COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

SENATE

COMMUNITY AFFAIRS REFERENCES COMMITTEE

Reference: Workplace exposure to toxic dust

THURSDAY, 10 NOVEMBER 2005

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SENATE

COMMUNITY AFFAIRS REFERENCES COMMITTEE

Thursday, 10 November 2005

Members: Senator Moore *(Chair)*, Senator Humphries *(Deputy Chair)*, Senators Adams, Allison, Carol Brown and Polley

Participating members: Senators Abetz, Allison, Barnett, Bartlett, Mark Bishop, Bob Brown, George Campbell, Carr, Chapman, Colbeck, Coonan, Crossin, Eggleston, Chris Evans, Faulkner, Ferguson, Ferris, Fielding, Forshaw, Hurley, Joyce, Lightfoot, Ludwig, Lundy, Mason, McGauran, Milne, Murray, Nettle, O'Brien, Parry, Payne, Siewert, Watson, Webber and Wong

Senators in attendance: Senators Adams, Allison, Carol Brown, Humphries, Lundy and Moore

Terms of reference for the inquiry:

To inquire into and report on:

- the health impacts of workplace exposure to toxic dust including exposure to silica in sandblasting and other occupations;
- the adequacy and timeliness of regulation governing workplace exposure, safety precautions and the effectiveness of techniques used to assess airborne dust concentrations and toxicity;
- the extent to which employers and employees are informed of the risk of workplace dust inhalation;
- the availability of accurate diagnoses and medical services for those affected and the financial and social burden of such conditions;
- the availability of accurate records on the nature and extent of illness, disability and death, diagnosis, morbidity and treatment;
- access to compensation, limitations in seeking legal redress and alternative models of financial support for affected individuals and their families; and
- the potential of emerging technologies, including nanoparticles, to result in workplace related harm.

WITNESSES

Committee met at 4.02 pm

CREASER, Mr Wayne Ellis, Acting Assistant Secretary, National Standards Branch, Office of the Australian Safety and Compensation Council, Department of Employment and Workplace Relations

HAYNES, Mr Peter, Director, Chemical Standards, Office of the Australian Safety and Compensation Council, Department of Employment and Workplace Relations

PARKER, Ms Sandra, Group Manager, Office of the Australian Safety and Compensation Council, Department of Employment and Workplace Relations

CHAIR (Senator Moore)—The Community Affairs References Committee is commencing its inquiry into workplace exposure to toxic dust. We are actually continuing our inquiry into toxic dust. Welcome to the officers from the department. As of yesterday, you are all legal, aren't you? This is one of your first public appearances in your new capacity, so welcome. I know that you have information on parliamentary privilege and the protection of witnesses and evidence. The committee prefers evidence to be heard in public, but evidence may also be taken in camera if you consider such evidence to be of a confidential nature. As public servants, you will not be required to answer questions on the advice you may have given in the formulation of policy or to express a personal opinion on matters of policy. The committee has your submission, and if you would like to make an opening statement, that would be fine.

Ms Parker—I would like to make a short opening statement which summarises some of the key points we made in our submission, without restating them, and also to respond to a few issues that were raised in other submissions. There have been a couple of other developments since we put in the submission which may be of relevance to the committee. In terms of the context of our work, the National Occupational Health and Safety Strategy 2002-2012, which we work under for quite a lot of our work, is endorsed by all the Australian governments, including the ACCI and the ACTU, and it provides a framework for improving OH&S, including management of issues associated with hazardous chemicals. We define hazardous chemicals as solids, liquids and gases hazardous to health, including dusts.

Adoption of the national model regulations for the control of workplace hazardous substances has led to a relatively consistent framework across Australia for the regulation of workplace chemicals, including those that may lead to occupational diseases. The elements are consistent with current good practice from around the world, and include classifying chemicals on the basis of their health hazard and establishing national exposure standards. Recently reviewed national exposure standards for crystalline silica and asbestos are of particular significance to the terms of the inquiry. Australian national exposure standards for these chemicals are now consistent with the majority of developed countries.

Australia has a system in place for collecting workers compensation and other data relating to occupational diseases, including those relating to exposure to dust. However, drawing meaningful conclusions from the data is difficult due to the latency of many dust related diseases. The Department of Employment and Workplace Relations, through the Office of the Australian Safety and Compensation Council, prepares watching briefs on emerging issues, and we currently have one on OHS developments in nanotechnology. The office represents DEWR

on an interdepartmental committee on nanotechnology organised by the National Nanotechnology Strategy Taskforce within the Department of Industry, Tourism and Resources. The role of the office on the committee is to provide input on OHS issues.

DEWR's view is that a full picture of the potential health and safety implications and risks of nanotechnology, if any, remain unknown. The office will closely monitor international research on this topic and ensure that key government agencies are kept informed of relevant developments. DEWR is of the view that the current OHS regulatory framework is appropriate for dealing with the potential risks associated with nanotechnology.

The Australian Safety and Compensation Council was established by the Australian government as a national advisory council on OHS and workers compensation. It had its first meeting in October 2005. The ASCC will lead and monitor research and develop broad OHS and workers compensation policy and strategic directions under the guidance of the Workplace Relations Ministers Council. The work is aimed at achieving national consistency in OHS and workers compensation. Legislation passed through the Senate yesterday will give the ASCC legislative power to declare national standards and codes of practice, as was the case with NOHSC documents, developed as the basis for nationally consistent OHS regulations. However, we do need to emphasise that they are only legally enforceable if they are adopted into state and territory regulations or codes of practice under their principal OHS acts. Regulatory powers relating to compliance or enforcement of the OHS acts and regulations rests with the various jurisdictional OHS authorities. The office has no regulatory powers relating to compliance or enforcement of the provisions in these documents.

Some submissions that were made to the inquiry raised concerns about the rate and consistency of adoption into regulation and enforcement, and therefore compliance of national standards and codes of practice. The office is currently looking at ways to improve the timing and consistency of adoption of declared standards and codes by the jurisdictions, and agreed time frames for the uniform implementation of new and revised standards and codes across all Australian jurisdictions will be developed during the consultative process. A recent example of this was the coordinated implementation of a national prohibition of the import and use of asbestos under NOHSC.

In terms of chemical standards, a key project being undertaken by the office is a review of the Workplace Chemicals Framework. The Workplace Chemicals Framework, as we said in our submission, is the package of national standards and codes of practice that provide a risk based, outcomes focused framework for determining the requirements for all substances that are hazardous to health. This framework includes those substances that are subject to this inquiry. We have prepared an outline of the components of the Workplace Chemicals Framework, identifying what is currently in place and highlighting changes being considered in the current review. I will table that.

Since our original submission, the office has released a preliminary draft of the new workplace chemicals standard to key stakeholders for review and consultation. Some of the features of this draft standard include: the standard brings together and simplifies the current separate requirements for hazardous substances and dangerous goods; risks arising from the handling of chemicals in the workplace will be controlled in an holistic way rather than under systems that separately deal with health and physical hazards; the standard is performance based, identifying

outcomes to be achieved, such as exposure standards, and ensuring its applicability across the widest possible range of occupational circumstances. The standard is based on the features of the Globally Harmonised System for Classification and Labelling of Chemicals—the GHS. Once the final draft is developed, the ASCC will be asked to endorse and release the draft for public comment in 2006.

The review of this framework also includes a review of the national exposure standards and health surveillance guidance, including biological exposure indices. This work will consider the process for setting exposure standards, what exposure standards it should represent, how exposure standards should be regulated, and international developments.

Just to finish, with respect to an international development in exposure standards that we are interested in at the moment, there is an International Council on Mining and Metals workshop being held in London this week which is discussing ways forward for an international approach to developing exposure standards. The United Nations environment program, entitled Strategic Approach to International Chemical Management, has identified developing guidance on a harmonised approach to the setting of occupational exposure limits as a current objective under their proposed global plan of action. The outcomes of these activities are being monitored very carefully by the office.

Just in final summary, the office is of the view, and the department is of the view, that the current Workplace Chemicals Framework and the changes we are proposing place Australia in a very good position in relation to the management of OHS issues relating to hazardous chemicals, including toxic dusts and nanotechnology.

CHAIR—Mr Creaser or Mr Haynes, do you wish to add anything at the start?

Mr Creaser—No, not at this stage, thank you.

Senator HUMPHRIES—I have not yet seen the document that you have tabled, so it might answer some of my questions, but I will ask them anyway. You indicate in your submission the sorts of incidents of respiratory diseases that have occurred in Australia in the last few years. I am looking at figure 1 particularly. I assume these are cases of first diagnosis of those illnesses; is that the case? This is on page 6 of your submission.

Mr Creaser—These are statistics of actual workers compensation claims made, so it would be at the point they would have been diagnosed to the extent that they would attract a need to claim compensation.

Senator HUMPHRIES—So it is the lodging of the claim that would put the figures in that particular year?

Ms Parker—The acceptance of the claim, yes.

CHAIR—These are successful claims?

Ms Parker—Acceptance of the claim, yes.

Senator HUMPHRIES—Acceptance of successful claims?

Ms Parker—That is right.

Senator HUMPHRIES—You mention on the previous page:

The estimated age-adjusted mortality rates (expressed in number of deaths per million per year)—

and this relates to a report that is referred to in the footnote at that page—

were estimated to be 5 and 2 for asthma, and 8 and 0 for dust diseases, respectively in men and in women.

So in this study it is eight diseases per million per year relating to dust. Do you know how those dust diseases would break up? What kinds of dust diseases would they be? Is there any more information about how that breaks up between different types of dust diseases?

Mr Creaser—Basically, it is pretty much as it is laid out in the figure on the following page. You can see that asbestosis and asbestos related diseases account for a considerable proportion, if you look at the ones that are actually caused by dust. Things like asbestosis and pneumoconiosis due to other silica and silicates would be the sorts of diseases—

Senator HUMPHRIES—I just want to go through it again. Which ones of these are dust diseases—asbestosis?

Mr Creaser—Asbestosis, pneumoconiosis, some of the other respiratory conditions maybe—some may not be.

CHAIR—How do you define the heading, 'Other respiratory conditions due to substances'? That is a pretty general kind of heading. Are you trying to find out what is in there?

Senator HUMPHRIES—Yes.

Mr Creaser—These are accumulated figures which can be broken down further; they certainly become very low numbers once you break them down further. I have a list here of the breakdown of the coding for the workers compensation claims which may be useful.

CHAIR—That would be useful.

Mr Creaser—That breaks down all of the chemical agents and chemical products. It could be coded for workers compensation claims, so that will give you an indication. We can extract data down to the level of this coding but, because of the nature of the way we collect data and the way we can report it, normally if figures are less than five claims per year we do not report the actual number because it is part of de-identifying the data, I suppose. We can then accumulate that upwards to get some more meaningful figures. The figures that are shown in the graph for the actual disease claims, I suppose, are the accumulation of those individual codings from these codes.

Senator HUMPHRIES—What I would really like to know is: what are the top five or 10 respiratory illnesses due to substances and can you provide a rough break-up of incidents between those different categories?

Mr Creaser—We would probably have to get back to you in terms of the details.

Senator HUMPHRIES—That is fine.

Mr Creaser—Certainly mesothelioma and asbestosis are the key elements by a long way, and then there is a whole range of other diseases which probably fall down below that but at much lower levels.

Senator HUMPHRIES—You state:

A review of available data sources shows that there is limited information on the extent of work-related respiratory disease in Australia.

Looking at all the evidence that has come before the committee, that is a fairly obviously true statement, it seems to me. Would you support the view that some kind of clinical study should be commissioned in Australia to provide more light on issues like the incidence of these sorts of diseases, possible causes of these diseases—things of that kind?

Mr Creaser—The issue with that is that generally the causes and effects of many of the traditional work related dust diseases are reasonably well known, just through historical research, and I suppose the question to be asked is whether carrying out more clinical work to identify that to a greater degree is helpful or whether we perhaps should be putting more emphasis at the control level and preventing the exposures in the first instance. Undertaking the clinical trials will, I suppose, clarify the picture and maybe give you more accurate numbers for the data but, at the end of the day, it probably does not help us any further down the line in terms of preventing diseases in the future. Bearing in mind that a lot of the dust diseases have long latency periods, some of the figures that we are seeing now relate to exposures 20, 30 or 40 years ago, where the control regime was quite different from now. Doing clinical studies now may not actually show any meaningful results or be relevant until you see disease manifestations perhaps in another 20 or 30 years. We would say that putting the emphasis on the control of exposures is probably more important than trying to get too much extra detail about the clinical data.

Senator HUMPHRIES—It depends on what your focus is, doesn't it? Your focus is on the prevention of future instances of dust disease absolutely?

Mr Creaser—Yes.

Senator HUMPHRIES—If you are looking at the shortfalls in identifying sources of illness for workers who had been exposed 20 or 30 years ago, then knowing more about exactly why they are suffering respiratory diseases now and to what extent those diseases are attributable to their workplace experiences is extremely important—to them particularly?

Mr Creaser—Yes, I concede that.

Ms Parker—Yes, definitely.

Senator HUMPHRIES—There is a lack of information on that. You talk in your submission about the present standards and the fact they are applied across Australia. You do mention that the silica standards have been adopted across all jurisdictions, although I put it to you that there has been some variation in the time at which that has occurred and the rate at which it has occurred, so there is some inconsistency of application there. We are told, for example, that New South Wales applied fairly clear standards with respect to airborne silica as far back as 1959, and in Victoria it has only technically happened very recently, since the turn of this century. Is it fair enough to have a system where NOHSC supervises a range of state based regimes for these standards to be set when, in the past at least, there has been great inconsistency in how quickly those standards are being applied? Is NOHSC enough of a mechanism to coordinate that to ensure that that kind of problem will not arise again, where you have decades difference in the adoption of what are now obviously necessary standards to protect workers?

Mr Creaser—That certainly has been an issue in the past because there has not been a national framework, and I think even within jurisdictions it would be fair to say in the past that there were inconsistencies in adoption in quite a number of jurisdictions. The mining industry had silica exposure standards way before the general OHS legislation did. I think probably in a couple of recent cases where we have reviewed the silica exposure standard and the asbestos exposure standard, those have been picked up across the country within a matter of months of each other, so there has been a fairly consistent uptake of those. Part of the work that we are doing with the ASCC at the moment is to try to develop implementation time frames which are agreed to up-front at the time these exposure standards are declared, and then endorsed by WRMC, so there is more pressure and more imperative for the jurisdictions to fall in line much more quickly.

Senator ALLISON—If I can just follow up on the previous question: as has been pointed out in a number of submissions, it took a long time for anyone to act in this country in terms of state or federal governments. Often cited is the 1949 UK decision to outlaw sandblasting without protection. How do you account for that? Why is Australia so fundamentally different from other countries in identifying this, and to what extent do you think that both governments and employers are negligent in not picking up on the fact that this is banned somewhere else for good reason? Is there not a responsibility at those levels to look after workers? Do we have to wait until there is a standard in place before the Commonwealth comes along and does something? It is a rhetorical question, I know, but it is constantly a frustration of these people, many of whom have written to us and described this situation.

Mr Creaser—I suppose historically that is part of the joys of a federal-state based system, which does not exist in a lot of other countries where there is a central government that runs health and safety legislation from a central basis all of the time. Whereas Australia has relied on individual states to put the issue as a priority before it is picked up. That may be brought about by pressure from industry or the public or whatever. One of the rationales for developing Worksafe Australia and the National Occupational Health and Safety Commission in the first place was to bring some consistency and timeliness to a lot of these issues so that they would be addressed in a timely and consistent manner across Australia. Certainly since the commencement of NOHSC we now have workplace chemicals legislation throughout Australia fairly

consistently, whereas before, in some jurisdictions, there was very little, except perhaps in the mining industry. I think we have come quite a long way in the last 10 years or so.

Senator ALLISON—I acknowledge that, and it is good to see that that work is being done. It is excellent to see that that work is being done, but do you not accept that there should be some responsibility now for those people who were exposed prior to 1990 when this new system came into place? Should not governments, at the Commonwealth and state level, assist those people who, for one reason or another—and often they seem to be purely legalistic arguments—are unable to get compensation for exposure prior to that time?

Ms Parker—Senator, we are not really in a position to answer that. The Commonwealth is looking at a whole range of ways—it is setting up an asbestos unit within the department, for example—to look at Commonwealth employees and claims. Our role is to develop standards that states and territories should pick up and adhere to, and to require employers to comply. I guess our role is to drive that process rather than look at the outcomes of lack of process, I suppose.

Senator ALLISON—What body ought to do that? Of whom should we be asking this question?

Ms Parker—It would depend entirely on the situation: which employer you were talking about, which industry, if they are Commonwealth. If they are state employees, then ultimately they are the responsibility of the state.

Senator ALLISON—Let us take, for example, employees of private contractors?

Ms Parker—Again, it would depend on the situation. I am not trying to avoid the question, but it is outside of the responsibility of the office and the department. I am not able to answer it in any way that will probably satisfy you, I am sorry.

Senator ALLISON—You mentioned earlier about the new Australian Safety and Compensation Council which had its first meeting in October 2005. Was that the one to which you were referring?

Ms Parker—Yes.

Senator ALLISON—Can you advise the committee who is on that council?

Ms Parker—It is made up of employers, employees and jurisdictions, governments, so there is a representative from each state and territory jurisdiction and the Commonwealth—Comcare is on it; and we have three representatives from the ACCI and three from the ACTU. There is a chair and a deputy chair.

Senator ALLISON—This is an advisory body rather than—

Ms Parker—That is right, yes.

Senator ALLISON—Is its advice public, or does that go directly to governments?

Ms Parker—It advises the Workplace Relations Ministers Council. The Workplace Relations Ministers Council also sets the business plan and reviews the business plan of the council.

Senator ALLISON—Does it take over some of the roles and responsibilities of the National Occupational Health and Safety Commission?

Ms Parker—All of them, and adding workers compensation policy advice.

Senator ALLISON—That is policy advice for—

Ms Parker—To WRMC. The main role—

Senator ALLISON—These are future cases—not cases that result from exposure in the past?

Ms Parker—I beg your pardon?

Senator ALLISON—You mentioned compensation cases. Does it advise about compensation cases like those who have submitted to our inquiry for past exposure?

Ms Parker—No. It is actually very high level policy, and it will advise Workplace Relations Ministers Council on achieving more national consistency around workers compensation systems. We will be looking at issues such as how things are defined in workers compensation, workers compensation schemes, return to work, rehabilitation—much broader issues than specific matters such as individual claims.

Senator ALLISON—Suggestions have been made in some submissions that we should have a national compensation commission. Do you see any need for that?

Ms Parker—The Productivity Commission recommended a separate workers compensation body to look at workers compensation matters. The Commonwealth response to that inquiry was to set up the Australian Safety and Compensation Council which would combine occupational health and safety and workers compensation, so that is the outcome of that recommendation.

Senator ALLISON—Does it fulfil the Productivity Commission's recommendations in every respect?

Ms Parker—No, not in every respect. It is the Commonwealth response, and it certainly did not pick up every recommendation. It provided a response with the aim of driving consistency in both areas and of looking at links between those areas rather than having them separated. It is not a complete response in the sense of picking up everything the Productivity Commission recommended.

Senator ALLISON—Is the business of setting standards also likely to cover medical standards—that is, medical practice guidelines, or whatever you might call them, for GPs who might see someone whose symptoms may be as a result of exposure to silica or other dust? We are hearing that many GPs do not explore the work history of patients who present, and because it might be 30 years after the exposure, it is not obvious to the patients themselves. Does

'standards' only relate to the workplace, or do you see standards being adopted or developed for the medical profession too?

Ms Parker—We cover workplace standards. We do work closely with other departments, such as the health department, and other areas on related matters. Do you want to add to that, Wayne?

Mr Creaser—We currently produce a series of health surveillance guidelines which are available both to industry and physicians for approximately 16 substances, I think, at the moment which includes silica and asbestos. I will refer to one of those. They identify some of the surveillance measures that should be looked at by physicians, and most of them include looking at demography and occupational and medical history and health advice, so it is triggering them to look at those sorts of issues. It then goes on to identify physical examinations or tests that would be appropriate for the various types of exposures.

Senator ALLISON—Would all GPs have such documents?

Mr Creaser—I suspect not, unfortunately.

Senator ALLISON—How do they get out to the medical profession?

Mr Creaser—They are public documents. When they were first released, the old Office of National Occupational Health and Safety Commission did quite a bit of work with physicians in terms of making them aware that this information was available. They form part of the suite of our workplace chemicals standards framework.

Senator ALLISON—Has any attempt been made to perhaps draw the divisions of GPs' attention to this in specific areas where you might expect there to be a higher concentration of workers exposed in the past—a place like Whyalla, for instance?

Mr Creaser—Not at the national level, no—not that I am aware of.

Senator CAROL BROWN—I have come in a bit late, so if I do start going over some old ground, please let me know. In previous hearings we have had quite a bit of discussion about the national exposure standard level. I understand that came into effect on 1 January 2005. It is 0.1 now?

Mr Creaser—That is correct.

Senator CAROL BROWN—What was the previous level?

Mr Creaser—It was 0.2 milligrams per cubic metre.

Senator CAROL BROWN—Can you explain to me how that was changed? What led up to that being changed?

Mr Creaser—The process of changing the silica standard was not in the normal time frame that it would take to change an exposure standard, but silica was identified as a standard

requiring review very soon after the National Occupational Health and Safety Commission initially declared occupational exposure standards. An extensive review has been undertaken.

Senator CAROL BROWN—When was that?

Mr Creaser—Pete, do you know?

Mr Haynes—The extensive review was undertaken between the mid-1980s and the mid-1990s, to which I believe a draft recommendation was produced to reduce the exposure standard. But there is another issue to do with the measurement technique for silicosis. That was only resolved when the new Australian standard was issued early in 2004, which enabled us to make a meaningful recommendation on the exposure standard and how it should it measured.

Mr Creaser—Getting back to the process issue, a consultancy was let to a group of researchers to have a look at the current literature available on exposure to, and incidence of, silicosis. They reported back through the National Occupational Health and Safety Commission. Their recommendations were peer reviewed because some of them were quite contentious, and then formulated into a document which was circulated for public comment. The public comment was reviewed by an expert group which had tripartite membership, and out of that group came a final recommendation for an exposure standard.

Senator CAROL BROWN—Was it just the one recommendation?

Mr Creaser—The recommendation that came out was equivalent to the standard that we have now, which is that there be one standard for the three forms of crystalline silica. I think the recommendation was originally 0.13 milligrams per cubic metre but, because of the change in the sampling methodology, the current standard of 0.1 milligrams per cubic metre is equivalent to the 0.13 under the previous sampling methodology. That decision was put through to the National Occupational Health and Safety Commission and endorsed, and a time frame of 1 January was agreed.

Senator CAROL BROWN—How does that compare with other countries, such as the United States?

Mr Creaser—The standard that we have in Australia is fairly consistent with most developed countries. The level in the United States at the moment, which is set by the American Conference of Governmental Industrial Hygienists, is 0.05 milligrams per cubic metre, using yet another sampling methodology, which is roughly equivalent to 0.07 milligrams per cubic metre using the Australian methodology. We have 0.1; they have roughly 0.07 on an equivalence basis.

Senator CAROL BROWN—You probably would be aware that the ACTU submission advocates a standard of 0.05. Would that be a suggestion that NOHSC—it is not NOSHC now, is it?

Mr Creaser—It is the ASCC.

Senator CAROL BROWN—Is that something they would consider?

Mr Creaser—That position was put during the public comment phase under the review of the current standard. Based on the evidence that was before the expert group considering the public comment, and including the recommendation from the expert researchers and the peer review of that, it was felt that it was difficult at that stage to validate going to a 0.05 milligrams per cubic metre exposure standard.

Senator CAROL BROWN—One of the other suggestions we have had is that, even with the reduction to 0.1, the workplace standards monitoring in each of the states is not proactive at all. Are you able to comment on the state policies?

Mr Creaser—No, it is probably not appropriate for us to comment on state policy in that area.

Senator CAROL BROWN—Was there any discussion at NOHSC around each of the state policies? When this standard was put in, were other monitoring standards put in as well?

Mr Creaser—In terms of the method for monitoring, yes because that forms part of the exposure standard, but in terms of the protocols that individuals—

Senator CAROL BROWN—Compliance?

Mr Creaser—In terms of the compliance strategies in each jurisdiction, no. That is left as a policy decision for each jurisdiction to take on how they implement the compliance activities.

Senator CAROL BROWN—That is entirely up to each of the states and territories?

Mr Creaser—Yes.

Senator HUMPHRIES—Can I clarify what you were saying before. Are you saying that the standard of 0.05 is not in your opinion a necessary standard to move to at this point in time?

Mr Creaser—That was the finding that came out of the expert review group.

CHAIR—You would not be giving an opinion though, would you, Mr Creaser?

Mr Creaser—No, this is not my opinion. This was the finding that came out of the expert review group that considered the public comments. It was based on the peer reviewed research report that was carried out and the public comment that came back in. That expert review group also looked at information that had been published internationally between the time the researchers finished their work and the time the public comment finished, which was a period of a year or so.

Senator HUMPHRIES—It was put to us earlier that the cost of measuring particulates below 0.1 in the air would be much greater than measuring it above 0.1; is that in your opinion a factor?

Mr Creaser—I do not know so much about the cost of measuring. The problem with the way that dusts like silica are measured is that, where you are measuring the respirable fraction of dust, which is the fraction that is likely to get into the oxygen exchange systems of the lungs,

using the methodology that we have, the lower the value you are measuring the more uncertainty in the accuracy of the answer. You could measure down to 0.05 milligrams per cubic metre, but the accuracy of that measurement would be questionable. If you want to get very accurate measurements, that becomes quite an expensive option. There are also issues about the cost and being able to physically control to those levels. Certainly, in setting exposure standards, those factors are taken into account in determining a finally agreeable exposure standard. While an exposure standard is based on health data, those other issues are considered in setting a final standard.

CHAIR—With respect to the number of submissions we have had from people who are not in the workplace but are co-located in workplace, you would have read submissions about people who are living in communities where there is exposure to dust that has been created by a range of workplaces. What role, if any, in terms of the research and knowledge exchange does your group have—with the knowledge that you have about the workplace issues—in that wider community environmental concern?

Mr Creaser—We are getting into issues of public health and, I suppose, environmental health. On the previous chemical substances subcommittee that sat under the National Occupational Health and Safety Commission structure we had representatives from the department of health, so they have been involved in considering recommendations in relation to the whole range of chemical exposures. Certainly that information is available to the health portfolio. Quite often, if we are reviewing exposure standards and the like, we will take into account data that is generated from studies done on public health exposures as well as occupational health exposures.

CHAIR—Is there any unit in your area that looks at that issue?

Mr Creaser—No. The broader issue of public health is outside of our remit.

CHAIR—There is no interdepartmental working group or, in the new terminology that we have in the public sector, no IDC that is looking at this issue?

Mr Creaser—Not that I am aware of.

Ms Parker—There is a lot of ongoing contact with the department, but no formal IDC.

Senator CAROL BROWN—Going back to the compliance issue has there been discussion about whether there could be—and this has been put to us in a previous hearing—an education campaign alerting the public and workers to the adverse health effects of exposure?

Mr Creaser—That issue has certainly been raised. At this stage, that responsibility has been left with the jurisdictions, being regulators and compliance agencies for dealing with the industry specific sectors in their jurisdictions and being able to tailor those particular campaigns for the sectors relevant to their jurisdictions.

Senator CAROL BROWN—NOHSC does not have a role at all in a community education campaign?

Mr Creaser—Not at the level of detail, not going out into the general community in a targeted sense. We do broad general community education as part of our role, but at this stage we have not undertaken any targeted program specifically in relation to silica.

Senator CAROL BROWN—Are you able to? You have not done any work on it, but is your council able to?

Ms Parker—Yes, we are able to. It would be a discussion we would need to have with the ASCC and with the minister. The Commonwealth provides the funding for the ASCC so it would need to be looked at in that context, but it would certainly be possible.

Senator CAROL BROWN—It seems entirely sensible to me that the more community information that is put out there the more it will help workers to be aware of their workplace. Your submission, on page 3, talks about the national model regulations requiring that 'no worker be exposed'. Really, if we are trying to ensure that workers are not exposed, we should probably be looking at a community campaign.

Ms Parker—The employer bodies that we work with and the unions do a lot of work with employers and employees, educating them on the work we are doing and the standards, the codes and so on. That is part of their role. We also fund the ACTU and ACCI to provide education on OH&S and for other ways of getting out the message to their own constituencies, so there is that part of it. We certainly have not done a national campaign in terms of marketing or advertising. Our budget at the moment does not cover that but, as I said, it is not impossible in the future.

CHAIR—Thank you very much. If we have any follow-up questions, we will be in contact with the department.

[4.46 pm]

McMAHON, Mr Andrew Peter, Policy Officer, Safety and Health, Minerals Council of Australia

RAWSON, Mr Robert Norman, Director, Safety and Health, Minerals Council of Australia

CHAIR—Welcome. I apologise for keeping you waiting. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you, and I know that you have given evidence before so it is the same story. The committee prefers evidence to be heard in public, but evidence may also be taken in camera if you consider such evidence to be of a confidential nature. The committee has before it your submission. I now invite you to make an opening statement, and then we will go to questions.

Mr Rawson—Yes, I will take that opportunity. First of all, who is the MCA? The MCA represents a number of mining companies that produce in the order of 85 per cent of Australia's mineral product, so it does represent a significant proportion of the Australian minerals industry. One of the key objectives of the Minerals Council of Australia, which represents these companies, is to have an environment that is free of fatalities, injuries and diseases. In the past the industry has focused to a large extent on safety, but in recent times increased emphasis has been put on health. Health has often been regarded as the poor cousin of safety, and we have sought in recent years to remedy that—not that individual companies have not been pursuing particular initiatives but we have done that as an industry as a whole.

Our submission highlighted that the health impacts of exposure to toxic dust, including silica, are generally well known. We emphasise that the national standards and codes of practice developed by NOHSC, the previous witnesses, have been adequate and timely, and they have been focused on priority substances. We all know there are thousands of substances out there, and NOHSC obviously do not have the resources or the capacity to look at all of them so they have tended to prioritise their work on those of most importance. The take-up of the standards and codes by the states has not always been as timely as we believe NOHSC has been in establishing the national standards.

Another issue we have raised is the concern of the industry about the integration of workers compensation with occupational health and safety, only from the point of view that we do not want to see occupational health and safety issues swamped by workers compensation issues. They come at the issue quite differently: occupational health and safety is from a preventive point of view, whereas workers comp deals with after-the-fact issues. We have been given assurance by the minister that our concerns have been noted and that that will not be the case.

CHAIR—As have we, Mr Rawson.

Mr Rawson—Good. The other point is that, in our view, there are no shortages of effective techniques to assess airborne dust concentrations and toxicity. We have noted in the submission that data on exposure and on health impacts is somewhat limited. We did conduct a survey of this, using a Queensland university to do the work, and there were quite varied approaches

across the country. Workers comp data, which is the basis for a lot of the analysis, is, in our view, lacking in detail and in timeliness. You have to have five days off work for it to be included in the workers comp data, whereas the industry records one day off and so forth in its statistics. There is no central database to facilitate analysis, to establish trends or to track the health of workers as they move from one company to another, or to track it through their life. I will make some further comment on that later. The data that is available is often not available in electronic form, so it is very hard to do that analysis. We believe that the focus has been very much on collection rather than on analysis. In some organisations that do collect data, such as government agencies, there are cupboards full of material but no resources to analyse it.

On the question of nanoparticles, we did make the point that much is unknown about the way in which people may be exposed and the potential health implications. We are aware that significant research is being conducted around the globe and we think it is very important to keep abreast of that. We do not think there are any definitive conclusions out there at this stage, but that is something that certainly needs to be kept on everyone's radar.

In relation to the recent review of crystalline silica standards, the MCA worked fairly closely with NOHSC in providing input and with the Australian Chamber of Commerce and Industry, which is also represented on NOHSC itself. The MCA supported the adoption of exposure standards based on scientific evidence. We thought that was a critical thing in determining exposure standards.

We noted that silicotic disease was not occurring or had not been occurring in recent decades due to exposure in recent times, since those new standards were introduced in the seventies. The existing standards appeared to be protective of Australian mine workers. We felt that the methods of measuring silica varied geographically. We heard Wayne Creaser talking about the US where they use different methodology. It varied both geographically and also temporarily. Over time the way these things are measured has changed and comparisons in measurements, I guess, are sometimes a little difficult; at best they are approximations. They can vary with sampling techniques and dust concentrations—whether it is at peak levels or whether it is at some sort of standard average level.

Finally, in providing input on that review of the silica standard, we felt that there was uncertainty in the epidemiological evidence linking exposure to silica to lung cancer, especially in those workers where there was no evidence of silicosis.

The mining industry believes it understands the nature of the problem, it understands the seriousness of the risk and it has an appreciation of what needs to be done to prevent the development of unwanted health effects. It considers that legislation needs to focus on how to manage the unavoidable contact with silica safely rather than continuing to lower the standard. Clearly, if it is possible to avoid silica, then those control measures should be put in place and clearly ventilation, certainly in underground mines, is a critical factor. It is a very effective way of removing all dust and particulates that could have an impact on health. But then there is a balance in how much do you ventilate, because the more you ventilate, the more expensive it becomes. We do not want to compromise health in any respect. We would advocate educating and raising awareness in those sectors that are not meeting the current standards and where dust control practices are minimal.

There are about four areas of activity that we did not touch on in the submission that I might mention and could be of interest to your deliberations. One was on the question of tracking. We did look at whether there were any practical options for tracking the health of workers, and we looked at a whole range of them—responsible care that PACIA use in the chemical industry—and there were pros and cons of all of these. The one that attracted our attention the most was HealthConnect, which is a network of electronic health records. It is a national and state initiative. It collects, stores, exchanges health information under strict privacy safeguards, and it will allow tracking after people left the industry. At the moment it is being introduced as a voluntary scheme, but it would need amendment to be able to add information on occupation, because at the moment that is a shortcoming, and clearly if we want to find some causal linkage to health effects, there would have to be some occupational marker in the health data.

That is one area of work. The other is that we are trying to look at health performance indicators. The safety indicators are pretty well established, although we are still looking to improve on that. We have been looking at a range of possible health indicators that we could use in our industry. The key areas that we have focused on as an industry are exposure to noise, muscular skeletal disease and exposure to hazardous substances. It is that last category that is probably of most interest. The sorts of indicators that we have come up with and are still debating within our organisation are the percentage of workers exceeding the exposure level; is there a certified or recognised occupational health and safety management system in place within the operation; is the company or operation setting and monitoring health targets—what is the percentage of those targets that are met? What is the percentage of employees that are requiring medical surveillance as a result of that? What is the rate of work related diseases and illness? We are looking at that and applying that across a number of areas. We have done a bit of a pilot study in relation to noise, but we want to extend that.

A third area that I might mention is this whole question of harmonisation of the way we set and review exposure standards. We heard about the review of the silica standard; it took 10 years. We think that is far too long and there has to be a way of streamlining that. At this very moment, today we have initiated through the International Council of Mining and Metals a workshop in London that has brought together regulators from around the world, as well as the mining industry, to look at the way we currently set and review occupational exposure limits, and is there a way of harmonising that in a global sense? We will be looking at trying to establish common definitions across the country, ensuring that the approach is underpinned by scientific evidence and the best available science. We are looking for consistent application of risk assessment. We wish the approach to recognise that any science based value should be achievable technically and also in terms of socioeconomic impact. There is not much point establishing a standard if no one can deliver on it because it is far too difficult or it has such an impact on the community that they suffer in some way as well. We are also looking for an approach that is open and transparent to all stakeholders. It was good that Wayne Creaser was here giving evidence before this committee, but that was the reason he had to pull out of that workshop in London, the fact that he was here. We had nominated Wayne as the Australian representative of government to participate, but he did in fact, through us, put his views forward.

CHAIR—We will follow up on that, Mr Rawson; we were unaware of that, and we will follow up to see whether that was in fact factual—whether our committee was the cause of that discussion.

Mr Rawson—He has indicated his continuing interest in this, and as soon as I get the feedback from that workshop, I will be engaging with Wayne and make sure that his views—he already has provided some input in advance of the workshop.

The final thing I wanted to mention is the benchmarking of safety and health globally. I am chairing a working group established by the International Council on Mining and Metals looking at how we benchmark performance across industry. We have started off with safety indicators, so that any mining operation around the world can go on to this online database and interrogate it and compare itself with like operations around the globe to see, well, where do we sit? Are we a poor performer? Are we up there with the best of them? If in fact they find there are a whole lot of operations that are doing a lot better than them, they can contact those people and find out what they are doing differently. We are trialling this now with safety, and we are following up with health next year. They are a few initiatives that the minerals industry has been involved in. I guess all these things are really trying to work towards our goal of trying to eliminate fatalities, injuries and diseases. With that, I will invite questions.

Senator ADAMS—On the development of the national regulatory framework, you commented that it has been adequate and timely. I note that some of the states have been slower than others. Can you just expand a little there as to which states are performing the best and which ones are lagging?

Mr Rawson—I probably do have the details, but not with me. It would vary, I guess, depending on what the substance was. There would be no uniform approach to it. There may well be good reasons for delays, but we would think that once NOHSC establishes a standard there should almost be an automatic adoption of that. I think that is the direction in which Australian Safety and Compensation Council would wish to go, and we would support that.

Senator ADAMS—Well, it should be, but obviously it is not happening.

Mr Rawson—No, and I think that is why the Australian Safety and Compensation Council is probably trying to focus on national consistency to bring about that in a much more timely way.

Senator ADAMS—Are you monitoring all of this as an audit, or what are you doing?

Mr Rawson—We do continue to monitor these activities. I am involved as a member of the National Employers Occupational Health and Safety Consultative Forum which provides input into ACCI, the Australian Chamber of Commerce and Industry, and ACCI then has representatives on NOHSC and will, presumably, also have representatives on the Australian Safety and Compensation Council. That is the way industry or employers get their views injected into the standard making process.

Senator ADAMS—How does Australia compare with respect to the way we are taking up trying to fit into the legislation with other major mining countries such as Brazil, Canada and the United States? Are we ahead in that respect?

Mr Rawson—The situation is that many mining companies these days are global companies, and they adopt company wide standards no matter in what country they are operating and regardless—well, not regardless of the regulatory regime that is in place, but they would

certainly meet the regulatory regime wherever they were operating. If the company's standard was far in excess of that, then they would be obviously be adopting that, and that would apply to most of our major members. In terms of performance, the health statistics are not as well documented, if you like, as the safety statistics, but in terms of safety, Australia is way ahead of any other mining nation in the world.

Senator ADAMS—Having been to a number of mining sites, it has been really good to see right at the entrance their safety record and how proud obviously they are of the days that they have not had any accidents or incidents. It is certainly to the fore of all the workers and employees there. I was interested when you were talking about the tracking and the HealthConnect, do you think this will really happen? I know that privacy is causing a few problems with other fields.

Mr Rawson—I think it is a real opportunity that we have to grab this and make it work. Clearly these things are not easy, and at this stage it is only voluntary. It is not just going to help on toxic dust; it will help with the analysis and identifying trends across the whole spectrum of health. If we could add that occupational marker in there as well, it could point us in directions of helping to identify potential problems or emerging problems. None of these things are easy, but they are achievable.

Senator ADAMS—Where are you progressing it through now?

Mr Rawson—It is not the industry that is progressing it; it is very much a government initiative, but we looked at the possibility of having an industry driven tracking system, but it was much more difficult for us to track people once they have left the industry, but they still have a doctor somewhere, they still go to a doctor, and their data can continue to be fed into some sort of system. Clearly, with the privacy issues, you would not be looking at an individual; you would be looking at data for individuals that worked in a particular industry and analysing the data in that sense. You certainly would not be requiring information on individuals. I am sure the people planning this initiative do not intend that. They certainly want to protect the privacy of everyone involved, which would be the whole nation. It really is quite an exciting concept.

Senator CAROL BROWN—On page 2 of your submission, you note, 'The impact of nanoparticles associated with the emergence of nanotechnology is unclear, but is a major focus of current research.' It also refers to research being undertaken in the UK, the US and Norway. Are any of your members undertaking or funding research in this area?

Mr Rawson—I am not aware of any of our members that are undertaking the research. We have established within the Minerals Council of Australia a health working group that reports to our safety and health committee. The people we have on that, including the chief health persons for Rio Tinto Australia and BHP Billiton, are eminent in their field. They helped inform this submission, and they are obviously keeping a very close track on it, but to my knowledge I am not aware of any specific research that they are undertaking themselves. It is probably something normally done in an academic environment.

Senator CAROL BROWN—They are obviously monitoring this?

Mr Rawson—I can follow up, if you like, and add some further information on it if you like.

Senator CAROL BROWN—Yes, please.

CHAIR—I would like to ask some questions about people who are not workers, as I asked the previous witness, but we just do not have time. Thank you very much.

Mr Rawson—Thank you for the opportunity.

[5.10 pm]

KELE, Mr Gavin William, Private capacity

Evidence was taken via teleconference—

CHAIR—Mr Kele, we will go through the opening procedure which is a statement and then we will go into discussion with you. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. The committee prefers evidence to be heard in public, but evidence may also be taken in camera if you consider such evidence to be of a confidential nature. The committee has before it most of your submissions; you have sent a bit in, Mr Kele. I think we have everything on record in front of us. Would you like to make an opening statement, and then we will go into some questions?

Mr Kele—I have a short opening statement I would like to make.

CHAIR— I do apologise for the limited time.

Mr Kele—Good afternoon, Senators; thank you for your invitation to address your committee. In my address I will highlight some of the points mentioned in my submission, especially known facts with oxidised light metal dust. In the past few weeks, our business was visited by a workplace health and safety advisor who gave instructions on how to comply with the regulations regarding material safety data sheets, MSDS. Just about everything used today has to have an MSDS with toxic materials recorded on hazardous substance risk assessment forms. Workers exposed to toxic substances must receive induction and ongoing training regarding those substances. A copy of the hazardous substance form has been forwarded for your appraisal. The first question asked on these forms relates to the MSDS classification of toxic or non-toxic. If the answer is yes, the form has to be filled out and ultimately workers have to be trained in the product's use. If the answer is no, employers need go no further, but the workplace health and safety advisor stated that if the product were to be reclassified toxic at a later date, as was asbestos, the employers are responsible if health concerns are mentioned on the original MSDS.

The MSDS on aluminium and, to a lesser extent, magnesium, are very detailed, and address most of the health problems and all of the dust characteristics mentioned in my submission. Magnesium hydroxide is a major component in asbestos. It is the glue that holds the silicon deposits together. Oxidised dust coming from aluminium and magnesium have the same characteristics as asbestos dust. Migrating oxidised light metal dust compounds bond to human and animal tissue, then the light metals dissolve and enter the blood stream (a copy of page 65 from the Inchem report has been forwarded explaining this point) leaving only the residue and tissue damage. This residue can include silicosis plaque—that is amyloid protein deposits—and some cancers.

Now consider the MSDS on aluminium, classified non-toxic. If you were to complete the hazardous substance risk assessment form, knowing the characteristics of the oxidised dust and the health concerns listed in the MSDS, the final risk rating can be nothing less than major or

extreme, and this is for a non-toxic material. Aluminium oxide is classed as chemically inert. However, when you look at the dust characteristics, the action of this dust is not chemical but mechanical. It is claw-like. The only chemical reaction is when the dust dissolves in the acidic body fluids. Silicosis—plaque and related cancers would not occur if it were not for the combined characteristics of the light metal dust carriers; combined hydrophilic—craves moisture and migrates to sources of moisture; electrostatic—attracted to and accumulating on things with reverse polarity; chelating—claw-like, bonding, gluing, action of the carrier, turns a non-toxic material into a lethal material. Workers afflicted by oxidised light metal dusts and their compounds, with the exception of asbestos workers, have no idea what has caused their illness as the culprit is dissolved and left the scene up to 20 years previously. It took 27 years of court action for asbestos to be recognised as toxic. How long before it is acknowledged that the other members of the oxidised light metal family are just as toxic as asbestos? There is no easy or quick fix solution to this problem, but if it is not addressed by the middle of this century, we will have the biggest part of the population with major health concerns. Thank you.

CHAIR—Thank you, Mr Kele. We will go to questions.

Senator HUMPHRIES—Following the correspondence you have been having with the Queensland government with respect to oxidised light metal dust, what exactly do you think is the reason that Queensland agencies with whom you have corresponded will not classify this particular dust as toxic for the purposes of setting limits on workers' exposure to it and so forth?

Mr Kele—That was the first of many letters that we have written to governments, both state and federal, and none of them will answer any of the questions. If you look at the answer from the cabinet minister, Wendy Edmonds, it does not address any of the points on which we asked questions. Basically the only thing it talks about is underarm deodorant. None of the government departments will address any of the questions. The answers you get back do not answer the questions you have asked.

Senator HUMPHRIES—Do you think that people are unaware of the health implications of this particular substance, but are not willing to find out about it, is that what you are saying?

Mr Kele—I would not say that. All of the bad things are in the MSDS reports and the Inchem reports. They are all known about. They just will not acknowledge them because of the implications, I think. The longer it goes on, the worse it gets.

CHAIR—Mr Kele, we have spoken before. What do you think needs to be done? You have put in this submission; you have raised the concerns; what in your opinion should be done so we can see for the record?

Mr Kele—I think it should be brought out in the open so that the academics of the world can assess the whole situation. No individual is going to fix this problem. People power is the only way that we will fix it. Until it is brought out in the open and addressed, at the present time everybody is being kept in the dark.

CHAIR—How would that be done?

Mr Kele—By your committee.

CHAIR—We are trying to find information through this process. Our committee alone is not able to do that. I am interested to see, with the submission you have given us, you have put lots of concerns there but very little in terms of what you think should happen next.

Mr Kele—I cannot answer that question on what can happen next. I think it just has to be brought out in the open and go from there. The same with asbestos—the people who were affected with asbestos fought in the courts for many, many years, but this is a much bigger problem than asbestos, with much bigger ramifications than asbestos. I do not really know—at some stage it has to start. The media will not attack the problem because the media are controlled by big business, and governments are afraid to attack the problem. But your committee is there to examine toxic dusts, and where would be a better place to bring it out?

Senator ALLISON—I am sorry I was not here for the earlier part of your presentation, Mr Kele; I had to step out of the room. What do you think the Charlton water works ought to have done to confine the aluminium dust to their site? In your view, what ought to have been done to that site to do that?

Mr Kele—I do not know whether they knew the full ramifications of what was happening with the dust. What happened out there was that there was a silo on the site that the council wanted to keep just in case there was ever a flood in Rockhampton and they could not get alum into the city and they wanted to keep that silo there, but the top of the silo had deteriorated—the wooden doors and windows were weathered away—and every time it rained and the silo got wet the material in the top of the silo got wet and then, as it dried out, it oxidised and came down over us like confetti. We had very high concentrations of this dust, and because of the high concentration we worked out what was happening. Anybody who was sick from the aluminium dust would not have that opportunity because the problem has gone 20 years before. The dust has dissolved and gone 20 years before they get sick. They would not know what was causing the problem. In our case, we had a dust problem and we worked backwards from there. We had a dust problem probably 500 times the legal limit, but we did not know. We did not know that this dust was a problem until afterwards.

Anywhere you have aluminium, including all the aluminium refineries and the building you are in, the airconditioning sheds oxidised dust at a huge rate because you have low humidity in the building. Everything in the airconditioning ducting is either zincalume or aluminium, and all the veins and everything in the actual condensers and everything are aluminium. You have heard of the sick-building syndrome—this is where it comes from. We are all exposed to it. Every time you fly in an aeroplane, and in your own house, you are exposed to the dust. We had extremely high concentrations, but everybody is exposed to the dust.

Senator ALLISON—When you complained to the council about this situation, what happened?

Mr Kele—I gave them an easy way out, and they would not accept it. They told me to prove it, and that is what I have been doing.

Senator ALLISON—The easy way out was for you to be released from your lease obligations; is that right?

Mr Kele—The easy way out was for them to pay us out for some of the problems that we had, yes.

Senator ALLISON—When they refused to do that, did you ask them to stop this dust from coming onto your site?

Mr Kele—We got out of the site. We knew there was going to be no easy fix. We sold the freehold land, gave the site back to the Queensland government and got out of the site. We got out of it. It is still there. Optus have built a telephone repeater on the site now. With the electronics from that Optus set-up, with the alum that is still there, the workers that go out there to work on that mobile telephone repeater would cop a huge amount of this dust every time they went there.

Senator ALLISON—Presumably there are other activities, other businesses, in the immediate region.

Mr Kele—There are houses in the vicinity, but it is only a minor thing. At Gladstone alumina works we have done tests on the rainwater tanks, and 60 per cent of the mud in the rainwater tanks 200 kilometres from Gladstone comes from the Gladstone alumina works.

Senator ALLISON—We have received a submission from Dr Geoff Pain who says that the dust loads are underestimated in some of the mine sites, including Alcoa's sites, by a factor of 2.4 to 3.4. There have been submissions to our inquiry that show quite high levels of alumina material.

Mr Kele—Our main business is to make concrete water tanks. In Central Queensland, some of the concrete water tanks are being eaten away at an unreal rate by the pollution coming from the alumina set-ups at Gladstone. You can track the actual course of the dust with the damage to the inside of the tanks. This is only in the area where the water goes up and down. It is not above water level and it is not below water level. It is in the working area of the tank. Some of the tanks are just getting eaten away at a shocking rate.

Senator ALLISON—What are the implications for people who use that water? Is any of that potable water?

Mr Kele—I could not tell you. It frightens me, but I could not tell you what the implications are. All I have used it for is as a guide to see which are the worst areas. Some areas are much worse than others. You can track the wind directions and the main courses by the damage to the inside of the concrete water tanks. It is a good long-term indicator of what is happening.

Senator ALLISON—It is generally accepted that it is that substance which is causing the problem to the tanks; you are not just making that assumption?

Mr Kele—All I am going on is my own observation there on the damage to the inside of the water tanks there compared to the way the water tanks were affected where they were full in the water treatment works at Mount Charlton. The damage to the tanks out there caused by the alum that they use to settle the mud is the same type of damage as you have in the rainwater tanks.

Senator ALLISON—That is very interesting; thank you.

Mr Kele—I have used it as an indicator for my own use.

CHAIR—Thank you, Mr Kele. Is there anything you wish to add?

Mr Kele—No; only that I would like this to become public so that the population of Australia could force the powers-that-be to investigate it.

CHAIR—Your submission is on our public web site, so people who are interested in this issue will have read your statement with your details on it.

Mr Kele—Thank you very much.

CHAIR—Thank you, Mr Kele.

[5.28 pm]

WALTERS, Professor Eugene Haydn, Private capacity

CHAIR—Welcome. In what capacity do you give evidence this afternoon?

Prof. Walters—I am Professor of Medicine at the University of Tasmania, and I give evidence as a medical practitioner with a particular interest and expertise in respiratory disease, the pathogenesis of airway and lung disease and occupational medicine.

CHAIR—Have you given evidence to a Senate inquiry before?

Prof. Walters—I have not, no.

CHAIR—Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. The committee prefers evidence to be heard in public, but evidence may also be taken in camera if you consider such evidence to be of a confidential nature. We have your submission before us. The committee members here are Senator Judith Adams from Western Australia, Senator Gary Humphries from the ACT, Senator Lyn Allison from Victoria, Senator Carol Brown from Tasmania, Senator Kate Lundy from the ACT, and I am from Queensland. So you know with whom you are speaking.

Prof. Walters—Thank you.

CHAIR—I now invite you to make an opening presentation to be followed by questions. I apologise at the start for our limited time. It is always very difficult. But it is over to you now, Professor.

Prof. Walters—I do appreciate the pressures you must be under, and I am very appreciative that this issue is actually being addressed at all at this level. My main concern really was brought to the surface by a particular clinical case that I was involved with and which I mention in some detail in my submission of 25 July. It really is an exemplar perhaps of a wider problem that I perceive as being underrecognised in the Australian context in particular. The problem is specifically the potential impact of dusts, particularly occupational dusts, in a fairly broad way upon airway function. It is not so much the traditional concepts that inorganic dusts can cause fibrosis and scarring of the lungs, the traditional pneumoconioses of the lungs, those interstitial lung disease entities, but it is also now quite firmly implicated as a cause of chronic airway narrowing which we refer to as chronic obstructive pulmonary disease. That is intermediate between asthma, which is a variable airflow obstruction due mainly to airway muscle spasm, and, at the other end, the lungs undergoing fibrosis.

COPD is a common problem in Australian society, and in Western societies in general, and indeed increasingly in the Third World. It is usually due to cigarette smoking, which of course is a complex mixture of gases, dust particles and so on. As smoking becomes less of a problem, we now increasingly recognise that other agents can also give rise to this chronic damage to the airways and cause chronic scarring of the airways in perhaps a rather more subtle form than the

very gross lung disease we traditionally associated with industry. My submission was really trying to elevate that as an issue and to try to get some acknowledgment of it within the legislation in this area in Australia, as has happened in other countries. That is probably where I would like to start.

CHAIR—We will now go to questions.

Senator HUMPHRIES—Thanks, Professor Walters, for your submission and your comments. Can I just be clear about some of the things you are saying in your submission and today. You have made the point that there has been some uncertainty of scientific opinion in the past about certain airborne dusts and substances but that there is now a generally accepted opinion in medical terms that certain occupational dusts and fumes can give rise to airway disease and be a cause of fixed obstructive airway disease. What specific diseases do you include in that category, in that description, and can you briefly describe the sorts of symptoms and prognoses that people suffer with the sorts of illnesses you are talking about?

Prof. Walters—The spectrum of illness would include simple chronic bronchitis—that is, cough and production of sputum on a fairly frequent and regular basis. There is then chronic obstructive bronchitis—that is, probably some cough but with progressive airway narrowing, which itself then gives rise to a difficulty in breathing, breathlessness on exercise. That overlaps with emphysema, which is another form of damage to the lung parenchyma itself, at the other extreme from fibrosis. At one end, disease can cause fibrosis and stiffening of the lungs; at the other, it can cause destruction of the lung tissue and the lungs become very floppy. That floppiness tends to cause the air tubes that pass through the lung tissue themselves to collapse because they are not being supported by the torsion effects of the lung around it. We refer to that combination of cough and phlegm, breathlessness and airflow obstruction as COPD—chronic obstructive pulmonary disease—and it tends to be a mixture of all of those. In one individual, one part of that may be more accentuated than another, but usually you have some combination of those three or four entities within the umbrella of COPD.

Senator HUMPHRIES—Do diseases like silicosis and pneumoconiosis also come under that heading?

Prof. Walters—Not directly, but there is some overlap. Silicosis is one form of pneumoconiosis. Pneumoconiosis is defined as a fibrotic disease of the lung tissue itself—not the airways but the spongy part of the lung. The air coming down through the airways moves into that compartment, the spongy compartment of the lung, and pneumoconiosis is a fibrotic disease of that part of the respiratory tract—the spongy tissue we call the lung parenchyma—and silicosis sits within that body of diseases we call pneumoconiosis. It is probably one of the nastier forms of pneumoconiosis. All forms of pneumoconiosis, by definition, are due to the inhalation of inorganic particles.

Senator HUMPHRIES—Like silica dust?

Prof. Walters—Like silica dust, which is quartz dust, yes. Asbestos is another form of silica, but the crystalline structure is quite different and the diseases that they end up with are quite different.

Senator HUMPHRIES—The committee took evidence in Sydney a few weeks ago and one witness gave evidence about the medical impacts of respirable crystalline silica. I think it is fair to say he rather startled the committee. This was Dr Bisby, who appeared as a consultant to Cement Concrete and Aggregates Australia. Have you managed to see the transcript of the evidence that he gave to the committee?

Prof. Walters—I have, yes.

Senator HUMPHRIES—In looking at that particular issue of airborne silicate dust, he said:

The silica issue is, in medical terms, basically over. It is a great success story. Australian industry is free of silicosis, by and large.

He went on to say that the sorts of illnesses which he believed flowed from exposure to those airborne substances were very rare in nature. What is your impression of that evidence?

Prof. Walters—I suppose it is true as far as it goes, I would say. In very well regulated industries in which the conventional standards of dust exposure are maintained, I would agree that interstitial lung problems, the traditional pneumoconiosis, are now probably largely a historic issue. However, I think those industries where the regulations are not vigorously upheld—and I think a number of people have made rather off-the-cuff comments about cowboys in sandblasting and that sort of stuff—still exist, and silicosis will still appear in time because it is related to the amount in the atmosphere and the length of time that you are exposed. If you are above the current threshold, then I think you are still in danger of getting silicosis.

The point that I am making is that the issue of airway disease has largely been overlooked, partly because people have been very focused on the terrible disease of silicosis, or the potentially terrible disease of silicosis, and the contribution of dust, particularly in occupational settings, to subtler forms of respiratory disease, and particularly to COPD, has been ignored. Because cigarette smoking has been such a problem, all airway disease which is not asthma has been presumed to be just from cigarette smoking in that population. The point I am making is that, as cigarette smoking becomes less, and also as more vulnerable groups, particularly women, move into the workplace, the impact of these dusts upon airway disease and, if you like, the natural ageing process of the lungs—we all gradually develop COPD; it is a natural ageing process—and the acceleration of that ageing process by exposure to dust is now becoming a significant feature, and that is not being represented.

So, as far as it went, the evidence was correct, in that in well-regulated industries with low dust problems silicosis and other pneumoconiosis should be historic—although I think there are exceptions to that when there are cowboys around. Asthma is not an issue with these dusts, but he did not mention at all the intermediate disease of COPD, and that is the area I think that is being neglected. And I think it is potentially a big problem.

Senator HUMPHRIES—Dr Bisby spoke about the time it takes for a person who has been exposed to respirable airborne silicates to start to manifest symptoms of that silicate presence in their lungs. He said that, typically, a person will show evidence of that problem in their lungs on x-rays and so forth within a couple of years—and no more than seven years in any case. Is the

same true for the sorts of airways diseases that you are speaking about? Will they be evident within a short period of time or will they develop over a longer time frame, typically?

Prof. Walters—I do not think the data is available to answer that too intelligently, but I thought the time scales would not be dissimilar to the sorts of time scales of cigarette smoking, because they are very similar. You are talking about non-specific irritant factors which develop an inflammatory response within the airways. You may say with cigarette smoking you need exposure to 10 or 20 cigarettes a day for perhaps 15 years or so on average, and I would think on average you are probably talking about similar effects. On the other hand, if you were exposed to very high levels, then obviously shorter time scales would apply. If you were heavily exposed, then it may be five to 10 years; if you have had moderate exposure, 10 to 15 years; light exposure, perhaps 20 to 25 years.

Senator HUMPHRIES—Coming back to the question of symptoms that people exhibit and prognosis, obviously there are a large number of diseases and illnesses that are manifested within the range of the airflow diseases you speak about, but I assume that the range of prognoses can include everything from just a persistent cough all the way through to death. Is it possible to give an indication of what typically a person might experience in these circumstances?

Prof. Walters—Yes. There are two or three confounders. One is whether there are any other co-existent respiratory diseases. For example, does the individual also have asthma? If somebody is an allergic individual and had asthma previously and now is exposed to this, they would have a more accelerated natural history, quite likely, than somebody who otherwise was healthy. If they have a history of lung infections and the lungs had been previously damaged, again you are likely to have a worse outcome. In other words, it depends upon how much reserve you have to which this exposure and this damage is contributing. But, in a general sense, it is likely that somebody will go from having some irritant cough and a bit of sputum to gradually developing some airflow obstruction to then becoming symptomatic and breathless on exercise perhaps over a 15- to 20-year period if they have moderate dust exposure which is continuing. In this context, I think by moderate I would say probably things around to just below the currently accepted standards. I think we would all recognise what a relatively dusty atmosphere is.

With any biological condition, you find at one extreme people who are very resistant to that problem and have no issues at all and never will and at the other extreme you have people who rapidly lose lung function. For example, I am in my mid-50s, of moderate height and my FEV^1 value would be perhaps 3½ litres. FEV^1 is the forced expiratory volume in one second. That is the usual measure that we take for lung function. The ageing process itself will probably reduce that by 20 to 30 millilitres a year, so it would take me several decades to run out of lung function. However, a condition like smoking related COPD—and I would suggest probably somebody with dust related airway disease—might accelerate that twofold or threefold. So it may be that an individual would run out of lung function and develop end-stage respiratory failure over perhaps a couple of decades or so if they are unlucky enough to be responding in that fairly aggressive way. Does that make any sense?

Senator HUMPHRIES—Yes, it does, and thank you very much for that.

Senator ALLISON—Just to be clear, your submission goes into some depth about the symptoms of exposure to silica and smoking. Can you explain why in your view this was difficult to get across in a court situation? You know Mr White, who lost a court case because it was judged that smoking was at least a factor. Do you think that the legal profession and the judiciary has difficulty with these very complex medical explanations such as you have given us? I am not sure that I understand it, but was that in your view a problem in seeking compensation in this case and others?

Prof. Walters—Yes, that would be my opinion. Some of it was timing, because there was a lot happening in the world around that time. In particular, the landmark decisions in the UK related to coal workers. Coal dust exposure in general gives similar things to silica exposure but is less aggressive. Anything that you would hear about coal related problems would be similar but less than problems with silicosis—or the other way around: if it happens with coal dust, it is likely to be even worse with silica dust in general. At the end of the nineties, after a lot of both scientific and legal argumentation, it was accepted that coal dust in the mining situation was a cause of chronic obstructive pulmonary disease in the way that smoking is. The problem in the particular case was that the individual was also a bit of a smoker—it was a bit indefinite quite how much smoking but the general impression was probably not a huge amount of smoking—and he may also have had a bit of asthma. The problem with that is that, once somebody develops COPD, it is not uncommon for them to have a little bit of asthma superimposed upon it. These are not clear-cut diseases. Once you have one, you tend to have a bit of the other. The argument against dust having had any part in it was, firstly, that there were other explanations for the airway disease and, secondly, they said there was not a lot of evidence that these dusts cause airway disease.

My evidence at the time—and I think my commitment to this argument has actually increased a great deal since—was that you were looking at an individual who seems to have excessive clinical and physiological problems relative to the amount of smoking that was around and to the asthma component. It suggests something else was going on. In that individual there was a period in his late teens in which he had very intense silica exposure. He probably has a very mild degree of silicosis, which is not particularly clinically evident but in which I believe the airway component is making the difference between a mild bit of smoking related COPD and really very bad destruction of quality of life and quite marked progressive loss of lung function. To say that the dust had nothing to do with it and it was all due to the smoking or all due to the little bit of asthma seemed to me to be unreasonable. I suspect if that was coming through in argument now, particularly after the British decisions over coal and so on, the outcome may be different. But it did imply that the Australian context was very slow to accept the general notion broadly accepted elsewhere that these dusts do have an impact upon the airways.

Senator ALLISON—What role would a biopsy have in these circumstances? As I understood it, one was taken and showed substantial presence of silica. Is that in and of itself evidence that exposure has caused health problems?

Prof. Walters—Yes. In some ways, unfortunately, it has rather confused and confounded the argument, because the biopsy was really of the very peripheral part of the lung and was predominantly the lung parenchyma, the soft spongy area. There was very little, if any, airway tissue within that. But the tissue that was obtained did show some foci, although not very large, of cells with silica within them, with some surrounding fibrosis, suggestive of at least some

silicosis developing within the lung. There was not really any clinical or physiological suggestion that that silicosis was actually causing the clinical symptoms. Those symptoms were very much more of airway disease—cough, sputum and progressive loss of airway function, but I think it was enough to show that there really had been silica exposure here. I think it was a marker that this individual had, indeed, been exposed to silica, enough to cause some degree of silicosis. It rather deflected away from the fact that that was not the disease the poor chap was complaining about. It was a marker of exposure, but it was not in itself what the patient was complaining of, which was very much an airway syndrome—cough, sputum, progressive breathlessness and progressive loss of airway calibre.

Senator ALLISON—I think you have opened the door to a very complex medical and legal minefield. It is not surprising that few of those workers exposed would have the capacity to take this to a court case for compensation. Do you suggest out of all of this that there should be an expert panel, with someone like yourself on it, which would take care of advocacy for people who are in this situation in order to get a fair outcome from the courts?

Prof. Walters—I think that would not be an unreasonable suggestion. In these situations, it is always difficult if you are advocating for somebody. I think it would probably be much better if the courts in some way could have a fairly neutral group who could try to dissect these issues. As you say, it is complex. You have lung parenchymal disease on the one hand, you then have airway disease and that could be smoking related or it could be related to previous asthma—it may be related to chronic lung infection—and, in the middle of that, you have this condition of COPD to which all the other things may contribute. I also believe that industrial exposures can also contribute to it. I think the evidence for that is now quite strong. A professional body, perhaps, which could give information to the courts, and perhaps in a neutral way to the plaintiffs themselves, would be quite useful. The problem in this, as you probably know, is that you get doctors on both sides. In this particular case you had clinicians coming along on the one hand and then there was a sort of a posse of people on the other hand that seemed very experienced and very well known to the court, and basically the court believed them and not us. I think what you need is not confrontation with people being hired on one side or the other; what you need is neutral professional commentary from people who are aware of all the facts.

Senator LUNDY—Are you aware of any legal cases that have been successful on behalf of the victim where COPD has been linked to silicosis, and that has been proven and compensation paid?

Prof. Walters—There are very, very many cases related to silicosis—

Senator LUNDY—But also connected with COPD?

Prof. Walters—COPD related to silica itself, I am not sure of, certainly not in Australia. In relation to coal workers' dust exposure, there was an enormous case in the UK in the late nineties which the government then accepted, once the court case said yes, that dust contributed to this. All miners in the UK have been going through a process of assessment to see whether they have COPD or not and, if they have COPD, they are being compensated. It is costing the British government literally billions of pounds to do that. I think that is justice.

Senator LUNDY—I come from the building industry, and I remember working on many safety campaigns warning about the dangers of synthetic mineral fibres, including fibreglass, sandblasting operations, ceramic mineral fibres. At that time—this was in the late eighties—there were material safety data sheets available on safe practice, codes of practice, fact sheets and so forth. It has been a long time, this being 15 to 20 years ago. Are you able to make some observations about trends in changing work practices and how that has perhaps impacted on the trends you are observing for these illnesses in Australia?

Prof. Walters—That is not an easy question partly because I do not have the data specific to any one industry. Obviously, you are only too aware that lots of things are happening all at once in society. The fact that people are smoking somewhat less and therefore attributing COPD particularly to only smoking I think will have an impact. Because when people turn up with COPD in middle age, and they have not been much of a smoker or a non-smokers, you are going to have to say, 'Well, what's causing this?' Similarly, in general, people are no longer going to get silicosis. When they turn up without silicosis but again with a lot of symptoms, you can say, 'Well, what's causing this?' I think it will push people to recognise that there are other diseases but silicosis being caused by these dusts.

Research data is emerging that shows that these conditions of COPD related to dust, particularly in the workplace, are perhaps more common than people have thought, and perhaps particularly amongst women who are particularly vulnerable to that. I have been working with a group in Victoria over the last decade—a group that I helped set up—and we published a paper in June this year in the journal *Thorax*, which is one of the major respiratory journals in the world; it is one of the BMJ stable of journals in the UK. The paper, called 'Biological dust exposure in the workplace is a risk factor for COPD', found in a random survey of 4,000 or 5,000 people, just ordinary people working and living in the suburbs of Melbourne, aged between 45 and 65, that there was about 10 per cent COPD in the population. Particularly amongst the women, it was quite evident that occupational exposure, particularly to biological substances but also to mineral dust, was having an impact. It was a fairly subtle impact, but a definite statistically significant impact upon their lung function. That included people like nurses and those working in bakeries and so on who were exposed to dust.

You might think: why nurses? They are exposed to latex dust on gloves, cleaning agents, formaldehyde—as they clean instruments—and so on. These things are, and will increasingly be, shown to have an impact upon the airways of the individuals involved. Twenty years ago when nurses smoked heavily, you would have put everything like this down to smoking in that population. Now they do not smoke at all. When they come up with an ageing of the lungs which is worse than you would expect, then I think we need to recognise that the workplace may be making a contribution.

Senator LUNDY—Thank you very much. Would it be possible to get a copy of that article on biological dust exposure which you referred to?

Prof. Walters—Yes, I would be happy to fax it through.

CHAIR—Professor, can you email that to the secretariat? I know you have been in regular contact with the secretariat, so could you get that to us?

Prof. Walters—Yes, I would be more than happy to.

CHAIR—Is there anything you would like to add?

Prof. Walters—Perhaps one last thing, on the same sort of line. This is not sub judice but it is not yet published. I am aware, for example, that a lot of work—and very responsible work—by the aluminium industry has been commissioned over the last 10 years, looking at the same thing: airway function, bronchitis, cough, phlegm, development of COPD, development of asthma type symptoms in the aluminium industry. My understanding is that the results of that again show much the same thing: that people exposed to fumes and dusts in the workplace do get accelerated loss of lung function, and that is a very responsible industry with very well controlled standards. This is not now lung disease again; this is airway disease. I think airways are the problem that we will have over the next 20 or 30 years, whereas over the last 200 years it has been these fibrotic lung diseases.

CHAIR—Thank you very much for your time.

Prof. Walters—Thank you for your time; it is very much appreciated.

[6.01 pm]

FAUNCE, Dr Thomas Alured, Senior Lecturer, Medical School and Law Faculty, Australian National University

FLOWER, Ms Kate Elizabeth, Final Year Law Student, Australian National University, Australian Sandblasting Diseases Coalition

WHITE, Mrs Christine Joy, Private capacity

WHITE, Mr Richard Andrew Roland, Coordinator/Convener, Australian Sandblasting Diseases Coalition

CHAIR—I welcome Mr Richard White and others. We do apologise for the delay, but you can see what happens when we start asking questions. We have your submission and I know that you have brought further documents with you this afternoon which you have handed to the secretariat. I now invite you to make opening statements and then we will get into questions.

Mr White—Thank you very much for allowing us to come forward. Also, thanks to the staff of community affairs because they have been very good to us as well. There is a supplementary list, so I will not waste time in going through it, suffice it to say that this is the one that needs to be handed up, because some documents are missing as there was just too much to photocopy. The three main terms of reference I wish to address here are: medical, which is (a), (d) and)(e); compensation, under (a), (e) and (f); and OH&S, which is under (a), (b), (c), (d) and (e). In relation to each of these, I will make specific suggestions for recommendations towards the end. Before I go on, I am a sufferer. The diagnosis can now refer to a range of diseases caused by particulate matter in the workplace. In my own case, I am told that I have small airways disease and silicosis, secondary to silica exposure. I therefore speak as an affected person who has experience with this disease and also as the coordinator of the Australian Sandblasting Diseases Coalition. Dr Faunce will address the bulk of our submission.

I speak from a personal journey and of the fact that the system was incapable of dealing with me and, as it turns out, many other sufferers. I started as a schoolboy in Darwin in a job after school. After matriculation I took a job full-time for a year, so I spent nearly three years in the industry. I wrote as the ASDC, representing those people who wrote in response to the ads that we placed and the list of sufferers who have come on since that time. I have brought with me today all the original letters if they need to be viewed. They were copied, as far as I know. Our journey has been: hospital 29 times since 1992—I have been out for only two weeks since the last one; diagnosis—two lots of trans-bronchial lung biopsies and then open lung surgery; physio—700 to 800 visits since 1992, because I cannot remember how many were when I was in hospital; medication—between 40 regular pills and four puffers and 60 pills per day when I have an infectious bout. I have consulted 500 GPs—

CHAIR—Five hundred GPs?

Mr White—Five hundred between 1992 and now. General life difficulties include carrying a cylinder; I have to go to shops either early or late at night to avoid people, because I am a high risk of infection, and I have had to curtail public outings. It really means that my wife cannot go with me to many places. This is the same for most of these sufferers. Legally, the Northern Territory Supreme Court found no link. There was no significant sign for her at the time to see, I presume. They could not find any causal link whatsoever, and there was only an attack on credit. If other people have to face what we have faced, I do not think they would be able to—well, it is just a very difficult situation.

We thought that the High Court would look after us, and at the High Court the first question was: '17 pack years'? I only smoked three to five cigarettes a day as a casual smoker, and I actually smoked 10 pack years. But, when you work it out, it is a pack a day for 10 years. They took 10 minutes to throw it out because I was a smoker—10 minutes. A financial document was prepared by RSM Bird Cameron. Who can afford this sort of loss? That document is not for publication, so I presume you will look at it and see the amount that it has cost. As a family and a husband and father, as I said before, we have had to curtail our outings. My wife has had to nurse me a lot of the time. As a father, I have had a reduced ability with them since they were little, and my role has been much depleted over that time. I have had to forgo life's opportunities in my career and personal life. I used to very much enjoy snorkelling and travelling, which I do not do now. That leads me to the recommendations.

CHAIR—Mr White, do you want to go on directly with the recommendations, or would you like Mrs White to say something at this stage, because I think the recommendations would tend to pull the argument together? That is only a suggestion. Is there anything you would like to add at this stage, Mrs White?

Mrs White—Only from the point of being Richard's wife all along, since we were married, and really just to make you aware of what it is like to have a husband as a sufferer, how it just changes the whole pattern, the whole lifestyle, especially when you have children as well. You feel for those out there. It is just the unknown quantity; you just do not know.

CHAIR—What you have been living with for that time?

Mrs White—Yes.

CHAIR—Mr White, we will bring it back now. I thought it was important just at that stage before you got to the recommendations that you had your chance.

Mr White—Thank you. The frustration with the legal system as we found it was that the legal system deny everything. They deny that they were ever in Darwin. They were there since 1968, but they deny it. When group certificates were brought into the court, they still denied that they were in Darwin—so it was a bit strange. The trouble with the people that we have encountered, for all these sufferers who write to us or ring us, is that the firms for whom they worked have either been on-sold or are defunct or, as in Dimets case for me, there were 52 companies and then 68 all together with other holding companies—68 companies to track down and to join to it. The disease has a latency period of between 10 and 40 years, there is individual variability to the silica and to diseases of the stomach, heart et cetera, and the industry has a transient nature. In my case, the disease took 20 years to come forward, and it is a similar period of time with many

of these other sufferers. I am concerned that in relation to submission No. 29—and I have spoken to the chap who placed submission 29—the insurers, Munich, are advising clients worldwide to delete the word 'silica' from their insurance policies; in other words, their risk, because they know that there will be a mountain of claims. They have experienced an increase of claims, especially in America. Insurance companies do not run away unless there is something to run from.

I now turn to the recommendations. Medically, I believe that Professor Williams, Professor Bryant and Professor Walters can supply world's best practice and centres of excellence should be established around Australia to do that. As to compensation, I recommend the Bernard Collaery model, which is basically the veterans' affairs model, including pension and entitlement with lump sum and flow-on entitlements that go with that. With respect to occupational health and safety, it is simply world's best practice—I cannot emphasise that enough. We think that the ACTU model is good, and also that significant input should sought from Lindsay Fraser from the CFMEU who, I think, addressed this committee on 30 September. A continuing scheme would be good because, since the incubation period following exposure is so long, sufferers need to be protected in a framework of national legislation for at least the next 40 years after they last breathed the dust.

Dr Faunce—I have prepared a paper with Professors Walters, Williams, Bryant, Martin Jennings and also Bill Musk. I think all of them will be known to senators for having given evidence. We are seeking to have this published in Australian health policy. I have copies here, and I seek to take senators through the paper. To a large extent, it outlines the bulk of the submissions that we seek to make. Essentially, as the paper indicates, Richard White is the sentinel case in some ways that set the wheels in motion for this inquiry. In this paper we describe the inquiry—and I beg senators' forgiveness—as the 'White' Senate inquiry because, without Richard's efforts, it would not be here. I have been associated with Richard since he started this process, and it is not just the financial cost—and that is substantial—but it is also the energy and time that he has taken from his personal life in circumstances of great distress due to his illness. To a large extent, he has done this to assist other sufferers of these diseases.

In his modesty, Richard did not actually include in the *Hansard* the amount of money that he has had to fork out, not just in fighting his own claims but in setting up the Sandblasting Diseases Coalition, but in the documentation that he has handed up, I point out that so far his total medical and legal costs have been $1,644,140. This is an enormous expenditure for someone in Richard's position. Not many people would have the determination to carry on with this sort of process. You might say it is a strange process of inductive reasoning to say from one case like this that there is an Australia-wide problem, yet when you have such a profoundly disturbing case as this, which winds its way through sandblasting operations in multiple states and through the court system at multiple levels, and comes out with a result like this, where someone has had to expend this amount of money, then I think it is a sentinel case that is worth listening to. It is not just Richard's case. Senators would be aware of the documentation which he has provided, again at his own expense, as to the number of other people who have mentioned items to him.

In relation to matters which are set out in the article, going through them answers some of the queries that I noticed senators had about some of the statements that were made at an earlier hearing of this committee on Friday, 30 September in Sydney by Dr Bisby, who was a consultant

associated with Cement Concrete and Aggregates Australia. Setting aside the obvious conflict of interest problems that his employment creates in this circumstance, I appear not as a respiratory expert—my training really is in intensive care and in law—but as someone who has worked with the professors I mentioned and with significant epidemiological experts in this area, and I refer to Martin Jennings and Bill Musk in looking at and preparing this evidence to assist Richard.

We would significantly dispute some of the claims that were made by Dr Bisby, even on their own, regardless of his position. We would certainly dispute that the silicosis is over as a health issue. We would certainly dispute the claim that he also made at that Senate hearing that the notion that silicosis comes on long after exposure ceases without any initial evidence. That is simply not supported, and we would disagree with that. We would certainly disagree that 95 per cent of all silicosis cases are diagnosable within a year of cessation of exposure. Essentially, much of the information behind this is set out in the article, but if I could take you through it systematically, it might assist you. I will try to not be longwinded, because obviously senators want to get home to their families, as I do. A quick survey will assist you, and then you can read the details later.

CHAIR—I think that is reasonable, Dr Faunce.

Dr Faunce—The article essentially sets the 'White' Senate inquiry in the context of other government inquiries into toxic dust, and there have been numerous ones, as you can see there. We are part of a tradition, and you might say that either means we are superfluous or it indicates that there is an ongoing problem that has not been addressed. We would say the latter issue. The article mentions that respiratory standards for crystalline silica in the atmosphere—and this is only one aspect of the inquiry—have fallen, and there has certainly been a decrease in notified cases and deaths; no one can disagree with that. However, all the research that we have read and our discussions with respiratory experts suggests that the problem of workplace disease from toxic dust is much more significant than these figures indicate.

It is a question of how these figures are generated and what they mean. First, there is the long latency period of the disease and the insidious nature of its acquisition which means that the incidence and prevalence of workplace injury remains largely unknown. We just do not know how many people are out there with this disease. You were hearing evidence earlier today about the problem of diagnosing chronic obstructive airways disease in a context of mild smoking history and silicosis. Richard's experience, and the experience that he has gained from the letters that he receives, suggests that there are a large number of Australians out there who are suffering respiratory distress. It is being diagnosed as COPD due to smoking, when actually there is a significant industrial dust disease component. This has been addressed much more seriously in other jurisdictions, such as the United Kingdom and the coal dust situation, and I hope to deal with that later.

Similarly, if you actually look at data from six occupational cohorts that were pooled and standard life table analyses, nested case control analyses and risk assessment performed, the estimated risk of death up to the age of 65 from silicosis after 45 years of exposure at a reasonable standard now was 13 per thousand, while the estimated risk of an exposure at a slightly lower standard was only six. Both of these risks are well above the risk of one per thousand currently deemed acceptable by the United States occupational health and safety standards.

You can see in the study that I have cited by De Klerk, Musk and others on Kalgoorlie coal miners in a variety of years there, looking at the number of deaths and really breaking all that down, a few facts stand out. Few of these miners end up receiving compensation. There are cases of compensation but you could not really call what is going on a systematic approach to compensation for these people. Secondly, occupational exposure limits for crystalline silica are under review worldwide because of the large numbers of exposed people, especially because of the recent International Agency for Research on Cancer classification of silica as a human carcinogen, which directly contradicts Dr Bisby's evidence, which was that silica does not cause cancer.

Obviously the volume of people potentially involved creates worries for industry. On the other hand it is a worry for the community if proper monitoring and enforcement standards are not in place. There is also the problem that monitoring and enforcement standards may be difficult if you drive standards lower. The more particular you are about the amount in the atmosphere the harder it is to actually establish that you have gone over.

Thirdly, the infrastructure for successful implementation of national standards, including the number of occupational hygienists in government employment, which is a particular issue stressed by Martin Jennings, has been eroded. Few, if any, Australian companies have been prosecuted for exposing workers to the risk of dust related disease. Those facts stand out. We can make all these statements that we have great standards on the books but, really—and Richard has said to me over and over again, 'I do not care what standards are on the books; they are not being enforced.' No-one is being prosecuted; no-one is going to the workplaces; no-one is getting out the dust monitors; and no-one is telling people to have these lectures and to get these masks on. We are not seeing that. It is not happening systematically.

I notice in its submission that the Department of Employment and Workplace Relations has mentioned that the Australian government is establishing a new tripartite body, the Australian Safety and Compensation Council. I would think that the recommendations from this committee will factor directly into what that organisation does. It may be that the committee's recommendations will factor into a different organisation or into a set of guidelines, but it would seem from what is going on that this is to be the regulatory body that will implement the recommendations. At least, that is one interpretation of this submission that I was reading. In that sense these are important issues for the committee to assess, because in some ways it is the riding brief for this new tripartite body. It may be produced initially by this committee, so there is a very practical outcome from this Senate committee.

The next point I make on page 3 is that it would be wrong to think of sandblasting as an activity in which silica is thrown into the body. We have pointed out the number of carcinogenic substances that are associated with silica. Again, it is misleading of Dr Bisby to say, 'Silica does not cause this.' The fact is that the operations in which silica is thrown into the atmosphere also involve, as we know, a lot of other highly carcinogenic materials. These are appalling.

The next part of the article sets out Mr White's case, and senators are aware of that. In handing up the article I hope that it will now be available for people to read. The salient fact in that case is that Mr White was denied compensation by a legal system on the basis that he could not possibly have had silica, and he then had an open lung biopsy which showed that his lungs were

full of silica. This is an example of the sort of compensation nightmare that we have when we have standards of proof that are not conformable to the types of compensation that people need.

This has been much more rationally addressed, which I discuss on page 5, in the United Kingdom. The British coal litigation was a watershed in the development of clinical and legal theories about causative relationships between industrial dust exposure and chronic obstructive airways disease. One of its major conclusions was that disability in a toxic, dust-exposed cigarette smoker should not be regarded for compensation purposes as if it were entirely due to one cause or the other. Rather, the court decided that it should attempt to estimate as far as possible the contribution of each cause and then award compensation proportionally. A related recommendation was that compensation should prima facie be paid to any worker with chronic obstructive airways disease who had worked underground for 20 years in coalmining. But you could apply that to 20 years in sandblasting, even in the absence of pneumoconiosis on a chest X-ray. In other words, if you work in sandblasting for 20 years you are entitled to compensation if you have something wrong with your lungs. You do not have to go through this process. That is one approach that at least needs to be considered.

We mention some of the other epidemiological studies which show the connection between emphysema or chronic obstructive airways disease and silica, and also the connection with carcinogens. On page 6 we address the health policy challenges of nanoparticles. This is an area to which the Department of Employment and Workplace Relations refers, and towards the end of its submission, at paragraph 5.4, it states:

> Currently, there is very little information on the interaction between nanoparticles and people i.e., how nanoparticles enter the body, are transported, how they interact with body processes and their potential for toxicity and clearance from the body. OHS regulation should be underpinned by sound science on the health hazards posed by nanoparticles. Currently that information is not available.

That is a surprising thing. As an academic I have just gone through looking at who was successful in the Australian Research Council grants project, and there are numerous projects on nanotechnology. Every single university has a project on nanotechnology. There are industries springing up everywhere with linkage grants and so forth. There is a huge nanotechnology industry growing in Australia. Our own Department of Employment and Workplace Relations has said, 'We know next to nothing about the health impact of nanoparticles.' Although you might say this is an issue that is a bit left field in relation to silica, I think in some ways the recommendations of this committee on nanoparticles could be one of its most significant long-term impacts. This committee is taking place at a time when the nanotechnology industry in Australia is just beginning. This is an ideal time to systematically map out the future process of regulation, compensation, monitoring and enforcement for nanotechnology in Australia. If the committee does not take up the challenge of doing this, then I think the community and regulators will be entitled to look back at its activities and say, 'What were they up to?'

The problems with nanotechnology are set out on page 6, and I will not go into those further. On page 7 I deal with some of the other issues that Richard mentioned in relation to his recommendations. Essentially, if you break those down, it is not a question of telling the National Occupational Health and Safety Commission to improve its standards. The standards are okay. It is more a question of how we fund and how we supervise the enforcement and monitoring systems. This is one of Richard's major points, and I endorse it wholeheartedly. I am

sure my co-authors in this paper would also endorse it if they were in this room. The question is: how do you enforce these standards on a day-to-day basis in every workplace? How do you do that efficiently? Of course we are concerned about the costs of doing this. But there are ways in which you can make employers responsible, create standards and have monitoring systems. Other countries do it, and we should start doing it systematically. We really do not have an alternative if we are to care for the workers who are constructing the infrastructure on which our economy is based.

Richard also made the point in terms of medical recommendation that one of the things he feels is important, which we would also back up, is the need to have centres of excellence where people who feel that they have a problem such as Richard has can go and deal with experts who are familiar with the types of compensation and legal issues they will face, the sort of information they will need and with the capacity to diagnose these illnesses from small symptoms. Richard had to see 500 GPs. It is astounding! It is hard to believe that that number is correct but, knowing Richard, he does not tend to overstate. If you think about this, this is somebody who knows there is something wrong with him and is desperate. With this recommendation he is really saying that what he does not want to leave is a legacy whereby other people who come along with diseases—and I guess we are thinking now about silica, but it may be nanoparticles in the future—have nowhere to go to get quickly to the bottom of what is going on.

The message that is coming through from people like Richard, if I could break it down, is that there are potentially enormous numbers of Australians out there who have something wrong with them. They know something is wrong with them, they know they have worked in an industry where they have been exposed to something, whether it is silica or nanotechnology in the future, but they just do not know where to go. They go to the GPs, but the GPs do not have the expertise to diagnose it so they pass them off and say, 'You've got a bit of smoking,' a bit like the High Court did. Richard is saying that you want some centre where people know that, if they have something like this, if they have a history of industrial exposure, they can go there and get to the bottom of the problem quickly. I have mentioned enforcement standards and the importance of having medical centres of excellence.

His last point is about the compensation issue. I have mentioned some of the improvements in the compensation issue which are coming out of the British coaldust inquiry in terms of making it much more science based, and I would certainly recommend that senators look at those. The long latency periods of silica are similar to asbestos, even though it is only a small aspect of the inquiry. All of these things create capacity for companies that want to avoid liability, to delay actions, to wait until people die, to obfuscate, to put on delay motions and to keep pushing things away because of this long period. We need to have a compensation system that does not facilitate that sort of tactical gaming by an industry that does not want to pay compensation. That is one of the important things that the committee needs to address. I think that is all. I would like to thank the committee for the time to present these submissions. I refer the committee again to the wonderful work that Richard has done. The paper I have given the committee summarises my evidence in more detail.

CHAIR—Thank you, Dr Faunce. We will now go to questions.

Senator HUMPHRIES—Thank you very much for that evidence. Mr White, could you describe to the committee the circumstances of your exposure to these airborne particles? You were employed to remove things from the inside of ships or barges, as I recall. Can you describe the circumstances of that, please?

Mr White—Can I just make a correction first?

Senator HUMPHRIES—Yes.

Mr White—It was not 500 different doctors; it was ongoing consultations. But it is about 500 times since 1992 that I have been to a GP. I have a regular GP. I have seen a lot of doctors, yes, but it is 500 consultations to the GP.

For my first employment I was picked up at a service station. I was pumping fuel at BP Parap and these chaps pulled up in a ute and said they wanted a strong lad, and I was quite a big boy for 15. So I started drying sand, which was wet sand out at the Winnellie showgrounds, and just spreading it out on the ground. If it was really wet it would go through a kero-fired tumbling steel barrel, and then I would stack it into 44-gallon drums which we would lift it onto the back of a truck when it would come in to take it to the various sites. I was drying out sand. Because it is so hot in Darwin I used to work after school from 4 pm until about 12 or one in the morning. They would send me in as the gofer. They would float barges in on the tide, and they would be on 44-gallon drums. They would take off the inspection plate underneath and we would go in there. They would often blast and then I would go in and clean it all out, which was just shovelling it out. We were not given any masks of any kind. I would be shovelling out the sand to the inspection hole and you could not see from one end of the barge to the other.

Senator HUMPHRIES—You were inside the barge?

Mr White—Yes.

Senator HUMPHRIES—It was a fairly enclosed space; was there a doorway or something to get into the barge?

Mr White—It was called an inspection plate, and it was underneath.

Senator HUMPHRIES—Okay. It was fairly enclosed and the air would be very dusty with the material that you had been using to blast off the paint or something on the inside?

Mr White—Rust, mainly.

Senator HUMPHRIES—So you were blasting that off. It was removing that, and the blasting process itself caused the airborne dust particles?

Mr White—Yes. There was a hopper outside, and you shovelled the sand in the top and compressed air from a compressor in the chamber would push the sand through quite thick reinforced industrial-grade rubber pipes through to the end nozzle, and then you would blast away. All you had was a helmet, which was just a shell on top with a calico, some had leather,

fringe around it. That helmet was actually supposed to be used for shot not for sandblasting, as we later found out.

Senator HUMPHRIES—This helmet was protective of your head, but did it cover your mouth or your nose?

Mr White—No. You just sat it loosely on your shoulders. You had a supply of air from the compressor which fired in the top, which often used to get quite snagged, and that was the only thing that was forcing air down over your face to keep the sand out. But of course it did not because it would ricochet off the panels and come back underneath and flick up, because as you moved around it was not strapped down on you. The clean-out work was even worse because you did not have any air supply. The air supply was off because the run had completed, and you were just shovelling it out. Different sized barges were used to go to Bathurst Island, Melville Island and Croker Island.

Senator HUMPHRIES—So the air was still full of this dust as you were shovelling it out?

Mr White—Correct. When you had done the clean-up you would start the operation again, because they would be doing barge after barge. Then we did the jet-fuel tanks at the RAAF base, which were worse because they were smaller and you had to climb in through the base plate underneath. They had fuel farms spread all over the RAAF base; rather than risk having all the fuel being bombed in one location they had fuel farms scattered. You would start the cycle by doing one, and by the time you got around to the end you would have to start again because they needed to be very pure.

Senator HUMPHRIES—You mention in the submission that there were contrasting regulations enforced at the RAAF, so that was a different place in Darwin where they were doing this?

Mr White—Yes.

Senator HUMPHRIES—Were they also cleaning insides of barges or ships, or something else?

Mr White—Blasting inside. They brought the barges into Frances Bay. There was also Port Authority work on the buoys they would tow in from out at sea, blasting off all the barnacles and then coating them with tar epoxy resins, because they had to be painted after they were blasted. There were steel beams and the like. There was a lot of wharf work, but that was usually outside. The predominance of our work was inside the barges. You could not get into them during the day as it was just too hot, so they did them at night. There was the RAAF base work, and we also did water storage tanks.

Senator HUMPHRIES—You said the workers at the RAAF base were supplied with fresh air, and that facemasks with charcoal scrubbers were worn and preferably used in an open environment. So there was a very different environment for workers there from where you were working; is that right?

Mr White—Not initially, no. A chap called Shepherd came along—who, by the way, has kept in close contact with my foreman, Barry Medley, which is why I was able to find him—and he closed down our operation, but we had already been doing it for about a month. When he saw how we were working, he was not happy with how we were being treated. We had no masks whatsoever to do the clean-out work and we were spraying without adequate protection when applying the tar epoxy resin—actually it was a different base coat from tar epoxy resin—and he supplied us with some masks. They shifted him from the RAAF base after about a month, because they were obviously not happy with the change in standards of work.

Senator HUMPHRIES—There were other workers obviously in the same position as you, that you were aware of or whom you saw, who were cleaning or removing sand from those barges in the same way.

Mr White—Yes.

Senator HUMPHRIES—How many workers would you estimate passed through this system and worked in the same way that you did over the time that you were there?

Mr White—Approximately 30 in Darwin.

Senator HUMPHRIES—The company you worked for operated this kind of operation in other parts of Australia that you are aware of?

Mr White—Australia-wide, yes.

Senator HUMPHRIES—We do not have a lot of time, so I will move to the next issue. You said that you have contacted a large number of these people through advertising in newspapers to ask for people who have worked in this industry and who now have some kind of respiratory or lung disease to come forward. I think you mentioned in your second submission a total of 792; is that the right figure?

Mr White—I think the figure is now 1,111.

Senator HUMPHRIES—These are people who have responded to your advertisement?

Mr White—Sorry, no, that is the total number. I am not sure of the total numbers. There are two printouts that you have: one lists all the people with illness, and most of those people who have responded with the illness are the numbers in that printout that was handed up today.

Senator HUMPHRIES—Okay. There are several hundred people who have identified themselves to your group?

Mr White—Yes.

Senator HUMPHRIES—Who say that they have worked in the industry and now have some kind of lung disease?

Mr White—Predominately.

Senator HUMPHRIES—Or are family members of people who have had lung disease and who are no longer living?

Mr White—Predominately. We asked for three classifications: deceased; those who know they are ill; and others who have worked, are unsure whether they are ill at this stage but who want to register. The predominance is sick people.

Senator HUMPHRIES—Dr Faunce, where do we go to from here? You have mentioned already some of the things that you believe should be considered, like medical centres of excellence—I think that is what you called them—and other assistance to people who might realise they have a disease that might be related to their previous occupation or exposure. One of the problems with the recommendations in the submission—that there should be a national body set up to overview these sorts of processes and enforce standards and things like that—is that there is a problem with the states and territories having jurisdiction over those issues, and the Commonwealth not having them. As you would imagine, there is a very large problem with bringing all those separate authorities together to agree on one supervisory structure.

What specifically should be done to deal with the legal position of people who are in the same sort of position that Richard White was before he began his litigation? As you point out in the paper, they have the problem of having to engage lawyers to try to prove a connection between an illness that might have an uncertain prognosis, where the cause might have occurred 10, 20, 30 or more years ago. In Richard White's case, of course, the problem is that the legal action was taken and it proved fruitless. What can be done to assist people like him who come forward to have that matter properly ventilated in the future?

Dr Faunce—I guess the question really asks what practically the Senate recommendations can do in the federal arrangements that we have. The boldest approach would really be to say that this is a matter that falls within some of the ILO treaties or other sorts of international arrangements on workplace safety, of which there are many to which you could point. To that extent, it falls under the external affairs power and justifies a unified federal approach. There would be other heads of federal powers, such as the commerce power, that immediately come to mind which would allow legislation regulating the health impacts of workers involved in the commerce side. If there were a determination to create uniform federal legislation, I think it would be possible to find justifiable heads of power. I guess it is a question of whether there is a need for such a body, who would oversee it and who would operate it. Yes, I think there is a need for such a body. I think the United Kingdom model shows that having a national dust diseases law or some central agency makes a lot of sense. It is not a localised problem in different states. Although organisations such as the Dust Diseases Board in New South Wales have done a good job and have a certain amount of money to fund resources, obviously that is limited by the financial restrictions of the fact that it is just a state.

In answering the question, I would say that there is a need for an overarching body. In looking through its submission, this body that is being set up, the Australian Safety and Compensation Council, at the moment is a box on a page, and I think that is why in my submission I suggested that the senators' recommendations could well fill out that box. It is not really for the senators to construct a piece of overarching legislation, but certainly you could say, 'On the basis of the evidence that we have received, constructing a rational compensation system has advantages in terms of social justice and equity.'

There are also economic efficiency advantages in the sense that, if someone is adequately compensated, they can get access to medical treatment, they can continue to fulfil employment and put stuff back into the community. So there are those sorts of efficiency gains. If there is not an overarching compensation structure, there are the inefficiencies of mounting litigation. I am sure senators would be aware already of the situation in the United States where compensation claims for silicosis are continuing to increase, despite the fact that in some ways the actual deaths defined with the ambiguous criteria I mentioned have been reduced. There are rational reasons for a unified compensation structure.

Also, I think the big advantage is that you could link the compensation structure to monitoring and enforcement in an integrated package. This is what we lack. The National Occupational Health and Safety Commission is doing a good job, but when it is not linked to an enforcement body and a compensation body, you do not get the flowing through of scientific expertise which I think the British example shows is crucial to developing and enhancing over time a rational compensation regime.

I think the lesson from the British model is that a good compensation regime has the capacity to evolve as scientific evidence improves. You cannot set up a body and say, 'Right, we have this system that will be good for 20 years.' Evidence mounts, for example, about the way in which silicosis may cause obstructive lung disease and be largely non-diagnosable on the old methods that we used to have, the chest X-ray and so forth. This is the issue with nanotechnology. We have a burgeoning industry with a completely unknown health profile which could create all sorts of problems for the Australian work force. We are trying to think: are we going to have individual states—Queensland, New South Wales—all having compensation systems that are completely different for nanotechnology? It would seem that we are moving into embracing nanotechnology as a major component of Australian industry and the economy, and we do not know anything about self-impacts, but there are a lot of concerns. These things can get into your bloodstream. When they are in your bloodstream, they can go anywhere, and who knows what is going to happen. We need to have something in place for the sake of the workers who are involved in that and whom we are encouraging to get into those industries, and we do not have to have the same sort of crisis that Richard has to produce change.

In summary, in answer to your question, you may need to step back from the whole process a bit, but I cannot see how you can really develop a rational compensation regime without the federal government having some oversight. It may be that, at the end of the day, you end up with a system like the National Corporations law, where you get the states to sit down and work out to what extent they are prepared to agree on a uniform package, and then have implementation legislation coming in through different states to facilitate that body. I think the states may be interested in that, because obviously they would see cost savings. Rather than having each state having a dust diseases board, a silicosis board or a nanotechnology board, they would say, 'If we had a single federal board and we were all prepared to put a bit of money into it, it saves us money as a state.' I think they would be prepared to see a unified federal structure as a cost saving. It costs a lot of money to run a regulatory authority, and I think one of the reasons why we have such an inefficient enforcing mechanism is that the states are just underresourced. If we put it together as a unified federal structure, it would save them money, and it would probably mean that you would have a much more efficient system and it would be more likely to be able to respond scientifically. It would have a higher profile internationally. You would be able to

form collaborations with similar national bodies overseas. There would be all those sorts of advantages as well.

Senator LUNDY—Dr Faunce, returning to your paper: are you able to advise the committee when the AIRC classified silica as a human carcinogen? You say 'recent' but I am just curious if they upgraded that from a possible human carcinogen and when.

Dr Faunce—I would have to take that on notice. The reference I have given there is for 1997. That was the time they initially made the statement, as far as I am aware. In terms of more recent statements—

Senator LUNDY—It may have been in 1997 that they upgraded it.

Dr Faunce—I would have to go away and look it up.

Senator LUNDY—Thank you, that would be useful. Going back to your earlier comments, Mr White, your submission details the hardship that you and your family have gone through as a result of this, and particularly some reflections by your children on the impact on your family. I guess I am just looking for, in your own words, how you think your life would have panned out if you had received the compensation you believe you deserved as a result of your illness. How do you think it would have played out?

Mr White—It is a great question, because I actually approached Mallesons, the solicitors, in 1995 or 1994, and I was going to do all this magnanimously because I set up a trust that was going to be funded from the proceeds of the court case to help other people, and of course that is sitting at home in a file and it is all defunct now, of course. But that is what we always intended to do.

Senator LUNDY—Even had you been successful, you believe you would probably still be in front of this committee fighting this case?

Mr White—Most certainly. Can I just say something else. The insurance company, Munich Holdings of Australasia Pty Ltd, in submission No. 29, at point 3 of their recommendations, talk about using the asbestos and the documentation of asbestos to muddle and confuse. It is their recommendation that companies use the paper trail and the company trail to defeat applicants for compensation. They also state that they feel that the silica problem is a huge problem but not disastrous to their industry. Again, they say to delete the word 'silica' from the policies.

Senator LUNDY—Yes, you mentioned that. At the time you were fighting this case, obviously against the insurer, what sort of legal resources did you have at your disposal at the time, and how did you—

Mr White—When the money ran out, the input ran out. It was as simple as that really.

Senator LUNDY—As soon as you ran out of money, you could not fight the case anymore?

Mr White—No, the case went on, but the case did not have any diligence about it. We were told in the solicitor's office that they would take probably 10 per cent off for my smoking. I said,

'Well, why don't I get stat decs about the smoking or affidavits?' and they said, 'Oh no, don't worry about that; they'll just deduct 10 per cent, and probably 10 per cent because you didn't look after yourself either.' I said: 'Well, my foreman was a lot older than me and he's got silicotic nodules, but he didn't do anything. He didn't make a complaint, and I was only young, so I just did what everyone else was doing.' They said, 'Well, they'll take 10 per cent off for that, and they'll take 10 per cent off for your smoking.' When they took the six sections of lung on the right hand side, there was no tar or nicotine staining in the pathology. My dentist, from whom I obtained an affidavit, said that he has cleaned my teeth and looked after me since 1976 and he has never cleaned tar or nicotine and did not know I was a smoker, as did one of my employers for two years. So I went and got all that information, but the court did not listen. I think it was too little too late. They form an opinion and they do not want to change it.

This is the problem; not only do these other people face the same thing, but you have jurisdictional problems. For example, if you breathe it for six months and you are notified that you are ill, it is over six months in South Australia and you cannot bring an action. If it is Victoria, it is 18 months; if it is Darwin, it is 12 months—there are all these different problems. I asked firms of solicitors to represent these people—I approached Cashmans and Slater and Gordon with my wife—and they were quite keen to help, but of course they said: 'You've got jurisdiction trouble, you've got people who have moved interstate. You have people who have asbestosis, people with silica, people with cancers. We can't run a joint action; it all has to be individual. How long do they have?' There are problems wherever you look.

CHAIR—Because you have to look at time running out as well.

Senator LUNDY—Yes. I noticed in the submissions that the point is made—I cannot remember where; it may have been in your submission—that if the current evidence that has now been brought out with the various scientific and medical studies were to be brought into play with cases being run now, the chances are that the sufferers would not survive until the fruition of some of that legal work.

Mr White—They use time to frustrate you. We went back to Darwin four times, and who can afford financially to keep going backwards and forwards to Darwin with your wife and children? It is not possible. One of the reasons I put in this list of articles that appeared in the newspapers is because I gave them the sufferers to speak to. In one case down here—with the coal board in New South Wales—in respect of a woman and her husband, they refused him because he smoked, even though he had been working for 20 years in the coal mining industry. When they did a post mortem, they found he had silicosis. The same is repeated in Western Australia. A woman went to the board or the equivalent with her husband who had been working for two different firms for 17 years blasting. They said, 'No, you smoked.' He went to the board in June last year and was dead by September—the wife is still so distraught and upset—and he was full of silicosis. I saw a pathology report about her husband that she sent me, because he had some lung tissue taken, and the report stated, 'Suggestive of silicosis but no employment history given.' Did anyone do their job? Could someone have not contacted his GP or ring him at home and say, 'Did you work in the silica industry, or were you a sandblaster?' It is just strange that people do that and they do not then admit the report.

Senator LUNDY—Do you envisage the proposed national board that you have suggested in your submission doing that kind of work and that kind of follow-up and making sure all the facts and figures and cases are known?

Mr White—It gets back to occupational health and safety. I have had people say to me, 'Since New South Wales has got the Dust Diseases Board, we're okay.' But that is the end result. People are going there when they are sick; they are not going there when they are well. That is the end result. You need to have occupational health and safety of a world-class standard. You need to say: 'Look, if you work in this job, you need to wear this mask. These are the cartridges. There's a box of them over there and you must have these on. They change colour when they get old. That is the box and, if you don't wear one, we issue you with a certificate. If you receive three certificates, you're out.' It is recorded on your history that you were not wearing a mask—so it is as much for the employee as it is the employer. If you give them the standards and say, 'This must be worn when you are doing this type of job,' surely that is a step in the right direction.

Senator LUNDY—As to the ongoing physical impact of your illness, you mentioned that you have to keep with you an oxygen bottle. Can either you or Mrs White describe the practicality of how that impacts on your life, how often you have to use it and that sort of thing?

Mr White—We have had two children; it is worse than having a child. We have an oxygen generator at home as well, which is on most of the time. I am supposed to go on it a couple of times a day to keep my oxygen levels up, because Professor Bryant told me when I came out of hospital two weeks ago that my oxygen saturation levels have fallen again, and my FEV1, which is the big capacity, has gone down again but not markedly. That is what happens; it slips over time. As to the practicality of carrying an oxygen cylinder with you: if you want to go on a plane, you have to tell them a week in advance, you have to make sure that you fill in a form, you have to get your GP to stamp it. This is ongoing, so we do not travel by plane much anymore—we cannot afford it. Even in the car, you have to make sure that you have two supplies of it. The best way is to have cylinders of oxygen, because the delivery is cool air into your system, whereas the machine is not quite as good; it is run by electricity. The cost of having the cylinders is $170-odd a month.

CHAIR—Mr White, what was that figure again?

Mr White—About $170 a month.

CHAIR—Just for the oxygen cylinders?

Mr White—Just for the oxygen cylinders, yes. It is not practical. At least we have—

Mrs White—It has a bit of weight with it as well.

Mr White—At least there is a system where you are able to have the machine in the home. When we had the fires, I had to race up to the hospital and lie on the bed and they put me on the oxygen for a while because I was worried that we would run out of oxygen—I knew how bad it was; I could see out the window. There was an element of panic, and I wondered what everyone else was doing.

CHAIR—Mr White, we have your original submission and we have the supplementary ones you put in today. When people have had a chance to go through those—and also, Dr Faunce, when people have had a chance to go through your paper—there could well be things we want to follow up with you by contacting you again. That is a normal process. This committee has had its reporting date extended to the new year to allow for this period at the end of the year which is going to be quite full, so there is still time for that kind of process to occur. Is there anyone that you recommend that we talk to? We have followed up previously some of the witnesses you suggested, but it is a good chance now—

Mr White—I have provided a list of sufferers for each state who are fairly articulate. I also made mention of the fact that, in South Australia, because predominately the people that came to work in Darwin were from South Australia, although there were some from Victoria and Western Australia. I think one lady has interviewed a lot of those people; I think she spoke to probably 20 or so people. Also, my wife has spoken to a great number of people, as have I. I have made a habit of speaking to anyone who was very ill before they passed away. I think a lot of sufferers are concentrated in South Australia for some reason, but I did give a list of the names of those that I thought were the best to speak to.

CHAIR—Yes, we have that.

Mr White—They are basically sufferers or people who have lost someone and know the system and how it has worked against them in their own situation.

Dr Faunce—The committee may be doing this, but I would suggest there would be benefit in a comparative analysis of what is happening, particularly in the United States and the United Kingdom, and talking to regulatory authorities, whether face-to-face through a visit there or possibly having a telephone linkup. In relation to regulation of dust diseases, the United Kingdom certainly is leading the way with some changes in the sorts of arrangements we are talking about. There could be some benefit in talking to regulators over there as well in relation to nanotechnology.

CHAIR—Thank you very much. Is there anything you would like to put on record at this stage?

Mr White—Only thanks to Kate Flower as well. Kate was very helpful.

CHAIR—That is good to have on the record. Thank you very much for your time.

Mr White—Thank you.

Committee adjourned at 7.03 pm