T R A N S C R I P T

ENVIRONMENT, NATURAL RESOURCES AND REGIONAL DEVELOPMENT COMMITTEE

Inquiry into the CFA training college at Fiskville

Melbourne — 14 December 2015

Members

Ms Bronwyn Halfpenny — Chair Mr Tim McCurdy — Deputy Chair Mr Simon Ramsay Mr Tim Richardson Mr Bill Tilley Ms Vicki Ward Mr Daniel Young

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Executive officer: Dr Janine Bush Research officer: Mr Patrick O'Brien

Witnesses

Mr Nial Finegan, CEO,

Ms Anne Northway, principal expert, land and groundwater, and

Dr Laura-Lee Innes, principal expert, waste, Environment Protection Authority Victoria.

The CHAIR — Good morning. We will start today's public hearing for the inquiry into the CFA training college at Fiskville. I would like to welcome and thank for their attendance the representatives of the Environment Protection Authority Victoria. We have Mr Nial Finegan, Ms Anne Northway and Dr Laura-Lee Innes.

Before we go into questions, there are a few preliminary comments we must make at the start of the hearing. In accordance with the guidelines for hearings, I remind members of the public gallery that they cannot participate in any way in the committee's proceedings and that they should maintain quiet at all times.

As outlined in the guide provided to representatives of the EPA today, all evidence at this hearing is taken by the committee under the provisions of the Parliamentary Committees Act 2003 and other relevant legislation and attracts parliamentary privilege. Any comments you make outside the hearing will not be afforded such privilege. It is an act of contempt of Parliament to provide false or misleading evidence to the inquiry. The committee may ask witnesses to return at a later date to give further evidence if required. All evidence given today is being recorded, and you will be provided with a proof of the transcript prior to it being made public.

As I have mentioned, we have a number of questions we would like to ask you today. We want to apologise in advance that we have two members of the committee that are required to leave for a short period during the public hearing, so they will ask questions first just in case they have to leave before we get to them. I hand you over to the deputy chair, Tim McCurdy, to start the questioning.

Mr McCURDY — Mr Finegan, given that the EPA submission relied heavily on the Joy report and the Joy report did not go beyond 1999, can you give us an overview of compliance towards environmental laws since that report was done?

Mr FINEGAN — From our perspective the Joy report was a clear moment in time and it raised concerns. From that point forward we have used our statutory tools to effect both the pollution abatement notice and clean-up notices at the site. Our interest and our activity at Fiskville has been much enlivened since the Joy report.

Mr McCURDY — Have you used all your enforcement powers to obtain, both historically and recently, what you need to establish?

Mr FINEGAN — We, through the statutory tools that we are using, have been engaging with the CFA to try to get an understanding as to the characterisation of the site at Fiskville. I think the short answer to your answer question is we have used our tools as best as we can.

Mr McCURDY — Any examples of that?

Mr FINEGAN — Any examples of how?

Mr McCURDY — Yes.

Mr FINEGAN — I think we have engaged fully with the CFA. We have been reviewing the reports that they have been giving to us, and we have been holding them to account in a public and transparent way.

Mr RAMSAY — Thank you for your time this morning. I am particularly interested in relation to the remediation works and what might be possible in the future, and I direct the question to Nial, the CEO. We have just returned from Germany, where we inspected a number of remediation sites on fire PADs through different cities. I am seeking your assessment of the feasibility of remediating the Fiskville site, either wholly or in part. Given what we know around the testing of the different areas of Fiskville in relation to PFOS, what actions would be necessary to address the risks associated with the site? What does the EPA do to keep informed of new developments for remediation — as I said, like what they are doing in other countries? What about the removal of other chemical contaminants from both soil and water? We have heard there are significant E.coli problems with water and other toxins on the site. We need a bit of a picture. I know you have your audits and works, but potentially could the site be remediated to a point where it is safe for some sort of training, whether it be academic or physical?

Mr FINEGAN — If I could step back one step to give the answer going forward, the audit system that we have is basically to allow us to be able to answer that question as to the future use of the site and what degree of

clean-up is needed. The 53 X and V audits are about fully understanding and characterising the site, and through that work the polluter — the CFA — will then understand what they need to do to remediate the site to required future use of the site. If the site is closed, so it is not going to be used as a fire training centre into the future, that changes the target of what you might clean it up for.

But if I talked in a generic sense, with any site that is polluted, we go through the audit process and at the end of the audit process you either get a certificate or a statement. If you get a certificate, it will say that this site is good for use, whatever you may wish to use it for. A statement will tell you that the site can be used for particular purposes, with a particular ongoing management regime on top of it. The answer to the question is: it is dependent on the future use of the site, it is dependent on the contaminants on the site, and then there is a balance of that intended future use and the clean-up costs whether there is public value return to do that.

Mr RAMSAY — When do you think you could give some indication of whether there is certification for future use? I think you have indicated 2017 — —

Mr FINEGAN — 2017 is the date in the notice. That is about the conclusion of this process that we are under. The future use is a question for the landowner, and the future use will determine the degree of clean-up. A generic way of answering the question: if you had a heavy industrial site and a business moved out and it was going to be used as a future industrial site, it would warrant a clean-up relevant to an industrial site. If you had an industrial site that was going to be used as — let us go to the other end of the spectrum — a kindergarten, you would need a much higher degree of clean-up.

Ms WARD — Welcome and thank you for coming along today. I apologise that we have had a couple of goes at this. In November 2012 the UFU or the United Firefighters Union requested that WorkSafe conduct an investigation. In April 2013 WorkSafe wrote to the EPA about this request. In May 2013 the CEO of the EPA, then John Merritt, responded stating that the UFU complaint:

 \dots does not raise any new issues in regard to water and soil contamination issues at the Fiskville premises. These issues were outlined in —

the Joy report. You have said that the Joy report was a clear moment in time, and that is right, but that moment in time ends in 1999. How are you sure that there is no pollution or nothing has occurred from 99 until we start to relook at Fiskville again in 2012?

Mr FINEGAN — I should clarify what I meant by the Joy report being a moment in time. I think how the EPA responded to the Joy report, shows a very different EPA than it was before 2009, and that is largely off the back of the changes we have gone through off the back of the Cranbourne East landfill incident. The EPA has almost reinvented itself. It has gone back and it has reauthorised all its authorised officers, for example. It has done a lot of training and a lot of work around its compliance and enforcement policy. What was different with the Joy report and then the Monash report that came about, it showed that clearly there was some harm at Fiskville. Our response to that was to sit down with the CFA, as we do with any duty holder, and hold them to account using our statutory tools in an open and transparent manner.

Ms WARD — Thanks for that information, but it does not explain to me why you have accepted that there is a gap between 1999 and 2012–13 where there is not any pollution or there was not instances that needed to be responded to as per the UFU's letter.

Mr FINEGAN — The letter, as I understand it, went to John Merritt, and John Merritt passed that on to WorkSafe, and they have carried on with other, in the UFU's submission to this committee — —

The CHAIR — Have you got a copy of that letter?

Mr FINEGAN — I would have it in here if I could dig it out.

The CHAIR — We will give you a copy of the letter. This is the letter, just to explain for the Hansard transcript. I do not have in front of me. What we are talking about is a letter signed by John Merritt, dated 22 May 2013. It is a letter to Mr Peter Anderson at WorkSafe.

Ms WARD — Where it says, 'does not raise any new issues'. Are you sure that that is right, that there are no new issues that arise between 1999 and 2012?

Mr FINEGAN — That is what Mr Merritt said at the time, and that is reflective of the fact that we have issued two notices to the CFA and those notices would be active and live. As the CFA went through characterising the site, any issues that would have come from that would have required our attention and action.

Ms WARD — Do you then say that there would have been contamination issues between 1999 and 2012 based on what you have since learnt?

Mr FINEGAN — There are historical, there are legacy issues at Fiskville. The issue of the letter coming in was about how we were dealing with those matters, as I recall the incoming letter from UFU.

Ms WARD — I think the letter was raising that they had environmental concerns, but I think that the committee has found it interesting that the EPA has relied quite heavily on the Joy report and not done any of its own investigation as to practices that occurred between 1999 and 2012–13.

Mr FINEGAN — The EPA, using the Joy report, was concerned enough with the Joy report to issue two statutory notices which were the clean-up notices which then triggered the environmental audit process, which is quite a stringent process. The intent of that process is to understand both the legacy and the ongoing issues on that side so that they can be managed.

Ms WARD — Looking back, do you think that there could have been a greater role for the EPA to play in this process?

Mr FINEGAN — I think looking back there have been a lot of practices at Fiskville which would be totally unacceptable by today's standards.

Ms WARD — Let me just pull you up on that. I am really interested in this idea about today's standards. We know that there is a lot of legislation that starts to occur in the 1980s that is ongoing and that the legislation is refined over decades, so while we can talk about today's standards, I think it is really important that we do actually talk about the then standards and how things were applied. It appears to me in the reading that I have done thus far that there are a number of breaches that did occur during the 80s and 90s against current legislation at that time. Would you agree with that?

Mr FINEGAN — I think there are many practices in the past which would not be acceptable today.

Ms WARD — That is not what I am asking; I am asking about the legislation at the time.

Mr FINEGAN — But the legislation at the time, and I would say custom and practice — I do not mean that glibly — but the way people worked — —

Ms WARD — I am sorry — I did not understand what you just said.

Mr FINEGAN — The legislative framework, if I can just explain it the best I can. When this Act¹ was written, it was pamphlet thick and it has grown over time to the size it is here with supporting regulations and the like. It has become very complex and the like. The practice between authorities such as ourselves and the CFA would have been very different back in the 80s and the 90s than they are today — the way they interacted with each other and how each other worked out.

Ms WARD — I understand that, but there is still legislation that has clear criteria about how you deal with waste disposal and how you deal with the transportation of hazardous waste, for example, and that appears not to have been complied with — and this is legislation that occurs in the 1980s.

Mr FINEGAN — Yes, so if we take waste transport permits, for example, our records would show that there is no record of permits before the legislative requirement or regulations change, but since then everything that went to Fiskville was covered by permit, and indeed there are very few permits.

Ms WARD — When did Fiskville get a permit to deal with hazardous waste or to dispose of hazardous waste?

¹ The Environment Protection Act 1970

Mr FINEGAN — No, this is the waste transport permit. There is nothing to show on our record that things were going to Fiskville after the regulations changed that should not have been going to Fiskville.

Ms WARD — Right. So when did Fiskville get a licence to deal with hazardous waste?

Mr FINEGAN — Fiskville does not have a licence. Fiskville does not have any EPA licence.

Ms WARD — So is that in breach of the law in the past? Because there were laws in the 80s about hazardous waste and the disposal, and they did not have a licence, so was that a breach of the law?

Mr FINEGAN — The whole concept of the muck truck going around, gathering up chemicals, bringing them to the CFA and burning them on site would not be acceptable today, and I do not think it would have been ever acceptable in law, but it was the practice at the time.

Ms WARD — It would not have been acceptable in law at the time, is that what you just said?

Mr FINEGAN — I would not think so.

Ms WARD — You would not think so?

Mr FINEGAN — No.

Ms WARD — The correspondence to the committee on 17 December 2015 states that in this instance the EPA will not receive progress reports or detail on the 53X audit prior to the receipt of the final report — —

Mr FINEGAN — Sorry; I am just finding it difficult to hear you.

Ms WARD — Sorry. The EPA's correspondence to the committee on 17 September this year states that in this instance the EPA will not receive progress reports or details on the 53X audit prior to the receipt of the final report in June 2017. It then goes on to say that the EPA receives quarterly reports from the CFA regarding progress of the clean-up plan which are not publicly released. Can you give us an explanation of how this is working? Does that mean that the EPA does not get direct updates from the auditor but receives reports from the CFA about their liaison with the auditor? How does this process work?

Mr FINEGAN — There is a requirement in the clean-up notices to make sure that the CFA keeps us up to date as to progress so that we understand that they are progressing the matters, and they have been doing that as they are required.

Ms WARD — Sorry; can you run that by me again?

Mr FINEGAN — As they are working through their audit and the activities required in the audit, we want to know that they are onto it — getting on with the job — so that is the nature of the update.

Ms WARD — How is that managed? So they have got an audit. They have got your notice that they have to respond to and implement. How does the follow-up work?

Mr FINEGAN — We have an environmental audit unit which oversees activities under the audit process to make sure that everything has been done in accordance with the requirements.

Ms WARD — How do they do that?

Mr FINEGAN — They receive reports in from the auditor on behalf of the CFA. If they inquire into that, and if they are happy with progress or if issues arise — —

Ms WARD — So the auditor is doing a report and then sending it through to you?

Mr FINEGAN — Yes.

Ms WARD — We understand that the quarterly reports are not made public, but are you able to give us some kind of indication of the context of these reports, of what is going on, how things are progressing, what is working and what may not be working? Are you able to give us any information at all?

Mr FINEGAN — We have had to give the CFA one sort of hurry up on progress reports — they were beginning to slip — but other than that they are complying with the statutory requirements of the notice. What they are working through is understanding and characterising the site.

Ms WARD — Are you monitoring the auditor's work? Are you monitoring how this remediation and clean-up is going, or are you just solely relying on the reports?

Ms NORTHWAY — I can talk to that. There is a requirement for a clean-up plan as part of the notices. That is a really detailed document that talks about not only what is possible at the site — so to your question, what standard are they cleaning it up to? That is a very detailed report that is part of the notice that gets supplied to EPA, and the auditor has to endorse that. The auditor is, again, an independent person looking at what consultants and the CFA are providing to look at that range of, I guess, clean-up that is possible at the site.

I guess the key point there is that EPA has an expectation of using proven technologies at sites to ensure that the technology meets the needs of the clean-up. That is inherent in the notice process. Our compliance officers — so the authorised officer who issued those notices — gets all of that information. We have very good relationships with our auditors, so if an auditor has a question out of session, if you like, out of the report, they regularly get in contact with our EPA officers.

Ms WARD — You have to forgive us because a lot of this is new to us, but does this process feel a bit hands off in terms of the auditors liaising with the CFA? You get some reports that come in to you, but you are very much an overseeing kind of body. Does it feel very hands off?

Mr FINEGAN — If I could maybe explain how I see the framework, starting with the principle that the polluter pays, we then have the environmental audit framework which is enshrined in this Act². We have a training and development program which all auditors must comply with, and then we authorise them as auditors. They are then out there in the marketplace and we issue a notice on a duty holder — we say, 'You must use an environmental auditor'. They can then choose who is the most suited to their task. In that sense the polluter is paying for all the audit activity and all the reporting that comes from that.

The auditor is, true to the act, responsible to the Victorian community, so there are indictable offences for them to mislead or misreport — so a very serious underpinning of the audit system to make sure that it is there in the process. On top of that we then have the environmental audit unit and our principal experts, such as Anne, who are there to support the auditor, so it is almost a 'phone a friend' to make sure they are up to date on the latest technology. We also then do audit audit reports to make sure they are robust and above board, and we do have the power to remove an auditor's ability to be an auditor, which has a serious impact on their professional livelihood, so to speak.

Ms WARD — Will you be auditing this one?

Mr FINEGAN — Like everything, I think there are many sites under environmental audit, and then there are some which attract greater attention, and I think this is one which attracts greater attention.

Ms WARD — It has attracted a bit of attention; that is true. You mentioned about having to give the CFA a bit of a hurry-up in terms of coming back to you with their progress reports. What is your view about the compliance of the CFA with the requirements that are being imposed?

Mr FINEGAN — Why I tried to go back into the history and forward, the watershed for us is that we make no apologies for using our statutory tools on any authority, whether it is private, public or in between. Fiskville came to our attention just about the time we had the road to Damascus moment where we changed how we interact with people. We, I would argue, are a much more professional — —

Ms WARD — This is the Cranbourne incident you are referring to? That was your road to Damascus moment?

Mr FINEGAN — On Cranbourne, in short, VAGO and the Ombudsman said the regulator was missing, the EPA had failed the community. EPA has acted deliberately upon that, and we are actually in the fifth year of a five-year program to transform how we act as a modern regulator. A big part of that is our compliance and

² The Environment Protection Act 1970

enforcement policy and everything that sits behind that. We will use our statutory tools. We do not do side meetings, we do not do letters of comfort — we do not do anything like that. We will just use the statutory tools given to us by the Parliament of Victoria.

When the Joy report landed, and why I say it was a watershed moment just then, it came when all of that was coming to a head, so this is our first real test under the new, re-envisaged EPA. We have used the statutory tools to the fullest. There was obviously some tempering and challenging around that, because people say, 'This isn't what used to happen'. We say, 'Well, what used to happen used to happen. This is what happens now'. So the statutory tools in here do ensure a degree of transparency.

Everything that we do is on the internet, for example. People can see the nature of the clean-up notices, and they can make comment on whether they think it is broad enough or too narrow or too focused or what have you. We have used two different tools within the clean-up notice — the V audit, which is about getting in and understanding immediate risks and harms in a very particular way, which then led to a whole lot of actions which ultimately led possibly to the closure of Fiskville. Then we have the X audit, which is our most comprehensive tool, which is about requiring the CFA to fully characterise — 'characterise' is the word we use — and understand the Fiskville site.

When those orders were issued, it was with a view that the site would continue as a firefighter training centre, so that is what the comment around your question, Mr Ramsay, was around. What is the degree of appropriate clean-up? The future use of that site will determine the absolute requirement for the clean-up. We require a clean-up as far as reasonably practical, and the practical is then tested back down to what is the future use of that site. The usual triggers for that would be a change in land use planning or a pollution concern that we have. In this case, it is a pollution concern.

Ms WARD — On 30 May the EPA issued a warning letter to the CFA for their failure to comply with the clean-up notice. Have you escalated or changed your regulatory responses because of this lack of compliance? Has anything around the way that you are managing this changed in response to that?

Mr FINEGAN — The fact that we have issued an official warning letter — that is an official letter; that is not just a pen-pal letter — is in line with our compliance and enforcement policy, which is again a public document. On one axis it has a culpability and on the other axis it has an environmental harm. Just to be slow, basically, in reporting against what it is an administrative part of the order would warrant an official warning, and that is what they got. If they continued to be tardy, it would then escalate up to a penalty infringement notice and up on to other action all the way through to prosecution.

Ms WARD — Thank you.

Mr RICHARDSON — Thank you for coming in today. I take your attention to the PFOS contamination, the committee understands that the EPA has been actively engaged with the CFA in relation to the Fiskville site since the Joy report, and the committee understands that the PFOS contamination in water at the site was not identified until early 2015, and that was by the Senversa report. Is this actually the case?

Ms NORTHWAY — I guess the 53V environmental audit report was finalised in 2014, and it had 22 recommendations about specific actions. They were prioritised in terms of highest risk. Those actions highlighted issues in terms of PFCs, so those perfluorinated compounds, and so there were a series of actions that the auditor required the CFA to manage as part of the original assessments and action then. In terms of your question, 'Were we aware of it before 2015?', yes, that audit report was published and it was publicly available. In fact that is what the quarterly report talks to when EPA receives it; it is a summary of those actions and how they have been complied with over time. As you would understand, there were major changes to the way surface water at the site flowed from Lake Fiskville. There was a lot of construction work to do to divert that water, essentially at the requirements of the auditor as part of a review of those assessments.

Mr RICHARDSON — Going deeper into the PFOS issue, the committee heard evidence from Senversa that the safe level of PFOS for dermal contact is 4 parts per billion. After doing a risk assessment, they recommended that in the firefighting training scenario those levels should be 80 parts per billion. Then Senversa witnesses informed the committee that after Dr Drew reviewed their findings, he recommended that the levels be increased to 2600 parts per billion. What is the EPA's position on the safe levels of PFOS in water being used for firefighting purposes and the contact with people's skin?

Mr FINEGAN — I think PFOS is a very interesting thing. The emerging issue around PFOS could be a teller for many other chemical compounds. The heads of EPAs³ meet regularly. We met last Monday, for example, and I raised the issue of PFOS. There is work being done on PFOS around the states by various EPAs in what could probably be called a disjointed way. Victoria — myself — has stood up and we have said, 'We want to help coordinate some of this effort'. There are conversations in the Parliament in Canberra, there are conversations in Queensland and New South Wales around PFOS, by way of example.

Laura-Lee attended a conference with environmental health officials on Friday in Sydney to talk about this issue. At our meeting in Perth on Monday we had the environmental health people there — the health professionals — and the issue about a safe level and a number is a hot topic, quite frankly. There is a lot of debate to and fro as to what a safe number could be. The EPA is looking to the advice of our health colleagues as to what would be an acceptable level for PFOS. Do you want to add to what you heard on Friday, Laura?

Dr INNES — I think I would just add that with regards to the audit and things happening at Fiskville they are very much being looked at on a site-by-site basis, and therefore the numbers that are published in literature or that certain people are recommending are being considered in particular for each of these cases so that you can assess whether or not, for example, people are exposed to certain waters in certain ways or if they are eating fish, or whatever it might be, so that we can ensure that whatever levels are set are particular to that site and the activities that are occurring there. But there certainly still is some discussion that will need to be had, as Nial said, with regards to the health professionals and their setting of a number and then from there how we use that number in the environmental setting in regards to how people are exposed to the environment with those levels of contaminants in them.

Mr RICHARDSON — What is the current level at the moment that the EPA is relying on?

Dr INNES — We use a series of different values, whether they be from the US or other countries where they have set values, and they are considered as part of the auditor's work. In regard to the site in particular, where there are soils, for example, that may have to go off to a landfill we would look at that on a case-by-case basis and determine if the management practices for the disposal of those soils to that landfill are appropriate in that instance. So we draw on a number of different standards that are currently in place, and we assess them based on the assumptions that were made to set those standards and therefore whether they are appropriate in the particular case or not.

Mr RICHARDSON — What evidence is that based on at the moment? What is leading the EPA in that regard at the moment?

Dr INNES — Largely they are based on, I suppose, exposures for us. Once the contaminant is in the environment, then it becomes human exposure to the environment, whether it be water or soils. There are a number of assumptions that have been made in determining whether or not those numbers are suitable in the specific areas where they have been set. For example, in Australia and Victoria we have different geologies and different types of soils and therefore different mechanisms for the transport of those chemicals through the soils to come into contact with humans. With water it might be in regard to how much water they are exposed to or how much they consume if they are consuming waters that might have these chemicals in them. Those are the kind of things that we look at when we are determining whether or not a standard is appropriate for use here in Victoria.

Mr RICHARDSON — The reason for those changes — what was the nature of the changes from 80 parts per billion to 2600 parts per billion? What was the rationale and the decision-making that underpinned that change?

Dr INNES — I would have to go back and look at those specific reports in particular.

Mr RICHARDSON — Okay, thank you.

The CHAIR — We would like a response to that after you have considered your paperwork.

³ Australian state, territory and New Zealand EPAs

Ms WARD — Because it is quite a big jump to go from 4 parts per billion to 2600 parts per billion. I accept what you are saying in terms of each environment is different, but that can also create confusion around an inconsistency of approach when you have got various environments having different levels.

Dr INNES — Would that be helpful if we were to provide something that gave some explanation for that?

Ms WARD — Yes.

Mr RICHARDSON — Yes, that would be great. Just going back historically to 1997, the EPA chairman wrote to the then chairman of the CFA, Len Foster, on 14 March 1997, indicating a willingness to help develop guidelines for the use of firefighting retardants and foams by fire and emergency services. Were such guidelines ever developed? What was the nature of the EPA's involvement?

Mr FINEGAN — I checked that very question before we started this morning. The short answer to that is no. The advice of the EPA back to the CFA around that time was a general concern about the persistent nature of these chemicals and any of their use should be limited. Beyond that, there were no guidelines written.

Mr RICHARDSON — Would that have set a red flag that there were concerns about persistent chemicals? You have got a statutory authority approaching the environmental regulator, and there was no follow-up subsequent to that.

Mr FINEGAN — I think looking at it from my perspective, if you think about something like PFOS, if you are the head of the EPA, you look right back up to the chain of where these chemicals come from, how they are permitted into Australia, then how they are permitted into use throughout the various jurisdictions and of course particularly in Victoria. The EPA has a number of very slight touches on that, very late towards the end — and maybe Laura can talk to that in a bit in a moment — but ultimately it comes in through WorkCover and it goes into the workplace as a controlled item or it goes into your home as a consumer item. It is only when it is released to the environment and indeed the horse has bolted that it becomes an issue for the EPA.

I think one of the things that this inquiry has given me thought about is: how do we get further back up the chain so that we can protect Victorians before these chemicals are brought into Victoria? I think on one hand there is the public good, the benefit that comes from a chemical such as PFOS around firefighting, and then that public good needs to be addressed with: 'What is the harm that goes with it?'. I think what we are seeing here is the emergent risk with some of these chemicals. To simplify: people are selling a wonder product which will do all these great things for you. What hold do we need to have on that wonder product before we fully and completely understand it and before we release it into the environment?

Mr RICHARDSON — Taking on from that question, then: is the fault then lying with where the foams and the remediation work that we have got the moment? What other option is there for the CFA other than approaching the environmental regulator to get advice on foams? Has not the EPA fallen down here? This is another historical example of where the EPA was completely missing in action.

Mr FINEGAN — Rather than just defending the EPA for the sake of defending it, I would think that whether it is the CFA, whether it is a refinery or whether it is Joe Bloggs PLC, the obligation is on them. Indeed if chemicals come in through the WorkCover authority, there is an occupational health and safety requirement on any individual to understand what they are doing. There is the close-up risk that needs to be understood and managed, and then there is the broader environmental risk. It is important to know what tools would be available to the EPA to prevent such an action. For example, the fire training facilities are not licensed — they are not scheduled premises under the Environment Protection Act. So there is the public argument around the public good, the public use, of this wonder product of firefighting foam. If that goes through processes, through another statutory authority, and it is seen to be fit for purposes by another regulatory authority, does the EPA have the authority, does it have the power indeed, to come in and prevent that? I think we need to have these conversations before rather than after. I think it is a good reflection for the committee.

Mr RICHARDSON — What interaction did the EPA have with WorkSafe during that period that my colleague Vicki was talking about in terms of that? From 1996 through to 2011, what interaction did the EPA have with WorkSafe?

Mr FINEGAN — The bits I have been able to find, I think the EPA was saying back to the CFA — whether it was the use of recycled water or whether it was other matters — it was saying that, 'You, CFA, need to consider the occupation health and safety impacts of this', and referred matters back to the WorkCover authority.

Mr RICHARDSON — So WorkSafe was in that area? From 1991 to 2011, we heard evidence that WorkSafe visited Fiskville on 117 occasions and issued some notices. We are still waiting for the advice on what those notices were. Did WorkSafe ever have any interaction with the EPA for any of those visits or any of those notices that they issued?

Mr FINEGAN — I look to my colleagues. I cannot recall off the top of my head, but I can check back into the records — —

Mr RICHARDSON — Can we check that? That is another thing we can take away. Just finally, the committee understands that Wynsafe Occupational Health Services wrote to the chairman of the EPA on 16 June 2009 seeking advice about whether the EPA had any concerns or requirements regarding the proposed amendment of the E. coli criteria from 10 organisms to 100 mils to 150 organisms to 100 mils for this use only. The EPA advised our committee that the EPA chairman did not receive any correspondence or information, but we subsequently had an email of correspondence between the CFA and EPA. Has that been brought to your attention?

Mr FINEGAN — My full intent for this committee is to do everything we can to be an open book and find documents. Again history, changes in systems, the readiness of being able to produce those documents is another reflection for us. But late on Friday, 4.45 or thereabouts I believe it was, we found the answer to one — the Friday before the Monday. It looks a bit — —

But also, if you think that if we had been heard when we were first called, it would have been after the event. So we continue to search for whatever records we can have to assist this committee. Perversely, the records — we found a response to that letter, and it was actually in our files on water, and those files are currently with the WorkCover authority, because they have ordered certain documents off us for their own purposes. That is why it was difficult to find those things.

I think — stop me if I am speaking too much and not answering your question — the incoming request was about how to use recycled water for firefighting, and I think, the long and short of it, the answer was back to, 'There is a framework around the use of recycled water, which is that water which comes out of a water treatment plant' — and there were some general guidelines done around how you might use that water. In the context of the millennium drought the CFA and MFB came to EPA and said, 'Is it appropriate to use?', and there was a document written around that. There was another request or — —

The CHAIR — Was it a 'yes' or 'no' to the request to increase the E. coli low levels?

Mr FINEGAN — That is where I am trying to go to. There are guidelines and there is a document available — I think we have given it to you — which talks about class A, B, C and D-type waters and it talks about their appropriate uses. But the important thing to note about class A, or whatever water, is that that is water which comes out of a water treatment plant — out of purple pipe, so to speak. That is the system that is regulated, overseen, by EPA. In the context of the millennium drought, the MFB, CFA were asking if they could use recycled water for firefighting. There was a conversation around that. But again, that would be pumping up to one of those purple pipes, drawing water off to go fight fires. It can be used — —

The CHAIR — Was it a yes or a no? Or there was no answer?

Ms WARD — There was no answer.

Mr FINEGAN — I think the answer was: 'This is not a regulated activity by the EPA. What you need to do is consider the occupational health and safety and environmental impacts and seek your own advice'. So what is the context of that? There is the grey water, the class A water, which comes out of the recycled system; then there is the water which is referred to as industrial water, which could be on any facility. Again, the advice is, 'You can use that water, but you need to be mindful of the occupational health and safety impacts of that'. So our advice back — and that is what the response found on Friday would indicate — was a reminder back to the

CFA: 'If you're going to use this water, you as the user need to consider the occupational health and safety impacts of that because how that water is used, what PPE' — personal protective equipment — 'users might be wearing, their exposure, all those things, become factors within it'.

Mr RICHARDSON — So what is considered by the EPA to be the safe levels for E. coli bacteria in water?

Mr FINEGAN — It depends on the use of the water and your exposure to it, and that is — —

Mr RICHARDSON — In terms of firefighter training, what would be a safe level, in acknowledging that there would be contact with skin?

Mr FINEGAN — I go to this document, which is on the use of reclaimed water, and in that table there is a list of various classes of water. Throughout the document it talks about — —

Excuse me while I leaf through it. For example, I am looking on page 20. I do not know if you have the document.

The CHAIR — Which one is it, sorry?

Ms NORTHWAY — Publication 464.

Mr FINEGAN — Use of reclaimed water.

The CHAIR — No, we do not have that. Is that part of your submission?

Mr FINEGAN — I thought we provided it to you previously. We could give you this. This is a publicly available document. Just before I describe what is in this document, I come back to the point: this is water which comes out of a water-processing factory.

The CHAIR — Do you mind reading what the document is for the transcript?

Mr FINEGAN — Yes. It is *Guidelines for Environmental Management* — Use *of Reclaimed Water*. It is publication 464.2, and it is dated June 2003.

The CHAIR — Thanks. We do not have that with us today.

Mr FINEGAN — The document itself is close on 90 pages, and there are a number of tables. There are a number of different tables in the document which talk about whether you are using reclaimed water — recycled water — whether you are using it for irrigation, whether you are using it for sprinkler systems and the like. Class A water, for example, will have an indicative objective of less than 10 E. coli organisms per 100 millilitres of water. Then it gives an example of ranges of uses. It talks about agriculture, human food crops which can be consumed raw; industrial open systems with workers exposed. Then you go right up to class D water, which is water which has greater than 10 000 E. coli organisms per 100 millilitres. That is for non-food crops, including instant turf, wood lots, flowers. Then there are ranges in between B and C which talk about uses.

But this document then goes on elsewhere to talk about the need for occupational health and safety so, without trying to go round and round the houses, it depends on the context of the use of the water. In a training facility where you have constant repeated exposures, I think you would expect to see a higher degree of protection of the workers on that. That is reflective of some of the notes in here which talk about irrigation and talk about minimising exposure to the irrigated water.

Mr RICHARDSON — Great, thank you. Thanks for your time.

The CHAIR — Do you think the Environment Protection Authority has done a good job in the situation at Fiskville in containing the contamination and preventing it spreading?

Mr FINEGAN — I think since the issuing of the statutory notices we have used the powers available to us to the fullest extent to hold the CFA to account for both understanding and then ultimately cleaning up that site for whatever its future intended use would be.

The CHAIR — And you are saying in the last five years, since there was that review and a change in terms of compliance, that you have got the powers that you need to do a good job?

Mr FINEGAN — I will just say out loud that the EPA is currently under a review by the state government. There has been a large public consultation — there is a ministerial advisory committee who are looking at what the EPA needs for the next 40 years.

The CHAIR — But what do you think in terms of the Fiskville situation?

Mr FINEGAN — I think in terms of Fiskville, using the tools that we had in the way we have since the Joy report, I think we have seen a deliberateness in our actions to hold the polluter to account. What do I mean by that? That they need to understand what has happened on that site. They need to further characterise the site and its impacts beyond the site and then come up with a clean-up plan which is therefore appropriate for whatever the intended use of that site might be. I think if you go back in history, I think you see custom and practice which would not be acceptable by today's standards — the application of the rules at moments in time which were in accordance with how people worked.

The CHAIR — Can you just go through what sort of chemicals or toxins are of concern to the EPA at the site at the moment?

Mr FINEGAN — Given that it is a firefighter training centre, there was a lot of hydrocarbons and benzenes and the like which were used in the general firefighting training. They are matters of concern to us, but in recent years they have moved to gas, so they have stopped burning fuels and waste.

The CHAIR — But at the moment, at the site now, what are the toxins or the chemicals that you are concerned about?

Mr FINEGAN — The chemicals that I would be concerned about are what residues are within the dams, given the way it operates within a certain regimen.

The CHAIR — But benzene — what are the names of them?

Ms NORTHWAY — Yes, so a range of hydrocarbons. There could have been also solvents, so they could be chlorinated solvents, petroleum hydrocarbons, but a range of hydrocarbons would be our general comment. There is a range of landfilling and the question about buried drums. That is something that the auditor is investigating. Obviously we have talked about PFCs today, but there would also be a range of heavy metals that could potentially be at the site. It all goes back to — and this is where the 53X environmental audit comes in — the auditor has a requirement to consider any historical activity and the associated contaminants and make sure they are assessed appropriately at the site, so — —

The CHAIR — Sorry, but I am just looking at the submission that you provided to us. One of the recommendations is high priority, which I think you mentioned earlier, relating to mitigation of identified potential risks to ecological receptors. These include the prevention of water in dams and Lake Fiskville leaving the site; meeting water quality objectives in the downstream waters; and remediating surface water and sediment in the dams and Lake Fiskville. And of course it would also be about containing soil. Do you think that that has worked? Has that happened? Has the contamination been contained?

Mr FINEGAN — There has been a lot of work on site to change the water quality, for example, through Lake Fiskville.

The CHAIR — Do you believe this has worked?

Mr FINEGAN — I believe that, given that there are no further pollutants going in, it is not going to get any worse than it is. There is a lot of management around the water on site. I have seen that myself, how the water is being managed between the various dams.

The CHAIR — But the neighbours complain that water continued, well after the involvement of the EPA, to run off into their properties. There were complaints from neighbours where burning off plumes of smoke drifted over their properties at a time when the EPA was involved, so I ask again: do you believe that the works that have been undertaken have been successful and are doing what you are requiring to be done?

Mr FINEGAN — The works are not concluded is the — —

The CHAIR — But as I understand it, it is about containing things as it is now. It is not about remediation but preventing further pollution of neighbouring properties.

Mr FINEGAN — There is no burning, so that is the easy one put to one side.

The CHAIR — Is that a result of the EPA making that decision?

Mr FINEGAN — I think that is as a result of the site being closed.

The CHAIR — So the EPA did not request that?

Mr FINEGAN — No, the EPA, its interaction around burning, particularly around tyres, was to basically broker an agreement between neighbours. The CFA's training site is exempt.

The CHAIR — The EPA is the mediator in these circumstances, not the regulator or enforcer?

Mr FINEGAN — My understanding is Parliament has decided that firefighter training centres would not be subject to EPA rules around air emissions.

The CHAIR — But I do not think the council or the neighbours were told that.

Mr FINEGAN — No, but that is my inquiry into it. But what I have seen in the records that I have been able to find is the EPA influencing and bringing around a change to practice in the CFA where they would talk to neighbours, they would think about wind direction and the like when burning.

The CHAIR — But in the meantime the contamination continues, the pollution continues?

Mr FINEGAN — Yes.

The CHAIR — This is a bit of case there. As I understand it, neighbours believe that when it rains heavily, water still runs, or was running, into their properties. We saw piles of soil with a sign that said 'Contaminated soil'. I understood the idea was to put vegetation over it. This was considered the practice for containing the soil, but it still blew around. When we spoke to people who were rehabilitating airports in Germany, those experts were saying that that form, which you are currently still allowing to happen at Fiskville, is something of the 1970s, that you do not put an earth cap on contaminated soil mounds and put in vegetation; you now cover things in some sort of a synthetic blanket. Do you still think that what is going on at Fiskville and how it is being conducted to contain the contamination is good, is okay?

Mr FINEGAN — No, I think we will continue to learn as an organisation and continue to — —

The CHAIR — But what do you say about the method of containing the soil in terms of an earthen cap versus a synthetic blanket over the mound of soil?

Mr FINEGAN — In the short term covering it with soil will prevent it from blowing away, because what I think the Germans might be saying is how can you guarantee the length of time that the soil with the cap will be there.

The CHAIR — They are saying that is 1970s technology.

Mr FINEGAN — Without understanding and seeing the technology I do not want to comment on that, but if I do reflect on what we do in landfills in Victoria, and we have a BEPM — best practice environmental management regime, which is seen in other fields as best practice worldwide. We use earthen caps on landfills, for example.

Ms WARD — So those mounds would be filled with PFOS being from the PAD and so on that would have had extensive use of foam, so every time it rains PFOS would be leaching out of those mounds? How are you preventing that?

Mr FINEGAN — It depends on the capping material. If it is an impervious clay, the water will not go into it; it will run over it and down the sides.

Ms WARD — So is there impervious clay capping these mounds?

Mr FINEGAN — I will follow up on that, and I will come to you on that one. The technology in Germany, if it is a better technology, that would be something that we would look to. One of the benefits of the nature of our tool is we can seek best practice outcomes, so we will continue. If there things that we need to learn and need to see from overseas, we will take those and adopt them. It is probably the — —

The CHAIR — I think this is also about monitoring. At the moment you just seem to be accepting whatever you are told by those employed by the CFA about what is going on there. I will give you another example before you answer. We heard from WorkSafe that they have been looking at the ability to prosecute perhaps, but there is an issue — and this is on the public record — with the way the samples were taken by representatives of the CFA. Because those samples of the water may not have been taken in the appropriate way, they may not be able to use that as evidence.

In your case, what is to say that the way that things have been handled at the CFA in terms of containing the chemicals and the contamination, how do you know that that has been done in the proper way? It may have been, but the thing is when you wonder — samples taken of water to test the quality do not look like they have been done properly, action taken in terms of trying to stop water run-off or soil blowing into neighbouring properties, maybe that has not been done appropriately either — how do you know, as the overarching body responsible to make sure that we are living in an environment that is free from pollution?

Mr FINEGAN — I come back to all of this has been done within the environmental audit framework. The environmental auditors are professional people who are authorised under the act and are both professionally and personally liable for their actions and indeed are indictable — —

The CHAIR — But you do not need to check? There is no point having those sort of penalties if nobody is checking.

Mr FINEGAN — We do check. Anne gave an example of how we check and work with the environmental auditors. But given the questions and given your insights from Germany, what I would say is the system is —

The CHAIR — Not just about insights from Germany but also what neighbours and others are saying of the area, that there is run-off, water was running off, soil was blowing around, so it is all those things.

Mr FINEGAN — Yes. If I take the soil by way of example, if it is a capped mound, the soil that would be blowing off the top would be the capping and not the internal guts of — —

The CHAIR — But you do not know?

Mr FINEGAN — I would imagine, yes. Do I know now, to answer you that question yes or no? No, I do not know.

The CHAIR — Can I just go back to the PFOS and the PFOAs? A notice that you put out was an EPA fact sheet 'Perfluorinated chemicals'. Have you got a copy of that?

Mr FINEGAN — What is the date on it?

The CHAIR — It is publication 1611, August 2015, and it talks about what are PFCs, what is PFOS, what is PFOA.

Dr INNES — I do not believe we have a copy here.

The CHAIR — There is a copy. This is related to other questions about keeping up with the times. This is a fact sheet that you put out. When obviously there were the media reports about the more present-day contaminants, which are the PFCs —

Mr FINEGAN — Yes.

The CHAIR — this notice was put out by the EPA to explain to people what PFCs are. It also says:

There is limited evidence about the health effects on humans from PFOS and other PFCs -

including PFOA.

And:

There have been numerous studies on animals. However, the link between the effects of PFCs on animals and how that relates to human health is not yet clear.

That is what the notice says.

Mr FINEGAN — Yes.

The CHAIR — We have heard different information regarding PFOA as opposed to PFOS — that is, that it is of extremely great concern, the PFOA chemical. In fact recently in Ohio a woman was awarded \$1.6 million in damages because of illness as a result of contact with PFOAs. So how does that fit in with your notice to the general public that PFOA and PFOS is of no concern to health at this point in time?

Mr FINEGAN — This document was produced around the time of the Penshurst regional training centre to give some information to the affected community around those sites as to what these words were meaning: what are PFCs, what is PFOS and the like. The health and veterinary advice in there comes from the chief health officer of Victoria and the chief vet.

The CHAIR — So that is your process, is it? You use the chief health officer for health issues.

Mr FINEGAN — So if there is a health impact on something, we will seek the advice of the medical doctors, the chief health officer. For veterinary stuff we will seek the advice of the chief veterinary officer.

The CHAIR — Did you seek any further information from anywhere else?

Mr FINEGAN — No, we asked the experts in the field.

The CHAIR — Okay, so why was the EPA the organisation that would issue this notice rather than the department of health in this case?

Mr FINEGAN — When the issue of Penshurst became live, and there were a number of regional training centres as well where there were concerns around PFOS, the EPA took on the role of coordinating the response effort around that to make sure that people were working in a consistent way around it. So we took on a leadership role to try and coordinate efforts. That is why we took on the issuing of this notice.

The CHAIR — The notice does not seem to make any differentiation between PFOS and PFOA, but our understanding is that there is quite a big difference. That is the evidence that we heard from the scientists and the medical people. That notice does not seem to differentiate between the two.

Mr FINEGAN — It brings the two together. You are quite right.

The CHAIR — Would that have been the chief health officer who put those together?

Mr FINEGAN — There are a number of meetings behind the production of this, which included people from health and people from the veterinary space of DEDJTR. We went and we spoke to and got the advice from those statutory officers for inclusion in this.

The CHAIR — In terms of the PFOS and PFOA, that would have still been the advice from the chief health officer on both of those perfluorinated chemicals?

Mr FINEGAN — We spoke to both the chief health officer and the chief vet to ensure that we were reflecting what their understanding was of both the impact on human health and the impact on animal health.

The CHAIR — Do you know where they were getting their advice?

Mr FINEGAN — Without going right back into my notes on the nature of the conversations, basically we asked them the question and received their advice. They have had peer reviews done and the like. What I have recognised in any of the conversations I have had with experts in different fields around PFOS is that it is an emerging area and there are numerous views on it. Again, what is our role? Our role is to seek the advice of the best-placed people to draw all those various opinions and views together and say what does that mean in a Victorian context. From our perspective, the right and appropriate people to ask those questions of in Victoria are the chief health officer and the chief vet.

The CHAIR — Moving on now to the local residents, what do you see the role of the Environment Protection Authority is in terms of protecting neighbouring properties of a polluter?

Mr FINEGAN — In a general sense?

The CHAIR — I guess in a general sense first and then we will go on to — the examples are the two properties: the Callow property and the Lloyd property.

Mr FINEGAN — I think what I would like to be able to achieve, and I think it is reflected in our annual plan this year for our plan of current work, is we want to be in a position to give community confidence in their environment. That confidence is not necessarily saying that it is good for you or bad for you, but you should be able to understand what is in the environment and how it is impacting on you. And how do we then hold the duty-holder to understand what is on the site and make that information as transparent and understandable to the community as possible.

The CHAIR — Perhaps we could use the Lloyd property for example. What was the role of the EPA in terms of protecting that property?

Mr FINEGAN — I think again ensuring that there is confidence as to what is the environmental consequence of living next door to the Fiskville site. A lot of what we are doing is supporting other agencies in some of those conversations. I know that Anne has been out and had conversations with adjacent landowners. We have invited ourselves to those conversations, so to speak.

The CHAIR — So, for example, I think we heard evidence from the Callow property that tin and plastic and metal was blowing into their property, and that there were plumes of smoke dropping ash and so on into their property. Again, was it just a mediator role in trying to work something out or an enforcer?

Mr FINEGAN — Coming back to the enforcer bit, if I can put it that way, just recognising that it was not a scheduled premises. It does not have a licence from us. It does not have a lot of what are the normal statutory tools for us to grab onto. But again, when I look back over the interactions of — —

The CHAIR — So whose responsibility would it be then, if it is not the Environment Protection Authority's? One, why do you not require a licence of them? And two, who would be responsible?

Mr FINEGAN — We cannot require them to have a licence for air emissions because they are exempt and they are not covered in the scheduled premises. That would require a change in legislation, and that is probably something for others to consider. I was going to express a view there and I stopped myself. Looking back at the various interactions between the regional office and the neighbours, I think there was a 'How can we broker an agreement between neighbours' type of approach. I think if you look back, again with a 2015–16 eye, you can see some basic customer care practices which could have been improved on — like helping and bringing people together. I think that on some of the properties you can see, at least from my reading of the documentation — again, actual experience might have been different, but as I can see it — I can see the EPA brokering meetings between local government, the property holders and the CFA. Again, trying to use influence to try to bring parties together and have a conversation around it.

The CHAIR — So what about the litter stuff — the plastic, metals and things that were blowing onto the property? Is that different to the air pollution? Are you responsible for that or not?

Mr FINEGAN — If it were a licensed landfill, for example, and there was litter and things blowing off premises, those would be matters covered in the licence conditions, and we would be able to infringe the organisation for doing that. When you have one state authority living next door to the community where it is

any of the neighbours, you would expect a good neighbourly approach. In the past that was basically the way things were working. Going forward — —

The CHAIR — So the EPA does not have responsibility to issue any sort of notice?

Mr FINEGAN — Litter in general is a local government issue to manage. If you throw a cigarette butt out of your car, the EPA deals with that. If you do illegal dumping, right at the other end of the scale, the EPA deals with that, and then local government deals with littering in between. Again I come back to this: you would have hoped, you would have expected people to be good neighbours, ultimately. That is the phrase I use. I use it with landfills, I use it with others — having that respect for your neighbour so that you do not allow debris and litter to fly across your fence lines.

The CHAIR — Tim, do you have some further questions?

Mr RICHARDSON — Yes, I do — just an overarching question in relation to your interaction with other authorities, particularly WorkSafe and the Department of Health and Human Services. I picked up on a comment you made before about referring to WorkSafe and stating the obligations upon the employer. That goes without saying, and a key fundamental principle of the EPA is accountability and enforcement. There are various reports and assessments, particularly by the Auditor-General but then other reports, that say that the legislative powers of the EPA are sufficient. But case in point, each and every time it is the enforcement and accountability of implementing that. The classic one is the hazardous waste assessment in June 2010 that was very scathing of the EPA. But WorkSafe relies on the environmental assessment of the EPA, so referring goes around in a nice little loop. Who is accountable for nailing these issues? Who is accountable for that in that moment where statutory authorities are meant to protect the health and safety of the community?

Mr FINEGAN — The health and safety for workers is the employer's responsibility ultimately and primarily. You talk about the powers that the EPA has. A lot of what I have heard about people talking about what the powers are of the EPA — I think people have a misplaced understanding of the powers of the EPA. For example, under the Occupational Health and Safety Act there is this preventative duty, which is to prevent harm. That same duty does not exist under the Environment Protection Act. The Environment Protection Act in very simple terms, the way it is framed, for us to take action we almost have to wait for something to go wrong and then prove that something went wrong, that an individual was responsible for that at a certain moment in time et cetera. One of the things that is timely is this inquiry being parallel with the inquiry into the EPA which is considering the powers of the EPA for the future. I think that if we are to prevent another Fiskville, I think the EPA would need very different powers to what it currently has.

Mr RICHARDSON — So effectively what you are saying is that despite the five-year reform that has gone on from the EPA, there is no proactive approach still within the EPA of taking the initiative effectively and being proactive in these circumstances? It is the OH&S act and WorkSafe that is — —

Mr FINEGAN — No, when I was talking about the OH&S act, I was talking about the reclaimed water. Other documents we have we will talk about the environmental risks and suitable uses of that water.

Mr RICHARDSON — In broad terms, where there is an issue — but for the Joy report, where would the EPA have been with regard to Fiskville? It probably still would not have been on the radar, is an assumption you can make.

Mr FINEGAN — In general terms unless there is a pollution event beyond the boundaries of a site or something comes to our attention, we would not go in — —

Mr RICHARDSON — Despite neighbours complaining persistently, despite adjoining properties bringing grievances forward? When does the EPA become proactive and assess?

Mr FINEGAN — The CFA site at Fiskville had no EPA licences of any sort, so it would not have been on our radar as a site to go in and check, because we had no reason to go in and check.

Mr RICHARDSON — Despite neighbouring properties?

Mr FINEGAN — I will come to that. The only thing in the whole of the Fiskville site that had any sort of works approval from the EPA was the small water treatment plant for the new residential properties at the front.

Around about the complaints from neighbours around the site, I think that is the type of thing which under the new regime would instigate a response, which would then require us to go in and inquire as to those things. If it were about litter, for example, people might have gone in and spoken to them about litter management or fencing or the like. I just think again that if this inquiry were not happening, if the Joy report had not happened, I think the issue of PFOS, for example, the Williamtown issue in New South Wales and a number of sites — 16 defence sites across the nation — would bring that to our attention, and we would have done some of the proactive things we have done in my time, which is to write out to all the users of that chemical. First take an assessment — what do you understand of it, what do you know of it? — and then move in.

In terms of a proactive approach, within the EPA we have a top 6 wicked problems. So there are a number of wicked problems which face the EPA which are huge on any scale. You look at it, do we have the right statutory tools? Do we have a proactive tool to be able to go in and tackle it? The answer to that is often not, but we do not shy away from it. Take underground petrol storage systems by way of example. It is a big problem across the state — old petrol stations with in-ground storage creating issues for the environment. We have no legislative hook to get into that, but we do not shy away from it. So we are doing an awful lot of work around understanding that problem.

I can point to lots of other areas that show we are taking a proactive approach. We are pushing to the limits of our legislation. I think the fact that we are at the limits of our legislation and our legislation does not meet the future and current needs of Victorians is reflected in the fact that the government has us and the act under review to say that we need to sharpen up the toolkit we have available to us.

On the Fiskville site, there is a long legacy of issues at Fiskville, ranging from the use of the muck truck, for example, bringing in unknown elements onto that site to be burnt, chemical sludges within the dams, which are being marshed through. But I think the emerging issue is PFOS and how we then manage that.

Then there is the good neighbour test, which is if people are making complaints about a site, what can we do? We are looking at that, we are improving what we do around that. We have a triage system in the EPA where a number of complaints used to trigger an action. That clearly does not say, 'What happens if you have got one person making the same complaint multiple times?'. Again, we are getting more active.

I have gone and I have met individual people — again at a different site — where they have had complaints into the EPA for 20 years and no action has been taken. With our more proactive approach, going and saying, 'Why are these people complaining for so long? Why is nobody listening to their complaint?', we can then get officers in. But I must say that often the actions we take are beyond our regulatory powers. They are with us being the broker, the influencer, bringing parties together and saying, 'Sort it out'.

The CHAIR — Just on that, what about litter abatement notices? Do you have the power to issue them?

Mr FINEGAN — Pollution abatement notices?

The CHAIR — Yes. For litter, for rubbish. I am going back to the Lloyds or the Callows — the idea of rubbish and litter on their property coming from the Fiskville training site. Do you have notices that you can put on the offender? You are saying that you do not have the regulatory tools. I am just trying to understand. In that case do you have a notice?

Mr FINEGAN — We use pollution abatement notices at landfills, for example, to stop stuff from flying across — yes.

The CHAIR — So that only applies to landfills or it applies to anybody?

Mr FINEGAN — No, that is just an example that I am aware of where we have used it. I am not aware — —

The CHAIR — But it could apply for any neighbour or a property?

Ms WARD — Is there a reason why it would not have been used in this instance — the litter abatement notice?

Dr INNES — Would it be helpful if we could provide you something that explains how litter is managed and the tools that we have and how we work with councils? It is quite a combination of rules and responsibilities, I suppose, and when we would use our tools or when council uses their tools. Would that be helpful?

The CHAIR — We are not asking for the custom and practice; it is more about whether you could have done certain things — that is all.

Ms WARD — Would it have been inappropriate to use a litter abatement notice in this instance?

Mr FINEGAN — Chair, my belief of it is this is an area where we would have not used powers. We would have expected council to use theirs around litter. In terms of litter, where we tend to get involved is litter or debris blowing off licensed sites.

The CHAIR — We are just asking, though, can you? On the one hand there seems that there is a lack of regulatory powers perhaps, but then we are also saying, 'Are there also some powers that are there that are not being used?'. That is what we are asking.

Mr FINEGAN — Laura has offered. We will give you the framework, and you can see then within the framework where different people take on — —

The CHAIR — What powers you have, what are used and what are not used.

Mr FINEGAN — Yes, and whether we should have stepped in if somebody else was not using the powers.

Ms WARD — When a local council is not stepping in and is not being proactive to resolve the issue, what role can you then play on top of that?

Mr FINEGAN — Could you say that again?

Ms WARD — If council is not being proactive and if the litter is continuing on a property and council is not resolving that issue, what role can you play in making something happen?

Mr FINEGAN — We will get you the answer to that.

Ms WARD — I am interested in this idea of the site and how the site is being managed and what will happen in the future. We have had discussion around the mounds and how that can be worked through. One of the things that we have learnt in our hearings is the role that concrete plays, especially in ongoing PFOS and PFOA pollution, and that the concrete PAD, for example, acts as a sponge and every time it rains will continue to leach PFOS and PFOA out, and off that runs. What plans do you have, if any, for how that PAD site will be managed and how to prevent PFOS and PFOA from continuing to leach out?

Mr FINEGAN — The work of the environmental auditor is to go through and understand that. If I just take concrete, for example. If the concrete is holding PFOA or PFOS and it is washing out each and every time, one of the solutions there would be to remove that concrete from that site and place it in a large landfill where you can actually manage that issue.

Ms WARD — Is that the kind of thing that you are canvassing?

Mr FINEGAN — Or you could manage the water on site. There are a number of engineering outcomes for that. The audit process and the work of the audit is to determine what is the most appropriate ongoing management of those risks on that site.

Ms WARD — What is recommended to happen to the PAD?

Mr FINEGAN — That is going to come from the auditor.

Ms NORTHWAY — We do not have those details to hand today, but it is the kind of thing that we could ask the auditor or the CFA to provide clarity on.

Ms WARD — That would be good, because every time it rains — and I know we are heading into a dry season — any of the work that you are doing to clean up is continuing to be eroded somewhat by the fact that PFOS and PFOA is continuing to leach out into the surrounding environment.

Mr FINEGAN — I get the question. My understanding of the site, and from my own visit and from the explanation that was given to me, is that the water that would run off the PAD is into the dams and the water in those dams is circulated between those dams and it is not — —

Ms WARD — You are certain that any rain that goes onto the PAD all goes into dam 1, that there is an overflow that goes out, because one of the things that we hear is that PFOS appears in all sorts of different areas because of water flow and the way that water does not necessarily just go in one direction?

Ms NORTHWAY — It is a question for the environmental assessors and the auditor to consider, but they do have a requirement to consider any surface water flow path and confirm that it is acceptable at the boundaries, and if not, to investigate that further.

Ms WARD — If you could get back to us with that, that would be really great, thank you. Is there a reason why the testing stopped at 18.5 kilometres down the creek in terms of PFOS and PFOA pollution?

Mr FINEGAN — My understanding is that the furthest test in the way was 40 kilometres, but the PFOS was found at 18 kilometres.

Ms WARD — Okay. At 40 kilometres it is no longer detected. Is that the case?

Mr FINEGAN — I asked, 'How far down the creek did we test for it to?', and somebody told me, '40'. I said, 'Was PFOS found there?', and their answer was, 'No. The furthest PFOS was found was 18'. But that is off the back of a conversation.

Ms WARD — From my memory, at 18.5 it was still at unacceptable levels. What is your plan to remediate the creek?

Ms NORTHWAY — The environmental auditor required that off-site impact — so, the creek — was investigated further. There was then a series of, I guess, risk assessment by toxicological experts to assess what the impact downstream was.

Ms WARD — This is the toxicologist appointed by the CFA?

Ms NORTHWAY — Yes, but independently reviewed, as the auditor has to make sure they have suitable experts. The auditor also has experts overviewing that work. That work was all put together. That is in the 53V environmental audit report. A number of testing was done downstream, both in the water — —

Ms WARD — So this is the same auditor that is saying it is okay to increase PFOS levels for skin contact to up to 2600 parts per billion.

Ms NORTHWAY — I do not know. I cannot comment to that. I am not sure what that quote is.

Ms WARD — It is.

Ms NORTHWAY — Okay. I guess that assessment on site is required and then the risk in terms of exposure had to be assessed, so if people had access to that water, sediments, how they would be exposed. The CFA did some consultation downgrading it with people who might have access to that. That would again be a question where we would need to go back to CFA to confirm those details.

Ms WARD — So part of the audit is also for neighbouring properties to be remediated as well?

Mr FINEGAN — Sorry?

Ms WARD — Is it a part of the audit for neighbouring properties to be remediated as well, where we know that there are quite high readings of petrochemicals, including benzene as well as PFOS and PFOA? Are these neighbouring properties to also be remediated?

Mr FINEGAN — At the moment it is about understanding what is on the Fiskville site, and then if there are impacts beyond that, the audit will broaden onto that.

Ms WARD — We understand there are impacts beyond that. We understand that there are neighbours who have got very high readings of PFOS in their blood. We know that animals have been contaminated with PFOS. We know that it is contained within the soil, so what remediation plans have you got for those neighbouring properties and how are you going to help them?

Mr FINEGAN — We do not have any remediation plans at this stage. That is a process of the audit, and 2017 is the end date for the audit because there is a lot of work to be done and considered.

Ms WARD — Does it concern you that there is no plan to clean up these sites until after 2017 — that there are people still living on these properties and that there is no plans as yet to clean them up?

Mr FINEGAN — That is the time line. It is 2017. There is a lot of work to be done to understand the impacts.

Ms WARD — No, I understand that. Thank you. I heard you the first time that you said it. Thank you for that. Does it concern you that things are not moving faster, that these properties are not being remediated or there is no plan to remediate them at this point?

Mr FINEGAN — I think there is a lot of understanding of what is on site. There is a fair amount of work to be done on site, and remediation clean-up is part of that understanding. What happens off site at this moment, I do not know.

Ms WARD — I understand, but there is nobody currently living at Fiskville. There are people living at these properties, so I do hope your response, just quickly — —

The CHAIR — Can I just ask: the adjoining properties are not part of any clean-up notice?

Ms NORTHWAY — The clean-up notice requires impacts to be considered on and off site. So as part of the 53V environmental audit there were soils, sediment and surface water sampling off site to the south. Again, it was the auditor's decision, using his expert knowledge, to assess potential exposure pathways, so surface water was the primary one whereby they sampled the neighbouring property.

The CHAIR — So the auditor's view was there was no need to do anything now for the adjoining properties, and the EPA accepted that assessment.

Ms NORTHWAY — We would need to confirm that with the auditor, but the findings of the 53V also highlighted a number of additional works to be done, which included looking at other properties, and that is the work of the 53V. We should point out that although that audit is due in 2017, it does not mean that there are not activities currently under way, because the outcome of 2017 audit is that the site has been suitably cleaned up for the proposed use. So clean-up activities will commence and be included across that period of time — —

Ms WARD — In these private properties?

Ms NORTHWAY — On site, but the auditor has to — —

Ms WARD — When you say on site, though, you are just talking about Fiskville.

Ms NORTHWAY — Yes, I am talking about on site at Fiskville, but the auditor has to consider off-site impacts as part of that audit as well. We are not clear today exactly what is happening at all the adjacent properties and what the auditor's opinion is or what additional assessments have been done, but you have heard from other consultants such as Senversa who are engaged to look at those works and provide expert advice. The auditor would be privy to all of that information.

The CHAIR — Tim has one more question.

Mr FINEGAN — I will just answer that. It is important, the clean-up notices and the tools we have are living documents but not cast and forget, so if information from this inquiry or information from other sources comes to our attention which raises a concern, we can then extend and go further. While it concerns me — of

course it concerns me as a Victorian — I go back to where we want to be in a position. We want people to have confidence in their environment.

Ms WARD — Absolutely.

Mr FINEGAN — There is a whole lot of other stuff that flows from that, but the primary concerns are those ones. I can point to other examples elsewhere in Victoria where pollution has gone beyond the boundaries and the EPA, with funding from government, has gone in to clean those sites because the original polluter was no more, for example. On this site the CFA is there. If there is pollution beyond the boundaries which is impacting and continuing to impact, it might impact and then pass and because of it, it has got to be gone. If it was intransient or a persistent thing, it is a different question. It is then: how do you clean it up? The clean-up will always be linked to, 'What's the future use of this?'.

Another thing I will just say, just a reflection perhaps for the committee to consider, at a premises such as the CFA training centre you have to look at what are the buffers and what are the other controls that you can have to protect the community from being in close proximity to it. I am not getting into who was there first or all the rest, but if this was a licensed premises elsewhere, we would have buffer zones around it to make sure that there was a clear enough watershed, airshed around it. That is the interplay between land use, planning and the Environment Protection Act that needs to be considered as well.

Ms WARD — Just quickly, what do you consider to be the best strategy for remediation of PFOS contamination in soil and water? What do you currently consider to be best practice?

Mr FINEGAN — Based on the conversations I had on Friday I would say there is a lot of work going on throughout the country, and I put my hand up to bring that together. I know that Defence is doing a lot of work. Queensland is doing a lot of work. I do not have that answer yet, but what we want to do is know what the best practice is. The best practice could range from leaving it in site and managing it in site or taking it off site and putting it into a managed facility elsewhere.

Mr RICHARDSON — Just quickly, just to the Auditor-General's report of December 2011, *Managing Contaminated Sites*, where they found that the EPA along with councils were not effective in managing contaminated sites and consequently cannot demonstrate that they are reducing potential risks to human health and the environment to an acceptable level. Given this finding from the Auditor-General and the fact that the Joy report was the only source to then bring to the attention of the EPA the contamination on site, what action has the EPA taken now on other sites where firefighting foam could have been used or on any practice or training sites? What action has the EPA taken?

Mr FINEGAN — I have written to the owner-operators of all sites that I could identify which may likely have used firefighting foams to take first and foremost a stock audit, and we are awaiting those responses. It is important to note that some of those sites are on commonwealth land jurisdiction, and then you will get jurisdictional issues around that, but what I am finding with regard to the issue of PFOS is a willingness of people to work together and to understand the risks that go with it.

Mr RICHARDSON — Given that finding in 2011, can you say with confidence that the EPA has a proactive approach to protecting human health and the environment to acceptable levels? In terms of Fiskville and other training sites, have there been assessments done of other sites by the EPA or its auditors?

Mr FINEGAN — I will provide you a written response on that, if I may, to show you the actions we have taken since the 2011 VAGO report on contaminated sites to give you some confidence or otherwise as to the actions the EPA has taken.

Mr RICHARDSON — Has it assessed other firefighting sites or where foam has been used in instances of chemical fires?

Mr FINEGAN — Without going and checking records, the sites that I am aware of are Fiskville, obviously, and then the regional training centres that the CFA have been using. There is a program of work around understanding the impacts there, working with the CFA and others, some under statutory tools and pollution abatement notices on those sites and clean-up notices as we work through it. As I said, I have written to the

airport operators. I have written to Defence. I have written to other major hazard facilities that might use PFOS to understand what knowledge they have so that we can then map it and then work forward from there.

The CHAIR — Just quickly before we finish up — I am sorry we are bit late — you have worked in the public service for some time, and the private sector. Just going on from what Tim was saying, is it normal that in this case the polluter's consultant seems to provide information to the chief health officer, the EPA, the Department of Defence and the department of agriculture? Is this a normal occurrence in terms of good governance, to have this situation? Have you ever heard of it before?

Mr FINEGAN — As I am getting to know all the names and see the commonality of some of the names, I have raised this with other people who have been relying on them and talking about peer review. I have made the comment that you might need to broaden the pool of peers that you are using for peer review. Without making any comment on people, if you ask the same people the same questions all the time, as professional or as diligent as they might be, they will continue to have the same views. I think it is time for some other views to come in. It is a good governance thing. I think if you see what is happening at the commonwealth level, there is a Senate inquiry into PFOS. There is stuff around Williamtown in New South Wales. Queensland has been doing work, and there are a number of defence sites in Victoria. I think there is a greater effort required to understand the issue of PFOS around what it means for us.

The CHAIR — Thank you very much for your time and for coming in today.

Mr FINEGAN — Thank you.

Witnesses withdrew.