839 8404

INDUSTRY SAFETY AND HEALTH REPRESENTATIVES
DISTRICT UNION CHECK INSPECTORS

SAFETY ALERT

18th May 2015

PNEUMOCONIOSIS (BLACK LUNG)

TO ALL COAL MINERS

In the previous months there has been two cases of Pneumoconiosis reported in the Queensland coal industry. It is with regret that due to the report of these two case of Pneumoconiosis that we see it necessary to remind all Coal Mine Worker's of section 89 of the Coal Mining Safety and Health Regulations 2001.

In essence section 89 of the Coal Mining Safety and Health Regulations 2001 requires that a Coal Mine Worker exposure to respirable dust is kept to an acceptable level and that a Coal Mine Worker does not breathe an atmosphere containing respirable exceeding concentrations $3\text{mg}/\text{m}^3$ air for coal dust and $0.1\text{mg}/\text{m}^3$ air for free silica for an 8 hour shift.

Blackwater
45 Arthur Street
Blackwater Qld 4717

P 07 4982 5131
F 07 4982 6325

Dysart
Shop 24B Garden Plaza
Shannon Crescent
Dysart Qld 4745

P 07 4958 2318
F 07 4950 0065

Mackay
33 Milton Street
Mackay Qld 4740

P 07 4957 2644
F 07 4951 3241

Moranbah
Cnr Mills Avenue &
Bacon Street
Moranbah Qld 4744

P 07 4941 7004
F 07 4941 5269

Rockhampton
Level 5/156 Bolsover Street
Rockhampton Qld 4700

P 07 4922 7100
F 07 4922 7105

The Safety and Health Management System must allow for monitoring of respirable dust. The Site Senior Executive must ensure that Coal Mine Worker's are not exposed to unacceptable levels of respirable dust and that if unacceptable levels of respirable dust is detected then a review of the controls for minimising the dust must be reviewed.

The use of Personal Protective Equipment is **ONLY TO BE USED** as last resort **IF THERE CAN BE NO OTHER WAY** to reduce the levels of dust to an acceptable level.

Dust

- (1) A coal mine's safety and health management system must provide ways of ensuring—
 - (a) each coal mine worker's exposure to respirable dust at the mine is kept to an acceptable level; and
 - (b) the worker does not breathe an atmosphere at the mine containing respirable dust exceeding an average concentration, calculated under AS 2985, equivalent to the following for an 8-hour period—
 - (i) for coal dust— $3\text{mg}/\text{m}^3$ air;
 - (ii) for free silica— $0.1\text{mg}/\text{m}^3$ air.

Editor's note—

AS 2985 'Workplace atmospheres—Method for sampling and gravimetric determination of respirable dust'

- (2) If a person works a shift of more than 8 hours at the mine, the system must provide ways of ensuring the person's dosage of respirable dust is not more than the equivalent dosage for a person working an 8-hour shift.
- (3) The system must provide that, if the average concentration of respirable dust in the atmosphere can not be reduced to the levels stated in subsection (1)—
 - (a) the controls for minimising dust must be reviewed; and
 - (b) if the average concentration still can not be reduced to the levels stated in subsection (1), personal protective equipment must be supplied for use by persons in the work environment.
- (4) The system must provide ways of suppressing excessive airborne dust so a person's safety is not threatened, including, for example, by reduced visibility.
- (5) The system must provide for—
 - (a) monitoring and recording concentrations of respirable dust and free silica in the atmosphere of the work environment; and
 - (b) keeping the record in a location that is easily accessible by each coal mine worker at the mine.

All controls need to reviewed these include but on limited to;

- Positioning of Coal Mine Worker's.
- Speed of coal cutting.
- Ventilation.
- Dust suppression.

- Maintenance on coal clearance systems.
- Road maintenance.

All the systems must be in place and working before the use of PERSONAL PROTECTIVE EQUIPMENT can even be considered as a control.



**SAFETY IS
NOT FREE**

STAND UP. SPEAK OUT. COME HOME.

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INDUSTRY SAFETY AND HEALTH REPRESENTATIVES
DISTRICT UNION CHECK INSPECTORS

SAFETY ALERT

1st October 2015

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