**3M Transcript for the following interview: Ep-7-SafeWork NSW 2017- 2022 Hazardous Chemical Exposures Reduction Strategy**

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Welcome to the 3M Science of Safety podcast presented by 3M Australia and New Zealand Personal Safety Division. This is a podcast that is curious about the signs and systems of all things work, health and safety, that keep workers safe and protect their health. I am Mark Reggers, an occupational hygienist, who likes to ask the questions Why, How, and Please Explain. Whether you are a safety professional, occupational hygienist, or someone with any level of WHS responsibility in the workplace, maybe you are a user of safety products or maybe you are a bit of a safety nerd who finds this stuff really interesting, then this is a podcast for you.

(R) Today we're talking with Meagan from SafeWork NSW. Welcome Meagan.

(M) Thank you.

(R) Now today, this is actually part one of a two-part podcast that we're doing with Meagan. The first one we're doing on the SafeWork NSW 2017-2022 Hazardous Chemicals and Materials Exposures Baseline and Reduction Strategy. Bit of a mouthful there. Meagan can you tell us a little about what your role involves at SafeWork NSW? I do have it written down here but there's a fair bit there, so I thought you're probably best to explain what you do.

(M) Okay well I look after four teams in SafeWork and we're state wide. So, I look after the Major Hazard Facilities team which is looking after the largest chemical sites in NSW.

(R) So, like an Orica or a chemical plant or refinery? Those type of places?

(M) That's right. I look after the dangerous goods and explosives sites, so explosives is fairly well to understand but dangerous goods could be anything from your fuel right through to your, you know, pool chemicals. So, where they're actually storing quite a decent amount of quantity. I also look after the Safety Management Audit team, so safety management systems are required in a number of workplaces, so we test those but also look after the internal systems in SafeWork. And we also have the hygiene and toxicology area which is the focus of today's session. They look at chemical exposure, sites with scheduled carcinogens, and essentially are driving these projects for the roadmap.

(R) So that doesn't sound like much there to keep you busy, all those hazardous and dangerous things there.

(M) Yes, that's right.

(R) All right so what is the SafeWork NSW 2017-2022 Hazardous Chemicals and Materials Exposure Baseline Reduction Strategy? I'll just call it the Strategy from now on, it's a bit of a mouthful there. So, what actually is that?

(M) The Strategy directly aligns to Action Area 2 of the roadmap which has identified exposure to hazardous chemicals as a key priority area or a harm to our workers in NSW.

(R) So, we're going to go up a level. So, what's the roadmap? I've got a pretty good idea just by it being called a roadmap but want to make sure we're not assuming anything here. What is the roadmap for SafeWork NSW?

(M) Well it's a plan for work health and safety for NSW. So, it's not just SafeWork NSW delivering the plan, it's actually produced for all of NSW. So as part of that it's got three action areas, and the first action area is embedding the health and safety landscape in all NSW workplaces. So that includes the government sector as well. The second action is focusing on key priority areas and harms such as chemicals, falls from heights, forklifts, electrocution to name a few, with the third area focusing in on being an exemplar regulator, so that's us as SafeWork NSW.

(R) So, we've got this safety roadmap. It's obviously a higher level. Action Area 2 then has the strategy program which we're going to be talking about today. That makes sense. You got the overarching program and then we're going down. Is this unique to SafeWork NSW in that do other states and regulators have similar type roadmaps and plans? New Zealand? Or is this a fairly unique NSW thing?

(M) Well all the regulators undertake targeted programs in specific areas that are priorities in their jurisdiction, so some overlap. For example, when we had to implement the new labelling system for chemicals that's something that all the states worked on together. Also, when we looked at silica for example we worked with the other regulators in the manufacturing benchtop area. So that's something where we work together on these priorities. However, there's no other regulator that actually has a roadmap such as this per se.

(R) And I think I saw something on LinkedIn yesterday about a SafeWork NSW and SafeWork ACT doing a construction thing over the border as well. So, it's good to see, I mean me being based and living in NSW and in Sydney and Newcastle, you want to see the states working together because we're not in isolation, which is

great. So, what are hazardous chemicals which are the priority focus for SafeWork NSW and what are some of those examples? I know you've mentioned some already. What are some other ones that may be getting used in the workplace?

(M) So, there are actually thousands of hazardous chemicals in the workplace, up to 40,000 for example. These can be paints, pesticides, cleaners and fuels to name a few and they come in various forms. They could be a powder, a solid, a liquid or a gas. So essentially our project is looking at reducing exposure to chemicals overall, but then we're going to narrow in on a couple that are actually presenting in the data as causing harm to our workers.

(R) Of the ones you just mentioned there, paints, pesticides and cleaners, there probably isn't a workplace in all of NSW that wouldn't have at least one of those particular chemicals as well. It obviously depends on the amount but that's a fair few workplaces. So why is it such a priority for SafeWork NSW?

(M) Over the past four years there have been more than 6,500 injuries in NSW workplaces generally as a result of poor handling or storage of chemicals. So, exposure to chemicals is actually 100% preventable but where people aren't being protected we're looking at as I said eight people that have died and more than 250 people now permanently disabled. So that's just in the last four years. So, reducing high levels of exposure through safe use, storage and handling is obviously a clear priority for us, and having that bolted in to the roadmap essentially allows us to create healthy and safe workplaces where chemicals are being used.

(R) So, you mentioned there's over 40,000 different hazardous chemicals. How do you narrow down that list to work out what to focus on?

(M) So, what we did, we actually looked at an initial top 100 priorities. So, they were developed on national and international sources and then we further refined

this criterion looking at things like toxicity rating, exposure potential, estimated quantities, number of workers using these chemicals, and using data both here and overseas. So, we narrowed that down to a top ten and from that top ten we're actually focusing on the top two to start with which is formaldehyde and crystalline silica as they rank the highest based on this criteria. In terms of where the industries that they most likely target, it's the government, construction, manufacturing, agriculture and healthcare areas.

(R) So, you've mentioned top ten, you've mentioned two. What are those other eight? Top ten chemicals?

(M) Okay the third is chromate, fourth is benzene, the fifth is carbon monoxide, the sixth is methylene chloride, seven is isocyanate, eight is methyl bromide, nine is xylene and ten is acrylamide.

(R) So, what are the objectives of the program? What are you actually looking to aim? You've got your top ten chemicals and you've got your top two for this year. But what are you looking to actually achieve?

(M) So, some of them have actually got some specific targets but overall the roadmap is looking to get a 30% reduction across workplaces. So, we're looking to reduce exposure to again the top two being formaldehyde and crystalline silica by 30%. We also want to research and adopt international best practice test methods for the early detection of silicosis, so that's more related to crystalline silica. We're also wanting to initiate legislative change requiring mandatory reporting of all occupational diseases or when workers are working above the standard, influencing changes to the Australian workplace exposure standards to make sure they're set at the right limits and that our people are working below them; disseminating and supporting international best practice, so that's a lot of guidance material and awareness; and identifying and reducing gaps to meet the needs of at-

risk workers, particularly young people and those from culturally and linguistically diverse workplaces.

(R) There are some pretty big goals there. I guess you're trying to tackle a lot of things at a whole bunch of different levels there, so obviously initiating legislative change, looking at international practices. So, there's some pretty big goals but I guess you've got to aim big to make a real difference and change in the workplace. So, what are you actually going to do to achieve these things? It's great to say we're going to reduce something by 30% but how are you actually going to go about doing that in a workplace?

(M) Well the first thing we'll do is consult and collaborate. So, gaining insight from key stakeholders such as the likes of 3M, producing initiatives and services and products in partnership with these stakeholders, collaborating with the Dust Diseases Care to introduce for example the NSW Register for Lung Diseases, working with partners to determine what is the best practice, and looking at adopting those practices in conjunction with SafeWork Australia. The second thing we'll do, we'll try to support businesses and workers in identifying exposure levels and their control measures, engaging with them to build their knowledge and skills to eliminate or reduce their exposures to hazardous chemicals, promote and encourage good work practice as in a safe environment, lots of practical tools and guidance, and informing workers and workplaces on how they can use, store and handle chemicals. So that's the second thing. The third thing will look at evidence-based interventions, so encouraging research that drives innovation and best practice and puts safe work practices into these environments. We will review various sources of data to make sure we're hitting the mark, and also identify risk factors that actually led to the injury or claim. The fourth thing we'll do, we'll look at demonstrating what compliance looks like. So, with all this information creating best practice material to help businesses comply and reduce their exposure to hazardous chemicals.

(R) I think that last point is a fantastic one as in trying to set what it looks like. It's great you can produce documents and we've got Australian standards and that stuff but what does it look like? If they can see that I think that's a fantastic tool there. But what is that going to mean for a workplace? Like alright if I'm a business owner and I'm using formaldehyde in the workplace, how am I going to get this information to actually do these particular things you have just run through there?

(M) We're going to do four things. The first thing is awareness. A lot know that they're working with chemicals. They may not know a lot about the chemical or how to keep themselves safe. So, we'll essentially have a lot of fact sheets, video safety alerts, webinars, social media, but also with the marginalised groups that I mentioned like youth or from linguistic backgrounds we'll translate those fact sheets and information as well. So that's the first thing. The second thing is our interaction. So that'll include visiting the workplace, conferences and events, field days, but we'll also be incentivising the area by offering rebates. The third area is research, so we'll look into again best practice for health monitoring, model ourselves against the world and the medical testing. The fourth area is the legislation. Review the legislation to make sure that it is reflective of current work practices, that it is meeting best standards, and then designing all our guidance material as a result of those four things and putting that into the marketplace for workers to comply.

(R) Are you involved with the SafeWork Australia review of the exposure standards? I know that's been going on for a couple of years now. Do you know how all that's tracking? I know all the occupational hygienists are keen and waiting to hear about that.

(M) Yes definitely. We also contribute to that. So, we're a stakeholder just like everybody else. So, we've put in our data. We look at again best practice trends

and make sure that when we set these standards that they are actually set at the right limit. That it not only is achievable, but they are actually best practice.

(R) We mentioned about formaldehyde and silica. Part two is going to be about formaldehyde but we had Kate Cole in before in a previous podcast talking about silica. One of the things that we spoke about there sort of reinforced this point like as in yes, you've got these exposure standards but irrespective of what the exposure standard is, do something about it. You know whether the exposure standard drops down you've still got to bring it down as low as reasonably practical. So, it's great to go yes, we're lowering stuff but at the end of the day it's about those tools and information to go look it's sometimes not that complicated or hard to actually do something about it, but you don't know what you don't know.

(M) That's right and as I said earlier, exposure to chemicals is 100% preventable. So, if you know how to do it again the standards are there in the background to just say that's the limit, but it's all about as I said working safely, knowing how to do that, and essentially you shouldn't have to worry about the standard then in the background.

(R) So, you've got these big audacious goals, which is great. You've got these things you're putting in place. I love the videos and fact sheets. That's easily accessible. But how are you going to measure success. That's great like five years down the track oh great we've finished that program, let's dust our hands and onto the next one, but how do you know whether that's a success or not? Because they're big things and hard things to try and get moving.

(M) Well the overall measure of a 30% reduction is a big target.

(R) Very big.

(M) We've got a lot to do and that's going to include over 10,000 interactions with business just in itself.

(R) When you say site visits, as in site visits, phone calls?

(M) So that would be the visits, the events, the education sessions, so how we interact. Those touch points that we have can form a number of ways but essentially, we will have direct contact with that amount of businesses. Again, to try to influence to get this reduction. But some of the smaller measures of success or the incremental efforts are ensuring that the level of stakeholder engagement and partnering that we're doing, we're actually achieving that. Essentially partnering with other areas in the industry, essentially the leverage we get from that is also a measure of our success; reducing the number of workplaces that have unacceptable exposures to silica or formaldehyde, so essentially once we visit them getting them back under the acceptable standard; increasing compliance with health monitoring requirements, so some don't even know that they need to do health monitoring, so essentially again the awareness and then how to comply; increasing the use of effective control measures, that's the key success - if you know what the control measure is then essentially you can eliminate a lot of the exposure; increasing the skills and knowledge between workers; the safe work practices and the use of the right or the correct personal protective equipment; having these NSW registers that I spoke about and so actually having them in place; and essentially adopting any international best practice – again, does Australia have the mix right and have we actually got the right information to help people comply?

(R) So, if I'm managing a workplace, maybe a stonemason for example with crystalline silica. Can I call up SafeWork NSW to come out and help me? How does that process work? So, people may listen to this and go do I have to wait to have a

high exposure or an event happen to have you guys come out or is it very much a proactive hey if you put your hand up we're here to help?

(M) Oh definitely. So, you can always call us on 13 10 50. Visit the website – there are lots of materials there that give you the information about what it is and how to control the workplace. But then from there if you find you need that extra bit of help, of course you can request an inspector visit. And also as I mentioned because of so many visits that we're doing across the five years, certainly if you want to put your hand up that counts for our interaction but also to help you. It's much easier to be invited in to the workplace to help you comply then us coming at the other end when we're coming from a compliance aspect.

(R) So, if I'm that stonemason and I've got my guys cutting you know stone and high dust, do you guys do measurements to know if I'm under or over? How does that process work? How involved are you going to get in the workplace?

(M) So essentially it is actually the business' obligation or duty to make sure you're working below the standard. So how you choose to do that and you would need to demonstrate that you're either collecting samples and where you're actually operating at. If we've detected that you are operating above standard, there's a number of things that we're offering. For example, if we've issued a notice we can direct you to the Dust Diseases Lung Bus where they will offer subsidised testing for you. So essentially it is a right or an obligation for the businesses to already be doing this but in cases where we detect where it's not happening, we have incentivised how to actually get to compliance through this program, which is very unique to offer it in that way. Because again our goal for NSW is to get a 30% reduction to exposures in these areas.

(R) It's something we spoke about in previous podcasts about that exposure standard level. It's not a safe-unsafe line, oh I'm under it, I must be safe; I'm over it,

it's unsafe. So, it's about even if you are underneath there are still plenty of things that, you know, I know as hygienists encourage workplaces to bring it down as low as reasonably practical, the ALARP principle, LEV watering stuff down in a silica case, so plenty of fantastic initiatives there, which is great. Thanks Meagan. There's some really great information. I guess the big thing I'm most excited for is that practical, real information, advice, guidance at the worker level. I mean SafeWork NSW are a regulatory body and a lot of documents get produced and as a hygienist I love them, but I mean what's going to make the difference for the workplace? That's what I'm most excited to see. In summarising, how would you sort of wrap this all up into a couple of key points for our listeners?

(M) So, I think the focus being the roadmap over the next five years gives us this fantastic opportunity to turn some things around. It's not a good state when we have to focus on a couple of chemicals that are causing harm to our workers, so over the next five years we aim to turn that around and get a 30% reduction, but also to put materials in the workplace that are easy to use and that we are keeping our workers safe. And the key thing, while we are a regulator, we are there for advice and support.

(R) So, can workers, workplaces, get in contact with SafeWork NSW for that help and that great advice?

(M) Well the best thing is to call 13 10 50, that's our call centre, or visit the website so safework.nsw.gov.au or the other way is if you see a SafeWork inspector, always ask.

(R) See them, chase them down in the street, come on we need some help in our workplace, and I hope they'd be very happy to help every single time. Well thanks for coming in Meagan, really appreciate your time. This is part one of two parts, so we'd love to have you back for part two. So, thanks for listening everyone. If you

have any questions, comments, suggestions or future topics or guests or anything else, if you want to get in contact with the podcast you can email us at scienceofsafetyanz@mmm.com. You can also contact us via that email if you need any information. But when you start talking about PPE, safety equipment that 3M can help you out with, please just shoot us an email and we'd love to hear from you. Be sure to subscribe to the podcasts through iTunes or wherever you get this podcast from so you don't miss any future podcasts. If you've enjoyed the podcast or found it informative we'd really appreciate if you could take a couple of minutes to leave us a review as it really helps other people find the podcast and future episodes. We'd hate for you to miss out. And as Mitch Hedberg once said, my fake plants died because I didn't pretend to water them. Thanks for listening and have a safe day.