

IPSWICH STATION, RISK and POLLUTION

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BUNDAMBA

Sch 4 - Personal Information

We ask that the Queensland Government:

1. Covers all coal trains to prevent community health impacts from coal dust
2. Increase monitoring of air pollutants at Ipswich Station and surrounds

Ipswich station is an underground, coal load carrying and passenger-intense station. There are therefore high risks of health impacts from air pollution at Ipswich Station, particularly due to the unfiltered diesel and coal dust.

This risk is heightened due to the number of sensitive passengers travelling through Ipswich station, from the local medical precinct, and the planning children's aquatic play centre.

The risk may increase with the possibility of Acland Stage 3 opening and increasing coal train traffic through the station.

Ipswich station is frequented by the usual commuters and those with higher risks. These include:-

- School children who we know may walk faster and naturally breathe faster.
- Lung impaired people who may also be going to the local hospital.
- Likewise, pregnant and nursing mothers going to the large medical precinct. We already have studies indicating birth defect risks with pregnancy and pollution.¹
- The elderly who are generally at risk.
- Frequent users often going to work every day.
- Rail staff

To reiterate: it is possible that there are **unusual numbers of young, sick, lung-impaired people and pregnant and feeding mothers using the station**. This is due to the ever growing nearby medical precinct and hospitals and the surrounding education hub. Additionally, our mining history with associated workers' lung impairments, a markedly aging population, and the termination of many trains here with attendant bus links to schools create further risks.

Relatedly, the government itself has cardio-vascular related services within the immediate environs of Ipswich Station. Air pollution, and specifically diesel and coal dust have well-known correlations of morbidity and mortality with some of these very diseases.²

TWO COMPONENTS OF POLLUTION AT IPSWICH UNDERGROUND STATION – Diesel and coal dust

We know that coal dust and diesel pollutants are both carcinogens not only because they are particulates but these specific particulates are carcinogens, due their toxic chemical composition.

These billow around the station at Ipswich with particular concentration due to its underground nature. Coal dust may billow just in a very small area near the rail, in its coarser fractions and so resettle and accumulate there exacerbating the problem.

¹ <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0005408>

² <http://heart.bmj.com/content/100/14/1093>

While much shorter periods, as those for commuters are less easy to monitor, it is obvious that these negative pollution effects add to existing negative health indications of shorter ranges of exposure in say a 24 hour period. We are all very aware of the ambient pollution characterising our cities. These extremely short term exposures of a passing coal train will affect the usual scientific measurements of pollution exposure in a 24 hour period. **Studies are needed to determine the risks of these short exposures to the community.**

The risk is heightened for those who undertake frequent, regular use of transport and those with impaired health or greater vulnerability, like young and old people.

As our government's own website notes, short-term exposure to raised levels may cause immediate health effects like wheezing or shortness of breath in vulnerable groups, such as asthmatics. In these cases, standards are set for short averaging periods, such as 1, 4 or 8 hours. More importantly it goes on to say:

*"These short-term standards are appropriate if the human body can effectively deal with elevated maximum concentrations over shorter exposure times without either irreversible damage or permanent accumulation of the pollutant in the body."*³

Presumably these will differ with people's health and biological characteristics. There has been no research that we are aware of to determine how they can cope with these effects.

DIESEL

While we know the risks are mainly demonstrated in occupational settings we also note that they are still present in low risk assessments of exposure (1,2,3,4) which may have much greater elements of filtered diesel. Unfiltered diesel may more likely be connected to occupational settings. While we don't appear to have evidence of very short term exposures, the NO² factor is significant in studies.⁴

COAL DUST

The problem of fugitive coal dust from uncovered but veneered wagons is as yet not independently tested while it is admitted even in existing self- assessment studies. However fugitive material in coarse fractions which will churn constantly and build over time and finer fragments which may escape via the platform to the outside. The less coarse fraction will go more widely including into the Ipswich mall.

CONCLUSION

These two particulate sources need specific targeted monitoring and a warning system. We do not know their short- term effects on our targeted Ipswich users who are slightly unusual in composition. It would be particularly unfair not to warn people of the small but likely demonstrable connection of exposure to diesel and coal dust.

Acting to cover coal wagons immediately is a small step to dealing with problem in a precautionary way until further research and monitoring demonstrates more definitively the problem for users and staff at Ipswich station. Monitoring in appropriate locations to capture commuter experiences on platforms as well as workers and nearby facilities including homes is essential. More monitoring and research is needed as well as precautionary actions.

³ [/www.qld.gov.au/environment/pollution/monitoring/air-monitoring/interpreting/](http://www.qld.gov.au/environment/pollution/monitoring/air-monitoring/interpreting/)

⁴ <https://www.cancercouncil.com.au/86083/cancer-information/general-information-cancer-information/cancer-questions-myths/environmental-and-occupational-carcinogens/diesel-fuel-emissions/>

Queenslander's deserve to know what's in our air

Clean Air Queensland call on the Queensland Government to:

- **immediately require that all coal transports in South East Queensland are required to be covered with physical cover (lids);**
- **extend the current enquiry into Black Lung to examine risks to community health from coal mines, stockpiles and transports;**
- **end self-regulation by the coal industry of air emissions and instead undertakes more auditing and monitoring itself;**
- **improve enforcement of best practice dust mitigation; and**
- **install comprehensive real time monitoring for all coal mines, ports, stockpiles and transport routes.**

The Queensland coal industry operates under a dangerously lax regulatory framework which potentially has widespread and severe health implications for many heavily populated centres, towns and rural communities in Queensland.

During the last 10 years, particle (PM10) emissions from coal mining in Queensland have increased by 187%. When this year's NPI report is released on March 31/2018, Clean Air Queensland expect there will have been another significant increase.

With the resurgence of Black Lung disease (Coal Workers Pneumoconiosis) the Queensland Government recently extended the terms of reference for a parliamentary inquiry from open cut coal mines to workers in underground coal mines, coal-fired power stations and coal terminals. Unfortunately, the inquiry has not been extended to the hundreds of thousands of Queenslanders who work and live close to coal mines, stockpiles and transport infrastructure.

- **Currently up to 10 million tonnes of uncovered coal per annum is transported across the Darling Downs, through Toowoomba, Ipswich and 21 suburbs of Brisbane.**
- **40 000 children attend schools or daycare within 1 km of the uncovered coal transports in South east Queensland.**

Industry has been defending these transports as safe but even though the government's own studies suggest that there are elevated rates of particulate pollution from coal transport. The only reason these emissions have been declared safe is because the ambient air quality in the vicinity of train lines is below the average daily Australian clean air standard. Peak emissions are not recorded in current monitoring. This is a misuse of the clean air standard and puts at risk the health of thousands of vulnerable community members.

Ambient air quality monitoring does not safeguard community health from peak pollution events from stockpiles and intermittent events like the passing of uncovered coal trains. [Even small increases in localised or ambient pollution levels raise the rate of Lung Cancer.](#)

Currently the industry claims that veneering is reducing particulate levels on some Queensland coal transports but the efficacy of the veneering process at best is a partial fix though no comprehensive studies have been conducted to confirm this and empty trains are not veneered at all.

A recent study published in the Australian & New Zealand Journal of Public Health found that if average daily pollution levels were allowed to increase to just below the current Australian National Clean Air standards then we could expect an extra 6000 deaths and 20 000 emergency hospital admissions annually in Australia from preventable particulate pollution.

Clearly the present Queensland and Australian pollution standards are inadequate to prevent serious impacts on community health.

Clean Air Queensland

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DL Release