



**LEGISLATIVE ASSEMBLY FOR THE AUSTRALIAN CAPITAL
TERRITORY**

**STANDING COMMITTEE ON EDUCATION
AND COMMUNITY INCLUSION**

(Reference: [Inquiry into the management of ACT school infrastructure](#))

Members:

**MR M PETERSSON (Chair)
MR J DAVIS (Deputy Chair)
MR P CAIN**

TRANSCRIPT OF EVIDENCE

CANBERRA

TUESDAY, 21 SEPTEMBER 2021

**Acting secretary to the committee:
Dr C Regan (Ph: 620 50142)**

By authority of the Legislative Assembly for the Australian Capital Territory

Submissions, answers to questions on notice and other documents, including requests for clarification of the transcript of evidence, relevant to this inquiry that have been authorised for publication by the committee may be obtained from the Legislative Assembly website.

WITNESSES

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Amended 20 May 2013

The committee met at 1.36 pm.

TAYLOR, PROFESSOR MARK PATRICK, Chief Environmental Scientist,
Environment Protection Authority Victoria

THE CHAIR: Good afternoon, and welcome to the eighth public hearing of the Standing Committee on Education and Community Inclusion for our inquiry into the management of ACT school infrastructure. The committee wishes to acknowledge the traditional custodians of the land we are meeting on, the Ngunnawal people. The committee wishes to acknowledge and respect their continuing culture and the contribution they make to the life of this city and region. We would also like to acknowledge and welcome other Aboriginal and Torres Strait Islander people who may be watching or listening to today's event.

Today we will hear evidence from Professor Mark Taylor, a member of the expert panel advising the Australian government on managing hazardous materials in public school buildings. He is the Chief Environmental Scientist at the Environment Protection Authority in Victoria and an honorary professor at Macquarie University.

Please be aware that the proceedings today are being recorded and will be transcribed and published by Hansard. The proceedings are also being broadcast and webstreamed live. When taking a question on notice, it would be useful if witnesses used these words: "I will take that as a question taken on notice." This will help the committee and witnesses to confirm questions taken on notice from the transcript.

Professor Taylor, please be aware that today's proceedings are covered by parliamentary privilege, which not only provides protection to witnesses but also obliges them to tell the truth. The provision of false or misleading evidence is a serious matter, and all participants today are reminded of this. Please ensure that you have read and understood the pink privilege statement that was emailed to you. Is that the case?

Prof Taylor: I do believe it was, some time ago, but it was interrupted by virtue of our joyful COVID holidays. I have read it and signed it, and replied accordingly.

THE CHAIR: Wonderful. As you do not have an opening statement, we will go straight to questions. Professor Taylor, you are an expert when it comes to the management of hazardous materials. Could you describe to the committee where, on the spectrum of responses to hazardous materials, the ACT government falls? One end of the spectrum would be best practice; the other end of the spectrum would be no plan.

Prof Taylor: That is a good question. I looked at their processes. I was invited to look at and make comment on the systematic approach that they decided to take in regard to clean-up. The first thing I will say is that I am not aware of any program that has systematically assessed and cleaned up lead and asbestos materials in schools in any other jurisdiction and made that information very publicly available, as the one that I came across. I do not know of any other jurisdiction—our nearest neighbour being New South Wales, in particular—that has taken it upon itself to investigate what standards it should use in order to mitigate any potential risk of harm.

The Education Directorate engaged with the panel and determined to take on board what I described at the time as my best advice—the best regulatory standard for dust deposition, which they were then to use as part of their clean-up process. Those are the standards promulgated by the US EPA, and they formally accepted them. They were using them before, but they formally accepted them, I think, in December 2020. They were the standards that they have used.

As it stands, I would have said they have a very clear program. The documentation is clearly available. They have a clean-up regime, and a standard to which they are cleaning up which I have not seen anywhere else.

I can benchmark that most directly against Broken Hill, in New South Wales, where, as you may know, there is an ongoing lead problem, not only in lead but also in terms of dust emissions from the facility and the waste piles around the town. Also, there is very elevated lead in soils. They have not set a dust standard, and they do not use a dust standard in the clean-up of homes that they decide they have to intervene in, where there are children with very elevated blood leads.

If you were to wrap all of that up, I would say the program is world's best practice, or at least it is the best practice that I have come across in Australia, comfortably, because it is systematic and organised, and it was structured and ordered according to the age of the building. They were the ones that were most at risk. They then used, from probably the world's leading regulator, the US EPA, their most recently promulgated standard for clean-up. That is how I would benchmark it. It was excellent.

THE CHAIR: I am by no stretch of the imagination an expert in this space, so when a school is identified as having these contaminated dusts, what actually occurs to remedy and manage that, in terms of the actual response?

Prof Taylor: You are probably asking the wrong person here because I am not involved in the management and the day-to-day cleaning in that process. I will give you, from memory, the best understanding that I can, but you need to benchmark that with Andrew Parkinson from the Education Directorate, to get it from the horse's mouth. He manages that program.

With the schools, I think there is cleaning every day; then there is a big clean each year, twice a year or something. If there is a situation where there is a concern in regard to lead in dust or lead paint, the room is excluded from use, there is cleaning and there is post-testing.

Whatever the general cleaning regime is that they have, and the general assessment of building standards, when there is an identified problem, after cleaning, it is then retested to ascertain that the dust wipes—the dust; they use a method called dust wipes—are less than the standard set by US EPA. It is only at that point that people can re-enter the classroom.

I have explained it to the best of my knowledge, but with respect to the exact detail of what happens, the frequency of the clean each week et cetera, you can get a much more precise answer. But it is my clear understanding that, where there is a concern,

children are removed from access to that classroom, it is cleaned and access is not permitted until that clean is shown to be efficacious and there are reduced levels of lead in dust below the standards that are used by the ACT Education Directorate.

THE CHAIR: It is a very helpful answer and I will pursue that with directorate officials at a later time.

Prof Taylor: May I add one more thing? They will be able to give you a schedule of the management and the processes; they have documentation on that, and that should be available to you. There is no reason why that would not be shared. I thought it was so good that I am interested in talking to my newer employer, after leaving Macquarie University, Vic EPA, for them to have sight of that, if they are prepared to share it, in case we need to use that. It was just ordered, organised, logical and structured.

MR DAVIS: Mark, it might seem a bit redundant, but going back to first principles, could you explain what you would call the difference between a hazard and a risk? Particularly in schools, when we are reflecting on materials, when do lead and asbestos change from being hazards to risks, or vice versa?

Prof Taylor: That is a great question, and it is an issue that gets conflated all the time. For example, a car is a hazard. It can be a hazard if you drive at 150 kilometres around a 90-degree bend, because you can have a crash. It will only become a risk when you actually drive it at 150 kilometres an hour around a 90-degree bend, because you are going to have an accident.

It is the same thing with electricity. Electricity is a hazard, but because we encase the copper wires in plastic sheeting and protecting materials, it is not a risk. It only becomes a risk if the covering is frayed. With respect to lead dust in schools, and lead paint and asbestos, many old homes and buildings in the ACT, New South Wales and everywhere else in Australia contain both asbestos and lead. Those materials are well-known hazardous materials. They could present a risk of harm to you or me if you scrape the lead-based paint and ingest that paint in your food or you inhale it. If that paint is stable and covered, it is not peeling or flaking, and you do not sand it, it is a hazard but not a risk.

The same thing pertains to asbestos. You can have asbestos sheeting as part of the interior construction of your home. If you do not drill it and inhale the fibres that you have drilled, that hazard will not become a risk. If you do not break it up and generate lots of small particles where you can either ingest or inhale them, it will not become a risk. Even though these materials are hazardous materials, they are not a risk to health unless there is the thing called an exposure pathway, which transforms that hazard. The pathway could be inhalation or ingestion, either deliberately or accidentally. It then gets into the body. Once it is in the body, it presents a risk of harm. If you break that chain, that exposure pathway, between the hazard and the risk, you are in a safe working environment.

Let us go back to schools. Where the schools have old flaking paint and it is not remediated and stabilised, it could present a risk of harm. But if they then stabilise that paint and remove all flakes and dust, the paint remains a hazard on the wall but there is no degradation, no dust generation, that can present a potential risk. Of course,

it only becomes an actual risk if that person ingests the lead flakes or the lead-rich dust. It is a potential risk; then it has to become an actual risk. There has to be an exposure pathway to take it from the hazard into a person, and there has to be a change from potential to actual risk. Have I helped to explain it to you? Do you understand it, as a layperson?

MR DAVIS: I do. That does make sense. I think that that clarification for the broader community is helpful. Do you do much work with the Education Directorate in terms of developing the policy for schools so that they understand the difference between hazard and risk, and they can manage that accordingly?

Prof Taylor: I gave input to the Education Directorate's information sheets on lead and various other related items. I specifically attended four evenings in May—I am now casting my mind back; I am pretty sure it was in May—where we were available to explain the process, go through the documents and talk people through this difference between a hazard and risk.

I was in Canberra for a week, where we were available. I did some media work as well. I said to the team in the ACT that people are able to call me at any time, including mums and dads, and I would still be happy to take a call from them to help them to understand and disentangle the concern that they may have regarding the difference between a hazard and a risk, so that they could feel comfortable with sending their kids to school, notwithstanding COVID at the moment. I think that the whole thing has been a gross distraction for mums and dads with respect to worrying about something. It had not been clearly explained to them or the issue between hazard and risk had got conflated in the media. I do not know of a parent that is not concerned about their kids. Obviously, they were concerned about whether it was safe to send their child to that school. I was available then, and I am available now, if that is still a concern to mums and dads. I have had input and I will continue to have input, as mums and dads require it.

MR CAIN: Mark, are you still formally engaged with ACT Education?

Prof Taylor: That is a good question. I am not disengaged; I never disengaged. I will explain it to you very briefly. I was a professor at Macquarie University. I was offered another position, to be the Chief Environmental Scientist for EPA Victoria. I have retained my honorary position, and all of that transition happened at the time when I was doing the work for ACT. I have not formally resigned from their hazardous materials panel.

What I will say on the record is that my immediate boss, the CEO, knows about my appearance for this matter. He knows about the previous work. All of the relevant declarations were made. I am not receiving any payment. That payment finished. There was some payment received for travel down to Canberra. Does that help to explain the situation?

MR CAIN: Sure. You were reimbursed, rather than being paid?

Prof Taylor: I was reimbursed; correct. I formally signed a document to join the panel back in December last year or something like that. I have never sent a letter

saying, “I’m not on your panel anymore.” You could take that as meaning I have not disengaged, but there has not been a need to disengage—if you see what I mean. Does that help?

MR CAIN: Yes. Thank you for your common-sense explanation of hazard versus risk. I will create a bit of a distinction here. As you said, a car and electricity wires are hazards.

Prof Taylor: Potentially.

MR CAIN: Sure. But the utility of them means we are going to put up with any associated hazard or risk. Obviously, we do not want to be without electricity lines to our homes, or motor vehicles.

Prof Taylor: Correct.

MR CAIN: For example, lead paint and asbestos do not have that same level of beneficial utility that other hazardous materials that we are surrounded by would have.

Prof Taylor: Yes.

MR CAIN: What is your opinion on recommending their absolute removal, which takes away every element of hazard and risk, from that point of view, given that they do not really provide any utility that we are willing to manage risks about?

Prof Taylor: You manage risk to an acceptable level, and you can never completely eliminate all risk, whatever you do. The question that you are really asking me is whether we should pull down buildings that have lead-based paint and/or asbestos in them, because they contain a material that we can replace with something that gives zero risk. I think that is what you are saying; is that correct?

MR CAIN: Not necessarily pull down a wall or pull down a building, but whatever degree of activities were required to see them out of that environment, which may not require the pulling down of a building.

Prof Taylor: I refer to the processes that the ACT Education Directorate have put in place to manage the hazard and effectively eliminate the risk, because there is always dust in the ambient environment, and that dust will contain some component of lead, because lead is a naturally occurring material. There are parts of Canberra where lead is actually naturally elevated in soils, but there is a standard background concentrate. I am not sure what it is—less than 30 milligrams per kilogram.

There will always be some lead in the environment. That is not to try and downplay the situation, but from everything that I have seen, with respect to pulling down those buildings, closing those classrooms and causing all of that disruption, and having regard to the cost involved in that, there is not a beneficial outcome from spending all of that money on that versus the process that they are doing, which is iteratively mitigating any hazard that presents itself over time, as part of their building maintenance work. Their ongoing building maintenance work, in my view, is more than adequate to deal with the potential risk that may arise from those materials.

I would say, based on all of the work that I have seen, the clean-up that has happened, the measurement of the lead dust in the environment and the absence of asbestos, in most cases, except in a very tiny number of cases, it does not warrant pulling all of that material down. The cost would be millions of dollars.

Do we know if kids are being lead exposed in homes that contain lead paint, or older homes? If they are leaving legacy materials which are hazardous and could present a risk of harm, does that relationship tell us whether we should remove this stuff?

There was a study carried out in Geelong of 520-odd children—it might be 526 children—aged four years of age. Geelong, in Victoria, is an older city, an industrial city, and the study showed that the average blood lead in children was less than one microgram per decilitre.

There was another study conducted by Queensland Health in 2018 or 2019; it came out fairly recently. That showed children's blood lead under age five—I think that was the category—at just over one microgram per decilitre. Of course, in all of those communities, kids will be living in older homes as well as newer homes. Certainly, Geelong has older homes and it is an industrial place.

What you can take away from that is that, even where people are living in homes which contain potentially hazardous lead paint, blood lead is not rising. It will rise if you have a house with lead-based paint and you go in there with your sander, sand the lead paint and you have kids running around, having breakfast and having dinner. Without a shadow of a doubt the evidence shows—and I have seen cases like this—that kids will end up with elevated blood lead, particularly if they are under five.

The data also shows that, for children who are aged two to three years, that is when blood lead peaks, and that is because they are mobile in the environment and their hand-to-mouth behaviours are common. After about three, between two and three, that regular hand-to-mouth behaviour ceases. You can tell a child, “Don't put your hands in your mouth, don't put toys in your mouth,” but at that age it is part of normal exploratory behaviour. In a leaded environment, where it is leaded because somebody has done something or there is a smelter, like in Port Pirie or Mount Isa, emitting dust which percolates the home, it is doing it for the whole time, and mums and dads cannot clean up and the kids will get leaded, and that is what the data shows.

In Canberra, we might get a one-off; when there is a cleaning event, it is identified, and there is no continuous source, because there is no lead in gasoline anymore, so there is no continuous source if you are not renovating. They only do renovations when children are not there. Plus, the children in those schools are above the age where kids' blood lead typically peaks. They are five and upwards, or six and upwards, in primary schools.

With the management of the identification of hazardous materials in these schools, the preschools were the first buildings that were assessed and addressed, followed by the older schools et cetera, and that is how they did it. It seemed to me to be extremely logical. Again, it was a risk-based process. With the children who were most at risk in that environment, where there was a hazard and there may potentially be a risk, those

places were dealt with first, followed by the older schools.

That is a long answer, but I have tried to give you as complete an answer as possible. Does that help?

MR CAIN: I still reflect that it may not require the pulling down of buildings to remove the materials. I am not quite sure if that is something that is being contemplated by our local Education Directorate.

Prof Taylor: I believe, from the conversations I have had, from memory, that the cost of this was discussed, versus the actual risk. When you pull a building down, it has a wall cavity. I do not know whether you have an older house and you have ever been up in the ceiling—it will be full of dust. You will then release all of that dust unnecessarily. You then have to clean absolutely everywhere; it will get into the ambient environment, in the playgrounds as well. If that cavity is sealed and there is no access to that cavity, and there is no air going through that cavity to reinvigorate and re-transport that dust, that dust remains a hazard but not a risk.

I can see the logic of somebody saying, “We should just remove all of this stuff.” Of course, it is not my money; it is public money. But it would take millions of dollars out of the public purse that could be spent on other programs that would give greater benefit to children. The reason I say that is not because I have worked for the Education Directorate; it is about balancing the risk against that benefit.

I do not see there is sufficient risk being paid out by spending millions of dollars in removing those walls or materials, as long as there is an ongoing, regular building maintenance program, which is what I understand exists in the ACT. If you talk to Mr Parkinson he will give you the exquisite detail on that program. It is my understanding that schools have a building manager that take care of all of that. They identify if there are any problems, and it is dealt with.

I was taken to a couple of examples where there were window frames that were deteriorating, and they could have fixed the window frame. But they looked at it and said, “We’ll just replace the lot. It’s easier to replace the lot.” Where that is possible, and it is not ridiculously disruptive by removing whole walls for a small patch, that is what happens.

To me, it is a very sensible, pragmatic approach, and not really wasting public money but using it in a sensible way. That is my opinion and my view. Obviously, people may have a different view. But I would say that the evidence does not support it. When you look at blood leads, which have fallen markedly since we removed lead from gasoline, and we look at other places, we do not see elevated blood leads in kids. Therefore, even with living in older homes, there is relatively limited risk, I would say.

MR DAVIS: Mark, that was a really comprehensive answer, particularly in terms of the management of asbestos and lead. But I do not need to tell you that, particularly in some of our older schools, the building maintenance program is so much broader than just the management of hazardous and risky materials. At some point you would hope that asset managers within the directorate would make a judgement that it is cheaper, in terms of good management of taxpayers’ money, to tear it down and start anew

than continuing to repair, not just mitigating the risk of some substances but also buildings that we have inherited from a pre self-government time that are arguably reaching the end of their natural lives.

The government have done a whole body of work in the housing directorate and are currently doing a whole growth and renewal strategy where they are essentially disposing of hundreds of government-owned assets in the property space because analysis has been done that it is simply more expensive to renovate and maintain them than to get rid of them and to build nice new homes for Canberrans.

Have you been a part of, or are you aware of, any work done in the directorate on a cost-benefit analysis of these buildings in their entirety, and not just the management of hazardous materials—about it being a better return for taxpayers to simply get a new building than continue to invest in what I might describe as a piecemeal approach over time?

Prof Taylor: The answer is that it was discussed, but I have not seen the concept. You might be conflating the situation here. If the building has a bit of peeling paint, for example, or it has some architrave which formerly had used lead-based paint, I do not see how that would warrant removing the whole wall and replacing it, when the whole wall is stable and you can seal the existing paint and paint over it. That is a very cheap option. Having done some home renovations myself, builders charge you like a wounded bull. There is also the other environmental assessment work that would be required, and the hazmat work, to ensure that that work has been done to a suitable standard. I do not think at this point that it is a good use of taxpayers' money, particularly when there is no risk.

All buildings, whether they are new or not, require ongoing maintenance, just as a home does; you are constantly painting, fixing and mending. With this re-painting and ensuring that the buildings are clean, a lot of the work revolves around cleaning the building. Painting is a standard operating procedure to make the thing look absolutely reasonable.

Ordinarily, with frequency of painting, it may be on a three-year cycle or it may be when it needs doing. But the cost of painting is far less than ripping down walls or half of buildings to replace materials which are a hazard but do not present a risk of harm. With the money that you would spend on that, I would rather see that spent on improving the access to resources for children to learn. I do not see that replacing the walls will improve their learning, because there is no apparent risk. That is my view on it.

There was some discussion. I am not sure where there was a systematic assessment. I think they had done some rough numbers. That is my rough recollection, but there is the cost of replacing buildings. Do not forget that if you were to run this program out, you would have to go through every government-owned building in Canberra, and there are a lot of buildings which are aged. It would be incredibly expensive to pull them down. The risk for those people working in those offices would not be that different from the risk for the children who go to those schools. Those people's blood leads will not be elevated, either; we know that adults' blood lead does not get elevated unless they have specific occupational exposures or they smoke, for example,

which is a rare thing these days, thankfully. Does that help to answer your question?

MR DAVIS: It does; thank you.

THE CHAIR: There were sustained calls from certain parts of the community to publish a list of every school that had a hazardous material in it. After a certain period of time, the government published that list of every school and the hazardous materials. Are there any benefits or downsides to publishing a list like that?

Prof Taylor: To the best of my knowledge, all of that information was available, and it is still available, at the front desk of schools. You can go in and ask for it. But I have looked at some of those folders, and there would be more than one folder, five centimetres thick. Do we expect mums and dads to trawl through all of that? It is available, but having it online just makes it easy. It does not change the risk. It does not change the fact that there are some hazardous materials in schools, and in many buildings across the ACT, as well as everywhere else in the country.

I saw that list. I think I was in Canberra; was it March when that happened? That rings a bell—March or April.

THE CHAIR: Sure.

Prof Taylor: A list was provided. It did not really change anything; it just provided people with access from their homes to look at that list. “Does my school have that stuff in it?” To be honest, if you knew the age of your school, you could pretty much work out whether it will have anything of concern in there; that is, if it is older than 1970, it is likely to have lead-based paint and probably some asbestos. If you live in a house of that age, or older than 1970, you are probably in the same bracket.

With improved access, you would still have to go down to the school to read all of the documents and understand what the documents are saying. Remember that these are really documents for tradespeople. The list provided a bit of extra transparency, but it did not change, improve or make the problem worse.

MR DAVIS: I am interested in what oversight you have, or the directorate has, about the management of lead paint and asbestos in non-government schools that you are aware of. Harking back to the chair’s question around that publicised list, one of the concerns I had was that I thought they were unfairly demonising, for lack of a softer word, government schools, when we know so many of these schools were built around the same time by the same contractors, and using the same materials. I wonder what oversight you have, or that you know the directorate has, of that.

Prof Taylor: I know there are older schools. There are Catholic schools and there are other types of private schools, of a range of ages. You would really need to talk to the Education Directorate. I did talk to them about it and they said it was not in their jurisdiction to deal with it, to the best of my knowledge. They were aware that there would be the same sort of issues for those schools as there are for government schools. There was discussion about sharing the hazardous materials strategy and management approach with those other schools and school bodies, so that we could have a harmonised process across the ACT. I do not know what happened to that. I do not

know where that is at.

You raise a very fair point. It is my understanding that that falls outside the ACT Education Directorate's control. It is not actually in their bucket of things to sort out. However, I do believe there was, at that time when I discussed it with them, a willingness to share what they had done, why they had done it, how they had done it and what the outcomes were, so that, for those schools, it would save them reinventing the wheel, so to speak. To be honest, some of the work does cost a lot of money to do all of the environmental assessments. That would be an extremely generous gift to all of those private schools. Does that help to answer your question?

MR DAVIS: That does; thank you.

MR CAIN: Mark, included within the scope of your work, there was a non-government school which had soil in its playing fields contaminated by PFAS from a former adjacent emergency services site. Was that within the scope of your advice?

Prof Taylor: No. It is a good question. I was aware of it, but my understanding is that PFAS issues in the ACT are dealt with outside the Education Directorate. The PFAS problem itself is dealt with by a different committee. I was aware that there was a fire station; I think that is what we are referring to. I do not remember the name, and I did not go to that school, but the stuff had migrated off-site, and PFAS was found in the soils of the school. I do not know to what concentration they were found, so I am not able to comment on the risk.

MR CAIN: I can illuminate it a little bit. The playing area was fenced off. The school was St Thomas Aquinas Primary School at Charnwood in Belconnen. They sectioned off far more than they were advised to section off, out of a sense of abundant caution.

Prof Taylor: You cannot deal with it until you know about it, and when you know about it, if you deal with it, that is the best practice that you can expect. It is the same situation with the lead-based paint issue. When it became a live issue, the directorate or whoever was involved, as with the PFAS, got onto it early. It sounds to me like they took appropriate action.

Again, it is the same situation whether it is PFAS or whatever else it is; there has to be an exposure pathway for those contaminants to get inside people. That would include ingestion or inhalation of dust from the sportsgrounds. What I can tell you is that we have looked at PFAS in dust and inside people's homes, because we also evaluated some fire stations down in Melbourne, and we wanted to see what it was like in people's homes. People's homes were not free of PFAS. These are homes like yours and mine, and they contain PFAS. It is not true that PFAS is everywhere; that is a bit of a gross overstatement. Where PFAS exists, typically, the problems that are associated with exposure are when people are drinking contaminated groundwater or eating vegetables grown on PFAS-contaminated soil.

Firefighters, because they are residing at a fire station, as happened in South Australia and Victoria, used to grow vegetables, or have chickens, because it is a home from home. They eat that food and they get contaminated. With the soil itself, it is the same

thing as lead in soil. It is a poor correlate to actual human exposure because you have to eat the stuff, or you have to eat something that is being grown in it, for that hazard then to become a risk. Does that help to answer the question?

MR CAIN: Thank you. In your opinion, should a school site contaminated with PFAS be included in the scope of this review?

Prof Taylor: It is not a hazardous material, as such—it is a hazardous chemical. Yes, it could have been, and it was discussed, but the PFAS thing is dealt with elsewhere. That is how the government had separated it. I was not asked to give any formal comment on it at all. If you are asking whether they should have just rolled it in, they could have done. We had a particular focus for this task. I did share with the Education Directorate some PFAS materials or some information about the work that I had done on PFAS, and we talked about this hazard risk as well. I think they were having conversations with their PFAS committee. Again, you will have to ask the Education Directorate that question.

In all honesty, it was really outside my terms of reference, because the terms of reference were clearly on the lead and the asbestos, and it was mainly lead paint, in any case. The PFAS thing came up quite late in the day. I only found out about it quite late; it was mentioned that there was this other issue. We talked about the same things that you and I have just talked about.

MR CAIN: In closing, it might sound a bit repetitive, but in your professional opinion, should an inquiry into school site contamination have included soil that contained toxic PFAS?

Prof Taylor: You would have to go and sample every school, to get controls and benchmarks, or where you might—

MR CAIN: But this was known. This contamination was known.

Prof Taylor: I do not understand the politics of it. Because it was an isolated case and the management team were largely dealing with internal issues, they could have included it, but as long as it was fixed, it does not really matter. If there was only one example of it inside the ACT—down at Jervis Bay, that is another whole complicated ball game, as I understand it, and let us steer clear of that because of the complicated politics—it is a single isolated case, from memory. If it has been dealt with elsewhere, and if there are no other locations, it keeps it clean and tidy—as long as it was being fixed, and it sounds like it was being fixed. There would be no benefit from merging it and bringing it in, if another part of the government machinery is dealing with that. It is being dealt with.

MR CAIN: I have a comment on your last remark. Obviously, with having two committees, for example, dealing with the same thing, it would make sense to have one approach rather than discrete approaches. Whether they end up being the same outcome or not is irrelevant. It would seem to be more efficient to bring in things that are, in principle, of the same nature.

Prof Taylor: It was made clear that I was available for comment.

MR CAIN: Yes.

Prof Taylor: But I think they were already across it; it was kind of sorted. I could not really have added anything to it. By the time I heard about it, it was quite late in the piece. It seemed to me that it was dealt with. I get your point. At the very start, maybe; I do not quite know what the separation of duties was. If it was an off-site contamination, how it has been dealt with in Victoria, where you have off-site contamination that has been identified to come from fire stations, Fire Rescue Victoria, as it is called now—it was the Metropolitan Fire Brigade—have taken ownership of that problem. They have done the assessments off-site and have developed remediation action plans.

To be honest, it is a bit of a moot point, as long as the problem was getting fixed. Evidence around finding what standards one should use for lead in dust is completely different from what you would use for PFAS-contaminating materials. All of that information is available. We do not have a lead standard for dust, except for removal of lead-based paint, and there are a few dated standards that sit with planning in New South Wales. But there are none in the national criteria, and there is no formal universal standard that people use for cleaning up lead dust. Having a panel working through that and then drawing on the best available standard from the world's best regulator makes sense to me.

MR CAIN: Mark, you mentioned Jervis Bay. Obviously, Jervis Bay is part of the ACT. I am not quite sure whether we have come across any instances of this issue from—

Prof Taylor: With Jervis Bay, you must know there is a Navy base down there.

MR CAIN: Yes.

Prof Taylor: What do you think they do at Navy bases? There you go. It is a well-known fact that there is a PFAS problem down in Jervis Bay. But it is a problem that pertains to the federal government. It is federal government land.

MR CAIN: Jervis Bay is also part of the ACT.

Prof Taylor: Yes, it is a shemozzle: who owns the problem? It is a very complicated matter. My understanding is that Defence have been doing some work down there, probably with AECOM or GHD, on that issue. The problem around that base is no different from the one down at Nowra, in New South Wales, Oakey, Williamtown or any of the military bases where they used AFFF, which is firefighting foam, for training and fighting actual fires.

MR CAIN: Are there any public schools in Jervis Bay that were in the scope of the lead and asbestos inquiry?

Prof Taylor: No.

THE CHAIR: There being no further questions, on behalf of the committee,

Professor Taylor, I would like to thank you for being here today. As there were no questions taken on notice, the committee's hearing for today is now adjourned.

The committee adjourned at 2.27 pm.