Australian tunnel construction workers exposed to dangerous silica dust

Jenny Campbell 9 December 2024

Tunnel construction workers in Australia's most populous state were repeatedly exposed to dangerous levels of respirable crystalline silica on major government projects between 2016 and 2020, historical air quality readings show. More recent data would likely show that this exposure is ongoing, but the state safety regulator has refused to release it.

The 2016–20 figures were released by New South Wales (NSW) state transit agency Transport for NSW (TfNSW) after a Government Information Public Access (GIPA) request by the Australian Workers Union (AWU).

The data, reported by the *Sydney Morning Herald*, revealed that workers involved in the construction of Sydney Metro and Southwest tunnels were exposed to silica levels over 100 times the "safe" limit before 2020, and more than 200 times the new standard set in that year by Safe Work Australia.

The Workplace Exposure Standard (WES) was halved in 2020 from 0.1 milligrams per cubic metre to 0.05mg/cc. This underscores not only the danger of exposure to the deadly dust, but also that governments, construction companies and unions have been aware of the risk for some time.

TfNSW released 948 measurements, of which 318—more than one third—exceeded 0.1mg/cc. In 80 of those cases, workers had no personal protective equipment. Some of the readings were as high as 10.4mg/cc.

In a submission to the NSW Standing Committee on Law and Justice in mid-October, the AWU claimed that their request for up-to-date silica dust readings on the state's tunnelling projects had been refused by SafeWork NSW.

It has since emerged that the state government's workplace safety regulator, supposedly tasked with

"reducing work related fatalities, serious injuries and illnesses," suppressed this data due to pressure from the construction companies responsible for the projects.

Abigail Boyd, work health and safety spokesperson for NSW Greens, told state parliament on November 20 that, in refusing the AWU request:

"SafeWork cited the potential negative impact on large construction companies of the release of information which could harm their reputation... [and] expose them to the potential risk of third-party civil litigation."

That the regulatory body purportedly responsible for ensuring health and safety of workers is running interference for companies that are putting lives at risk speaks to the corporate interests SafeWork NSW represents. It also indicates that the companies involved, as well as the government, are fully aware that the WES are being routinely transgressed, endangering the lives of tunnel and other construction workers who number in the tens of thousands.

In response to revised regulations set out by Safe Work Australia on September 1, the AWU website blithely announced, "Workers to breathe easy as new silica dust laws take effect." The union told the 600,000 workers employed in hazardous silica dust environments across Australia they can now "enjoy protections at work against this deadly dust."

This is a deliberate attempt by the AWU to paper over the ongoing risk to workers' lives from silica dust exposure. The union's own GIPA requests demonstrate that not only have corporations routinely ignored existing regulations, the government agencies responsible for enforcing the rules have been covering it up.

The AWU is also trying to conceal its own role in exposing workers to dangerous conditions. Even armed

with figures showing deadly levels of silica dust exposure, the union has never called on workers to down tools on the Metro tunnel projects to demand safe conditions. Instead, they have ensured operations continued, whatever the risk, in order to protect the profit interests of the major construction companies.

Silica is a naturally occurring mineral found in the sandstone and shale which forms the bedrock of Sydney and surrounding suburbs. When disturbed by tunnelling machinery, silica is atomised into fine particles called respirable crystalline silica, or crystalline silica dust, which construction workers have been inhaling in Australia for well over one hundred years.

The inhaled silica embeds itself into the lung tissue and cannot be expelled. The effects of prolonged silica inhalation are irreversible with lung transplant being the only life-saving option for the worst cases. Crystalline silica dust is 100 times smaller than a grain of sand and, according to the Cancer Council, prolonged inhalation causes lung cancer, silicosis, kidney disease and chronic obstructive pulmonary disease.

Methods of preventing silicosis and lung cancer resulting from exposure to silica dust include fit-tested respirators, on-tool extraction systems, water suppression and ventilation.

A study conducted by Curtin University in 2022 calculated that 10,000 Australian workers will be diagnosed with lung cancer and up to 103,000 with silicosis in the coming period as a result of exposure to respirable crystalline silica. According to iCare, the largest workers compensation insurer in NSW, the number of new entrants to the Dust Diseases Scheme, leapt from 38 in the 2018–19 financial year to 373 in 2023–24.

The collusion of SafeWork NSW with the major construction companies in keeping recent air quality data under wraps demonstrates that workers' health cannot be left in the hands of the government safety regulators. These agencies exist to cover over the prevalence of unsafe working conditions that is a direct result of the subordination of every interest of workers, including their lives, to big-business profits.

That is a political issue, implicating capitalist governments, Liberal-National Coalition and Labor alike, and all of the parliamentary parties. The Greens for instance, while they may occasionally posture over elements of workers' safety, uphold the dictatorship of the banks and the corporations that is the essence of capitalism.

Neither can the AWU, which, along with all the other unions, serves as an industrial police force for the corporations, be entrusted with workers' safety. Their paid health and safety officers, who have the power to stop work over safety concerns, instead ensure that workers remain on the job, under the illusion that issues are being reported and "investigated" by the probusiness safety regulators.

Workers on tunnelling projects and throughout the construction industry must form rank-and-file committees, independent of the unions, to take workplace safety into their own hands.



To contact the WSWS and the Socialist Equality Party visit:

wsws.org/contact