REPORT ON PROCEEDINGS BEFORE

STANDING COMMITTEE ON LAW AND JUSTICE

2024 REVIEW OF THE DUST DISEASES SCHEME

At Macquarie Room, Parliament House, Sydney, on Friday 2 May 2025

The Committee met at 9:00.

CORRECTED

PRESENT

The Hon. Greg Donnelly (Chair)

The Hon. Mark Banasiak
Ms Abigail Boyd
The Hon. Susan Carter
The Hon. Anthony D'Adam
The Hon. Chris Rath (Deputy Chair)
The Hon. Rod Roberts

PRESENT VIA VIDEOCONFERENCE

The Hon. Stephen Lawrence

The CHAIR: I welcome everyone present here today or joining us over the internet for the third hearing of the Committee's 2024 review of the dust diseases scheme. I acknowledge the Gadigal people of the Eora nation, the traditional custodians of the lands on which we are meeting today. I pay respects to Elders past and present and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of New South Wales. I also acknowledge and pay my respects to any Aboriginal and Torres Strait Islander people joining us today.

My name is Greg Donnelly and I'm the Chair of the Committee. I commence by asking everyone, if they've not done so, to please turn their mobile phones to silent. Parliamentary privilege applies to witnesses in relation to the evidence they give today. However, it does not apply to what witnesses say outside of the hearing. I urge witnesses to be careful about making comments to the media or to others after completing their evidence. In addition, the Legislative Council has adopted rules to provide procedural fairness to inquiry participants. I encourage Committee members and witnesses to be mindful of these procedures.

Mr MARTIN SMITH, Group General Manager, Health, Sustainability and Climate, John Holland, affirmed and examined

The CHAIR: I welcome our first witness who is joining us today. I'll commence by inviting you to make an opening statement and then, if you're comfortable, we'll take the next half hour to ask you questions. As I indicated to you previously, there are members of the Opposition, the crossbench and the Government.

MARTIN SMITH: Thank you to the Committee for the invitation to address this inquiry. This is a very important issue for our people and the construction industry. My name is Martin Smith, and I'm here in the capacity of Group General Manager, Health, Sustainability and Climate for John Holland. I'm responsible for overseeing the development and implementation of John Holland's health and safety management system and processes, including managing the risks around silica on our tunnelling projects. At John Holland we are fully committed to the health, safety and wellbeing of our people and contractors, and we take all risks associated with tunnelling work seriously and comply with all the relevant workplace health and safety regulations. I have been following the proceedings of the Committee and want to take the opportunity to briefly address some issues raised through the course of the proceedings, after which I'm more than happy to answer any questions.

The first is the distinction between a workplace standard exceedence and individual exposure. Whilst it's important to note that an exceedence does not necessarily mean workers have been exposed, we take both extremely seriously, as does our workplace regulator, Comcare. When planning to identify and control the variety of high-risk activities on our sites, we look firstly to how we can eliminate the hazard. If this is not possible, we then work our way down the hierarchy of controls, employing controls consisting of engineering, substitution, isolation, isolation training and personal protective equipment. This method is also applied to the identification and control of respirable crystalline silica, where we aim to eliminate the generation of silica dust at its source and employ ventilation systems, water suppression, sealed enclosed plant cabins, all designed to minimise the level of silica in the air and reduce exposure. The use of specialised PPE, including Versaflo masks, is the last line of defence and is never used in isolation of other higher order levels of control. We ensure workers are trained in how to properly fit and wear their PPE. All levels of control have improved in their levels of effectiveness over the years, and they continue to do so.

I want to address some commentary about access to air quality monitoring data on our sites. We provide de-identified results of all air quality monitoring, as well as actions and recommendations to workers via site noticeboards and toolbox tools, which happens at the beginning of shifts. This information is shared with union representatives, and we also work directly with impacted people if there has been an issue. In addition to sharing information with our workforce, we also provide our results, including any exceedences, to our clients and regulators. I'm aware the Committee has discussed the release of air-monitoring results for tunnelling projects under a freedom of information request. During this process, and as part of a joint venture, we raised objections to the release of this information to an external third party. At John Holland, we have revisited this position and, subject to appropriate privacy provisions, we would not object to the release of this information again. We are ready to work collaboratively with the Government and regulators in the event they decide that more information should be made publicly available.

The control of silica is a challenging issue and one we are taking extremely seriously. Contractors like us clearly have a role to play in managing this risk, but we can't solve this problem alone. If we are to achieve the aim of fully eliminating the risks associated with silica, it will take full buy-in and cooperation from regulators, unions, government and procurement agencies and contractors so we can continue to progress towards the safest possible working environments. Thank you again for the opportunity to address this Committee, and I'm happy to answer whatever questions you have.

The CHAIR: Thank you very much for that opening statement, Mr Smith. We'll now go to questions.

The Hon. CHRIS RATH: Thank you for that opening statement. It's helpful having some of that information. Thank you for appearing today. The projects that you're currently working on—I've got a list here. Maybe you can just confirm that these are the ones: Sydney Metro West, the eastern tunnelling; Western Harbour Tunnel project, stage one; Sydney Metro City and Southwest tunnel; and WestConnex M4 East—previously, I assume, or is that still ongoing?

MARTIN SMITH: The only project out of those projects you've just mentioned—the eastern tunnelling project is the one that's currently under construction.

The Hon. CHRIS RATH: So that's the one you're currently doing at the moment?

MARTIN SMITH: Yes.

The Hon. CHRIS RATH: And the others are either completed or not yet started?

MARTIN SMITH: Yes. M4 East is complete. Rozelle interchange, which I don't think you mentioned, that one is complete. Western Harbour Tunnel has just been completed.

The Hon. CHRIS RATH: I don't know if you've had a chance to look at the submission from the Australian Workers' Union. They've said that they've singled out John Holland—this is a quote from them—for the highest level of respirable crystalline silica or RCS exposure on those projects. What information can you give us in response to that claim, in particular with these projects, previous or that you're currently working on? Are there concerns in the operational maintenance of these projects that there might be ongoing respirable crystalline silica risk?

MARTIN SMITH: As I mentioned in my opening remarks, we take all exceedences of the workplace exposure standards very seriously. We have had exceedences on our projects, both controlled and uncontrolled. Where there is an exceedence, those instances are investigated and that information is shared with the people on the project as well as reported to our regulators. We have a very robust, safe system of work that controls silica in the air—in the atmosphere—and that safe system of work consists of our policies and procedures as well as our plans, which includes the regular monitoring of silica on our projects.

From time to time, we do get exceedences. As I said earlier, they are investigated thoroughly. The reason that we do get exceedences from time to time is that—and this happens generally in the area of health and safety when we're talking about management of hazards and risks—we do get controls that fail or are absent, resulting in those exposure standards being exceeded. The control that failed could be a mechanical failure and that raises the level above the exceedence levels. By virtue of the geology in Sydney, dust does occur in the tunnelling activities, but we make best endeavours to make sure that hose exceedences are kept to a minimum.

The Hon. CHRIS RATH: With these exceedences, or just generally, I suppose, in terms of dealing with the regulator, I think you said your regulator is Comcare.

MARTIN SMITH: Yes.

The Hon. CHRIS RATH: Could you walk through with us why it is Comcare and not SafeWork NSW? I assume you might have some contractors or subcontractors that you use that would be covered by SafeWork NSW, but your company is regulated by Comcare. What's the interaction there between Comcare essentially being a Federal regulator and then SafeWork being State? How does that work in practice at one of these sites? It seems a bit confusing to us.

MARTIN SMITH: Yes, it is. It's a jurisdictional distinction. We are the only construction company that is self-insured under the Commonwealth Act, which means that we're responsible for all our own insurance arrangements for workers compensation and so forth. With that comes the different regulatory oversight that is done at the Commonwealth level. What that means is that any John Holland site where John Holland is the principal contractor comes under the jurisdiction of the Commonwealth. The Commonwealth regulations cover John Holland and John Holland direct employees. The subcontract workforce, which is made up of our subcontractors, are covered by the New South Wales Workplace Health and Safety Act. We actually have two jurisdictions running concurrently on our projects. To give you a practical example of what that means is that, if we have an incident onsite, we notify the regulators, we notify Comcare, and our subcontractors notify their regulator, which is SafeWork NSW. At any given time when we have an incident on one of our sites, we can expect regulatory oversight from both the regulators.

The Hon. CHRIS RATH: Is it confusing, that sort of level of duplication where you've got two different regulators you need to work with? It's not harmonised in some way. Are there practical problems with having a State regulator and a Federal regulator and contractors dealing with one and then you dealing with another, or does it work fairly well in practice?

MARTIN SMITH: John Holland's been under the Comcare scheme for in excess of 20 years, so the company's quite conversant with how that dynamic works on a construction site. In relation to the obligations of the contractors and in relation to their reporting obligations and notification obligations to SafeWork NSW, we make sure that those notifications occur. We would make sure in our contact and interactions with the subcontractors that they have made that notification within the specified time frames for notifiable incidents, et cetera.

In construction, it's not uncommon, particularly in joint venture arrangements where we might be in a relationship with another contractor delivering a project—we're quite conversant with managing and interacting with multiple stakeholders. What it means, again in a practical sense from a regulatory point of view, is that we get a lot of oversight. We have both State-based regulators and the national regulator overseeing our projects,

which I think, from a governance point of view, provides an extra level of assurance that we're getting adequate oversight from the regulators.

The Hon. CHRIS RATH: A final one from me if that's okay, Chair, and I'll then hand over.

The CHAIR: Yes, please proceed.

The Hon. CHRIS RATH: You mentioned in your opening statement the data that you're collecting on silica exposure. Is there information or data that you have that you're not giving to Comcare, SafeWork or icare, for instance? I assume you're probably not obligated to give it. You would have more data available than the data that you would give to the regulators. Is there additional data that you could be sharing with the regulators that you're not?

MARTIN SMITH: My observation over time is that the regulators have really stepped up their level of oversight, particularly in the last 12 months. We're seeing more regulatory activity from both regulators at State and Federal level on our projects, and with that comes a requirement for more information. I'd say it's less than a year that the regulators have asked for both uncontrolled and controlled exceedences. They're working through—and we're working very closely, particularly with the Comcare regulator—their responses to controlled exceedences. To go back to the original question, we do provide a lot of information to them through their reporting portals—both regulators. We provide them with a lot of personal information as well about the individual—their names, date of birth and that sort of thing—which is fairly straightforward when you notify incidents to the Commonwealth and State regulators anyway. We are well set up to provide whatever information the regulators require, now and into the future.

The CHAIR: Before I pass it over I will jump in. You said that up to about 12 months or so ago, as I understand your answer, you were providing responses with respect to uncontrolled incidents. Now there has been the provision, from about 12 months ago, to both uncontrolled and also controlled exceedences. Is that what your evidence is?

MARTIN SMITH: My recollection is that we've provided both exceedences—both uncontrolled and controlled—for a period of time. What seems to be happening at the moment is that the regulator is interested in both, whereas before, their focus was really on uncontrolled exceedences. Now they're paying more attention to controlled. The conditions, I think, that give rise to those controlled exceedences are of more interest now than they have been historically.

The CHAIR: But John Holland has collected data on both of those historically. Is that your evidence?

MARTIN SMITH: Yes.

The Hon. MARK BANASIAK: You mentioned reporting requirements that you impose on—you make sure your subcontractors are doing their own reporting. What other measures do you put in place with your subcontractors to make sure that they are actually adhering to work health and safety, particularly around crystal and silica?

MARTIN SMITH: To give that question a bit of a broader explanation, we see the positive reporting of incidents as a very strong cultural marker of a positive safety culture. We create an environment where people are encouraged to report incidents. We encourage information to go through the organisation very quickly, whether it's good news or bad news. We see that as a real hallmark of our safety culture, and we've been working on promoting that over a long period of time. That's the first thing. The second thing is that we engage our subcontractors based on certain qualification criteria, and one of them is their safety performance and their culture of safety. We make sure that we bring subcontractors onto our site that are aligned with our culture of health and safety.

The Hon. MARK BANASIAK: Just picking up on that, Mr Smith, how often in your tunnelling projects have you suspended, fined or removed a subcontractor due to their failure to adhere to this culture of safety?

MARTIN SMITH: That's not an uncommon event. If we're talking more broadly about how we do—

The Hon. MARK BANASIAK: I'm happy for you to take it on notice in terms of an exact number. That's what I'm after.

MARTIN SMITH: I can take that on notice. In terms of the approach that we take, when we have an incident and it's thoroughly investigated, we look at the behavioural aspects of the incident. We have a process that we call "just and fair culture", where we apply a weighting to whether the incident and the action of an individual was wilful misconduct or whether it was a slip, a mistake or an error. On that basis, we make a decision. Generally, if it's wilful misconduct, those subcontractors are removed from site and they don't return. If you're talking about the quantum, I can certainly take that on notice.

The Hon. MARK BANASIAK: That would be good. I think we've all seen some of the documents that have come through in the SO 52, not necessarily targeting you specifically, but there seems to be a long list of what I would put down as schoolboy errors and repeated breaches of basic stuff like wearing PPE that seem to continue on. There doesn't seem to be an escalation of consequences. That doesn't necessarily point to a culture of good practice in terms of work health and safety if that basic stuff is allowed to continue. If I'm allowed one more, does your company have any policies around the use of unregistered vehicles or vehicles that wouldn't be considered able to registrable on road to be used in these tunnelling projects? That's another thing that has come through in the documents. There has been some cavalier attitude to some unroadworthy vehicles being used in these tunnels.

MARTIN SMITH: I have read that submission. To get a vehicle onto a John Holland project in the condition that it was described in that submission would be almost impossible. We have very strong systems of work around the procurement of vehicles for our sites and the checks that need to be undertaken before the vehicles are delivered onsite or as they're delivered onsite.

The Hon. MARK BANASIAK: Does that include subcontractors coming on?

MARTIN SMITH: It's the same with subcontractors, yes. Once they're underground, if we're talking about the tunnelling environment—let me be clear: The tunnelling environment is a very harsh environment on vehicles. They need to be maintained and fit for purpose whilst they're in operation underground. I can't think of a circumstance where we would find a vehicle with a rag in the petrol tank, which I think is the example you're referring to. I couldn't think of a circumstance where we would see a vehicle like that in that condition on a John Holland project or a joint venture. There are checks and balances that we have in place on a daily basis. There are pre-starts and inspections done on all the vehicles before they're mobilised to their work location. And then the monthly checks would make sure that those things don't occur.

The CHAIR: We've got someone joining us remotely today. The Hon. Stephen Lawrence, do you have any questions that you'd like to lead off with?

The Hon. STEPHEN LAWRENCE: Yes, I do, Chair. Mr Smith, could you explain to us why your organisation opposed the release of the silica exposure data under FOI for parliamentary return orders?

MARTIN SMITH: As I said in my opening remarks, that was a decision that we took at the time. With the benefit of hindsight, we wouldn't make that same decision today.

The Hon. STEPHEN LAWRENCE: I'm interested in the reasons for it as opposed to what occurred.

MARTIN SMITH: The main objection that we had—and this was an application that came from a third party under the Freedom of Information Act for medical records. In my experience, it's not uncommon for organisations to object under certain criteria for information under the Freedom of Information Act. The information that was being sought was information that contained personal information and personal medical records, not just exceedences and so forth. It actually had personal medical history and medical records of individuals. We were concerned about releasing that to a third party. We were made aware that the third party was making that application and that information was going to be used for the purposes of academic research. When we did finally agree to releasing the information, we agreed on the basis that the records were redacted to protect the personal information of those people who were in those records. Again, we made that decision at the time. On reflection, what we should've done and what we would do now is ask for those records to be redacted early and released.

The Hon. STEPHEN LAWRENCE: Yes, I was going to say—are you saying that the only reason for the lack of cooperation was the privacy of the workers, or were there other reasons?

MARTIN SMITH: No, that was the primary reason that the organisation responded in the way that it did. I'm aware that there was a letter drafted by the project on the Rozelle Interchange project, setting out the reasons why that objection was made. In that letter it says that the objection was based on reputational impacts to the organisations in question and the ability to win future work. The fact of the matter is that those reasons that are set out in that letter were done so based on the criteria that could be selected for objecting to that request under the Freedom of Information Act. But the primary reason was that we were concerned about the privacy of those records.

The Hon. STEPHEN LAWRENCE: So there's obviously a difference between something being a primary reason and something being the only reason. Are you saying that the protection of reputation of the company was a reason, but not the only reason?

MARTIN SMITH: No. Let me be clear: The reason that we objected was the privacy issue. The reason for the criteria that's set out in that letter that went, in a formal sense, as an objection to that Freedom of Information

Act request was because of the limitation in the criteria that can be selected for that objection. But, no, our only objection was the privacy of that information.

The Hon. STEPHEN LAWRENCE: And the only consideration that you took into account in making that opposition was the privacy of the workers; you had no regard to any other consideration. Is that the evidence?

MARTIN SMITH: Yes, that's correct. I would add to that, if I can, that we have very high levels of transparency around sharing data and information within the organisation with people that need to know that information, obviously de-identified. We also share that information readily with our regulators. Our unions are aware of that information as well, because we have health and safety reps on our projects that are there to represent their members.

The Hon. STEPHEN LAWRENCE: Moving to more substantive matters, John Holland was legally required to control RCS exposure to below the 0.05 threshold as far back as 2020. Can you explain why workers continued to be exposed to levels many times above this, sometimes for months?

MARTIN SMITH: I can't comment on the duration that you've just specified, but what I can say more broadly about exposure—and I mentioned this in my opening remarks—is from time to time the exposure standard is exceeded. That is generally in response to a failure of a control or an absence of a control. A practical example of that is—as I mentioned earlier, our last line of defence for our workers is the PPE, the Versaflo masks. But if people don't put the mask over their face, it negates the protective factors of that PPE. That in itself causes an exceedence to the individual and exposure to the individual, which is unacceptable. It could be a failure of a mechanical control, like a mister that's blocked, that causes the air quality—the workplace exposure standard for silica to be exceeded. So there are many reasons as to why a control can fail. They're not immune to failure, particularly mechanical controls.

The Hon. STEPHEN LAWRENCE: But are you saying the company was unaware of repeated exposures and that's why it continued, or are you saying something else?

MARTIN SMITH: No. If there is an exposure, when an exposure occurs, we are made aware of it because it's picked up through the workplace monitoring and the surveillance program. Either static or personal monitors would detect that. Generally the exposure is over a shorter duration. But we need to be made aware. Our monitoring systems need to pick up those exceedences as they occur in order for us to address them.

The Hon. STEPHEN LAWRENCE: So if your own data is showing—

The CHAIR: Stephen, sorry to cut you off. We're nearly at time, but with your concurrence, Mr Smith, could you stay another five minutes just to deal with a couple of other questions?

MARTIN SMITH: Yes, absolutely.

Ms ABIGAIL BOYD: Thank you, Mr Smith, for being here to provide evidence. I have two main issues. With this release of data, your evidence here today is that that was not released to begin with because of personal information concerns. Is it your evidence that your legal department was previously unaware of the ability to redact personal information? It's incredibly standard—in GIPA's, in SO 52s—for personal information to be redacted. Is your evidence that when Transport asked if that information could be released, your legal department just said no rather than, "Yes, but only if that personal information is redacted"?

MARTIN SMITH: I would need to take that question on notice.

Ms ABIGAIL BOYD: If you could, I think that would be good. You also said that there is a very high level of transparency within your organisation when it comes to this information. Looking externally from the organisation, the Western Harbour Tunnel site in particular has been a vexed location, particularly before 2020, for the information that was being sought by the unions. My understanding is that that information not being provided to the unions actually ended up in court, in a way. I understand that John Holland was sued by the unions for refusing to allow the unions to bring on dust-detecting equipment. That evidences quite a long struggle in trying to get information out of your company. What happened with that case? Where are we up to?

MARTIN SMITH: Yes, that was quite a protracted process. Ultimately, the company and joint venture partner in that situation agreed that—and this was over the right-of-entry provisions. We disputed the unions' right-of-entry reasons at the time. We stood by that decision because we were concerned with the methods that were going to be used for the sampling of air quality on that project for silica. The particular device that the unions wanted to use, we had no confidence in its ability to monitor for silica. It was a dust-tracking device that took air quality samples for dust and not for silica. It wasn't able to detect silica at the levels that were required, so we had no confidence in those results. What it came down to was we challenged the unions' right of entry to come in to

do that monitoring, because the unions have a right of entry to come onto projects based on certain criteria, and it's generally that they have concerns from an imminent health and safety point of view.

Ms ABIGAIL BOYD: They took you to court for it.

MARTIN SMITH: Yes.

Ms ABIGAIL BOYD: What happened to that case?

MARTIN SMITH: That's now resolved.

Ms ABIGAIL BOYD: How was it resolved?

MARTIN SMITH: We agreed to come up with a protocol for the use of that dust tracker, and we would allow them to come onsite to use it under certain conditions. The union—I'm referring to the AWU—were involved in the drafting of that protocol.

Ms ABIGAIL BOYD: Did you get any financial penalty for that? Was there any financial cost to the company from that case?

MARTIN SMITH: Only the indirect costs associated with people's time. No, there wasn't any penalty.

Ms ABIGAIL BOYD: Obviously, after these revelations of particularly CPB workers being diagnosed with silicosis—and it now looking like there's quite a high risk level for tunnel workers when it comes to silicosis—what has your company done to check the levels of disease within your workers?

MARTIN SMITH: We already have a very robust approach to medical surveillance on our sites. To give you an example, we would ensure that, as people come onto our projects and they're working underground, they undertake a baseline lung assessment. We would collect their work history—what other projects they've been on—which is useful from the point of view of tracking people in the industry. Tunnel workers are a very small cohort in Australia, and generally people move around between employers and projects. Once they're on the project and they've been through the training and induction process, we would have medical surveillance for them on a regular basis, which would include—we've just moved most recently to best practice diagnostics, which is the high-resolution CAT scans, for all of our employees as a more sophisticated way for diagnosis. We would just incorporate the monitoring of those individuals through our onsite surveillance programs.

Ms ABIGAIL BOYD: Is that testing information then available in some way for people to see? Is it given to the regulator or is it given to—is there any transparency over that testing data?

MARTIN SMITH: The personal information and the medical records are generally not provided to the regulator. They're provided to the individual and obviously we retain them. We have the obligation under the legislation to retain the medical records.

The Hon. ROD ROBERTS: Thanks, Mr Smith, for your attendance today. I have just two questions. They're as a result of your evidence that you've given today. In your opening address, when you were talking about air quality monitoring, you used the terminology "we de-identify results". Could you explain to me what you mean by that?

MARTIN SMITH: What that actually means is that we don't identify the individuals that have been exposed.

The Hon. ROD ROBERTS: You're talking about individuals, not sites, when you say you "de-identify the results".

MARTIN SMITH: Yes. It doesn't go to the extent of de-identifying the site. We talk about the work location, the level of exceedences over what period of time. We just don't name the individuals involved.

The Hon. ROD ROBERTS: That's fine. That clears that up. The other part was in answer to a question from my friend the Hon. Chris Rath. We were talking about exceedences, and you used again the words that "the controls may be absent".

MARTIN SMITH: Yes.

The Hon. ROD ROBERTS: What do you mean by that?

MARTIN SMITH: A good example of that would be—going back to the personal protective equipment and the Versaflo, which is really an encapsulated mask, it's completely ineffective if the face shield isn't down, so you've got a level of control there that's just absent.

The Hon. ROD ROBERTS: Are there any other controls that are absent that you're referring to or is that the only example you've got?

MARTIN SMITH: No. Generally we find, when we investigate any safety incident, there's generally a failure of a control or the absence of a control. If a control hasn't been selected and then implemented, then we would use that terminology. If people weren't wearing—again, a low-level control—their safety goggles or their safety glasses and it results in an eye injury, then we would say that's an absence of a control, not a failure of a control.

The Hon. ROD ROBERTS: What other controls are absent, though? What are you referring to? Because you said, in terms of exceedences—obviously eye injuries aren't exceedences of the silica level. You said that would be perhaps because controls were absent. Well, what is absent and why are they absent?

MARTIN SMITH: Generally, in the context of this particular topic, it's usually a failure of a control rather than an absence of a control, because we have lots of checks and balances in place to ensure the controls are in place.

The Hon. ROD ROBERTS: Mr Smith, though, your own evidence was—and these are your own words—that the controls were absent. You may have said there was a failure of controls, but you also said controls were absent. I want to know how, on a worksite that's regulated and controlled, these control methods are actually absent from the workplace.

MARTIN SMITH: In the context of my opening remarks, that just explains what is attributed to an exceedence. It's either an absence of a control or a failure of a control. There are generally two categories: control failure or absence of control. So I use that as a category, if you like. In the context of the incidents that we have in relation to exceedences, it is generally a failure of a control rather than an absence of a control. Because of the planning processes and the checks and balances that go into our systems of work, those controls are there. It's when they fail, and they could fail because of—if we talk about some of the mechanical controls. As an example—I'm not suggesting this has happened in the cases on our projects—a ventilation system could fail, a scrubber could fail, a scrubber could get blocked. That affects air quality, and therefore the exceedence occurs. That could happen for a number of reasons. It could be maintenance issues. It could be a range of things. But that is an example of where a control would fail as distinct from an absence of a control.

The Hon. ROD ROBERTS: I note the time, Chair. I just have a follow-up to that, though. On notice, could you provide to the Committee a correlation of where you've had exceedences and whether that was a result of a lack of control or a failure of control? Can you identify those and provide them to us?

MARTIN SMITH: Yes, I think so. I could do that, but I would need, as my reference point, to have an investigation report to refer to because that's where the detail would be, in the investigation findings, whether it's a failure or an absence of a control.

The Hon. ROD ROBERTS: But you have access to those reports?

MARTIN SMITH: I can take that on notice. I can have a look at those reports, where there has been an investigation, and take that on notice.

The CHAIR: Thanks for agreeing to staying on a bit longer. Thank you, Mr Smith, very much. There are some questions that you've agreed to take on notice, and we're grateful for that. I expect, following a review of the Hansard transcript, members may have some supplementary questions. Our secretariat will liaise with you in regard to both of those matters.

(The witness withdrew.)

Mr GLYN EDWARDS, General Manager, Tunnelling and Major Projects, CPB Contractors, affirmed and examined

Mr GRAEME SILVESTER, General Manager, Safety, Health, Environment, Quality, Sustainability and Rail Safety, CPB Contractors, sworn and examined

The CHAIR: Thank you, gentlemen, for coming along this morning. You now have an opportunity to make an opening statement. I gather there might be just one opening statement.

GRAEME SILVESTER: There's just one, Chair. Good morning, honourable members. We are here to respond to any questions that you have related to the New South Wales parliamentary inquiry into the 2024 review of the dust diseases scheme. We thank you for the invitation to attend and the opportunity to address the Committee with a short opening statement. CPB Contractors has been proudly building our nation's transformational infrastructure for more than 90 years. The health and safety and wellbeing of our people is a priority, and this includes protecting our people from the potential exposure to respirable crystalline silica, also known as RCS. CPB work with independent health and hygiene experts to address the potential exposure by eliminating or minimising the risk through the application of known or new engineering controls, updating our training programs and personal protective equipment, including respiratory protective equipment, and by implementing worker health monitoring processes, supported by leading occupational physicians and respiratory physicians.

Specific to RCS, our commitment to health and safety is demonstrated through our leadership via several initiatives. We were the first contractor to adopt the use of powered air purifying respirators, also called PAPR, for all roadheader operators in 2022. This initiative was then expanded at scale to all underground workers in proximity of excavation activities. We were the first contractor to implement low-dose HRCT scans based on risk and employment history, at the recommendation of our occupational physicians as part of a health monitoring program. We employ a full-time occupational hygienist on every tunnelling project. We also invest in academic education for our people, providing opportunity to complete internationally recognised certificates of occupational hygiene. We have also worked with our supplier, Allcott, to redesign our crib rooms to ensure that they are pressurised, setting a new standard in the industry. We engage and rely on independent, certified occupational hygiene experts to conduct personal air monitoring across our projects, with these results shared with our workers and exceedences notified to the regulator as required.

We financially support the Prince Charles Hospital, its scientists and the Tradie Health Institute program by investing in its research into the early detection and treatment of disease associated with RCS. We recognise the critical role that we have in protecting our workers and we value the collaborative relationships that we have across our joint venture and delivery partners, supply chain, clients and SafeWork. We have a genuine desire to work with all relevant stakeholders to productively use our knowledge and data and further develop industry initiatives. However, this issue is bigger than any one contractor or project. For this reason, we would like to commend the New South Wales Government for establishing the Tunnelling Dust Safety Taskforce, and we embrace the call to maintain and reinforce a set of industry-wide minimum standards to ensure worker health and safety in all tunnelling environments. Thank you, again, for the opportunity to speak. I now welcome any questions.

The CHAIR: We will share questions around. There are representatives here from the crossbench, Opposition and Government. I invite the Deputy Chair, the Hon. Chris Rath, to kick off.

The Hon. CHRIS RATH: Thank you for the opening statement and for appearing today. I was wondering if you could expand a bit more on what your standard air quality monitoring procedures are and also how an extremely high level of RCS is reported to the regulator.

GRAEME SILVESTER: Thank you for the question. We have quite a detailed risk process when dealing with occupational hygiene issues. It's underpinned and anchored by the engagement with an independent certified occupational hygienist. As I said, we do recruit occupational hygienists on each of our tunnelling projects. We ask them, at the early stages of a project, to undertake what we call a level one assessment of the hygiene exposures. We then ask for a walk-through, which is our level two assessment, and that's conducted, again, by our on staff occupational hygienist. At a point in time, shortly after the start of the project, we bring our independent certified occupational hygienist in. They review the level one assessment, they review the level two assessment and then they undertake a level three assessment, where they create a respiratory protection program and an air- monitoring program that's then implemented across the project throughout the life of the project, with air monitoring commencing no later than one month of work commencing on the project.

The Hon. CHRIS RATH: If there is an extremely high level of silica exposure, is that reported to—I assume you deal with SafeWork rather than Comcare?

GRAEME SILVESTER: Yes, we do.

The Hon. CHRIS RATH: Is that reported to SafeWork in real time? Or how soon after the incident would that be reported to SafeWork?

GRAEME SILVESTER: With the hygiene assessments that are undertaken, there's normally a lag of time between when the independent certified occupational hygienist undertakes their work—so their samples when they're then sent to a NATA laboratory—and we get the records back. There's generally a lag of somewhere between 14 to 21 days and sometimes 28 days.

The Hon. CHRIS RATH: And that's because you need to do that work with the laboratory and so forth. So you couldn't give it to SafeWork immediately even if you wanted to.

GRAEME SILVESTER: No.

The Hon. CHRIS RATH: I'm just interested in whether you track worker health post-employment or post-employment on a specific project relating to any data that you have on silica exposure.

GRAEME SILVESTER: We make all attempts that we can to do that. We're not always successful. There is a level of worker emotion obviously around being exposed to occupational hygiene risk and particularly RCS, and we've experienced that where workers don't want to know, but we make every attempt that we can. Any worker who is diagnosed with a silica-related condition—we ensure that they are put on a health management plan and that that health management plan is shared with their general practitioner.

The CHAIR: Before I pass it over to one of the crossbench members, I will return to that point about workers not wanting to know, could you please elucidate on that and perhaps give an example of an experience where this has happened, without necessarily naming an individual but just so we can conceptualise what that means?

GRAEME SILVESTER: I think it's human nature—and I know I've experienced it myself—where some initial diagnostics are done on myself, for example, and then that leads to additional diagnoses where it can come up with a diagnosis that you don't want to hear. There's a real stigma around silicosis, and I can understand why and I genuinely feel for anyone who gets a diagnosis that they may perceive is going to affect their future. We've had people who've been diagnosed with silicosis who just don't want to talk to us anymore, and I understand that. That's why we've gone down the pathway of using low-dose HRCT, because we want to make sure that we look after our workers the best possible way, get the best possible diagnostics involved, so that if it's caught early enough, then they will live a long, productive life.

It won't be the cause of any end of life if we get it early enough. If there was one thing that I would really want to see this Committee resolve, it is that we have to use low-dose HRCT. It has to be mandated in this circumstance. I just can't see any other way around it. X-ray and spirometry is 150-year-old technology. By the time X-ray and spirometry identifies a case of silicosis, I can understand why people would be emotional. I can, and I really feel for them. But we have to do low-dose HRCT.

The Hon. MARK BANASIAK: I have just two quick questions. Firstly, following up from the Hon. Chris Rath, you talked about a lag of 14 to 21 days. On receiving the results, how quickly do you pass on that data to SafeWork? Is that immediate?

GRAEME SILVESTER: We have had one issue where we didn't, and that was an error on our part. As soon as that was identified, we notified. That was wrong on our part, and we accept responsibility for that. But we notify as soon as we possibly can. There might be a lag of a day or so, but there's no more than that.

The Hon. MARK BANASIAK: Secondly—it's a similar question I put to John Holland—your website talks about a collaborative approach to procurement with your subcontractors. In your tunnelling projects, how many times have you fined, suspended or torn up contracts with your subcontractors for failure to adhere to work health and safety with regard to RCS, and have you placed any of those subcontractors on a "not to be procured again" list?

GRAEME SILVESTER: Yes—

The Hon. MARK BANASIAK: I'm happy for you to take that on notice because I'm after a specific figure.

GRAEME SILVESTER: Certainly, member, if you like exact numbers, we will take that on notice. But from a moral perspective—and I always come from a moral perspective. I think legislation is fine, and we need

it, yes. But, in my view, we come from a far higher standard, and that is that morally we want to make sure we do all we possibly can from a moral perspective. Where there are people or companies who, for whatever reason—and we would need to understand what that reason was—are not complying with our system and process, and if that reason is, "Don't care," or, "It's all talk," then we will deal with that contractor or that individual, and we will exclude them from the workplace. We have a system and process to engage our contractors. I personally have put bans on contractors being engaged because of that.

Ms ABIGAIL BOYD: Obviously—sorry, thank you for coming. I should say that to begin with because I think it's really important that we do hear from people like yourself.

GRAEME SILVESTER: I actually appreciate the opportunity. Thank you.

Ms ABIGAIL BOYD: Yes, thank you. It's obviously really shocking to hear about cases of tunnelling workers contracting silicosis. It's one of those things that, a little bit like with manufactured stone, sort of creeps up and then it becomes very well known. Now there's quite a lot of attention on it, which is a good thing.

GRAEME SILVESTER: Yes, it is.

Ms ABIGAIL BOYD: Given the recent reports about the numbers of tunnelling contractors who have already identified as having silicosis and who we suspect are likely to get it in the coming decades, what is your company doing differently to try and add extra protections? Is there something extra that you're now doing as that information is coming to light?

GRAEME SILVESTER: Thanks for the question, member. I'm going to deal with it in two ways, if you don't mind. We notified 13 cases of silicosis on M6. That was because we've implemented low-dose HRCT, so we're getting it far earlier. The advice that we've been given by our occupational physicians and respiratory physicians tells us that if we find it using low-dose HRCT then the worker should, if they follow the advice being given, live a normal, healthy life. That's a massive difference to X-ray and spirometry detection. That's why the 13 cases were identified on M6. It wasn't because of the work on M6. When you look at the career history of those workers, they worked with different contractors in tunnelling around Sydney. They worked in mines in New South Wales. It's a career exposure.

Again, the advice that I've been given from our occupational physicians is that the silicosis that the workers have been diagnosed with—and I'm not understating the diagnosis. I'm not. But what they have been diagnosed with is called simple silicosis. Again, what we've been advised is that simple silicosis occurs after low to medium exposure over decades. It's not something that they would've been able to acquire in the short period of time between their pre-employment medical and then the health surveillance medical. That's called acute silicosis.

Ms ABIGAIL BOYD: Can I just stop you there, because time is limited?

GRAEME SILVESTER: Sure.

Ms ABIGAIL BOYD: It's obvious that workers are going to work on different sites. Sometimes when we have those sorts of scenarios, you end up with a situation where no-one takes responsibility because you can look and say, "Well, obviously this worker worked somewhere else." But from a worker's perspective, what they are looking for is for their current employer to do everything they possibly can to stop adding to that exposure, I guess. So, bringing you back to my question, what are you doing differently now to up the protections for workers?

GRAEME SILVESTER: There are two anchors to our system. One is obviously our independent certified occupational hygienist. The other one is a ventilation engineer. Something else I'd love to see the Committee arrive at is something around ventilation, because it is one of the primary controls to manage exposure. The ventilation engineer comes in. He designs the ventilation system for the tunnel. That includes air movement, it includes direction of movement, it includes things called scrubbers. My colleague Mr Edwards will tell you more about a scrubber than I could ever tell you about, but it's basically a vacuum cleaner that cleans the air in the tunnel.

So we have the scrubbers there. We have them as close to the face as we possibly can, depending upon the excavation technique that's being used. Again, my colleague will be able to provide more information on reasons why and which techniques we use. We have the scrubber up there at the face, as I said. We have a high-pressure nozzle spray. We have wetting agents to minimise the level of dust with any equipment or machinery that goes down into the tunnels. We have a strict regime of ensuring that everything is sealed. Those seals are regularly checked and tagged out if they're not in place. We have air conditioning systems in with filters that are regularly maintained. We have workers in Versaflo masks.

Ms ABIGAIL BOYD: Is there anything new?

GLYN EDWARDS: Two things specifically. From an engineering perspective and engineering control, we have enlarged the fans that we would typically have used on previous projects so that we can get more air into the tunnel, which basically gives you fresh air, which helps to blow it out. We are restricted in the tunnels by an air velocity, which is basically 0.5 metres per second. We can go higher. What we need consistency on here is one standard says it can be 0.3 metres per second and one standard says it can be 0.5 metres per second. We always go to 0.5 metres per second. The issue is if you get too much air blowing through, you get the wind chill factor. I'm serious. It's a hot, sweaty environment, but when you've got too much air blowing in—that is one thing we have done on our project, enlarging the fans so you can get the airflow.

The second thing that we have done which is new on our projects, as Graeme has previously alluded to, is we have introduced the PAPR Versaflo masks, which is basically a filter that you stick above your bum. It's got a tube that comes into a helmet. Picture of a typical helmet that you would wear on site. It's slightly more robust. It's got a face mask like, I guess, a welding mask. It's got a little bib that comes under your chin. It blows fresh air in—again, not at rapid rates. I personally have worn them. They're quite a comfortable thing to wear, certainly far more comfortable than wearing your typical dust mask—they're just not pleasant. But we have moved to that. So there are two examples: increasing fan sizes and also the Versaflos, which give you a factor of from 10 on a typical mask to 50 times the exposure on a PAPR.

The Hon. ROD ROBERTS: Just a couple of questions again, because I note we're running out of time. Thank you, gentlemen, for attending. Mr Silvester, this is probably best addressed by you, but it could be Mr Edwards. When did your company, CPB, actually mandate the use of PPE in tunnelling projects?

GRAEME SILVESTER: The specific date, I'll have to take it on notice.

The Hon. ROD ROBERTS: Yes, that's fine.

GRAEME SILVESTER: But I started in the business 26 July 2013. We were using PPE then. I started out as a carpenter in construction in 1976. I can remember us wearing PPE in 1976.

The Hon. ROD ROBERTS: That's in a tunnelling project?

GRAEME SILVESTER: No, that was—

The Hon. ROD ROBERTS: That's what I'm referring to. Again, I appreciate it, and I'm not being rude by cutting you off. It's just we're on the clock.

GRAEME SILVESTER: Sure.

GLYN EDWARDS: Can I? Do you want me to—

The Hon. ROD ROBERTS: Yes, sure.

GLYN EDWARDS: I have worked for a CIMIC company, CPB basically—it used to be the Leighton companies. I have worked with one of those companies for the past 22 years. My recollection is, certainly in tunnelling, when it comes to the likes of dust masks, when it comes to the engineering controls like the scrubbers we're talking about—we use a different scrubber now—to the best of my knowledge, since 2003, when I started working with the company in a tunnel environment, we had dust masks, we had the scrubbers, we had the glasses, we had the helmets. We even went to the long sleeves for UV protection, not that you have it in a tunnel underground. But we also introduced that because underground it's a hot, sweaty environment. Basically, that's why we introduced that. To answer your question, in tunnels, to the best of my knowledge, 2003 is when I first—

The Hon. ROD ROBERTS: Okay, so you're wearing them then. When did you, as a company, start enforcing compliance then on the wearing of those masks?

GLYN EDWARDS: To the best of my knowledge, back in 2003. I can't comment previously to that for tunnel works.

The Hon. ROD ROBERTS: Going back to the dust masks that we're talking about—not the Versaflo; there is a question about Versaflo, but the dust masks themselves—when did you, as a company, realise that they were inadequate protection? We know that they're at the bottom level of the hierarchy of safety. When did you realise that they're fairly useless? Let's agree that they're not protective completely because of sweat and we know you've got to remove the mask to communicate with others. When did you decide that they were probably an inappropriate form of PPE?

GRAEME SILVESTER: To be fair, Member, this has been an evolution, and it's been a journey that we've been on for many years. We are always on the outlook for new technologies, better things, easier ways to do things. As you point out, even PAPR has its limitations. We're working with suppliers now to come up with a communication method so that you can talk to someone next to you because, at the moment, with a PAPR it's

difficult to hear the person standing beside you. Certainly from at least 2022 we've had a mandate for PAPR, particularly for roadheaders, and that was expanded later to all people involved in excavation activities. We've used PAPR well before 2022 as well.

The Hon. ROD ROBERTS: But you mandated it from 2022?

GRAEME SILVESTER: Yes, we did.

The CHAIR: Can I deal with what's been activities by the Parliament—by the Legislative Council and also others—in terms of seeking information from CPB Contractors in regard to exposure of workers on your projects, which has been over a period of time. There's been opposition to that release of information, and that obviously was a conscientious decision taken by the company to do that. I wonder if you could explain to the Committee why that opposition was put in place in the first place, to resist the provision of the information that was being sought?

GRAEME SILVESTER: Sure. Thank you for the question, Chair. I'm going to ask my colleague, Mr Edwards, to respond to that, and I'll come in at the end.

GLYN EDWARDS: Thanks, Graeme. Before I go into that exact detail, I want to address what we perceive as a misunderstanding—that because CPB objected to the release of certain GIPAA applications, this, by implication, means that we're not necessarily sharing that information with certain parties. Now, from our perspective, from a worker perspective, we share this information, be it dust monitoring information, with our workers via pre-start meetings, toolbox talks and also publishing the information on noticeboards. That is a routine, regular activity that we perform. From a union perspective, we facilitate right-of-entry notices from the unions for a number of different reasons. It might just be to talk—to address the troops, address the workforce. It could be for certain work health and safety matters. On occasion, we have been asked for the production of our monitoring data. Now, that information has been facilitated. To the best of my knowledge, the documentation has been provided to the unions. To say that, yes, there is an implication or—sorry, there is a misconception, a misunderstanding that we are not providing information to certainly the workers and certainly the unions.

The CHAIR: If I understand correctly, the evidence you're providing is that the information that has hitherto been sought through the FIA mechanism has been duly provided. That's been done. Is that your evidence?

GLYN EDWARDS: My story—there is more about each individual project. We provided the information, we thought, confidentially in discussions with our clients and SafeWork—or, sorry, the regulator. We understood that they were looking to provide the information anyway, so we withdrew our objection to providing that information.

The CHAIR: I will move to another line of questioning in regards to the 0.05 mg per cubic metre exposure limit. As you'd be aware, you've been legally required to control RCS exposure to that limit of below 0.05 mgs per cubic metre as far back as 2020. Can you explain why workers, on occasion, continue to be exposed to levels many times above this, sometimes for extended periods of time?

GRAEME SILVESTER: Thank you for the question, Chair. I'm not sure of the specific examples that you're referring to. Just because there's an exceedence that's been identified as part of our monitoring, it doesn't necessarily mean that a worker has been exposed to respirable crystalline silica, because of the controls that would have been in place during that air monitoring and during construction activities. I think it's important to note that wherever there is an activity that involves fracturing rock, grinding rock, drilling into rock, drilling into concrete, there's a risk of exposure to respirable crystalline silica. Obviously, the more that activity occurs, the more potential there is for an exceedence of the WES for respirable crystalline silica.

I don't think it necessarily follows that just because an exceedence occurs, a worker is exposed. With the occupational hygiene monitoring undertaken by our independent certified hygienists, they take notes of what they see while they're undertaking that monitoring. When those results are known and they come back, and if there is an exceedence, then we conduct an investigation to understand what was in place in the time. Was it working and was a worker exposed? If we determine as a result of that investigation that a worker was not exposed, then we will notify that exceedence as a controlled exceedence, because the controls were in place and the worker was not exposed to the risk.

The CHAIR: Perhaps I will jump in and thank you for your concurrence with going beyond 10 o'clock when we were delayed with the previous witness. My final question is in regards to real-time monitoring of dust inside tunnelling. Can you provide evidence to the Committee about the work that may be being done by the organisation to bring that into place, if it's not there already? If it's not there already, what are the inhibitors, or what's really preventing that being done, as a piece of engineering and practical monitoring activity inside the tunnels?

GRAEME SILVESTER: Sure. We are adopting, and have adopted, real-time dust monitoring in our tunnels. The issue with real-time dust monitoring is that it just monitors the dust level. It doesn't discern between respirable crystalline silica or other dusts. We've got to do more work in that space, but we are down that pathway already.

The CHAIR: But in terms of the material being bored through or tunnelled through, it would be correct to say that in terms of what that material is, it's almost guaranteed—in terms of the geological structure in parts of the broader or Greater Sydney metropolitan area—to contain silica dust. Would that be correct? I mean, it's not a case that you might find it here but not there, if you're talking about generally the tunnelling work in the Sydney greater metropolitan area.

GRAEME SILVESTER: Look, I think that's fair to say. The geology of the rock in and around Sydney is mostly Hawkesbury sandstone and therefore there is a risk—yes, I agree.

The CHAIR: Thank you. There might some further questions arising from members having an opportunity to read *Hansard* after today and some follow-up questions in terms that you may have taken on notice or will be looking at. Our secretariat will liaise with you in regards to that. Once again, thank you both for coming along today. It is much appreciated.

GRAEME SILVESTER: Thank you for the opportunity.

GLYN EDWARDS: Thanks for inviting us.

(The witnesses withdrew.)

(Short adjournment)

Mr CORNELIUS BUITENDAG, Health and Safety Manager, Ghella, sworn and examined

The CHAIR: Welcome back, everyone. I welcome our next witness and invite you to make an opening statement and then, if agreeable, we'll share questions around the Committee. There are members here from the Opposition, the Government and the crossbench. Would you like to proceed with an opening statement?

CORNELIUS BUITENDAG: Good morning, honourable members. I would like to thank you for this opportunity to appear before the standing Committee in relation to the 2024 Dust Review Scheme. As I mentioned, I'm the national corporate Health and Safety Manager for Ghella. Ghella is involved in infrastructure and tunnelling works. We typically operate as a minority partner or shareholder within joint venture partnerships with larger principal contractors, working within their stated safety management systems, which just assures us that there is a more precise, streamlined and clear way of managing one particular system on each and every project.

Having said that, we fully accept our responsibility as a partner towards the health, safety and wellbeing of every single worker on each and every project that we are involved in. We are committed to maintaining safe and healthy workplaces. We actively manage associated risks, which might include silica. We work closely with our partners and industry bodies, inclusive of regulators, to continually strengthen and protect our workers from risk or harm. We welcome any questions from the Committee and are here to support this inquiry in any way we can.

The CHAIR: Thank you for coming along today. It's much appreciated. We'll start with the questioning, if that's okay. I'll share the questions around and start with the Deputy Chair, the Hon. Chris Rath.

The Hon. CHRIS RATH: Thank you for appearing today. I asked the last witness this question and I want to ask you as well. What are your standard procedures for air quality monitoring? How is an extremely high level of RCS reported?

CORNELIUS BUITENDAG: Thank you, honourable member. I would also like to refer to similar answers that were given by some of our partners within the previous two sessions. The basic principle stays the same, as mentioned, due to that being the principal process of those contractors that we are involved working in. The key area that we do focus on is taking a risk-based approach, whereby we involve a certified occupational hygienist to form part of a team that take sampling in accordance with relevant standards set out within Australian standards. That is elevated through a three-level basis of risk assessment: level 1, which is a baseline risk assessment, conducted prior to starting work; a level 2 risk assessment, which basically follows through with the appropriate and adequate people taking sampling on a project; and then a level 3 might be sampling taken on workers as often as every month. Those data parameters are then sent to a laboratory and then we get feedback from the laboratory on that on a paper.

The Hon. CHRIS RATH: Similar time frames to the—

CORNELIUS BUITENDAG: The time frame, to my knowledge, is the same, yes.

The Hon. CHRIS RATH: I'm not sure if you can answer this question, but how do you think New South Wales or Australia compares to international jurisdictions on silicosis? I know that Ghella is involved with projects all around the world. I was reading about the high-speed rail between Lyon and Turin that you're developing. What are the policy settings in other jurisdictions? What do they do well? What do we do well? I know you might not be involved as much with international projects.

CORNELIUS BUITENDAG: As far as I'm concerned, and as far as my knowledge goes, the process is quite similar, albeit very different regulatory or legal requirements, especially with the 2024 updated crystalline silica regulation. Within that regulation or standard, it's quite robust to what we've seen recently taking place within the Australian environment. In general, the policies and processes are quite similar in terms of the risk-based approach and utilising the hierarchy of control of implementing control measures.

Ms ABIGAIL BOYD: Thank you for coming along today. We've heard a lot about the higher order control measures and then masks and things being a last resort or the last line of defence. As technology has increased and our knowledge has improved, what has your company been doing differently to improve that higher order control in tunnels?

CORNELIUS BUITENDAG: What I can speak to, from my knowledge in the past couple of years, is that even prior to the introduction of the updated regulation of September 2024, Ghella and its associated partners, as early as around 2018, from my recollection, have been working with SafeWork, have been working with experts in the field and have been working with clients to improve systems and processes to protect workers from silica dust. Out of those discussions and workshops, various items have come up that have been implemented. I believe the previous members have also discussed that a fair bit.

I have a couple of examples, if you don't mind. We've got the tunnel ventilation management system with scrubbers and all that, but things that stand out that have changed in the past couple of years are the utilisation of HEPA filters and sealed cabins within machines, plant and equipment to allow those workers inside not to be exposed to any particular RCS dust. In addition to that, power tools have been fitted with vacuum machines and HEPA filters to extract the dust at the source of cutting or where rock is being broken. Various amounts of vacuums are used. In addition to that, the RCS management programs have adapted a fair bit in the past few years to put in place more stringent action plans where there are exceedences.

Ms ABIGAIL BOYD: Are your workers using these PAPR masks?

CORNELIUS BUITENDAG: Yes, absolutely.

Ms ABIGAIL BOYD: Is that a standard or does it depend on which project or which worker?

CORNELIUS BUITENDAG: From what I can say, it has been a standard for at least a couple of years in the projects that we've been involved in with our partners. It's a very good system. It is a system that we do a lot of training on with the employees to ensure that they understand how to utilise them—maintenance programs and how to keep it clean. We even set up a system on each site where there's a whole team for storage and maintaining and cleaning and keeping that equipment to a level that it's safe to keep using.

Ms ABIGAIL BOYD: What's the battery life of one of those masks?

CORNELIUS de BUITENDAG: It depends—up to 12 hours.

Ms ABIGAIL BOYD: So if for some reason it runs out midway, you've got other masks that people can swap into.

CORNELIUS BUITENDAG: Yes, absolutely, that's correct. The battery pack is actually on your back—it's tied, almost similar to a belt—as well as the filter system. That's then connected by a hose. But yes, absolutely, at certain storage locations we've got additional battery packs; we've got additional filters. It's always on standby. We do checks and balances to ensure that we've got enough for everybody, to be utilised within each work environment where there's a high risk.

Ms ABIGAIL BOYD: Do you require your occupational hygienists to sign non-disclosure agreements?

CORNELIUS BUITENDAG: I'm not aware of that. I will have to take that on notice.

The Hon. MARK BANASIAK: Just to clarify, you do subcontract to other companies?

CORNELIUS BUITENDAG: No, sorry, that's not correct. We are a joint-venture partner in a minority shareholder with principal contractors.

The Hon. MARK BANASIAK: All right, so I can't ask you the same question I asked the other companies. Can I just go to the issue of vehicles. What came out in some of the documents that we got through an SO 52 was the high prevalence of unroadworthy, unregistrable vehicles being used in tunnelling projects, some with poor seals on windows and rags hanging out of petrol valves on the gas tanks. What processes have you got in place to ensure that all the vehicles that you use on your sites are roadworthy, safe et cetera?

CORNELIUS BUITENDAG: From the review and compliance checks that Ghella partakes in, in the realm of our partners, I've never seen that, to be quite honest, in any of our projects that we've been involved in. The balances and checks that go into any plant and equipment, inclusive of vehicles that come onto any of our projects, are quite robust, and it's set out in our health and safety management system. Predominantly, we have a safety team or an onboarding team that looks at every single piece or item of plant or vehicle that comes on board, with a specific checklist of requirements. Those requirements are checked and maintained throughout.

The Hon. MARK BANASIAK: I might reword the question I asked the other witnesses. What we saw through the documents that we got through the Standing Order 52 was a high prevalence of breaches in what I would probably consider quite basic workplace health and safety areas, like making sure your mask is on at all times—really basic stuff, and repeated. In your tunnelling projects, have you ever had cause to remove workers or groups of workers, or retrain them, for continued breaches of really basic work health and safety principles like that?

CORNELIUS BUITENDAG: Yes, I'm surely aware of instances like that occurring. I have, in the past, known that there have been instances where workers or employees have not always complied with certain or specific requirements. But to my knowledge, supervisors or other employees or workers on the project normally pick up on that and provide advice to those workers, normally within the sense of either retraining or picking them up on the spot.

The Hon. MARK BANASIAK: Have you ever had cause to actually stop a project or pause a project because of those repeated breaches, or is it the case that you just push on and hope that the talking-to works?

CORNELIUS BUITENDAG: To my knowledge, I do know of an instance at least where work has been stopped to ensure a safer work environment where breaches have been identified.

The Hon. MARK BANASIAK: Can you give details as to how that occurred, where it was and for how long?

CORNELIUS BUITENDAG: I'll take that on notice and provide you feedback.

The Hon. MARK BANASIAK: And the reasons why it was stopped.

CORNELIUS BUITENDAG: Yes, of course.

The CHAIR: In your opening statement, you describe the nature of the company as one that is—and these are my words—smaller than the principal contractors. You fit in, presumably, doing work for and on behalf of the principal contractor. You sit separate from the principal contractor, but you have a commercial relationship with the principal contractor to do certain aspects of the project. Is that a fair way of describing how Ghella operates?

CORNELIUS BUITENDAG: Somewhat, but not completely.

The CHAIR: That's what I understood. Could you please describe it?

CORNELIUS BUITENDAG: In basic terms, it's a joint venture between different partnerships.

The CHAIR: Forgive me for asking these questions, because we've been hearing different explanations of how this works. In terms of the joint relationship, that doesn't mean that you're subservient to the bigger contractor and therefore have to, dare I say, follow their lead. You operate in a joint fashion with them. Is that a fair way to describe the way the projects work?

CORNELIUS BUITENDAG: It is fair. Having said that, the principal contractors' systems and all management systems are predominantly utilised to streamline the process.

The CHAIR: Indeed. This is where I'm taking the line of questioning. We don't need to name any individual principal contractors, but let's say principal contractor X is in a project with Ghella, working on a tunnelling project. With respect to the principal contractor, do they place, formally through the joint relationship, obligations on how you carry out your part of the work, given the relationship? Or is that a matter that you just work out between yourselves outside a contractual relationship?

CORNELIUS BUITENDAG: There's typically a joint venture agreement or a legal agreement that stipulates those requirements.

The CHAIR: If it's a joint relationship and a joint contractual arrangement, I presume—I shouldn't presume—that, in terms of meeting occupational health and safety standards, neither the principal contractor nor yourself could ever find themselves in a situation where they fall below the minimum. In other words, the principal contractor surely must set the lead and insist on the regulatory standards and, of course, you would follow that. That's a fair statement?

CORNELIUS BUITENDAG: That's a fair statement to make. But, having said that, as a minority or stakeholder partnership, that does not absolve us of having that same standard.

The CHAIR: No, indeed.

CORNELIUS BUITENDAG: In addition to that, our own health and safety management systems are also developed to the similar standard, although not always utilised.

The CHAIR: Following on, are there occasions—and, once again, I'm not asking you to nominate companies—whereby you find a situation where there could be a difference or a debate between the principal contractor and yourself about occupational health and safety, and where a tension arises and there is, therefore, some debate over what should be done, in general terms?

CORNELIUS BUITENDAG: It has been my experience that we've never had much debate in terms of a difference where we feel there's a lack of meeting a relevant standard or requirement. However, the process does work in a way that, even prior to tendering and up to tendering, all partners are involved and give input into that development of the actual management systems related to safety that will be implemented in each individual project. We've got sight on that even before the project starts, and therefore we have the time and input right there and then and throughout the whole process to completion.

The CHAIR: Indeed, that was my next question. To the extent a project got underway and was progressing, and some occupational health and safety matter arose, based upon which there needed to be some discussion about how to deal with it because of its complexity or because it may not have been fully anticipated in that negotiation, do the parties come together—the principal contractor and yourself—and discuss that and work out how best to proceed to deal with the matter?

CORNELIUS BUITENDAG: Yes, absolutely, that's correct. We're involved as much as we can. In terms of consultation and participation between partnerships, that occurs daily on many levels. I can attest to my level, in any way. We do regular site visits. We do—annually at least, or less—site audits and inspections with our partners. We are also invited to project reviews. We receive monthly detailed updates and reports on the projects—not only monthly but as required. We've got a steering committee.

The CHAIR: Who provides those reports to you? What's the line of communication? From the principal contractor back to yourself—is that what you mean by reports?

CORNELIUS BUITENDAG: Yes, correct—from the joint venture. We don't necessarily see the partnership, in the joint venture sense, as separate. Contractually, yes, it's separate.

The CHAIR: I understand what you're saying.

CORNELIUS BUITENDAG: But, in reality, we are one team.

The CHAIR: With respect to the individuals that Ghella engage to do the work, which is part of your obligation under the joint contract, are those individuals direct employees of Ghella or are they contractors to Ghella? In other words, do you subcontract out perhaps elements of what you're required to do under your contract with the principal contractor to someone else to do part of the project that you've got responsibility for?

CORNELIUS BUITENDAG: From a Ghella point of view, no, we don't.

The CHAIR: So the individuals who are working for Ghella are on a contract of employment. They're not contractors; they are direct employees of Ghella.

CORNELIUS BUITENDAG: That's correct, yes.

The CHAIR: With respect to those employees, would you mind providing just an overview of the history of the practice of dealing with crystalline silicosis as an issue in tunnelling? Give us some insights into how it has been managed historically, if you could, and then some insights into how you're dealing with it now and what you might be looking to do into the future to try to deal with this matter, just so we've got a sense of how the company has been dealing with this.

CORNELIUS BUITENDAG: Yes, certainly.

The CHAIR: I know that's a big range of questions, but I'll leave it to you to provide an overview.

CORNELIUS BUITENDAG: I certainly do believe that any area where there's a high risk—inclusive of silica in this case—we've always taken it seriously. I've been with Ghella for about the last five years—4½ years. I can remember—I believe my first or second board meeting with Ghella actually related to crystalline silica: bringing that into the business and saying, "Hey, we need to be looking at this. They're changing the WES from 0.1 to 0.05. What are the risks? What do we need to do as a business? What do we need to be looking at as a business with our partners et cetera?" So it has been something that has always been dealt with as a concern, but also as a reality to make sure that we stay on top of things. With regards to where we are at the moment—

The CHAIR: Sorry, without being difficult, that's going back, say, five years ago. That's your experience or history with the company. Are you able to make any comment about before then? When you took over, were you being told that this is an issue that needs to be considered, or is that history that you're not familiar with?

CORNELIUS BUITENDAG: It certainly is true that I'm familiar with—albeit not that in depth, but I know it's always been a discussion topic and not as a singular item, but as part of a holistic risk management process that Ghella has been working on, obviously because we're doing tunnelling works. It's always been something that's been high on our priority list. Whether it be in Australia, whether it be working in the US, working in Europe—it's dust exposure. Silica has always been among our priorities to ensure that we can comply to those mitigating standards.

The CHAIR: In terms of the position of the company now in dealing with what is now a matter that's received much currency in debate and discussion, and indeed there's an appreciated concern about its impact, what is Ghella doing looking forward to deal with this issue? Are you able to explain that to us?

CORNELIUS BUITENDAG: Yes, of course, honourable member. I also want to make it clear that Ghella absolutely agrees with that; it is an issue. We've been working on this for many years. But we can, as an industry and as partnerships, create a better line of communication between regulators and between unions to ensure there's collaboration to work towards a common goal of reducing this risk of silica towards the workers on a work level. We as a business, of course, with our partnerships, always look at ways on how to improve safety standards on projects. As I mentioned earlier, even before the update of the regulations we have been implementing above-and-beyond measures. We have been looking at implementing measures on a project level that are beyond what is currently or have been used previously. To that end, I think for the future we need to really invest in looking at technology and ways of providing a better risk plan for workers moving forward.

The CHAIR: Can I return to this theme about the nature of the relationship with the principal contractor and yourself on what is a joint project? Have you found occasions, in dealing with this matter of crystalline silica, where the principal contractor has put forward a means of managing and dealing with it—I suppose, first of all confronting it and then dealing with it as an issue. They put forward what they're proposing to do, and Ghella also, as co-partners jointly doing this project, looks at what's been put forward and finds that it's actually lower or beneath what Ghella would be wanting to do, and perhaps does do in jurisdictions overseas? Have you ever been in that circumstance?

CORNELIUS BUITENDAG: No. To my knowledge, we've never been in that particular position. But having said that, that doesn't mean that we're not always looking at ways to improve methods of operating safely on a project. We do tend to look elsewhere abroad at what's been implemented. Are there better ways? Are there different ways to bring over, potentially, some of our projects in Australia? However, I've not been in a position where that's been actually the case.

The CHAIR: Is your evidence that during this period leading up to the project commencing, these issues are essentially worked out between the co-parties to the contract? Based on what you've said a bit earlier, these matters are worked through during this period.

CORNELIUS BUITENDAG: Yes, that's correct.

The CHAIR: With respect to the part of the project that Ghella has contracted for, has it even on occasions either been required or needed to use equipment that are aspects of, dare I say, hardware or infrastructure parts of the project which are under the control of the principal contractor? Or do you operate, to be clear about this, quite autonomously as a unit—you've got your own gear, you're very much self-sufficient and just get about doing your part of the project?

CORNELIUS BUITENDAG: At no point do we have autonomy or are autonomous or separated through that joint venture.

The CHAIR: How does it mesh together, then? Let's take a piece of tunnel-boring equipment. Would that be typically owned by the principal contractor? I'm trying to work out, in these conjoint arrangements, what you're bringing to the project, other than the labour to do it.

CORNELIUS BUITENDAG: Typically it's not just labour or workforce. We tend to bring expertise within the tunnelling industry. I probably can't answer—

The CHAIR: As best you can.

CORNELIUS BUITENDAG: Where it comes to commercial contractual agreements, I'm probably not the best person suited to answer that.

The CHAIR: But, at the end of the day, the nature of the arrangement is that there is a contract there but working as partners with the principal contractor. And there could be other partners as well, is that correct? There could be other conjoint partners?

CORNELIUS BUITENDAG: Yes, that's correct.

The CHAIR: And they, at least in principle, are meant to be working in synchronicity with each other to complete the project.

CORNELIUS BUITENDAG: My experience is that that synchronicity is absolutely vital and key. That is how we go about our business—being at the same level as everyone else. That's what I referred to earlier as being one team on the joint venture.

The CHAIR: Thank you very much for coming along. There may be some questions arising from the members reading Hansard's transcript following its publishing or its circulation after today, which might lead to some supplementary questions. The secretariat will liaise with you. Once again, thank you for coming along today.

(The witness withdrew.)

Mr CHRIS DONOVAN, Assistant National Secretary, Australian Workers' Union, on former affirmation

Mrs KATE COLE, **OAM**, PhD Candidate, University of Sydney, on former oath

The CHAIR: Good morning and welcome back to the inquiry. Thank you both for making yourselves available again to come along today. You both appeared on the first day of the inquiry, representing your respective organisations but also in a joint capacity in terms of Ms Cole's research work, so your previous oath or affirmation stands. I invite you, singularly or both, to make an opening statement and then, if you're agreeable, we'll share the questions around. There are representatives from the Opposition, Government and crossbench. The Hon. Stephen Lawrence is joining us remotely from Dubbo. If you're happy with that, let's get underway with opening statements. If there's only one opening statement, that's fine. But the offer is there to both of you.

KATE COLE: I'd like to begin by acknowledging the traditional owners of the land that we meet on today and pay my respects to Elders past, present and emerging. Thank you for the opportunity to return and provide further evidence for this important review. Since I last appeared, I've undertaken a preliminary review of around 72,000 pages of documents obtained under the return to order. These documents from SafeWork NSW, Transport for NSW and Sydney Metro cover respirable crystalline silica in air data across 14 tunnel projects from 2016 to 2024.

At the first hearing I said that the New South Wales Government should expect a significant number of lung cancer and silicosis cases from our infrastructure program. Unfortunately the data that I have reviewed only confirms this concern. The data clearly shows that tunnel workers have been exposed to silica dust on New South Wales government-funded projects and, while exposure levels do vary between projects, some environments contained very high concentrations of silica dust over prolonged periods of time. Across the board, there were repeated instances of exceedences of the workplace exposure standards, including where workers were not protected by personal protective equipment.

I've also recently finished analysing data from a national survey of people who have worked in tunnelling, with nearly 300 respondents providing insight into dust control practices in this industry, and I've commenced interviewing people to understand the barriers in silica risk reduction in tunnelling. I will acknowledge the work of Minister Cotsis in establishing the Tunnelling Dust Safety Taskforce and to SafeWork NSW for progressing the long-awaited code of practice for tunnels under construction, and say thank you again for the opportunity to contribute. I welcome your questions.

The CHAIR: Would you like to make an opening statement, Mr Donovan?

CHRIS DONOVAN: Yes, thank you. In early 2024 the Australian Workers' Union began requesting documents under the GIPA Act regarding silica dust exposure in New South Wales tunnelling projects. While Transport for NSW released key data revealing dangerously high exposure levels, SafeWork NSW refused, citing multiple reasons including potential reputational damage to companies like CPB and John Holland. What should have been a straightforward transparency process quickly became obstructed by delay, inconsistency and active resistance. A small portion of the requested information was eventually obtained, and this is summarised in the AWU's written submission. Following a recommendation in our submission, the Hon. Mark Banasiak, MLC, used Standing Order 52 to compel the full release of those documents. We thank Mr Banasiak for his decisive action. These documents confirm what AWU members have long known: widespread breaches and systemic failure to protect the health and safety of workers in the tunnelling industry.

Key findings from those documents obtained through the Standing Order 52 include but are certainly not limited to workers on multiple projects being exposed to silica dust well above the legal limits; one in three tests on Sydney Metro City and Southwest exceeding the WES—the workplace exposure standards—some by 208 times; on the Metro West, one in seven tests breached the threshold; 13 workers from the M6 stage one project have been diagnosed with silicosis; companies knew that workers had to remove their PPE to communicate; SafeWork NSW failed to prosecute despite having evidence of breaches of the WHS Act since 2017; regulators gave companies up to a week's notice before conducting safety inspections; and the Australian Tunnelling Society sought to exclude unions from a national forum on silica dust safety discussions.

This is not an isolated noncompliance. It is systemic negligence by employers like John Holland and CPB, regulators and government departments. Unless urgent reforms are made, this will become, and in fact already has to a degree become, a full-blown occupational disease crisis. Accordingly, the AWU recommends—and this is outlined in our paper as well—amending section 118 of the WHS Act to allow WHS permit holders to take photos, videos and measurements when investigating suspected contraventions; amending section 230 of the WHS Act to allow unions to prosecute breaches of the WHS Act; amending section 232 of the WHS Act to extend the limitation period for prosecutions from two years to at least five years; and to conduct a review as to the

suitability of a centralised body to collect information modelled on coal services for all government-funded tunnelling projects.

The CHAIR: The company involved in doing work in this area—a well-known international company, Acciona—has not made itself, at least at this point, available to provide evidence to this inquiry. I am just wondering—and I am just asking for a headline comment here—for the work that you've both done, does it actually cover work done with Acciona being a principal contractor with any of the projects, or a contractor at all in any of the projects?

KATE COLE: I can answer that. Yes, it does cover projects that have been delivered by Acciona.

The CHAIR: Thank you. That just helps give a bit of context. The Hon. Rod Roberts?

The Hon. ROD ROBERTS: Good question, Chair, by the way. Thank you both for attending. I've just got a couple of questions to start with and I may come back later, depending on time. To you, Mr Donovan, first, in your opinion, the actions taken by the regulator, SafeWork NSW, were they timely and sufficient in addressing issues that have been found in the workplace?

CHRIS DONOVAN: I think they were almost certainly not timely and sufficient. One may have been led to the opinion that that may have been the case, potentially, but there is very clear evidence now, thanks to the papers that we have, that that just is simply not true, unfortunately. As a result, it would have impacted, to a degree, workers in the tunnelling industry.

The Hon. ROD ROBERTS: To that regard, then, what additional steps would you like to see in place to make the regulator more efficient?

CHRIS DONOVAN: I'd certainly like to see—

The Hon. ROD ROBERTS: Or steps that they should be taking.

CHRIS DONOVAN: In terms of steps that they should be taking, the regulator clearly has the evidence that companies—some of the companies that have appeared here today—have been in breach of the WHS Act. It is the regulator's job to regulate the industry and, as their power under the Act allows them to, to prosecute companies or other bodies who fail to follow the Act. What's the point of having an Act of Parliament if people who are going to breach the Act are not scared of being prosecuted?

The Hon. ROD ROBERTS: So, more action then?

CHRIS DONOVAN: More action, more teeth.

The Hon. ROD ROBERTS: Yes, more teeth—I agree with you. And—we've heard from the regulator earlier on and I think they're back again today—a bit more stick instead of carrot, perhaps?

CHRIS DONOVAN: Yes, definitely. There are other examples of the regulator providing a week's notice to the company of them doing safety inspections.

The Hon. ROD ROBERTS: We'd love that, wouldn't we? All of us in our various roles would love advance notice of what's going to happen. Further on, then, what actions does your union believe are necessary to fully address silica dust issues in tunnelling projects? Apart from the regulator enforcing the regulations, which is their job to do, what other things could happen in the actual workplace to ensure it's as safe as it can practically be?

CHRIS DONOVAN: There's a lot of things for that.

The Hon. ROD ROBERTS: You've got plenty of time. Here's your opportunity.

CHRIS DONOVAN: So the part of your question where you go to what things in the workplace could change, I think there's a large, overarching fear in a lot of construction workers, particularly tunnelling workers, that, if they speak up in relation to safety, they won't be given access, that once that project finishes they may not be given work on other projects with the same company or with other companies and that they'll be blacklisted. So I think to some degree there has to be a greater protection of workers in that space. What's the solution to that is another difficult thing. I'm just outlining a problem here and not giving you a solution, but just to give you an idea about around the context.

The Hon. ROD ROBERTS: We need to know these things because, clearly, we're here in this workplace, whereas the workers are at the coalface—to use that expression—who know and see the issues, related via you to us so we can try and recommend, perhaps, various changes.

CHRIS DONOVAN: There are other changes as well that could be made in relation to the union and employer groups being a party to the WHS Act and some of the recommendations that I outlined there that may allow for suspected contraventions to be caught prior to them becoming an issue. What the union has asked for is not anything radical. These laws already exist in South Australia, so it would just be adopting best practice in this space.

The Hon. ROD ROBERTS: To that point, in your opening statement you touched upon regulatory and legislative changes. Would you like to expand upon those a bit further?

CHRIS DONOVAN: Regulatory changes in relation to what, how things could be made better in tunnels?

The Hon. ROD ROBERTS: Well, are there any legislative changes? You talked about it in your opening submission. You said there could be changes to the Work Health and Safety Act and various things. Would you like to expand upon that a bit more for us?

CHRIS DONOVAN: Yes, certainly. A union official is allowed to enter a workplace to conduct a safety inspection for a suspected contravention of the Act. As I alluded to before, at the moment that official cannot technically take photos or videos or measurements. When I say measurements—at least in the AWU's experience of taking measurements—I mean the measurement through a dust monitor that we purchased. Right now all of those things are not technically allowable under the Act. The photos and videos that the Australian Workers' Union has provided to this Committee have, in fact, been done with an element of risk associated with doing that. But we believe, obviously, that it's our responsibility to make sure that these things are aired publicly.

You might have heard comments this morning from other parties in relation to dust monitoring. The Australian Workers' Union purchased dust monitors a number of years ago now. And, as I think you're aware, we were banned from going onto site to use those dust monitors. The company actually uses the exact same dust monitors themselves. I think there needs to be greater collaboration in relation to what the union can do to assist this to become an issue before the regulator gets involved. We understand that the regulator can't be in every single worksite every single time; we fully understand that. There is a role, as is stipulated under the Act, for unions to play a role in safety onsite, and we believe, at least in this situation in tunnelling, that that may assist.

In relation to the other suggestion that I made in relation to amending section 230 of the WHS Act to allow unions to prosecute, the regulator is not going to do it. Why should it be the case that a representative of a party who's an employee of the Act that's been breached not be allowed to prosecute? I think that's stifling policing of the Act, in my opinion. The other recommendation was around changing section 232 of the WHS Act to extend the limitation period for prosecution, which is only two years under the Act, to five years. I understand the statute of limitations, more broadly speaking, may be six years as well, but I'm not 100 per cent sure on that. Extending that period from two years to five years would allow the regulator, or whoever may be allowed to pursue a legal action in this case, to actually do that.

We find that people diagnosed with silicosis might not find out for many years. As well, the Parliament or the union may not find out that, in fact, the company has breached the regulation until after two years anyway, which has been the case with some of the information that we've been provided. So, to some degree, the regulator is caught in that sort of space. But keep in mind that they did themselves have the information readily available. Perhaps not the information that Transport for NSW had, but they themselves didn't have that information.

The Hon. ROD ROBERTS: I will change to you, Mrs Cole, for a question. You talked in your opening submission about doing research in relation to the barriers to try and prevent exposure to RCS. What are some of those barriers? What have you discovered via your surveys and your questioning and your reviews?

KATE COLE: Through the survey and interviews I've been asking participants what they are, and three top barriers have come out that have prevented good dust control in some of the tunnels in the State. The first is leadership, which relates to safety culture, so not prioritising the issue at a project level. The second is lack of enforcement of regulation, which leads to the feeling that if the regulator isn't enforcing the issue then maybe it's not a problem. The third is time or schedule pressure. So prioritising other areas over health and safety.

The Hon. SUSAN CARTER: Thank you both for being here. Mrs Cole, if I could pick up where my colleague just left off, I'm interested in your discussion of leadership as a factor or as a barrier. In your research, have you seen—when you're talking about leadership, is it corporate leadership or is it project leadership? For example, for the same contractor, are there different approaches to safety? Is it project specific or a culture of safety more broadly?

KATE COLE: That's a great question. The information that's coming through is that it's largely related to project-level leadership, so someone on the project that really prioritises worker health, prioritises safety and, no matter what is happening, always puts safety first. That is not necessarily consistent across industry, regardless

of the principal contractor that is there in place. That was the number one factor that came through that contributed to whether things were going to be protective of worker health or otherwise.

The Hon. SUSAN CARTER: As I understand these very large projects, there will be a head contractor and there will be multiple subcontractors. Does the safety chain fall down at a subcontractor level or if the leadership at the top level is in place? Can you talk a little bit about exactly where the problems arise?

KATE COLE: I don't have information on the exact level of leadership but I will say, in my experience, if you have a very strong project manager, a strong project director and a strong construction director, that all comes from the top and it trickles down, even down to the subcontractor level. I mentioned in my opening statement that there were projects with high exposures and some that were actually managing this quite well, so I would anticipate that leadership has at least something to do with that. It's evident that this issue is not managed consistently across the entire New South Wales tunnelling industry. In my own experience, I know that there are some very good leaders in this space that take no prisoners and make sure that everything is going well but, equally, there are others that evidently have not done that within their own projects.

The Hon. SUSAN CARTER: I'm conscious of the difficulties that you've had in accessing readings and material, and I understand that you have documentation in relation to air data. Do you also have documentation in relation to the PPE that workers had when there were those exceedences?

KATE COLE: Yes. In most cases the information that was provided included qualitative descriptors as to whether workers had access to respiratory protection and were wearing it, if they were clean shaven, if it was the right type, for example, and what type it was.

The Hon. SUSAN CARTER: Have you been able to map the levels of RCS against the PPE that was available to workers?

KATE COLE: Yes. I have information as to how effective PPE was when the exposure standard was exceeded across various projects. Obviously some projects have a lot of results that are above the workplace exposure standards and also have a lot of results where those workers were not protected by respiratory protection. Conversely there are projects where most samples are below the workplace exposure standards and where respiratory protection was used—that it was used effectively. Yes, I have that information.

The Hon. SUSAN CARTER: Do you have any data on the length of time that there were exceedences? Are these unusual flare-ups or is it a consistent pattern across weeks?

KATE COLE: That's a great question. It really comes back to the types of work. There was one instance where, even as recently as, say, 2023, there was a piling contractor on one of these tunnel projects with really high exposures to silica dust, over one milligram per cubic metre. And you think, "Okay, that's an issue." You'd think it would be investigated and it wouldn't happen again, but then it happened again the next month. Similarly, in the Australian Workers' Union submission there was a graph showing exceedences that related to roadheader operators and their exposures to silica over time. It's not one exceedence without the appropriate respiratory protection; it's around, from memory, seven over a period of months, which suggests that this is an issue that has not had the appropriate level of attention to stop those exposures to workers happening over protracted periods of time.

I will say that there is a very big difference—and the data is somewhat limited—in that the majority of the information that was provided under the Standing Order 52 came from Sydney Metro, who I presume have appropriate contractual requirements to obtain or receive that information. Very limited information was provided from Transport for NSW. There is not much information relating to the Western Harbour Tunnel or indeed the M6. I guess that Transport don't have a systematic approach to request or receive that information because, if they did, it would have come out in the Standing Order 52 documents.

The Hon. SUSAN CARTER: With respect to exceedences, is there always a form of PPE that can protect regardless of the level, or are there just some levels against which all protection will fail?

KATE COLE: That's a good question. The PPE isn't infallible, so it's not going to protect against absolutely everything all of the time. It's not going to protect it to zero. We're talking about a known human carcinogen. It's not just silicosis, even though I know we focus on this a lot; we're also talking about lung cancer. I know we talk about the workplace exposure standard as some magical limit, but we also know that adverse health effects happen below this limit. If we're just assuming that respiratory protection or PPE is controlling everything to this limit, we're doing a disservice to workers because we're still putting them at risk of silica-related diseases, including lung cancer.

To answer your question, in the exceedences that I've seen, based on the workplace exposure standard at the time, yes, there was always something that could have been done. But I would argue that when we start to see

exposures of crystalline silica dust in whole numbers—so the exposure standard is 0.05 and we start to see exposures of one, two, nine, 10 milligrams per cubic metre, I would argue that PPE is not the first thing that we should be going to in that instance, and that it just speaks to the importance of engineering controls like ventilation and dust suppression more broadly.

The Hon. SUSAN CARTER: Mr Donovan, you flagged that the enforcement changes that you want to see are in place in South Australia already.

CHRIS DONOVAN: One of the provisions in relation to permit holders I believe is already existing in South Australia, yes.

The Hon. SUSAN CARTER: Right, so it's only one of the provisions.

CHRIS DONOVAN: Yes.

The Hon. SUSAN CARTER: How long has that been in operation in South Australia?

CHRIS DONOVAN: Approximately six to 12 months.

The Hon. SUSAN CARTER: If you could take it on notice, I'd be interested to know what, if any, effect that legislative provision has had on the culture of safety, on enforcement, on worker safety in South Australia.

CHRIS DONOVAN: Sure, I'm more than happy to give—I may not be able to provide you information in relation to tunnelling projects, although there is one in Adelaide that's coming up, but more generally I could provide that for you, yes.

The Hon. SUSAN CARTER: The question really goes to their experience and if this has been a positive change in South Australia.

Ms ABIGAIL BOYD: Thank you to both of you for coming along again to give us the benefit of your expertise and knowledge. Mr Donovan, in relation to the case that the AWU was running against John Holland—it was in relation to the Western Harbour Tunnel, wasn't it?

CHRIS DONOVAN: I understand that it was, yes.

Ms ABIGAIL BOYD: I think we were all keen to see an outcome from that case because it was a bit of a test case for the right to entry. I'm aware that litigation is very expensive. From what they were saying this morning, it seems that case has been settled in some way. Are you able to comment at all about the response that was given by the representative from John Holland today and whether there has been something good coming out of that case?

CHRIS DONOVAN: Whether or not there's something good coming out of that case—arguably yes. I think the representative from John Holland indicated that there was some arrangement made whereby they would allow the Australian Workers' Union to enter tunnelling projects with the use of the dust monitor in certain circumstances. To that end, I imagine that's a relative benefit. However, if we're talking about the overarching benefit, in a sense it restricts us to some degree because on sites where we can simply go on and use it, those companies could just point to a case with John Holland where access to use the thermometer was restricted. It's not the best-case scenario, no. It's where it's landed. That's my understanding.

Ms ABIGAIL BOYD: The representative of John Holland also talked about how they're now very happy to release the information. Can I ask you, Ms Cole, first, as you have a lot of experience trying to get information out of various government bodies around the country. Did the evidence this morning ring true for you in terms of their reasoning for wanting to hold back that information on the basis of not wanting to give the names of workers?

KATE COLE: Look, I will say that when I did request information through freedom of information to a number of regulators, in every request I have always made it really clear that I do not seek data on individual workers' names, or indeed any information that may make them identifiable. That was very clear in every single request. I guess I can't comment on the evidence that was provided because it was the evidence provided by that company, but it's inconsistent with the information that I have received. That is all I could say because the reasons that have been provided to me by tunnelling contractors that restrict, or aim to restrict, the access to information relate to potential reputational damage in relation to that release, which I find really interesting because if the silica dust in air data show low levels of exposure why would it impact the reputation of a tunnel contractor?

I've come at this research very open-minded and very hopeful, and as the perpetual optimist, that things are much better now than they were historically. Maybe I was naïve in thinking that this would be a relatively easy process, but that has not been the case. I point to an existing case where I've tried to access information from Queensland and the tunnelling contractors have again restricted my access to that information, citing reputational concerns. That is a matter that is currently scheduled to be heard by the Queensland Civil and Administrative

Tribunal just to get access to silica dust data in air from a recent tunnel. I think it's wonderful that there is this new-found feeling of wanting to release this information because I firmly believe that it shouldn't be kept private. In fact, in this State I think that all silica dust in air data should go to a centralised body.

In New South Wales mining, we have Coal Services, which is a fantastic institution that does independent monitoring. All the monitoring goes back to that particular statutory body. That is used for a range of purposes: one, to understand compliance; another, to understand potential claims, or provision of claims; and, thirdly, for research purposes. Without that structure within infrastructure or tunnelling more broadly, it relies on people like me or others to then go through that whole freedom of information process, which takes up to 12 to 24 months to access information.

Ms ABIGAIL BOYD: And if you're also having to potentially go to court, that is a long period of time before you get the information. This may be a question for you as well, Mr Donovan. The current statute of limitations of two years under the relevant legislation—do you think that that's playing in here? The cynic in me would say if I was a company, and I could just delay the release of this information for two years, then you're not going to get pinged for it under the Act because it will then be a bit too late for that. Do you think that's part of the problem here?

KATE COLE: Maybe I can answer that. In this context, I don't think so and the reason I say that is that I'm asking for information from work health and safety regulators. They already have this information and I'm asking them for it. In the Standing Order 52, there were many documents from SafeWork NSW that demonstrated that they knew the levels of silica dust in tunnels across Sydney. In fact, a lot of the information from the road tunnels came from SafeWork NSW, including information where they had monitored silica dust in air exposures to their own inspectors as part of their duty of care. I don't necessarily think that may be a part of it. I guess the new-found cynic in me may presume that it does relate to reputational impacts, but I really had hoped that recent tunnel projects would have the benefit of the knowledge and expertise of the engineers in our industry to create safer workplaces for tunnel workers.

Ms ABIGAIL BOYD: It's bothering me, this personal information idea—that that's why we're not releasing this air-monitoring data. What personal information does it show anyway? What could possibly be coming through in whether or not there's been an exceedence?

KATE COLE: The type of personal information that's present in the reports provided in the Standing Order 52 return to order that has been redacted is a worker's name.

Ms ABIGAIL BOYD: Because they were carrying the device, or they were—

KATE COLE: Because they wore the device. I will say that there is an increasing trend in these air- monitoring reports not to include the worker's name, which is fine. It's in other documentation which is linked somehow, so they do know. It therefore becomes less of a problem in redacting it, because it's not there to start with.

Ms ABIGAIL BOYD: Given that the Government is the giver of this work—it's a gift to the construction industry whenever it decides to build a tunnel, if we put it like that. It's not like there's other players in that market competing for that construction contract from a buyer perspective. It is a bit of an obvious question, but presumably it's within the Government's power to just write it as a standard thing into contracts, that any construction company needs to be providing this data very publicly and very quickly as part of that contract. If that was the same across every contractor, presumably that's a really obvious way to exercise government control to ensure this would happen.

KATE COLE: Yes, absolutely. I'd point to a good example that is undertaken by Sydney Metro that does include those types of contractual requirements in each and every contract—at least since the city and south-west project and still in the west and Western Sydney airport contracts—where they are going above and beyond the regulations and putting in really specific requirements for contractors to meet, including giving them copies of air-monitoring data. To your point, though, the extension of that would be that it would then also be provided to another centralised body, whether that be icare, the Dust Diseases Board or another appropriate institution.

There were many examples in the Standing Order 52 return where that government client had issued contractual notices to tunnel contractors, saying, "You haven't met these contractual criteria. You haven't given us the air-monitoring data on time. You've exceeded the exposure standard and you've exposed a worker. What are you doing about it?" That precedent, I guess, exists, but that doesn't exist in Transport for NSW, so the issue is managed differently, which is interesting because the exposures to workers are higher on Transport projects because they use mined tunnelling and roadheaders more often. The level of exposure on average in Transport projects, and the number of exceedences of the WES and exposures to workers without using respiratory protection, is much higher on Transport projects than it is on Metro projects.

Ms ABIGAIL BOYD: The representative from John Holland started their opening statement by talking about controlled and uncontrolled exceedences. I know the Chair touched on this as well, but there seems to be this argument that only the uncontrolled exceedences need to be notified. Is that correct? Can you talk us through what that means and what you think of that statement?

KATE COLE: Yes. Since 1 September last year, there's been a requirement for all exceedences of the exposure standard—controlled, which means "was wearing respiratory protection"; or uncontrolled, meaning "wasn't worn", "not worn appropriately" or "not right type"—to go to SafeWork NSW. Prior to that, there was no requirement for a business to notify the regulator. The regulator may have obtained or, in the case of tunnelling, did obtain this information through a section 155 request or a notice to contractors to obtain it. There is, in some projects, an increasing trend of those uncontrolled exceedences getting less and less. That trend exists on Metro projects. It's difficult to understand if that trend exists on Transport projects. In the very early projects, there was a large number of exposures to silica dust without them being controlled—so either no PPE, an inappropriate type of PPE or it wasn't worn correctly.

Ms ABIGAIL BOYD: I have one more question and then I'll allow other people to ask. The other thing that both of the companies in the first session this morning were saying—I guess I was trying to get out of them that there was some new approach to ensuring that the risks of silicosis are managed in a better way. There was talk of the use of PAPR masks as being one of the advances and making that more standard. We know that they're not the first line of defence. In practice, what is the reality of what it looks like when someone is wearing one of those masks and how effective it really is?

KATE COLE: I need to be clear to the Committee here. I know that there was evidence provided that maybe their use has been mandated since around 2022. Maybe I got the year wrong, but around 2021 or 2022. The Versaflo line of powered air-purifying respirators was launched 16 years ago. Prior to that, they existed under another name. When I started working in tunnelling around 2012 or 2013, they were used by some roadheader operators. They have always been there. The issue has not been around the availability of the technology; the issue has been around prioritisation and cost. From memory, they may cost around $2,000 or $3,000 each, as opposed to a P2 dust mask, which is less than $20, I'm guessing, each. The issue has not been about the availability. While it's really good that contractors are providing these—this is a good thing—the challenge is that the heavy reliance on personal protective equipment kind of takes the eye off the ball on keeping a safer workplace or improving the workplace environment. If one only focuses on uncontrolled exceedences, then you have a risk of the general level of silica getting higher over time.

I recently did a trend analysis of that and found that silica levels in some work groups are going up because they're focusing so much on personal protective equipment. As you would know, the hierarchy of control is entrenched or focused on providing the highest level of protection to workers. This is a problem because when there is a breach, for some reason the visor is lifted because there's no comms—by the way, we have had communication systems that can be integrated into powered air-purifying air respirators for some time so that we can talk through radios. That technology does exist and has existed for a while. When the focus is on these breaches, it's very much at a worker level on disciplining or going through that process of what did the worker do right or wrong, and less about what could have been done in that workplace to provide a safer workplace—better ventilation, better dust suppression and higher level engineering controls.

The Hon. STEPHEN LAWRENCE: Thanks to both the witnesses for their evidence. It's really helpful. I'm aware that you've been present throughout the morning and heard the evidence of the three companies. You have already done this in some respects, but I'm wondering if there are any comments that you wish to make regarding the evidence provided this morning by the three companies.

KATE COLE: I might just focus on one point. A previous witness spoke about the importance or the reliance on independent certified occupational hygienists and ventilation engineers. This is a really good thing, but I need the Committee to understand that neither of those positions generally have accountability or authority. Unlike New South Wales mining, these are not statutory positions. I have experience in this myself, where I've been a certified occupational hygienist engaged on a tunnel project, and I know very well that I can make recommendations for improvement. The ventilation officer or the ventilation engineer can also make recommendations for improvement, but that advice has not always been taken up because there is no authority or accountability to that particular role. It's not a statutory position. So I don't want to say that all tunnel contractors ignore the advice, but I will say that it does happen, and so making those roles statutory positions in legislation would actually go a long way, just the same way as it is in New South Wales mining.

The CHAIR: Mr Donovan, anything that you would like to add? We observed that you were sitting here earlier today in the public gallery listening to the three contractors that gave evidence. Is there anything that you'd like to comment on in regard to that evidence you heard?

CHRIS DONOVAN: Some of the some of the concerns that I had were raised in questions by members of this Committee. One of them was just in relation to seeking personal information and requesting public information through the GIPA Act. There was no time when the union was going through this process that we were seeking to get personal information, whatsoever. Our applications were simply to obtain information about what we believed to be breaches of the WHS Act in relation to dust monitoring. The names of people were of no interest to us, so I don't really understand why that was brought up as an issue, to be honest with you. I think that it was mentioned by someone on the Committee as to why their lawyers wouldn't actually have a process to redact the names anyway and provide the information, given that it's supposed to be public.

The CHAIR: And probably be aware of that fact anyway.

CHRIS DONOVAN: Yes.

The CHAIR: Mrs Cole, your opening statement was packed with information, if I could describe it that way, which obviously relates to how much work you've been doing, obviously both before you appeared late last year and since. Is that work that you're doing part of ongoing work you've got, which will presumably take further time to bring you to a position of producing, dare I say, a comprehensive document or report? Or as you go along are you preparing summaries, if I can use that word, or sub-reports in terms of what you're finding? The reason I ask is simply this: I'll be bold enough to say I expect, subject to what Committee members say and subject to your concurrence, that we probably would have an interest in having a look at that work, unless that's not possible because it's part of an ongoing exercise. If you could perhaps just let us know, because I won't press it further if the position is you are, in fact, doing a piece of work which has a conclusion.

KATE COLE: I am in the process of publishing various papers that relate to various chapters of my PhD work, so it will be published progressively over time. But that does not prevent me from providing information that would benefit the New South Wales Government in the development of policy that aims to protect the health and safety of workers in any way. If there is any information that I have that would benefit the Committee, then I'm more than happy to take any questions, including any questions on notice, that may best inform you.

The CHAIR: Thank you, that's very helpful and I appreciate that response. On the issue of the capture of the dust, and then the exhaust systems or the extraction systems to have the dust removed from the tunnels, that's obviously dust that's being exited out of the tunnels somewhere. To the extent you're able to assist us, I'm interested in where that dust goes. Obviously, to have it extracted and removed from the tunnels is very good with respect to the very significant interests of the workers in the tunnels, but where does this dust go?

KATE COLE: That is a great question. It depends on what's being done. If I think about shafts or the building of shafts, that dust will go straight up into the atmosphere, unless it is captured at the source. In fact, there was an example—I think it was last year—where a worker was exposed just from being located near the top of a shaft, and the amount of silica dust coming out of that shaft resulted in him being exposed to around one milligram per cubic metre of respirable crystalline silica. He didn't have any respiratory protection because he was above ground. So he didn't think he needed any, I'm guessing. That was uncontrolled release of respirable crystalline silica out of that shaft and then into the work environment.

In a tunnelling scenario during production, the air is typically exhausted into a very large spoil shed. It's extracted at the face through scrubbers, which are collecting the majority of the dust. But, as you probably also know, there are back-end works or there are work activities happening not at the tunnel face that may produce dust. That dust is then carried up into a spoil shed, which is one of the reasons why workers who are located in those sheds are still at risk of high levels of exposure to silica dust, because that's where it's contained. When those doors are opened, I would presume that it leaves those doors. I'm guessing the priority is always on extracting the dust at the source, at the tunnel face.

The CHAIR: That has gone straight to the second point that I was going to raise, and that is that the collection of the spoils is, in fact, retained in big sheds. The reason I know that is I drive home up the Warringah Freeway every night I'm in the Parliament. On your left-hand side there's a huge spoil shed with big signs saying "Acciona", which obviously have responsibility for the shed. I note that on occasions that shed is vacant, in terms of nothing being in there. But then, on another occasion—it could be later in the day, when driving home or whatever—it's full of spoil. I've observed, on some occasions, work being done in the shed, when that spoil is being loaded onto trucks and taken away, presumably, somewhere. I do not know. That might be another question to ask in a moment. But I've noticed a lot of dust being created in the loading of the spoil into the trucks. This is a lot more than just the capture downstairs, so to speak, in the tunnels. This exposure of dust does make its way up to the surface and the workers in proximity of the surface. With respect to that spoil, do you have any knowledge about where that spoil goes?

CHRIS DONOVAN: Specifically on that one, I'm not—

The CHAIR: In general terms. If I draw back from that example, in general terms, do you know where spoil goes?

CHRIS DONOVAN: Generally, no, but I just wanted to touch on what you mentioned in the lead-up to that question, which was in relation to the dust levels in those sheds. Some of the observations that we've had and that we've confirmed when we have used dust monitors are that, in some cases, the exposure to silica dust is actually higher in the spoil sheds as opposed to at the surface of the tunnel—the tunnel face. I just wanted to make sure that you were aware of that. But you're right in your observations that it is a messy area. There is a lot of dust, and the dust eventually does escape into the environment publicly, which I think might raise some concerns as well for residents in the area, maybe around the Rozelle interchange where you have those houses that are very close. But in relation to where it goes, I'm not sure.

KATE COLE: I think that would be a question for the contractors that appeared this morning.

The CHAIR: If we can continue on this issue of the spoil sheds for a moment, if you're able to assist any further, that would be appreciated. Do you know, from the knowledge of the work that you've been doing in this area, from the point of view of the representative trade union and a person doing detailed research, if the people working in proximity of the spoil sheds, which would include also the truck drivers coming back and forth, are being provided with what would be required? First of all, is there any mitigation going on in regard to dust exposure in those sheds and also the provision of personal protective equipment and, indeed, education to them about the potential exposure risk they have? Do you have any knowledge about that?

KATE COLE: I will say that, in my experience, a lot of the work that's undertaken in those spoil sheds is undertaken inside enclosed cabins—so, in heavy plant—whether that be a loader, for example. So you have a worker that's there for an extended amount of time over that period of shift in a loader. I'll just pick up a good thing, which is that we've seen the increased use of pressurised and filtered cabins for loaders that therefore don't necessitate the use of respiratory protection in them because those cabins are compliant with an appropriate Australian and international standard. That is a good thing that we have seen.

Conversely, that is not consistent across all tunnel projects. Where we have one that meets this international standard, we would have another that just relies on a standard loader coming to site, and therefore the worker is required to use respiratory protection—whether that's half-face or a powered air-purifying respirator—for the extent of their shift. This is the challenge and the inconsistency that we see in the industry. From my perspective, it comes back to the desperate need for a code of practice to specify minimum criteria, whether that's—ideally—around heavy plant enclosures that meet the appropriate Australian or international standards, through to ventilation requirements, statutory positions et cetera. It's not until we get that level of minimum requirements that we can improve the level of compliance and therefore reduce the level of inconsistency that we see across the industry.

The CHAIR: On the matter of real-time monitoring of dust, are you able to provide us with your best knowledge and technical understanding about what is available to do such monitoring from a technical point of view? Is there equipment out there that is capable of doing this monitoring and producing, to a high-level accuracy, reportage of what the dust is before or that it's monitoring?

KATE COLE: There are several brands, makes and models of portable, personal, respirable dust monitors that are available on the market. They have been around for a very long time. Whilst they do not directly measure crystalline silica, as the earlier witnesses provided, they do measure close-to-respirable dust. We do use them routinely when we're investigating or assessing exposure to respirable crystalline silica because what we do is we know the approximate level of crystalline silica in the dust—whether that's 50 per cent or 75 per cent—and we just apply a simple correction factor to that. Whilst it is not as accurate as personal-exposure sampling, which is done—so it doesn't replace it—it is a very important supplement to it.

That is because it tells us in real time where failures in controls have happened, where a scrubber system is not working anymore, whether something's blocked or something's jammed or door seals no longer work. It tells us right then and there such that the control measure can be rectified, exposures can be reduced and we can move on. That technology does exist. There is a real-time silica detector that I know is the subject of a review by the office of the chief scientist in New South Wales. Their report, I understand, is imminent, so I think it wouldn't be appropriate to comment on the accuracy of that until then, but I understand that instrument not to be portable; it sort of sits in a spot. In tunnelling and infrastructure more broadly, it's really important that we have monitors that move where workers are located.

CHRIS DONOVAN: Adding further to that, when the union obtained dust monitors to actually go and conduct monitoring, it was one of those monitors that doesn't actually count—it can't indicate to you the level of silica dust or diesel particulate matter or any specific dust particle. But what we can understand is whether or not

the dust is respirable. That's very easily done on the machine. The main reason—again, just supporting what Kate's saying—that the union used it isn't to go to the company and point to the machine and say, "Look, you're breaching the law." It's to go to the company and to say, "Your control measures aren't working in this particular space right now. Let's have a think about how can we—the ventilation system up there is incorrectly set up, or the tunnel face has moved forward and it needs to move forward."

We do try to act in that way to assist the project and not just to point the finger to say the law is being breached.

The Hon. ANTHONY D'ADAM: Mrs Cole, earlier you mentioned giving statutory authority to hygienists. Are you proposing a separate statutory arrangement for the regulation of tunnelling, akin to what applies in mining?

KATE COLE: I think it's fair to say that the system that we have doesn't operate well and it could operate a lot better. We're not talking about engineered stone when we're talking about these cases of silicosis. We're talking about tunnelling, which is serviced by tier one contractors. This is the best of the best that Australia has to offer. This should be absolutely world-class. What the data from the return to order demonstrates is that this issue isn't managed in a world-class way all the time. Yes, there are areas where it's really well done. There are some fantastic tunnel projects out there. But there are obviously some big differences where it's not done very well because it is disjointed. The way we have this scheme, SafeWork and this health monitoring process, which is separate, is all very disjointed.

It would be really wonderful to see something like the formation of a Coal Services or similar for the tunnelling industry, something where workers have health monitoring through that particular agency, where that agency receives data, where that agency goes out and does air monitoring independently, where that agency provides really useful and helpful information on trends to the regulator to be able to act on that information as appropriate to them. At the moment it's very disjointed.

In terms of legislative reform, in my opinion it's a little bit bigger than a statutory position, even though that is, in my perspective, really important. Coalmining in this State has borne the brunt of poor control for many decades and now has obviously established a really well-run scheme and an appropriate way of dealing with that very high risk to New South Wales coalmine workers. In New South Wales we've been dealing with the issue of silicosis since the 1900s, and we've never really got it right. In the light of the evidence that's been presented, particularly in the return to order for papers, maybe now is the appropriate time to rethink the structure and how it's all working. That may include the establishment of something similar like Coal Services for the tunnelling and maybe the infrastructure industry more broadly.

The Hon. ANTHONY D'ADAM: Does the AWU have a view on that?

CHRIS DONOVAN: We would 100 per cent support it. Coal Services is probably a world-leading company. In relation to that matter, we would definitely support it. Right now, as Kate mentioned, where the information—there have been some changes in the regulations about where information around silica dust exposure needs to go. For example, if somebody is diagnosed with silicosis, that information needs to be reported to the new registry that's set up. That's a national registry. That may bypass, or potentially bypass, the New South Wales Government or the New South Wales regulator and go straight federally. What doesn't bypass the regulator is the new provision around whether or not there is an exceedence of workplace exposure. That goes straight to the regulator now but only if it's an exposure. Not all the monitoring that's done is provided.

While these new provisions are relatively good—it's a good step forward—they are a little bit disjointed, in my view. Having something like a Coal Services equivalent for tunnelling would collate all of that information in a way that can assist workers, moving forward. To some degree, we owe it to the workers who are going to be diagnosed with silicosis. The lessons that we've learnt throughout the last 10, 15 years, particularly since this tunnelling boom occurred in Sydney and in greater parts of New South Wales—we owe it to them to get it right for next time. I don't see there being any slowdown by the New South Wales Government—whether it's this one or whether it's another one that will eventually happen—for them to stop tunnelling projects. Where are you going to build highways in the middle of Sydney anymore anyway? And then you have your other projects like your Snowys and stuff that is happening in Coffs Harbour and whatnot. To some degree, I think we need to look at it holistically like that as well.

The Hon. SUSAN CARTER: Mrs Cole, I understand that you've been able to model based on three Queensland projects. Was it easier to get access to information in Queensland? Do they do something different there that we could look to?

KATE COLE: Unfortunately it was incredibly difficult to get information in Queensland. The only way I could get access to information from the Clem7, Airport Link and Legacy Way tunnel was that it was published in a response to questions on notice as part of the coal workers' pneumoconiosis inquiry by Queensland Parliament.

As I said, I'd hoped to actually compare the results of the study that I did with recent projects that were happening in Queensland. Unfortunately the tunnel contractors have worked to restrict access to that information, citing potential reputational impacts and other commercial impacts. That is a matter for the Queensland civil and administrative appeals tribunal at the moment, unfortunately.

I would have anticipated that exposures to workers in recent tunnels in Queensland and, indeed, in the State of New South Wales would have been lower. I would have loved to sit here in front of you today to say that, yes, it was one in 10 but now it's a lot better, but unfortunately I can't. I will say that I haven't had an opportunity to do similar modelling on the New South Wales data. But I will say that, on average, the exposures to roadheader operators and exposures to workers on foot building road tunnels and supervisors are actually much higher than there were on the Queensland projects that I modelled. On that basis, it's still concerning.

The Hon. ROD ROBERTS: To that regard then, Mrs Cole, you've obviously done a lot of studies across various projects. Is there one that stood out to you that was worse than any others, in terms of exposures?

KATE COLE: Yes. Based on the information that has come back from the return to order, the project with the most exposures above the exposure standard—the highest level of exposure and, indeed, the most instances where workers were not protected—was WestConnex M4 East, closely followed by WestConnex new M5. I would like to provide a balanced view, if I can. I would like to say that the projects with the least results above the exposure standard and the lowest average exposures were Sydney Metro West Western Tunnelling Package and Central Tunnelling Package.

The Hon. ROD ROBERTS: I think you said the M4 East was the worst, with the highest numbers of exposures. Looking at that, have you been able to identify a reason why there were much greater levels of exposure on that particular project, as distinct from the other ones that you say were quite satisfactory? Was there a cause that you could find?

KATE COLE: It's a very good question. I think a lot of it comes back to exposures to roadheader operators on those projects and dust not adequately, in all cases, being controlled at the source. It also comes down to using roadheaders that don't always have enclosed cabins—so, open cabin roadheaders. I will say that, on average, if we're looking at a subgroup within tunnelling that is most at risk, the exposures to silica dust for roadheader operators are on average four times higher than any other work group in underground construction in the tunnelling industry. Even though it might seem like that's a very small cohort, there were lots of roadheaders that were used across WestConnex, NorthConnex and other road projects in Sydney. Whilst I can't answer on specific factors, the averages and the exceedences are largely attributed to roadheader operators and those in proximity to those workers where dust has not been adequately captured by extraction and scrubber systems at the face.

The Hon. ROD ROBERTS: Well then, in balance and in fairness, in those projects that you talked about—and excuse me because I didn't write them down—that had lower exposure rates, what methodology did you see in place, and what restrictions and controls were in place that provided for less exposure? Were the roadheaders used on those projects, for example, fully enclosed as distinct from the other ones? Is there something we can look at in that regard?

KATE COLE: The exposures to workers on western tunnel package and central tunnel package, mainly they're using tunnel boring machines, and I thought, well, maybe that's the main reason why they're lower. But indeed the data does include exposures to roadheader operators, and they are significantly lower than those on the older projects. I can only anticipate that that is primarily due to greater controls around cabins. Indeed, I think it was an Acciona project where they're doing remote-controlled roadheader operations, so the worker is removed, which is a good engineering control because they're in a safe location—that's operating the roadheader. Because the exposures are so low, regardless of PPE, it speaks to a higher level of engineering controls— ventilation, dust suppression et cetera—that are already present in those work environments, such that if PPE is removed for a particular reason, generally it's not constituting a breach because the exposure is already lower, if that answers your question.

The Hon. ROD ROBERTS: It does. That's all.

Ms ABIGAIL BOYD: One last question from me. Mr Donovan, there's been obviously since we've started this inquiry—but more importantly the SO 52, the process, the work that you've been doing, Mrs Cole—the media attention on this issue. Have you or your members seen any significant change in approach from these big contractors as a result of that extra focus?

CHRIS DONOVAN: I can't give you a direct answer. I might have to take it on notice.

Ms ABIGAIL BOYD: I'm just wondering if things are getting better.

CHRIS DONOVAN: They're far more conscious of the issue of being exposed to dust and silica dust; that I know for sure because we have delegate training and they come in and we talk to them. But just more broadly, I'd like to take it on notice.

Ms ABIGAIL BOYD: You may need to take this on notice as well. We've spoken a lot in this inquiry about the reticence that workers may feel about getting a diagnosis in the first place, about all of the mental health issues that go along with this sort of exposure. Have you seen, or are you aware of, anything that the companies are doing to help with that side of things? Even if there are things like a sort of tough-guy approach to not wearing masks, is there anything that companies are proactively doing to ensure that workers are actually kept safe and that they are getting help when they need it?

CHRIS DONOVAN: I think I'll have to go back and take that on notice again.

Ms ABIGAIL BOYD: Fair enough.

The Hon. SUSAN CARTER: A question to both of you: Are there models operating in other States that we can look to where things are better? I understand there are some different legislative provisions in South Australia. Queensland doesn't sound like it's got better access. Is anything happening in other States that would be good or instructive guides for us to look to?

CHRIS DONOVAN: I don't really think so. I think it's pretty bad across the board, but maybe Kate can talk to—sorry if I'm the one asking questions here. That's not really supposed to happen.

The Hon. SUSAN CARTER: It was a question to both of you.

CHRIS DONOVAN: Kate has a broader understanding about international best practice though.

KATE COLE: I can't say that any other State is better. Internationally there are some really good models, in addition to the model of the New South Wales coal industry with Coal Services. Internationally Switzerland has a great model where tunnel contractors have to get workers compensation by a certain agency called Suva. That agency also does air monitoring independently and, if air-monitoring results are high, it results in an increase in insurance premiums for the contractor. Therefore, it's a direct financial incentive to keep dust levels low. And I will say that that particular agency also does the health monitoring, so it's all centralised. It's similar to Coal Services, but the thing that is different is the immediate financial incentive.

I will say that, back in 1920, when we had our very first Workers Compensation Act in New South Wales, which was obviously developed for silicosis, we had the same thing. We used to have a committee that was funded by levies of silica dust generating industries, and that levy would fund this committee that would go out and do air monitoring. If dust levels were high, it resulted in increased workers compensation premiums for those contractors. Maybe it's time that we reflect on the past and what was put in place then as an opportunity to better protect workers.

The Hon. SUSAN CARTER: Any details about that Swiss model, that you were easily able to provide on notice, I think we'd be very grateful for.

The CHAIR: I might finish with a question, and I'll bowl it up as what's called a Dorothy Dix question; I'm sure you appreciate what that means. We have, this afternoon, representatives from SafeWork NSW and also Transport for NSW giving further evidence—they both provided evidence previously. Are there any specific areas associated with this issue that we're tackling that you could suggest there could be more rapid movement on? In other words, it's clear that there could be more rapid movement by SafeWork NSW and Transport for NSW to address some of these issues that we're facing. This inquiry is going to produce a report with recommendations, and we've heard evidence that, obviously, iteratively, things are improving and all the rest of it. We accept that as a general statement but, right now, are there matters that can be moved on and pressed upon them to do which, arguably, they shouldn't be delaying or dragging the chain on? I'll put that to you both.

KATE COLE: I did acknowledge the work of Minister Cotsis in my opening statement, and I'll reiterate it: The establishment of the Tunnelling Dust Safety Taskforce is great. That's very good. I understand that SafeWork NSW is progressing the *Tunnels Under Construction: Code of Practice*. Again, that is very good, but it needs to happen fast. It needs to be thorough and appropriate, and a large part of that *Tunnels Under Construction: Code of Practice* must include a very large chapter on silica dust control, because the existing one, which is very old, is largely absent of the areas that are of most need. When it comes to SafeWork, I understand that they are constrained by a statute of limitations of two years for prosecution. I would implore the Committee to consider ways to extend that, because it's evident that there is information held by SafeWork NSW that there were high levels of exposures to workers without the use of masks. Whether or not two years is enough time to bring about a prosecution in that space is, I guess, a question for SafeWork NSW but, arguably, extending it would only be of benefit.

To answer your second point around Transport for NSW, it was very evident—I think I mentioned before—that this issue was not managed consistently across government. You have Sydney Metro with very large contractual requirements, expert teams that are gaining compliance with those contractual requirements, and then, over here, you have Transport with a high level of risk to workers, absent of those contractual requirements and absent of experts in that area to gain any type of compliance with it or, indeed, any systems in place to assure themselves of the levels of silica dust on their projects. Obtaining some type of consistency—arguably, I would think that applying the metro model more broadly, because it's already been done and it's a precedent, would be an area of benefit for the Government generally.

The CHAIR: Just because I didn't write it down quickly enough, it's tunnels under construction—what was the rest of the name?

KATE COLE: It's *Tunnels Under Construction: Code of Practice*.

The CHAIR: Thank you, both. It's been very informative and helpful. I think there were some questions on notice and, I'm sure, after reading *Hansard* there'll perhaps be some supplementary questions that we'd like to follow up with as well. If you're agreeable, we'll liaise through the secretariat to have them returned. Once again, thank you very much for coming along today. We appreciate it.

(The witnesses withdrew.)

(Luncheon adjournment)

Mr TRENT CURTIN, Acting Deputy Secretary, SafeWork NSW, on former affirmation

Ms YASMIN COX, Executive Director, Regulatory Capability and Harm Prevention, SafeWork NSW, sworn and examined

The CHAIR: Welcome back, everybody, to the afternoon and final session today for this inquiry hearing. I welcome the witnesses from SafeWork NSW and thank them for coming along this afternoon. Mr Curtin, your appearance before us last time, going back now many weeks—in fact, months—stands, so there's no need to have you sworn or affirmed again. I invite you to give an opening statement, if you wish to do so. Then, if you're agreeable, we'll move into the question/answer, and we'll be sharing that between the members at the table. Once again, welcome and thank you very much.

TRENT CURTIN: Thank you and good afternoon, everyone. I've got a full opening statement.

The CHAIR: That would be very helpful for us.

TRENT CURTIN: Thank you for the opportunity to appear again before this Committee to assist with this inquiry. I want to take this opportunity to update the Committee on the key actions that SafeWork NSW has taken since I last appeared before the Committee. Since I last appeared, I have visited a number of tunnelling projects and gone inside tunnels to see work conditions for myself across New South Wales. I've been able to hear directly from workers, HSRs, unions and project directors on the challenges that they are facing. I've also had the opportunity to see SafeWork inspectors in action and to experience the challenges they are facing in regulating these workplaces. It's important to me that I get this firsthand experience, because it shapes my direction of SafeWork NSW. It's reinforced my belief that SafeWork NSW has a vital role to play to secure work health and safety, and that other parties also have an important role in ensuring worker safety in these government-funded tunnelling projects.

I'd first like to outline how we have continued our compliance approach. Our inspectors have been continuing their targeted field inspections of all tunnelling projects across New South Wales, with a strong focus on assessing silica management systems and notifications of exceedences to the workplace exposure standards. We've conducted audits of all major tunnelling projects in New South Wales since November of last year. These audits have been undertaken at Metro West, Snowy Hydro 2.0, the Coffs Harbour bypass and the Western Harbour Tunnel. These audits are focused on the systems that monitor air quality and prevent silica exposure for workers, including ventilation extraction systems, water suppression, and relevant work health and safety policies and procedures.

To date, we've found that principal contractors have silica dust management systems in place that have been developed in consultation with competent persons such as engineers and certified occupational hygienists. Principal contractors also have consultation arrangements in place to provide information to workers on matters regarding their health and safety, including silica dust management. During this series of inspections in tunnels, no notices for noncompliance for silica dust exposure were issued.

SafeWork has also supported the New South Wales Government to establish the Tunnelling Dust Safety Taskforce. Through this taskforce, SafeWork has an important role in developing greater collaboration and coordination between key experts on this issue. SafeWork NSW cannot secure worker safety on our own, and it's important that all parties in the tunnelling industry take action to protect workers. As chair of the taskforce, I've been pleased with the engagement of experts, who come from a range of backgrounds. The first meeting of the taskforce was on 8 April. An initial 10-point action plan has been developed. A communique has been published on the SafeWork website outlining the discussion at the first meeting and the agreed actions. Communiques will continue to be published as the taskforce meets and progresses its action plan.

I note that data is a key focus area for action. SafeWork NSW is publishing WES notification data. With the support of the taskforce, we've taken steps to make our data more accessible. Since 1 September 2024, it's been mandatory for PCBUs to notify SafeWork of air-monitoring results where the workplace exposure standard for RCS has been exceeded. Quarterly information on the number of notifications by industry is now available on the New South Wales Government's silica dashboard website. We will continue to work with taskforce members on refining the way that SafeWork collects data and to make more data publicly available. Key actions taken on by other taskforce members include making data available for sharing to develop new insights, supporting research and informing health screening. It's important to recognise that SafeWork does not hold all the data relevant in this area—it's held by various stakeholders—and collaboration is the key to bringing it together. The taskforce will play an important role in achieving this.

More broadly, SafeWork is streamlining our processes around data access. I acknowledge the submissions made by unions to this Committee that, in their experience, it's been difficult to get data and information from

SafeWork, including on notices issued after an investigation, as discussed at the last Committee hearing. There are confidentiality provisions under the Work Health and Safety Act, being section 271. In brief, the section restricts the disclosure of information and documents where they have been obtained in exercising any power or function under the Act. There are exceptions to this, but applying these exceptions requires an evaluative judgement. I can appreciate that, in some circumstances in the past, SafeWork may have taken a cautious approach in applying the exemption. I'd like to see SafeWork move towards making data and information more accessible where possible. Due to the confidentiality provisions in the Act, it may always be necessary to consider, on a case-by-case basis, whether information or documents can be disclosed.

We're also on track with the tunnels under construction code of practice, in line with our commitment to this Committee in November. About a third of the revised code has been drafted. SafeWork is in contact with experts to assist the drafting of those sections that are more complex and technical in nature. We aim for a renewed industry and social partner working group to meet in June this year to consider and comment on content for the new code. According to our projected timeline, a final draft code will be ready by the fourth quarter of this year, with the final code anticipated to be released by the end of the year.

Effective consultation with workers is also another key element that needs focus. In my tunnel visits, I had the opportunity to meet directly with workers and health and safety representatives at the front line of tunnelling. Through my own experience and reflecting on the evidence from other stakeholders at earlier hearings of this Committee, it's apparent to me that consultation with workers is critical across all workplaces, and in particular in tunnelling projects where there are unique challenges for undertaking compliance activities. PCBUs have a duty under the Work Health and Safety Act to consult with workers who are likely to be directly affected by a matter relating to work health and safety. The focus on improving consultation will be reflected in the SafeWork NSW annual regulatory statement for next financial year, which we've recently commenced public consultation on.

I've also observed that there are a range of challenges for the tunnelling industry. Securing work health and safety controls can be challenging in this environment. I'm pleased to say that my colleagues in the taskforce, Transport for NSW and Infrastructure NSW have taken an action to lead a review of best practice engineering controls and other good practices in tunnelling projects to inform contract development and procurement processes to standardise best practice. This will help to ensure that best practice health and safety is considered at the very start of a project and how it may be separated from the competitive tendering process.

The nature of the work also means that workers move through the industry and can often change employers. This can make it challenging to accurately monitor the health of workers over time and makes it difficult for SafeWork NSW to undertake investigations and prosecutions when diagnoses are reported. I appreciate the importance of following a worker's health throughout their career. Addressing this issue should see workers have improved access to their own health- and atmospheric-monitoring results. This was also a matter discussed with the taskforce and my colleagues in Transport for NSW and Infrastructure have also undertaken to review contract arrangements and procurement practices with industry to assess how they can be used to collect data and share relevant data.

The Silica Worker Register will also be an important tool to track worker movements throughout the industry. Having finished public consultation on the Silica Worker Register late last year, we'll use the expertise of the taskforce to maximise the potential for the register and the data it will be holding. Silica Worker Register regulation is on track to be published in the third quarter of this year. Finally, I'd like to express my personal commitment, and SafeWork's commitment, to continue to take action on this issue—to collaborate with industry, unions and across government to secure safer work for tunnelling workers. I assure the Committee that SafeWork NSW is focused on work health and safety risks in tunnelling. Every worker has a right to go to work and to come home safely every day. The risks are well known. The consequences of ongoing exposure to silica are serious, and SafeWork's regulatory response will be firm and focused. I will be pleased to answer any questions from the Committee.

The CHAIR: Thank you very much, Mr Curtin. Is that a joint statement being made on behalf of the organisation, or do you have a separate statement?

TRENT CURTIN: No.

YASMIN COX: No.

The CHAIR: That's fine. Thank you very much for a very detailed opening statement. It is really appreciated. It's very thorough and I have to say—I speak on behalf of myself but I'm sure other Committee members would agree—that's a very positive update report. Part of the reason for calling you back was to provide that opportunity because we really did appreciate at the last hearing that by that stage you had started to pick up the reins and understand matters, but clearly much needed to be got on top of, so to speak, and you've been

obviously very busy with your whole team, and a number of very positive things have been reported, so thank you very much. That's very good news. We will start with questions, perhaps from Ms Abigail Boyd.

Ms ABIGAIL BOYD: Thank you very much for coming back and giving us that update which, I agree, sounds really positive. Can I take you back to the audit that was done of all the major tunnelling projects? You say that there were no notices issued. Presumably, the inspections that were done were done with notice ahead of time. I guess what I'm saying is: Were the PCBUs on their best behaviour because they knew you were coming, perhaps, or were any spot checks done?

TRENT CURTIN: These were specifically targeted audits in relation to the exceedence reports that we'd been receiving in relation to the WES. Being an audit-natured process, we were advising those projects that we were coming to check their systems of work, and the purpose of the audit was to check all of their silica management systems. In some cases, we issued notices to obtain those documents so that we could assess them in full. Alongside that, we've been doing a range of other visits to those tunnelling projects to look at the systems at work. Many of those have been unannounced and many of those have been in response to the exceedences that have been reported.

Ms ABIGAIL BOYD: Have there been any more compliance notices or other things issued outside of that audit then in relation to exceedences and air pollution?

TRENT CURTIN: We've been undertaking a range of visits to tunnelling projects. We've visited all tunnelling projects many times across New South Wales. Many of those visits have been in response to exceedences and to work with those PCBUs to understand the investigations that they've taken and the actions they've taken in response to those exceedences. It is a very challenging environment, as I've said many times, for us to obtain compliance and to undertake our regulatory practice. Even with an unannounced visit, you get to the front gate and there's a 30-minute at best—and, in my experience, at least 30 minutes—before you undertake an induction and get through into the areas where you may have been able to observe where poor practices might be occurring. When our inspectors have undertaken their visits of recent times, they have not observed any of those activities that have been a concern in relation to observing silica dust.

Ms ABIGAIL BOYD: We spoke quite a lot last time with the union representatives, and I think we also touched on this in your session as well, about the obligation to consult with workers. We certainly received evidence from the union representatives that they felt the safest workplaces were where there had been the best consultation between workers and businesses to create a safer workplace. They were worried that the duty to consult wasn't being respected in a lot of these cases. Have you done anything to investigate that aspect to ensure that businesses are working with workers to make it a safe workplace?

TRENT CURTIN: Yes. All workplaces have an obligation under the Work Health and Safety Act to consult with their workers for those areas where work health and safety affects those workers. Our inspectors in any organisation will undertake a review of consultation mechanisms to make sure that they're meeting the legislative requirements. In my own observations and conversations with workers and HSRs on these major tunnelling projects, they have raised concerns with me about the consultation mechanisms. I have spoken to our inspectors about making sure that we are lifting our approach in observing those consultation mechanisms.

Regardless of compliance with the law, where inspectors are finding that these organisations are complying with our law in terms of consultation, I continue to recommend and have conversations with those project directors about enhancing consultation. I think one of the combats to the challenge that we as a regulator face in this particular environment is full and meaningful consultation with the workers and a full and meaningful system of health and safety representatives and work health and safety committees that allow workers to meaningfully raise their concerns and have them addressed without any reprisal. We want to take up a piece of work, as I said previously in my opening statement, to make sure that strong consultation mechanisms are in place.

My recommendation, as I said to those PCBUs, is to think about enhancing consultation over and above their minimum legislative responsibilities. I think it's through those consultation mechanisms that we'll continue to find the challenges or the areas of non-compliance and be able to address them more quickly. We will be hosting a forum, roundtable or workshop if you like with health and safety representatives from the tunnelling industry. It's one of the actions I've taken from the Tunnelling Dust Safety Taskforce to make sure enhancing that across all industries will be a priority for us next year. I think there should be an intensive focus on supporting HSRs in the tunnelling industry.

Ms ABIGAIL BOYD: In the answers you returned to supplementary questions, there was a question about how many improvement notices have been issued in relation to tunnelling sites and then saying what the nature of the offence was. In the last five or so years, there had been one issued in relation to consultation. There have been criticisms of SafeWork not using a stick approach sufficiently and using a carrot approach too much.

Can you give us some idea of what it takes to get an improvement notice issued for something like consultation, and how discretionary that is for who the inspector is? I'm trying to get an idea of when they're issued and whether there is scope to issue more for where consultation is really not coming up to standard.

TRENT CURTIN: Forgive me, as I've said in this area before, I'm not an inspector. I'll do my very best to explain how best an inspector undertakes their practice. As I best understand it, an inspector will need to ensure that the PCBU has put in place appropriate mechanisms that demonstrate that effective consultation is in place with workers in relation to the legislative mechanisms. Broadly, where I've been into different industries and different organisations right across New South Wales, there is a clear correlation between those organisations that are open and transparent and consulting readily on work health and safety issues and safety outcomes, as well as production outcomes and good staff management outcomes. Going above and beyond compliance is what we really want to seek here.

In terms of the actual issuing of notices, the inspector will do an assessment of the mechanisms that are in place. They'll ask questions or obtain documents under notice from the PCBU in relation to the consultation mechanisms that are in place. There's quite broad flexibility in the legislation around how consultation is done, and the workers are required to have a say in how they want to organise around that consultation. It's important that we undertake a process to inform and advise workers about what their rights are in terms of consultation, to make sure that PCBUs are clear about their obligations and, if there are any breaches, that we are taking action to support that. I think the approach in the tunnelling industry specifically will be a key focus for us over the next period.

Ms ABIGAIL BOYD: One of the things that came up in the introductory statement from the John Holland representative this morning was in relation to the obligation to notify exceedences of the WES based on whether or not it's a controlled or an uncontrolled exceedence. Are all of the companies notifying correctly of all of those exceedences or is there an element of only having the uncontrolled exceedences being notified?

TRENT CURTIN: The requirement is to notify exceedences, so they need to notify all of those exceedences. We are attempting and working to improve the way we receive that information to try to narrow down where those exceedences are controlled or uncontrolled. One of the concerns is that there's not a proper definition for controlled or uncontrolled. It's a little bit up to the PCBU to determine whether it was a controlled environment or uncontrolled environment. These are some of the areas, as we continue to receive more notifications as we do our verification process against them, to determine what are the mechanisms and how are those exceedences occurring so that we can tighten up these controls and get really clear about where it is an exceedence or where someone has been exposed without respiratory protection or similar.

Ms ABIGAIL BOYD: One of the other things that we spoke about last time was the uncertainty around how the obligation to monitor air quality was implemented in practice: things like how frequently you would do it, whereabouts you have to do it within the tunnelling project and all of those sorts of things. We've got the tunnelling code of practice work that has been ongoing, but we spoke about maybe getting some of those things nutted out ahead of time so that everyone was reporting on the same basis. Is that work that has been done yet?

TRENT CURTIN: It is work that we're exploring in terms of strengthening. I think the tunnelling code of practice is the right place to make sure we get really clear on the expectations about how that works. Our inspectors are currently doing some work to explore what better practice might look like in terms of setting out expectations for how that monitoring is done. We should be concerned to make sure that there are rigorous and structured ways in which that monitoring is done so that we know that it is being done in appropriate ways.

I have, in my discussions with project directors, discussed with them making sure that their workers and health and safety representatives are a part of the process in designing how those systems are set up. I think that's relevant for building confidence amongst the workforce: that the proper monitoring programs are in place and that the workforce can feel comfortable that the results they're receiving are accurate for the environment they're working in. There is a role for SafeWork and for the tunnelling under construction code of practice to define that much better, but there's also a role for project directors and PCBUs to openly consult with their workers on how those programs are set out, so that they can have confidence that those right control measures are in place.

Ms ABIGAIL BOYD: Comparing data that is coming from very different types of monitoring situations gets difficult. We've spoken about how hard it is to get the data to begin with. You've spoken about new developments in trying to put that data out there a bit more easily. Will we also be given the details as to this is the number of exceedences here but this particular PCBU is only doing this every three months, whereas here is the number of exceedences at this one but they're doing it every day? Is that level of transparency going to be available so people can properly analyse what's going on?

TRENT CURTIN: I would like to see us be more able to release more detailed information in regard to those notifications and exceedences. We are restricted by section 271 of the Act. I may have shared it here last time, but I certainly will this time: I think it's relevant for the Committee to have a look at how section 271 interplays with the amount of information that we're able to release in relation to those exceedences. The purpose of us collecting that information is to review it and undertake compliance activities, but there's a public interest in where those priority areas are, where the types of work might be occurring where workers are regularly being exposed to those exceedences or which particular projects might be receiving those exceedences.

We'd also like to see some improvement, and we've put on the table at the Tunnelling Dust Safety Taskforce an opportunity to see how we might be able to better collect that information for workers so that they'll be able to see, longitudinally over their career, their health monitoring results and potentially even their atmospheric results. I would like to see us able to do that. If there are legislative mechanisms that are restricting us from making meaningful information available, I think that's definitely worth reviewing.

Ms ABIGAIL BOYD: Are you having to use section 155 of the WHS Act to get information from the Dust Diseases Authority about instances of silicosis being reported, or is that something that comes to you directly from the PCBUs?

TRENT CURTIN: My understanding is we do use section 155 notices with icare to get information in terms of diagnoses of silicosis.

Ms ABIGAIL BOYD: Would it be better if you had direct reporting to you, so you didn't have to do that?

TRENT CURTIN: Probably. It would relieve the regulatory burden, but it is a reasonably straightforward process for an inspector to issue a 155 notice. But it would make sense that we can have direct access to information that affects workers.

The Hon. SUSAN CARTER: Thank you both for being here, and thank you for that update in the opening statement. That was very helpful and encouraging. I have some questions, if they're not premature, in relation to the code of conduct that's being developed. Is it proposed that this be voluntary or mandatory?

TRENT CURTIN: A code of practice can be used in court processes. It relates to how we assess, as far as is reasonably practicable. If there's an industry code that defines a set of criteria then our expectation is that industry are able to implement those criteria and, therefore, it becomes part of our compliance activity.

The Hon. SUSAN CARTER: So it's effectively then mandatory to comply with the standards in the code of practice.

TRENT CURTIN: It would normally be that a PCBU has to comply with that or provide a system that's better than what's outlined in the code.

The Hon. SUSAN CARTER: What are the compliance checks, then, in relation to the code of practice?

TRENT CURTIN: The existing code of practice?

The Hon. SUSAN CARTER: Do you anticipate there will be any change in compliance checks with the new code of practice?

TRENT CURTIN: Yes, our inspectors have a responsibility to make sure that tunnelling projects are implementing control measures—and we often speak about the engineering control measures—as far as is reasonably practicable. Where we see improved practices across industry or we see it in other tunnelling projects, there's an increasing expectation that those improved controls are then standardised across industry. The code of practice is a documented way of setting out our expectations and the minimum standards required.

The other mechanism is through the contractual arrangements at the start of the project. We are a big advocate for safety by design, and we'd like to see a standardisation of the safety mechanisms that are put in place right back at the contract phase. Many of the contractors that I've spoken to and our own inspectors would appreciate those mechanisms being put in place right at the very start of a project so that there's a holistic approach to those engineering controls. We know that for some of the engineering controls, such as the scrubbers that many were talking about earlier today, they use an enormous amount of energy. Power availability has to be part of the design process right at the start so that the right engineering control mechanisms can be put in place.

The Hon. SUSAN CARTER: Other than power availability, what are the other barriers to that safety by design occurring at the moment?

TRENT CURTIN: I think some of that comes to—and forgive me, I'm no engineer—the design of how we build the tunnels in the first place as something that's considered at the contract design stage. The difference between a tunnel-boring machine or a roadheader is, of course, a common discussion here. When I met with some

of the tunnelling projects that were building roads, they indicate to me and can demonstrate that a tunnel-boring machine is only appropriate for some parts of the project and not for other parts of the project. There are different types of approaches with pressurisation and using misting and other things in tunnel-boring machines, but I'm advised that some of those improved safety mechanisms will slow down projects from progressing. Slower projects cost more money. As I understand it—forgive me; it's not my area of expertise—there is a cost versus project design element to the discussion that we're having.

The Hon. SUSAN CARTER: In terms of those cost discussions, especially where the Government is the client, is there ever a discussion about the cost of impaired worker health?

TRENT CURTIN: We are not in those discussions around the design of the contracts. SafeWork is represented in the Construction Leadership Group, which is a whole-of-government group that comes together to look at the issuing and management of these contracts. We've been able to feed into that process some increased information in relation to safety outcomes on various projects. We've got a memorandum of understanding with Infrastructure NSW where they use a power in their Act to obtain information from us about the safety outcomes on those projects. We're really pleased to be able to provide that information because it should be an important part of informing Infrastructure NSW about how they issue contracts and how they manage contracts ongoing.

The Hon. SUSAN CARTER: We've heard a lot of comment and a lot of criticism that current enforcement procedures and current inspection procedures are not really working. What will be different about the climate with the new code of practice?

TRENT CURTIN: Our inspectors undertake an assessment of the conditions in the tunnels and the systems of work that have been laid out in an as far as reasonably practicable way. The code of practice will help us to better define, along with industry, those types of controls that we would consider best practice and required in these tunnels. We're also undertaking some work with the resource regulator. There are typically tighter controls in the mining industry than there are in tunnelling, and we'd like to see what parts of those control measures in the mining industry would be relevant to tunnelling and would help us to progress to safer outcomes.

We are looking at improving our understanding of how the engineering of ventilation systems works so that we can make sure that we can continue to provide advice to tunnelling projects about what better practice might look like. If there are, for example, a number of exceedences in a particular project that's not using a wet-based scrubbing system, we might have discussions with them or potentially issue notices to them to make sure that they improve their systems. If those systems are available to the industry and available across other projects and they're practicable, we might continue to see an increase. The code of practice is the mechanism to get the best experts we can get our hands on to help design and define what those criteria are, to help our inspectors take a measured and structured approach in seeking compliance in those tunnelling projects.

The Hon. SUSAN CARTER: Do you need additional resources to be able to enforce and, when there have been breaches, actually proceed against the parties who have been in breach?

TRENT CURTIN: We, like any government department, we could always use more resources, but that's a matter for the Government to determine. Within our existing resources, we've allocated inspectors to a dedicated infrastructure and renewables team, and this year the Government has funded $2.5 million for a dedicated silica compliance team. We have significantly increased the number of inspections that we've undertaken in tunnelling projects, as well as across the broader silica industry, with engineered stone and other construction businesses. In terms of the compliance, what I've observed in my discussions with inspectors is the challenge that they face in this particular environment. It's much simpler to attend a construction site, see a worker working from height without the right control measures in place and issue a penalty notice or take some other enforcement action against that person or against that PCBU. It's a very straightforward approach.

This is a very complex environment. It's underground; it's difficult to access. There are complex and mature systems that these large organisations have put in place and have developed over a long period of time. The mechanisms that we use in terms of on-the-spot penalty fines, improvement notices, prohibition notices and prosecutions are particularly difficult to implement in this environment. When inspectors attend a site, it's many days or weeks, normally, after the exceedence has been reported to us. Activities might be changed in the process of the inspector arriving onsite and getting to the point where those activities might be underway. Prosecutions are very difficult. We've got a statute of limitation, and we also find it difficult because of workers moving across different organisations through the life of their career. To be able to say that this organisation, for this period of time, is responsible for that person's diagnosis of silicosis is a very challenging and difficult environment.

The Hon. SUSAN CARTER: With respect to the prosecution issue, is the point in time when you want to be launching a prosecution at the point in time of the diagnosis with the worker, or is it the point in time of the breach by the PCBU?

TRENT CURTIN: Correct. Often we've been notified of silicosis diagnoses, particularly in the engineered stone industry. As a result of that notification, we've initiated investigations and prosecutions because that's the point where we've become aware, for that particular PCBU, where the risk has occurred. But in tunnelling projects, of course, the risk occurs over a period of time. Whether a breach has occurred or hasn't occurred is a matter for investigation, and then for the legal process to determine it. It is a very tricky environment to understand exactly when the breach or the risk occurred when the trigger for the statute of limitation starts. Then the investigation process, with prospects of prosecution, is very difficult.

The Hon. SUSAN CARTER: Do you have any recommendations about how some of those tunnel-specific issues could be better addressed in terms of framing of penalties or legislation?

TRENT CURTIN: Yes, I would welcome any recommendations from the Committee to have a look.

The Hon. SUSAN CARTER: I'm asking you if you've got any recommendations.

TRENT CURTIN: If you were to focus those things on having an exploration of whether there are additional penalties that could be applied to PCBU use, my best understanding of the statute is that, where an inspector sees a worker without their respiratory protection properly worn, they can issue a penalty against that worker but they can't issue a penalty against the organisation for ensuring that worker has the right respiratory protection on. We think that that might be an opportunity to increase the opportunity for our inspectors to take immediate and direct action, for example. So areas for penalty notice would be worth looking at. For this type of environment, where we're looking at an occupational health problem similar to the challenges that we're facing in terms of psychosocial risk in workplaces where the statute of limitation was broadly designed around a time when we had more direct injuries and fatalities and we could take two years to undertake an investigation and lay charges, that there might be an opportunity for the Committee to make recommendations and consider broadening those statutes of limitation.

The Hon. ANTHONY D'ADAM: Just jumping in on that question, you say that there's no capacity to penalise the PCBU. We've heard evidence around repeated breaches of the same nature. Surely that indicates an absence of a safe system of work, which would then provide an opportunity for the PCBU to be penalised. Isn't that correct?

TRENT CURTIN: In terms of penalising in that circumstance, what we're currently exploring is reviewing those exceedences that we've received, particularly those ones that have been characterised as non-controlled, to see whether an investigation and potential prosecution is the right pathway for us. We've been receiving those exceedences since September last year and we're looking into the opportunity to potentially do investigations.

The Hon. ANTHONY D'ADAM: Obviously if it's a repeated occurrence, then the system is not working. Clearly there's a risk there that the PCBU should be aware of and should be mitigating to put in place a system of work that is safe and that anticipates that workers are going to—and puts in measures to make sure that's not a repeat occurrence. Surely the safe system of work is the—

TRENT CURTIN: We've been doing verifications on every single exceedence that has come in. They all have a different nature to them or a different time or a different work environment. But you are correct: Where we see multiple exceedences, we are currently looking into opportunities to investigate and potentially move to prosecution for those.

The CHAIR: The Hon. Stephen Lawrence is joining us by video link. Stephen, do you have any questions?

The Hon. STEPHEN LAWRENCE: Yes, a couple. Thanks to both witnesses for your evidence. It's really helpful. Mr Curtin, in terms of this work in these tunnels, is it work that is capable of being done in a safe way, assuming compliance with the various regulatory systems, the wearing of masks and so forth? Or is there some factor that makes it inherently unsafe? Is there always going to be a percentage of workers who develop silicosis, for example, irrespective of what they do?

TRENT CURTIN: Mr Lawrence, thank you, I think that's a very good question. We are choosing to dig tunnels for the purpose of prosperity and to improve transport across New South Wales. Our observation to this point—that has been revealed through this Committee and other working groups and taskforces—is that, as a result of those tunnelling projects, workers are being diagnosed with silicosis. That's a matter of fact. What we're attempting to do is to work with industry, to work with unions and workers to find as much as possible all of the controls that are foreseeably able to be put in place to protect those workers from those environments.

Improved monitoring has been successful in making sure that we can identify as quickly as possible where workers are being exposed, or where there are systemic ways that workers are being exposed, and we can put in

place further control measures. I was really pleased to see on my visits to one of the tunnels that there was a remote piloting trial underway for a roadheader. Opportunities for government to invest further or for contractors to invest further in ways where we can eliminate the exposure that workers have to these dusty environments would be fantastic. To completely eliminate total risk of being exposed to dust would be a great challenge in this environment.

The Hon. STEPHEN LAWRENCE: There are sort of two sorts of risks, isn't there? There's the risk that arises from the inevitable fact that some people, whether workers or managers, won't comply with what should be done, and there's the risk that might exist irrespective of their compliance, so there is still some risk. Is this a case of the latter or the former?

TRENT CURTIN: I think it's both, in my observations. I met with a man who was driving the roadheader in a particular tunnel. He was in an atmospheric controlled environment that was pressurised to make sure that dust that was being dug against the face wasn't coming into his environment. But he continued to wear a P2 mask because he had picked up dust on his uniform on his way in and out of the machine, so he still had dust in the environment that was well controlled. The engineering controls, as I explained before, are sometimes limited by other factors such as availability of electricity or other things. I understand that some of the scrubbing machines are designed for the coal industry and might be working much better in that industry than they are in terms of silica. There are much improved controls in place, in terms of the engineering and in terms of the systems of work, and we're doing much better than we've ever done before, but there is more work to be done.

That's the purpose of the taskforce, to really explore and deep dive into what those opportunities are. I'm really pleased to see Transport and Infrastructure doing that work. The work that my inspectors are doing, working with the resource regulator to try and find those opportunities out of the mining industry, is really positive. But at the end of the day, leadership, culture and consultation are really important mechanisms for making sure we see compliance. When I visit tunnels, I see a lot more people now wearing the PAPRs, the full respiratory masks, because the awareness of the risks that they're facing and their potential health outcomes are much more known across the industry and they're looking to protect themselves much more than they have in the past. Those improved controls—whilst we acknowledge RPE is one of the lowest order controls, we want to see improved versions of RPE so that people are better protected in the long run.

The Hon. STEPHEN LAWRENCE: In terms of the causes of the silicosis, are the two main causes exceedence—where the concentration exceeds the allowable limit—and also people not wearing masks?

TRENT CURTIN: I think the exceedence itself is a measure of an increased exposure over the period of time that the monitoring has occurred. I think we can focus very easily on the idea that dust in your lungs is a really bad thing. When the dust has silica in it, that particularly fine particle causes particular damage to the lung. That happens over a longer period, where workers are exposed to low levels of it over their entire career. We know that we see those accelerated cases where people are exposed in those high-risk areas. Previously where we've seen roadheaders that weren't protected and RPE wasn't used many years ago, we saw those cases coming through much more strongly.

The Hon. STEPHEN LAWRENCE: Lastly, could you give us a bit of an overview of criminal prosecutions of these companies involved in the tunnelling projects in Sydney over time?

TRENT CURTIN: I can take that on notice. Most of our prosecutions in terms of silica have been in relation to the engineered stone industry. We do currently have an investigation underway at the moment in relation to the workers identified at CPB. That's the main prosecution that's underway at the moment. But I'll take it on notice just to make sure we come back to you with accurate information.

The CHAIR: With respect to the work that's being done now and from the evidence today, it's very positive about progressing and accelerating the way this challenge is being dealt with in this State. These initiatives can continue to follow their trajectory outwards. My question is: Is New South Wales inhibited in any way from pushing out and doing this good work in this area by any of our obligations as a State within a Federation and Commonwealth work in the area of occupational health and safety? I'm thinking specifically at the Safe Work level. Perish the thought that all the good work that has been got underway and moving forward does get—and I'm not saying there's any malfeasance behind this, but obviously the process of working laterally across the Federation is a slower process. On that particular point, is there anything that you can see on the horizon or that has poked you in the eye already which is a potential bit of dead weight for us in New South Wales?

TRENT CURTIN: We are a signatory to the intergovernmental agreement and I represent New South Wales as a member of Safe Work Australia. We in New South Wales have been pure to that intergovernmental agreement and being good partners across the Commonwealth in terms of legislative amendments. I have indicated to the Safe Work Australia membership more recently that, at times, I think that may have inhibited us from

moving as quickly as we needed to. We have at times moved more quickly than the Commonwealth in terms of control measures in relation to engineered stone and other things, and I think we should be prepared to continue to move quickly where necessary to protect workers' lives in New South Wales. We can still do that and be respectful to the national context. We've seen other jurisdictions take action and amend their legislation outside that particular process. I think it's entirely a positive environment to have nationally consistent laws and to have model laws through that process, and we absolutely want to continue to pay respect to that. But we should not allow that to inhibit us in areas where we need to act more swiftly.

The Hon. ANTHONY D'ADAM: Can you just clarify the nature of the agreement around the national consistency? New South Wales is obliged to maintain our legislation in strict compliance with the harmonised model legislation. Is that right?

TRENT CURTIN: Yes, the agreement—it might be appropriate for me to provide the agreement on notice, if you like—details a process whereby, if we intend a legislative amendment to the model provisions and the laws and regulations, we would propose those amendments in the national forum first and work through that national process to get the model laws changed in the first instance. If that is not carried forward in the model provisions, then it's available to us to change those at a State level. It's really the timing of undertaking that process that can sometimes be of concern. The question at hand is whether we stay true and positive to that particular agreement and do that in a purest form or whether we form a view that potentially we might like to move more quickly and we notify the other Ministers that we intend to do that and they might consider similar amendments in those provisions at the same time.

The Hon. ANTHONY D'ADAM: We heard evidence earlier from the Australian Workers' Union around the powers of authorised officers and it was submitted that South Australia has amended its legislation in relation to that. South Australia just unilaterally amended. Is that right?

TRENT CURTIN: As best I recollect, they made the decision to make that amendment and then their Minister wrote to other Ministers to indicate that they intended to do that and that the other Ministers might consider that as part of a Safe Work Australia process.

The Hon. ANTHONY D'ADAM: They've jumped ahead but it's open to Safe Work Australia and the other jurisdictions to agree to that as the model and then amend the legislation accordingly. Is that right?

TRENT CURTIN: Yes. You might argue that, in circumstances where one jurisdiction makes an amendment to their legislation, that does give an opportunity for us to observe how well that works and whether the model law might be changed in a very similar or different way. So there are benefits to different jurisdictions jumping ahead, depending on the circumstances. Queensland has moved ahead on some of the other provisions. It's a viable option for us to explore.

The Hon. ANTHONY D'ADAM: Can I ask you about that particular provision? The issue in dispute was about whether an authorised officer can effectively make their own records onsite, take photographs, take readings, bring in equipment for the purposes of assessing whether there's compliance with the work health and safety legislation. Is it your evidence that an authorised officer doesn't have that power now?

TRENT CURTIN: That's as I best understand it, that there is disputation in terms of the entry permit requirements and that there have been concerns raised between unions and industry about how that applies. Inspectors will get involved in entry permit discussions but we're not a decision-maker in that regard. They tend to go off to the other legislative forums like the IRC.

The Hon. ANTHONY D'ADAM: Presumably you're the first port of call in terms of disputes. What advice do you provide to disputants in relation to that question of whether you can take a photograph in a workplace of, say, a noncompliant piece of equipment? Surely this is something that has been happening for years: Authorised officers have been entering workplaces. If they can't actually gather any evidence, what's the purpose of an authorised officer?

TRENT CURTIN: I understand that there have been disputes between unions and other parties in relation to that. I think there's an opportunity for clarity if the Parliament wants the unions to have that power to go and seek that information.

The Hon. ANTHONY D'ADAM: My question is really about, what do you advise at the moment? Do you say, "Yes, the authorised officer does have the ability to take photographs," or, "No, the authorised officer doesn't have the power to take photographs"? What is the current advice that's provided by SafeWork in that instance?

TRENT CURTIN: It'd be better for me to take that on notice, Mr D'Adam, so I can give you an accurate picture of what an inspector has experienced in providing advice around entry permit.

The Hon. ANTHONY D'ADAM: Do you see any obstacles to New South Wales adopting the South Australian provision?

TRENT CURTIN: Not from a SafeWork NSW perspective, if that's something that everyone wants to pursue. I have shared that I think these tunnelling environments are a particularly difficult place for us to undertake compliance activities and make observations of breaches of the legislation. If a mechanism to do that is through unions, that would be a matter for the Government and the Parliament to work through.

The Hon. ANTHONY D'ADAM: There was further evidence or a suggestion about perhaps looking at the Coal Services model for the tunnelling industry. Do you have any comments about the practicality or impracticality of that type of regime being put in place for tunnelling in New South Wales?

TRENT CURTIN: As I best understand, the way that has been described is using a process in the coal industry where workers health information is collected and put into a database and available to those workers across the life of their career. If that's accurately how I'm describing that, then my discussions with industry—

The Hon. ANTHONY D'ADAM: It was a bit further than that. It was also in relation to hygienists being given some statutory force in terms of their directions.

TRENT CURTIN: I think improved control measures for the health of the workers involved in the tunnelling industry is all worth exploring. In my conversations with principal contractors, they have also raised concerns that workers are moving between projects and they don't necessarily have all of the health information available to them as a result of that. I think there would be support for some sort of mechanism to improve arrangements around how workers can get access to their health information. That seems like a very sensible approach.

Ms ABIGAIL BOYD: I just wanted to get clarification on the obligation of PCBUs to notify when they have a silicosis diagnosis with their worker. Is there an obligation to notify SafeWork or is it just an obligation to notify the Dust Diseases Authority, or none of the above?

TRENT CURTIN: I think, Ms Boyd, in the absence of being able to describe that full process accurately and specifically, I might take on notice the full process so I can come back to you to describe exactly how it works across the full process, so I have some detail on it.

Ms ABIGAIL BOYD: I know it was reported that there was a number of cases that had not been reported to SafeWork from CPB. I guess I'm just wondering what the obligations are in the first place. From my previous questions, when I was asking you about section 1.5, you were saying it would be really good if there was a direct obligation to notify. I'm just curious as to what the current situation is then.

TRENT CURTIN: If you'll forgive me, I think it's best placed if I take that on notice so we can map it out for you.

Ms ABIGAIL BOYD: Yes, that would be good. I'm trying to piece it all together, but I remember we had this discussion when we had the obligation for Health to no longer notify SafeWork when it came to silicosis cases, and the idea was it was going to go into a Federal register and then SafeWork would be able to get it from the Federal register. But, obviously, that's when it's going through doctors and through Health. I'm just curious as to what the obligation is on a PCBU to tell SafeWork.

TRENT CURTIN: Let me come back to you. Doctors have an obligation to report through the national occupational disease register, but I'll need to check the obligation and how the actual process works for a PCBU to notify SafeWork.

The CHAIR: Forgive me, this is a technical point—I should have understood it as I read the material coming through—about the term "exceedence". To just probe you a bit about this point, there could be, and I'm talking in hypothetical terms here, an incident, presumably in a tunnelling project, where there is an exceedence that takes place—I'll use the word "randomly". Let's assume they're drilling through material and they hit a different composite of the material, and it could lead to an exceedence at that particular moment. So it's just happened at that moment, but it's a matter that, if the ventilation draws it all away, the exceedence would drop below what may be the requirement for that particular moment in time, in terms of the dust.

There could be other occasions, I would imagine, whereby, from the very start, boring into some material over what might be many minutes and maybe hours, there is an exceedence in terms of a level in the tunnelling cavity. There can be those types and perhaps some others in between. When we use the word "exceedence", are we using it for one or other of those, or is it a generic term which is just used when there has been an exceedence that has taken place? I know it's a rather technical question—for me, anyway—but it may have a straightforward explanation, or you can take it on notice.

TRENT CURTIN: No, Ms Cox might have some more in-depth information, but the exceedence is an exceedence against the standard of 0.05 milligrams per cubic metre over a time-weighted average eight-hour shift. Usually workers will wear a monitor for a period of time. They often do 12-hour shifts, so there is a discount for the exceedence number as a result of the 12-hour shift instead of the eight-hour, time-weighted average. Where there has been an exceedence based on the time-weighted average, then that triggers an exceedence based on the occupational hygienist's report, which triggers a notification to SafeWork.

YASMIN COX: If I may, Chair, a notification may include more than one exceedence. So, for scenarios like you've explained, it may, if it's not what was described by some of the witnesses earlier today—not necessarily an absent control but it certainly could be a failed control or an example of what you've just described. And until such time that triage or that assessment is formed and a site verification, that's when that is looked into as well, in so far as what remedial action has been taken in that regard.

The CHAIR: In terms of that formula that was just described in working out the average over the period, with the discount from 12 back to eight, is that determined through what is a mandated procedure of the checking of the monitoring equipment that's worn by the individual tunneller? Is that what is done? In other words, at the end of their shift, there is a check done against the reader to see whether or not that's been exceeded. Is that how it's done?

TRENT CURTIN: Yes. I have seen a process whereby a circular filter that's in the monitor that's on the worker is taken from the monitor and run through a machine, whose name or scientific definition I do not know, which does an analysis of the amount of silica on the filter. Through that amount of silica, they can determine over the time period of that shift whether there's been an exceedence.

The CHAIR: I will follow that up further. In our questioning this morning of one of the companies—it might have been more than one company—we spoke about the matter of real-time monitoring. It came up in the exchange about the existence of specific equipment that is placed, presumably, where work is being done to measure in real time what the situation is. Once again, if you need to take it on notice, feel free to do so. Presumably there is some meshing of real-time monitoring with what is the monitoring being undertaken, effectively, by the individual by wearing the piece of equipment.

I thought up until now that the real-time monitoring is effectively the gold standard that we all should be shooting towards, so everybody knows that there is a moment of exceedence at a point in time. But there are obviously two ways of doing this: the monitoring which is an average versus what is a machine that has a readout that says there is an exceedence at this point in time, and what that would mean for having that formula used to work out the average. I don't know whether you care to comment on that.

TRENT CURTIN: As best as I've observed, there are fixed stations throughout tunnelling projects that do monitoring of the atmospheric conditions, not just for silica but they look at diesel particulates and they look at CO2 and other things.

The CHAIR: They have a readout, do they, that the workers in the tunnel can see—the operators, or whoever?

TRENT CURTIN: Typically, I think they have an indicator on the monitor device. Then I've observed where the results are put into the mess room or similar for the workers to observe the results over the previous period.

The CHAIR: I will go on while I can. With respect to pre-employment checks of workers who wish to commence working on a tunnelling project, it came up in some of the evidence earlier today—if not explicitly, at least implicitly—that certainly some companies, primary contractors and co-contractors, do some pre-employment medical checks and/or diagnosis. Once again, forgive me if I've missed this somewhere in the detail, but is there a mandated requirement somewhere which, in fact, requires that to be done? In other words, before you can commence in the tunnelling industry—I use that term in the generic sense—whoever is your employer, whether it's at a primary contractor level or some other contractor level, is required to have this medical test done. And if that medical test suggests something, either they have that followed up or have that required to be followed up to see whether or not it needs to be advanced further.

TRENT CURTIN: I understand that tunnelling projects will do a pre-employment check where they get a baseline result for workers in relation to silicosis. Forgive me; I don't know the full detail of how they go about that. I did speak to a worker about the regime that he was a part of. He indicated that he had been tested but that, from his view, he would like to have seen more testing being done. But I understand there's a risk-based approach so that people are not overly tested. But are they getting the right access to medical information? It's probably outside the sphere of my expertise.

The CHAIR: Clearly—this is where my question was primarily going to—this is about following the workers. Say I was a young man or a young woman wanting to have a future doing this particular type of engineering work—tunnelling work. There would be an entry point where they started their very first job doing this. One would have thought that if there was a mandated requirement that there be a medical check—however one might define it—in that instance that would define that person's baseline at that moment of entry. Then, as they followed the work with successive tests, that would be monitoring, obviously, the medical condition of the individual, being able to identify whether or not there is the commencement of an issue that may manifest. And then, presumably, as it goes on, it will become of greater concern, potentially.

What concerned me a little bit is hearing, from some of the evidence, about the fact that it could just be over a long period of time where there's sort of the gradual accumulation and then there is this moment where it just seems that it can be, for some people, you've really got a problem. And of course that's just so undesirable. The ability to, at the very earliest opportunity—I think, the evidence provided by one of the witnesses today, and I'm not reflecting on the witness, referred to the type of silicosis called simple silicosis. I think the implication was it's a very low level and—not putting words in his mouth—not something to be deeply concerned about at that moment. But then there is the other type, which was referred to I think as complex silicosis. And that's where, obviously, the rubber hits the road, in terms of the red lights going off. So the ability to, at the very moment of entry, do a baseline check and then, each successive start of a job or contract, a new baseline—and that would give you the sort of continuity of the actual condition of the individual with respect to how they are going with respect to this ongoing exposure.

TRENT CURTIN: Yes. I think it's entirely sensible, given the nature of this industry, that workers are fully informed about the status of the health of their lungs throughout their career. If there are baseline results and then ongoing monitoring that occurs, that could be collected and made available to them. At the start of their career, they might consider themselves invincible.

The CHAIR: Yes. As young people sometimes feel.

TRENT CURTIN: And then, throughout the nature of their career, they wish they had access to the results back at the start of their career. I think there's an opportunity for us to support workers. Industry is supportive of that being put in place, and I think we're all supportive of workers being fully informed about the things that are impacting them.

The CHAIR: Thank you for that. Were there any other questions or final questions from anyone? We're not going to hold you back to take you out to the extra 15 minutes. You've been very, very helpful, and we appreciate it.

The Hon. SUSAN CARTER: I'm just looking to get your understanding of difficulties with enforcing the Act. As I understand it, you said that the tunnelling environment is particularly complex, difficult: There's a lag between reports of exceedences and inspectors being able to inspect; there may be different operations in place; it's lots of moving parts and it's very difficult to understand what's happening. Other than the different environment of the tunnel, are there other factors which make it challenging for you to perform your regulatory and enforcement role?

TRENT CURTIN: I think one of the other factors in my observation has been the nature of the industry and the desire for the culture and the desire of workers to be able to continue working in the industry. Given the nature of the work and the specialisation of it, some of those workers are well rewarded for the work that they do, and they don't want to see themselves being removed from that work and having to go and find other work that might not have the same rewards to it. So I think, as I've observed and has been shared with me in the industry, speaking up can be very difficult. I've also observed, and health and safety representatives have shared, that often they observe production over safety, when we'd prefer to see safe production in those environments. There is a natural requirement to continue with production and keep things moving. But we should never do that at the expense of workers' health and safety. And so the culture and the nature of the industry is important.

I heard Ms Cole's evidence earlier around leadership and culture, and I think that's something that's not lost in your observations if you spend time in and around the industry. That is one of the impediments to us putting in place the best possible safety mechanisms, because often SafeWork NSW will receive reports from workers or will gain evidence from workers about breaches and other issues, and this industry can be a little bit more difficult to do that than in other industries.

The Hon. SUSAN CARTER: But is that tunnelling specific? They seem to be fairly general factors that you'd expect to find across a range of industries.

TRENT CURTIN: They are general factors across all industries. My observation is that it has been particularly acute in the tunnelling industry.

The CHAIR: The dust spoil, which is removed from the tunnel, is taken up and deposited in what are normally large sheds that are called spoil sheds—I think that's the terminology used or approximate to the terminology used. The spoil is then removed, normally trucked away somewhere, and disposed of. We haven't quite worked out where that is yet, but we'll probably get to the bottom of it. With respect to those spoil sheds, they are quite dusty environments, as we apprehend, with exposure potentially to the operator of the front-end loader, who is loading the spoil into normally a B-double truck, and then of course you've got the truck driver himself or herself being potentially exposed if they get out of the cabin of the truck. I'm just raising with you, is that something that has been picked up with your work, about the issue of the spoil sheds—that it's not just underground and there is this ancillary or associated issue above ground with the whole issue of the dust.

TRENT CURTIN: Yes, correct. Our inspectors look at the system in its totality. We want to see improved mechanisms with pressurised cabins, with respiratory protection above ground as much as we see below ground. We do see exceedences above ground as well, so we want to make sure all of those controls are in place. Different control mechanisms like the wet-style scrubbers that process that dust down underground are obviously better and preferred, from our experience. Anything that can be done to reduce the amount of dust available is a good thing, yes.

The CHAIR: Do you know where the spoil goes? Is that something that has come across your path as you've been poking around and asking questions?

TRENT CURTIN: No, forgive me, I haven't followed the chatter.

The CHAIR: No need to apologise. We will continue our investigation and find out where this spoil ends up.

TRENT CURTIN: You should.

The CHAIR: Thank you both very much. It has been really helpful. It has been very appreciative that you've made yourselves available to come along today and further update us with what you did at the start but also answer our various questions this afternoon. The questions on notice and any follow-up supplementary questions will be liaised through the secretariat.

(The witnesses withdrew.)

(Short adjournment)

Ms CAMILLA DROVER, Deputy Secretary Infrastructure, Projects and Engineering, Transport for NSW, on former affirmation

Mr DAVID MULLINS, Director Health & Safety (Eastern Harbour), Transport for NSW, on former oath

The CHAIR: Welcome back, everyone, and thanks to our witnesses this afternoon, Ms Camilla Drover and Mr David Mullins. It is great to have you back to receive from you some further update on matters that were raised at the last hearing, and other matters you may care to report back on. I provide you with the opportunity to make an opening statement and then members from the Government, the crossbench and the Opposition would welcome the opportunity to ask you some questions. Are you okay to proceed on that basis?

CAMILLA DROVER: Yes, and we have got an opening statement. First of all, thank you for inviting David and me back to this committee. We are genuinely interested in supporting the committee and if there is anything further we can do to address this issue we will. As you may be aware, I'm Camilla Drover, and I'm the Deputy Secretary for Infrastructure, Projects and Engineering. I'm joined by David Mullins, our director of health and safety from our Safety, Policy, Environment and Regulation division.

As at the last occasion, I wish to emphasise the health and safety of our people, as well as our contractors. Workforce is our top priority. We recognise that exposure to dust, including silica dust, is hazardous to workers on many of our projects including through tunnelling—but not just tunnelling, also in labs, surveying and geotechnical activities. It's important to note that the responsibility for the health and safety, and management and control, of a transport construction project is with the principal contractor, and that WorkSafe is the regulator.

Principal contractors must abide by work, health and safety law to eliminate or minimise the risks of respirable crystalline silica exposure as far as reasonably practicable, and have a federally accredited safety management system. That's a requirement of our procurement process. Transport manages risks associated with silica exposure for our own direct employees through the standards, procedures and guidance within our Safer Together safety management system. Transport also requires our principal contractors to have accredited safety management systems as well as adequate resourcing to manage the health and safety risks commensurate to the scope of works.

Since we last attended the inquiry Transport is pleased to note that there is an increased body of work and focus on silica and tunnelling within the establishment of the Tunnelling Dust Safety Taskforce. The inaugural meeting was attended by the Transport Secretary and demonstrates our commitment and focus to safety across Transport for NSW, as well as our suppliers and contractors in the delivery of New South Wales infrastructure. Transport supports the ten-point plan developed by the taskforce, and we are meeting and working with contractors, engineers and subject matter experts on best practical work, health and safety controls and better use of data and transparent access.

Transport has also been updating our own respiratory protection program, including systems, documents and online silica awareness training. Whilst these are predominantly focused on our direct employees, they do establish foundations for industry performance. Transport is also reviewing our governance and assurance processes, including contractor management activities and our procurement approach within the current regulatory environment. This work will align the Tunnelling Dust Safety Taskforce and assist in providing continued clarity on the roles of WorkSafe as a regulator, our principal contractors and, of course, ourselves, Transport, as client.

The other areas of activity within Transport include: we're working with industry to develop their policy procedures, risk management, compliance controls and technologies to improve dust safety management. We're also working with the Centre for Construction Safety and Well-being at the University of Newcastle to assist with a study into dust within tunnels, providing samples and support to identify which particulate matter represents the highest risk, and biomarkers to diagnose early stages of disease and processes to prevent and treat the progression of disease. Also, as part of the transport contractor safety management program, we're continuing with a project focused on risk, worker management and infrastructure procurement process improvement so as to incorporate regulator changes and uplift our processes for safety in design when procuring infrastructure construction work. Thank you for the opportunity. We're very happy to answer any questions you have today.

The CHAIR: That's very helpful to set the scene for our questioning.

The Hon. SUSAN CARTER: Thank you both for being here, and thank you very much for that update. I'll ask you about the work you're doing with the University of Newcastle. Do we currently have a proper understanding of the health risks involved in tunnelling?

CAMILLA DROVER: I might get David to help. There has been quite a body of work done to date and I'm also aware of other work happening in other jurisdictions—for example, in Victoria and I think Queensland as well. David, I might get you to comment on the work with the university.

DAVID MULLINS: Certainly. It's in its infancy. The university contacted us in regard to some icare funding that's being made available to do some research into this area. From that discussion, we've looked at our Acciona partnership on the Western Harbour Tunnel. We've identified that that's probably a good site where they can seek sampling and gain access to the tunnel environment for that work, should the funding go through—should the icare funding be secured to do that study. It is at its infancy, but I think it's a good activity in really understanding not just silica but all the other range of particulates that are in underground environments.

The Hon. SUSAN CARTER: Just to clarify, has this study commenced or are they applying for funding for it to commence?

DAVID MULLINS: Applying for funding.

The Hon. SUSAN CARTER: So there's no actual ongoing work at the moment?

DAVID MULLINS: Not at this point.

The Hon. SUSAN CARTER: And the plan would be to use the Acciona site to investigate tunnelling risks at that site?

DAVID MULLINS: Correct—the Western Harbour Tunnel.

The Hon. SUSAN CARTER: What would this add to our body of knowledge about tunnelling risks that we don't already know?

DAVID MULLINS: I suppose the scope of the study is a bit broader than just silica. It's to really understand what else there could be in those underground environments—what other particulates, what other harms could be created. Obviously, this is a fairly rapidly evolving piece of work around silica, but is there something else that we're not picking up? Is there something else—another harm like spore mould or other airborne particulate that we haven't correctly captured and assessed and so forth? But, more importantly, in this particular study it is a little bit regressive in that it's going to assist with diagnosis, early interventions and medical treatment of those who may have contracted dust disease from a tunnelling environment.

The Hon. SUSAN CARTER: And you've identified the Acciona site as being an appropriate one to be able to get a really full picture of tunnelling risks?

DAVID MULLINS: Correct, yes.

CAMILLA DROVER: I think the benefit is it is a real live environment, and it's also the only project that has significant tunnelling left to go in Sydney sandstone. That's the other rationale for that adoption of project.

The Hon. SUSAN CARTER: So you see that Acciona project as being different to a number of other projects that are ongoing?

CAMILLA DROVER: It's the last project that we've got of major road tunnelling in Sydney that's left. Most of the other tunnelling is almost complete or complete.

The Hon. SUSAN CARTER: And there are no future tunnelling projects in the pipeline?

CAMILLA DROVER: No, there are not. This is actually the last one. The tunnelling is almost finished on the Coffs Harbour bypass, and that's a different form of methodology. This has a material amount of tunnelling still to go and, again, it's got two different types of tunnelling methodologies. It's got roadheader but also tunnel boring machines, so it's a good case study.

The Hon. SUSAN CARTER: We've heard evidence from other witnesses that one of the challenges of creating and enforcing a safe workplace in tunnels is that it's a very complex environment. Do you have any comments about tunnel-specific challenges with respect to ensuring, regulating and enforcing a safe workplace for workers?

CAMILLA DROVER: It is a challenging environment because you're obviously underground, but, at the same time, that actually creates an opportunity to regulate it. Because it is underground, there are many, many checks and balances. People have to tap in before they go underground. We know how long they're underground for. There's a high degree of monitoring of that environment underground. Because it is, if you like, a closed environment, it also creates the opportunities to manage and measure and monitor that environment.

The Hon. SUSAN CARTER: What would you comment has been unsuccessful about the managing of that environment if we're seeing workers who are contracting significant industrial-related diseases?

CAMILLA DROVER: I think the way the environment has been managed has obviously significantly improved in recent times. I think what has driven that is the amount of tunnelling that has occurred in Sydney in the last 10 years, both through the road tunnel program but also the Sydney Metro program as well. Prior to that, there just wasn't the level of tunnelling and perhaps some of the historical practices weren't as contemporary as today's practices.

The Hon. SUSAN CARTER: Have you got any data that you can provide that demonstrates the increasing safety for workers in underground tunnelling environments?

CAMILLA DROVER: We've certainly seen examples of increased technology and an increase in safety practices adopted with time.

The Hon. SUSAN CARTER: Is there data that demonstrates that that has led to a safer working environment for workers?

CAMILLA DROVER: I just need to converse with David. I'm not sure exactly what David has got on that, but there would be a lot of data available, obviously, given the level of monitoring.

The Hon. SUSAN CARTER: I understood you to be making a claim that, because of increasing experience with tunnelling, we had improved practices, and so I was looking to see the basis for that statement and the fruits of that in terms of increased worker safety.

DAVID MULLINS: I think some of the markers that we could point to is the amount of monitoring that's occurring, the frequency of monitoring and some of the technology and controls that are put in place. As you are probably aware through this inquiry, the lead and lag times for actually contracting silicosis is quite extended, so it's very difficult to get a clear picture of the effectiveness of controls over time, over the longer period. But I think the monitoring regimes being increased, the visibility, the practices on the ground have certainly taken a significant uptick. To find a data point is probably a little bit difficult other than the empirical activities that are occurring. The outcome data will probably come over time.

The Hon. SUSAN CARTER: Is it a fair summary of your evidence that we are monitoring more and, therefore, we assume we have a safer workplace?

CAMILLA DROVER: No. Look, I think we're definitely monitoring and putting controls in the environment, but what we probably don't have as much data on is what is the impact and result of those measures on individuals. That's more difficult to measure because, obviously, the workforce is dynamic, and it moves between projects and the workforce moves between tunnelling and non-tunnelling projects and different types of construction projects. I think that's where we've got the issue. There's definitely evidence that the environments are improving. There's certainly the adoption of the improved systems for management and technology, but I'm not sure we've got the perfect dataset that says that's adding up to improvements on individuals' health.

The Hon. SUSAN CARTER: Do you have any recommendations that we could consider that would address that issue of what we can be doing so that the regulation is assisting to improve workers' health?

DAVID MULLINS: I think there are a number of health monitoring activities probably already in evidence around making sure that when people enter the tunnelling environment, from inception you have those baseline pre-employment health assessments. So we can get those markers and that detail, and maintain the consistency of that over the period of the working life of the individual. That will give you the key health data that you really need to understand if an individual is being affected. Combined with that, we don't want to be in a situation where we're the canary in the tunnel type of situation. We've got to have the proactive monitoring of air quality and, I would suggest, improvements in that space as well. We look at fairly complex equations on how we (a) gather the data, (b) analyse the data, and (c) then try and make assertions around controls and control effectiveness from that point forward. That isn't the ideal situation. The time between collection, analysis and result is quite extended through the analytical process and the collection processes. The further we can shorten that—ideally you want the immediacy of exceedence, the big red button and a siren; "Stop work. Change your controls. Something's going wrong." Unfortunately we don't have the technology to do that today, but that would be the end state. That would be what we're looking for. There are incremental activities and improvements in technology that are moving towards that. I think that this inquiry will help push that even further.

The Hon. SUSAN CARTER: Who exactly is responsible for the analysis?

DAVID MULLINS: In our environments?

The Hon. SUSAN CARTER: In the scenario you just outlined.

DAVID MULLINS: It's a certified hygienist. We make sure that we've got the individuals with the qualifications and experience in those particular technical disciplines to perform the sampling and to make sure that there's a controlled environment scientific process in the analysis of the material and the collection of the material. Obviously there's some interpretation in reporting out and making sure that that data is clarified for the end users.

The Hon. SUSAN CARTER: Do you have a view about the extent to which it would be helpful to make that data broadly available for other researchers to assist in that task of analysis and the development of improved protocols for safety?

DAVID MULLINS: I think that the more people that we can get around this from a technology front, from a manufacturer of equipment front, from the hygiene fraternity, from the health and safety fraternity, from the worker union and everybody else—the more people that have access to that data, the more information we have to analyse, get sharper with our analysis and really focus on the most important aspects of control.

The Hon. SUSAN CARTER: You see no reason why that would be kept within the project? It could be made more publicly available more easily.

CAMILLA DROVER: Yes. Obviously it would have to be de-identified, but I think there would be support for that from our contractors, the workforce and other stakeholders because it makes sense. I have seen an uptick in contractors monitoring their workers' health. There have been some great examples where they're monitoring for one thing but they pick up another health issue. That's provided some benefit for that workforce or that worker.

The Hon. SUSAN CARTER: Can you quantify the uptick that you've seen?

CAMILLA DROVER: I can't. I just anecdotally know. For example, on one site they had a mobile monitoring centre where they cycled through members of their workforce. That has identified some unknown issues. That has been a benefit to that workforce.

The Hon. SUSAN CARTER: Once those issues have been identified, what improved processes, monitoring or regulation has been put in place to stop those issues reoccurring in other workers?

CAMILLA DROVER: Often the issues were actually unrelated to their activity at work. The one I'm thinking of was actually a heart condition which was identified. That on-site monitoring of workforce, I think, does provide some benefit, particularly if you look at the demographics of our workforce. They're not always a demographic that goes to the doctor.

Ms ABIGAIL BOYD: We now know that John Holland in 2020 developed this five-stage hazard management plan for silica in tunnelling. It was presented to SafeWork. Was that also presented to Transport at the time?

CAMILLA DROVER: Not to my knowledge. I did read that, but I have no knowledge of that, actually.

Ms ABIGAIL BOYD: Perhaps you could check on notice if there was an actual presentation to anybody in Transport at the time. That would be useful. In that presentation it was suggested that those measures be incorporated into the tender for future projects, and obviously that would be something that would have only related to Transport as the contractor. It would be useful to know if you've got any records on that and what the response from Transport was to that. We heard evidence earlier today from Kate Cole that metro has stronger requirements under its contracts for air quality monitoring and health reporting. She drew the connection between that and a lower rate of exceedences than what we see in Transport. Do you support the inclusion of this health monitoring and other document sharing as an enforceable requirement in the contracts that you're procuring?

CAMILLA DROVER: We haven't made it enforceable to date, but we also haven't had an issue with—if we've asked for information, we've generally received it. That is my understanding. The other thing we need to remember is the methodology that Metro uses is quite different to the road tunnels. They're using tunnel boring machines, which have a different outcome to our approach, which is roadheader. That's generally because of the different nature of the tunnels, the number of cross passages and on- and off-ramps et cetera. There is a different methodology which will result in a different outcome. But to your primary question, yes. But it hasn't been an issue to date, is my understanding. If we want additional information, we would just request it as opposed to it being a contractual requirement. But we could amend our processes to tighten that if that was thought to be needed.

Ms ABIGAIL BOYD: In our last session with you at the end of last year, there was a statement made by Transport that you haven't seen significant, major safety issues of late. You said:

> Because of the tunnel environment—and it's not just because of dust in the tunnel environment—they are highly managed, regulated environments. We actually often get a better safety outcome overall because it is so managed.

You then went on to say that we haven't seen significant, major safety issues of late. Now that we've seen what we have seen out of the SO 52, and we've seen the number of really concerning exceedences, as well as learning about the numbers of tunnel workers that are already being diagnosed with silicosis, do you see that there is a role for Transport in better elevating requirements for monitoring and ensuring that those exceedences don't happen on sites that Transport is responsible for?

CAMILLA DROVER: I do stand by my statement. Given the nature and scale of these tunnelling projects, we generally have tier one contractors working on them. If you look at their TRIFR and LTIFR outcomes, they are generally better than industry standards. That's just because we've got the first tier contractors, and the complexity necessitates a whole lot of safety measures that deliver that outcome. That's obviously general safety outcomes, as opposed to just silica.

Ms ABIGAIL BOYD: I was going to say, what is the industry in that context? There are not many other buyers of tunnels.

CAMILLA DROVER: I'm talking about overall safety in terms of physical harm to workers, whether that's injuries to body because they're working in live traffic or electrical interface or whatever. Overall, because they are tunnels and they're underground, and because of the nature of the contractors working on them, they are highly monitored, regulated spaces. But your question about whether there are opportunities for further—was it monitoring?

Ms ABIGAIL BOYD: Yes. Sorry, just coming back to your comments there, yes, you can look at industry standard for the harms that we know about. But the problem with dust diseases is that you don't necessarily know what that harm is for a little while. Sometimes it can take decades for it to show up.

CAMILLA DROVER: I accept that.

Ms ABIGAIL BOYD: If you've got evidence coming in that there are exceedences on projects that Transport is responsible for, you don't currently have in your contracts the ability to call for information or impose breach consequences or anything on these contractors. Is that something you would be looking to now build in and take a firmer role on?

DAVID MULLINS: I think there are probably two components of it. One is that regulatory, breach compliance, prosecution path. We have a suite of opportunities to compel and enforce activities from nonconformance—predominantly safety processes—in the auditing processes, where we would look at a situation, exceedence or any safety event onsite. We'd look at it from an investigative perspective, provide a nonconformance, ask for that to be addressed and work through that process. That is available to us. If we requested an investigation to be undertaken or if we wanted to step in and do an investigation, they're all available to us within our current contract suite. We do use those from time to time. If we work through a process with an exceedence, we will follow that through to ground, get the information that we need and satisfy ourselves that there is a control or a focus on improvement in control across the board.

Apart from that, looking at specific instances, across the board, the industry as a whole—or across our principal contractors—working with them to try and elevate above and beyond wherever we can, where it makes sense to do so. Things like Versaflo were instituted prior to any requirement being enforced upon them. That was an industry initiative. We got together, had discussions around the challenge of silica. We talked about the different segs in the work group, what the exposures were, what we could do to do it. From that discussion came the institution of Versaflo. That wasn't a small task in itself. That wasn't through contract. It wasn't through a compliance process. It was through a safety improvement process that makes sense.

CAMILLA DROVER: We had two workshops last year, February and July, just on how we could improve the safety in tunnels. And it wasn't just to do with silica; it was broad safety. Again, it wasn't in response to any legislative change or any new requirement; it's just the right thing to do to continually work with our contractors to see that we can adopt continuous improvement as we go forth and tunnel.

Ms ABIGAIL BOYD: If information came to you that there were a lot of exceedences at a particular site and/or there was information coming from new research or other things to say, "Actually, this would be a better way to do things in order to keep workers safe," and it's not something the industry wants to do, is it something that you could proactively require? I'm thinking of, for example, if you've got workers doing 12-hour shifts, which is an extraordinarily long period of time anyway for something that's often quite a physical job. We know that 12 hours in an environment that has got that high exceedence is obviously going to be much worse for a worker than eight hours, but there's a cost to the company of bringing on more workers. Is there a capacity for you to look at that and say, "Actually, we want to impose an eight-hour day under these contracts"? Do you have that sort of flexibility?

CAMILLA DROVER: A couple of things: The principal contract is responsible for the safety on the site, and SafeWork is the regulator. But, as a good client, we will always try to influence our contractors to ensure that we get a safe outcome. I suppose we haven't had to enforce anything to date because we've actually been working very collaboratively with the contractors to strive for better safety anyway. In terms of work hours, the threshold for exposure for workers is already moderated for the amount of time they spend in the tunnel. David can give me the exact details around that.

DAVID MULLINS: Yes.

CAMILLA DROVER: So there are already some measures in place to address the length of exposure and accepting that those shifts are long for tunnelling workers. But we haven't had a specific request to change the durations of shifts and therefore had any discussion about what that might mean in terms of commercial arrangements.

Ms ABIGAIL BOYD: Has a contractor ever come to you and said, "We think that we need to impose this new thing in order to increase safety, but it will cost us so much more that we actually need to adjust the contract"? Has that ever happened?

CAMILLA DROVER: No, not in my experience. Maybe David has some experience. I think the Versaflo is a good example because that was something that was instituted, to my knowledge, during the contract—so it wasn't necessarily from day one—and there was no request for additional funding or anything. That was what they had to do, they felt, to protect their workforce to meet their safety obligations.

DAVID MULLINS: There's not a specific—there is from time to time. With the legislation changes on 1 September, there is some claim—variation claim—coming through, which is at cost. We will review that: Is it reasonable, is it practical, is it in line with the legislation and so forth. That does occur when there are changes in legislation mid-contract. Obviously contracts are written at a point in time, and there are changes in frameworks and in requirements over that time. They come down to a commercial discussion generally, but by and large they get paid where it makes sense, where it's aligned with the legislation and so forth.

The CHAIR: You mentioned in passing in answer to an earlier question a collaborative project with Acciona, is that right, in regards to the tunnel?

CAMILLA DROVER: Acciona is the contractor for the second package of the Western Harbour Tunnel.

The CHAIR: Correct. Did I mishear what you were saying about some collaborative work being done with Acciona or some project that you were working on with Acciona in terms of some aspect of that?

DAVID MULLINS: There's a couple that Acciona have initiated. The tele-remote management of the roadheader, that is one, and also the work with Newcastle university, utilising that site as a location to sample.

The CHAIR: As a follow up, who do you deal with at Acciona in New South Wales? Is there a general manager for occupational health and safety that you're dealing with, or are you dealing with some other person located elsewhere?

DAVID MULLINS: We deal with the general manager, project director, safety leads on the project.

The CHAIR: They're located in New South Wales?

DAVID MULLINS: They are, yes.

CAMILLA DROVER: We deal with them on many levels. There are a number of initiatives that Acciona have proposed and are trialling themselves; tele-remote is one of them. The boot wash for the cab—

The CHAIR: Yes, I think it's been mentioned earlier.

CAMILLA DROVER: That was, I understand, proposed by one of the workers and adopted by Acciona. Then, as David said, we'll also adopt that as a case study site for this proposed work with the university.

The CHAIR: But those individuals you mentioned, their titles—they're located in New South Wales so they have ready access—

CAMILLA DROVER: Absolutely. The project team are all located here.

The CHAIR: With respect to the issue of the title of "principal contractor", we had a company earlier today—Ghella, which is company you'd be familiar with. They describe themselves—I'm paraphrasing them—as a smaller operation within the tunnelling industry but obviously joined with other businesses as part of a project. I tried to tease out with my questioning about was there any subservience that the smaller operators had vis-a-vis the principal contractor. I was trying to tease out is it a vertical requirement. You've got the tier one operator who

is the principal contractor and everything really flows down from that, so to speak. By nature of what is the practice or the requirement, everyone falls into line, so to speak. The answer that came back was it wasn't quite like that. It was more collaborative and they seek to have synergy working together. There's not competition in that sense. Are you able to answer, from your knowledge, is it the case that the principal contractor really sets the pace, and what flows from that must by definition flow down the line, in those simple terms?

CAMILLA DROVER: Commercially, Ghella, for example, is often part of a joint venture.

The CHAIR: Yes, that was the example.

CAMILLA DROVER: They might be fifty-fifty with another tier one contractor, so commercially they are sharing 50 per cent of the risks, the profits and the downside on a project. However, when a JV comes together, they usually decide which safety system they will adopt for that joint venture. They may decide that it's not going to be Ghella's safety system; it may be their JV partner's safety system. Often that's a JV partner that perhaps has a longer history in Australia or New South Wales—not always, but the JV decides which safety system they'll operate under, and that will be the safety system that will be adopted for the project. They are slightly different concepts. One is a commercial coming together and one is which safety system will be operating.

The CHAIR: That's very helpful, because perish the thought there was a tension. I just wasn't quite sure from the answer back—no disrespect to who was answering the question—about the nature of what is the consistency down the line in the context of what we're talking about, occupational health and safety. It was described, and it was also by the gentleman from Ghella talking in general terms, I have to say, but I took it as what is the practice, that obviously there is a long lead-up time starting from the point where—sorry, let me say the end point is where they sign on to the contract with the Government to do a project, but this primary contractor, or who would be deemed, if it all comes to pass, the primary contractor and these other contractors who are going to be in this joint contract. There is a lot of nutting out of things over a long period of time to work out whether or not this whole plan of a joint project is going to be able to be brought to fruition and iron out a number of things to bring the tender proposition forward for consideration. Is that your understanding, that there is quite a lengthy deliberative process which is entered into before we ultimately get to a sign-off? That's taken as a given, I presume.

CAMILLA DROVER: I might just explain. Our practice is to do a market engagement process well before we come to procure a project. The reason we do that is so that we can share with the market the nature of the project that's coming. They can understand the risks, they can understand where they want to participate, they can inform the way we might package, what form of contract we might use and how we might share those risks. But it also helps them to decide where they want to go for that project and, therefore, that will help them team and form joint ventures et cetera. They will need to have formed a joint venture by the time we issue an expression of interest, because that's actually when they say, "Look, we're interested. And, by the way, here is our team." It usually takes often three to six months or perhaps even longer before we actually shortlist and decide which of those that have expressed an interest and teamed will actually go forward through a tender phase. That can take up to a year, depending on the complexity of the project.

During that procurement process—the tender phase—we will ask for plans to be submitted. We don't necessarily ask for all the plans to be submitted, but key plans around safety we will ask during a tender phase. Then one of the contractors will win or one of the joint ventures will win. But before they go anywhere near starting onsite and breaking ground and tunnelling, it often takes them about a year to actually develop their detailed design but also, in parallel, get the approval for the construction environment management plan and all the other plans that sit below that. That gives them a lot of time whilst they're doing that detailed design to actually finalise the exact methodologies, the exact nature, and all the plans and controls they are going to adopt for that delivery. So they do have a reasonable amount of time. They've done some of it in the competitive tender phase, but they have that period post-award to finish, finalise and make specific their plans for the actual detailed design that they're going to lock in and then go and build.

The CHAIR: With respect to tunnelling projects, at that point where there is this first engagement with yourselves and the potential business entities co-jointly wanting to come forward who are showing an expression of interest, up-front you are placing information before them and perhaps even expressing what are going to be minimums required in the area of occupational health and safety so that they can be appraised of that straight up from the very start?

CAMILLA DROVER: Absolutely. Even beyond what we might prescribe, they have to have a Federal accreditation for tunnelling. They will know what the Australian standards and all the other requirements are well before any project, because they're generic, if you like. But then there'll be specific things and they will tailor those plans depending on the geology, the particular methodology and a whole lot of other project-specific and site-specific constraints, and also they'll need to respond to the planning conditions. It's one of the reasons why we don't like to award contracts until we have planning approval, because we need to know what the planning

conditions are to make sure that the contractor is bidding and basing their pricing on those project-specific planning conditions, which include environmental and other requirements.

The CHAIR: That's very helpful.

The Hon. CHRIS RATH: Thank you for your evidence so far. I was wondering if any consideration is being given by Transport for NSW to using independent hygienists, or if it would even be possible to use independent hygienists, on specific tunnelling projects.

DAVID MULLINS: I can talk to that. Within the safety function within Transport, we have a group that's specifically focused in on health, and within that group we have qualified hygienists. We can draw on them to provide us with verification and checking any technicalities on site. Generally where we have a project set up, we'll have a team of safety professionals working on that project in lockstep with the project team. They're safety generalists, but we have the specialists centralised, and we can draw on them to help out with any interpretation.

There are always hygienists embedded in these projects. When the hygienists get together, they will review, discuss matters, talk about their testing methodologies and so forth, particularly with the recent changes in September—obviously, upticks in education, standardisation of the awareness training, those types of things. There was a lot of involvement between the Transport-embedded occupational hygienists and those that are embedded within our principal contracting groups just to make sure we're all working in lockstep and all sharing best practice as we step through those changes.

CAMILLA DROVER: There are other instances where we've engaged an independent hygienist ourselves. We did that on the Rozelle interchange when we had the asbestos issue. And I know the contractors themselves also engage independent consultants, companies to provide that service to them.

The Hon. CHRIS RATH: With contractors, how do you ensure that the contractors actually enact the recommendation of the hygienists? We've heard some evidence that occupational hygienists might have their safety recommendations ignored or not actioned entirely.

CAMILLA DROVER: I don't have any evidence of that.

DAVID MULLINS: I'm not aware of any specific examples, suffice to say that my team members embedded in projects work in lockstep with the hygienist and the safety teams in the tunnelling environments, and they're cross-referencing and validating data information, issues and improvement activities daily.

The Hon. CHRIS RATH: Does Transport do audits?

DAVID MULLINS: We do.

The Hon. CHRIS RATH: To ensure that the recommendations are being implemented as well.

DAVID MULLINS: Yes.

The CHAIR: Thank you very much. We appreciate you coming along for a second time to provide a further update on matters, and we appreciate all the good work you're doing. On behalf of the Committee, thank you very much. I'm not sure if any questions were taken on notice. We'll double-check. If there are any questions on notice or supplementary questions, the Committee secretariat will liaise with you.

(The witnesses withdrew.)

The Committee adjourned at 16:15.