

TRANSCRIPT

STANDING COMMITTEE ON THE ENVIRONMENT AND PLANNING

Inquiry into unconventional gas in Victoria

Melbourne — 6 October 2015

Members

Mr David Davis — Chair

Ms Harriet Shing — Deputy Chair

Ms Melina Bath

Mr Richard Dalla-Riva

Ms Samantha Dunn

Mr Shaun Leane

Mr Adem Somyurek

Mr Daniel Young

Participating Members

Mr Jeff Bourman

Ms Colleen Hartland

Mr James Purcell

Mr Simon Ramsay

Staff

Secretary: Mr Keir Delaney

Research assistants: Ms Annemarie Burt and Ms Kim Martinow

Witnesses

Mr Steve Vlahos (sworn), Assistant Auditor-General,

Mr Dallas Mischkulnig (sworn), Sector Director, Performance Audit, and

Ms Maree Bethel (sworn), Manager, Performance Audit, Victorian Auditor-General's Office.

The CHAIR — I declare open this hearing into onshore unconventional gas and welcome representatives of the Victorian Auditor-General's Office. I indicate that evidence taken under oath here today is protected by parliamentary privilege. If you repeat that material outside, it may not be protected by parliamentary privilege.

I ask you to provide a short presentation on your tabled report, and then we will follow up with some questions.

Mr VLAHOS — Thank you, Chair, and also thank you for inviting us to speak to the committee today on its inquiry into unconventional gas in Victoria.

My name is Steve Vlahos, and I am one of two assistant Auditor-Generals responsible for managing the Auditor-General's performance audit program. My portfolio covers infrastructure, investments and the environment.

As you know, Chair, the role of the Auditor-General is to provide assurance to Parliament on the performance and accountability of the Victorian public sector, and for this reason we value the opportunity to participate in the inquiries of the committees of Parliament by sharing the findings of our reports.

We are pleased that the committee's terms of reference require the committee to have regard to our *Unconventional Gas — Managing Risks and Impacts* performance audit report and appreciate the committee's invitation to discuss the report with you today.

The report's recommendations are based on extensive and rigorous information collection and analysis, and we hope they may offer some useful insights to inform the committee's deliberations and final report.

My colleague Dallas Mischkulnig will present on the performance audit report today, but before I hand over to Dallas to share some key insights from the report, there are a couple of comments I need to make.

Firstly, I would just like to remind the committee that section 16 of the Audit Act precludes the Auditor-General from questioning the merits of policy objectives in his performance audit reports, and for this reason our evidence to the inquiry today will not comment on the merits of any proposed policy on unconventional gas. Instead we will provide the committee with audit findings on whether Victoria is well placed to effectively respond to the potential environmental and community risks and impacts of onshore unconventional gas activities in the event that these proceed in this state. This includes findings of relevance to the committee's terms of reference in relation to risks of onshore unconventional gas activities and the current regulatory environment. The intent of this audit is to apprise policymakers so they can make decisions that balance economic benefits with environmental and social impacts and to give due regard to the strengths and weaknesses of our current regulatory regime; it presents objective, findings and recommendations to inform the final decision of government so that it can be made in the best interests of the Victorian community rather than individual stakeholders.

Secondly, although I am sure the committee members are aware of this, the Audit Act also precludes us from disclosing confidential information collected through an audit, except for a report to the Parliament. In practice what this means is that the VAGO representatives here today will not be able to answer questions that go beyond the information included in our report to Parliament.

With that, Chair, I hand over to our director, Dallas Mischkulnig.

Mr MISCHKULNIG — Thank you for the opportunity to speak to you today about our performance audit *Unconventional Gas — Managing Risks and Impacts*. This audit assessed whether Victoria is prepared to manage the challenges of unconventional gas should an industry develop. We found the risks and impact of unconventional gas in Victoria have not been comprehensively identified or assessed. There are major problems with applying the regulatory system to manage the risks and impacts associated with these activities, and leading practices that other jurisdictions have identified for managing these risks and impacts need to be considered for Victoria.

Information on risks is needed to properly inform decisions about economic, environmental and social sustainability of any future unconventional gas industry. These risks occur across the life cycle of gas development, from exploration to decommissioning and after care. Scientific literature and reviews have concluded that these risks can be managed if an appropriate regulatory system is put in place and is administered well. The audit concluded that Victoria is not as well placed as it could be to respond to the

potential environmental and community risks and impacts of onshore unconventional gas activities in the event that these proceed in the state, as neither of the above two criteria has been met.

As the committee are well aware the overseas and interstate literature and experience have illustrated the potential significant risks and impacts associated with this industry. As a result it has become extremely controversial both here in Victoria and elsewhere. The potential impacts of developing unconventional gas resources include, but are not limited to, competition for groundwater; contamination of groundwater, soil and air; and landscape impacts including habitat fragmentation, land use conflicts, competition for natural resources; noise; traffic; industrialised landscape; social impacts that affect livability and amenity; and impacts on human health.

Importantly, while many of these risks are also common to other industries and existing land uses, the scale of their impact is potentially much bigger with unconventional gas. They can affect a large area of land both above and below the surface. It is important to consider the cumulative effect of these over time and alongside other land uses. Our regulatory framework is not set up to do this. What is less well understood is the likelihood and consequences here in Victoria and how well they can be controlled within our regulatory framework.

Our current framework is complex and fragmented, does not address all unconventional gas risks and the roles and responsibilities of regulators overlap and duplicate. These issues are well known and have been identified in a number of reports and reviews. Addressing these matters and incorporating better practice principles will place the state in a better position to deal with the key challenges presented by an unconventional gas industry. This has been experienced in other jurisdictions where the industry has emerged. The framework needs to be more reflective, adaptive and systematic in its approach. It should adopt better practice risk-based principles and performance outcome approaches and prescribe best practice controls where these are known.

We also found that the earth resources regulation group within the department had not effectively overseen the industry's compliance with the regulatory requirements. For example, it did not identify or target specific risks associated with unconventional gas for its inspection and audit programs, and it has not implemented the majority of the recommendations out of our 2012 compliance audit. It is now in the process of addressing this.

So the way forward: the audit presents a chapter which talks about how the state needs to consider the broader issues of land use planning and environmental impact assessment associated with the industry. There are opportunities to improve the early identification of sustainable areas for unconventional gas and the regulation of these should an industry proceed. There is currently no land use planning to determine whether extracting gas in a particular location will sustainably meet community needs and safeguard the priority economic, environmental and social values. The starting point is to improve the way earth resources are identified and assess appropriate land and resource use in terms of sustainability.

Once a region has been identified as potentially containing unconventional gas, a land use plan for the area should be developed to identify, assess and resolve land use conflicts and prioritise and map these potential land uses. Key landscape, environmental and social factors and considerations need to be taken into account to assess best land use options for the community as a whole. Prospective licensees could then be provided with improved information around the potential for unconventional gas in an area and the key economic, environmental and social considerations that form part of an assessment and approval process. The type and level of mandated risk-based impact assessments should be tailored around these considerations. Assessments and approvals should then be aligned to risks posed by particular activities undertaken in particular locations. The level of rigour and oversight applied should also be proportional to the severity of the risks.

The processes should be transparent and applied across a region, such as the sedimentary basin, and consider the cumulative impacts of all current and future land uses on, below and above ground natural resources. Community consultation should provide the opportunity to comment on and influence decisions across the life cycle of a project and, if a project goes ahead, should enable those affected to understand the issues and risks and how these are to be managed.

As the committee knows there are a number of recommendations that have been made by the Auditor-General in the report.

The CHAIR — Further commentary?

Mr MISCHKULNIG — That is the conclusion.

The CHAIR — Okay. Can I start with perhaps a definitional issue first off, your inquiry, *Unconventional Gas — Managing Risks and Impacts*. The moratorium actually goes further than unconventional gas; it was widened in 2013 or thereabouts. Do you have any commentary about conventional gas, and are your findings applicable to conventional gas or not?

Mr MISCHKULNIG — We did not particularly look at conventional gas. We focused on unconventional gas and how it had been managed since the early 2000s. Some of the findings have more broader application across earth resources management, but we did not particularly look at those as individual types of resources.

The CHAIR — So we should not take the lessons or the commentary in this to apply to conventional gas, strictly?

Mr VLAHOS — That is right, Chair. The findings and the conclusions relate directly to the issue of unconventional gas.

The CHAIR — I am just trying to get this absolutely clear, for the obvious reasons.

Mr MISCHKULNIG — Yes. But the Chair may note that the recommendations, some of them do have broader applications.

The CHAIR — About processes?

Mr MISCHKULNIG — Yes.

The CHAIR — The other point I wanted to ask — and there are a lot of questions, but I will just confine myself to two at this early point — the points that are made about the national harmonised regulatory framework for natural gas from coal seams, you look at progress and steps towards that. Is there any particular reason why you are accepting or adopting that framework as opposed to another framework, perhaps with a higher environmental and regulatory standard?

Ms BETHEL — Thank you, I will try and address that question. We use both of those, if you would like. We use the table where we compare the national harmonised regulatory framework principles, because they have been adopted by all the states and agreed to by all the states, so we make our comparison of the current regulatory framework against those. But also within the context of chapter 3 you will see that we talk about other better practice regulatory systems, and we refer to ones like Alberta, Canada.

The CHAIR — That is where I am going.

Ms BETHEL — Yes. So there is a mixture of both within there. Where we have seen that there are better practices in those systems, we directly refer to them within the document.

The CHAIR — So I am correct in my initial conclusion that there is nothing sacrosanct or magical about the national arrangements?

Ms BETHEL — No.

The CHAIR — There are different arrangements in other jurisdictions that could be equal or potentially better?

Ms BETHEL — Yes.

Ms SHING — Thank you to you and to your office for the report itself, for the preparedness to come along today and to give further evidence and to respond to our questions. A couple of questions that arise for me in relation to the audit's objective and scope, looking at the extent to which:

... Victoria is well placed to effectively respond to the potential environmental and community risks and impacts of onshore unconventional gas activities in the event that these proceed in this state.

Without wanting to take you to the edge of section 16 as it applies to expressing merits on a policy, it would appear to me that the report concludes that the answer to that question is no, the state is not in a position to be able to effectively manage unconventional gas risks. You have stated that in the audit summary and in the body of the document itself. To that end, at what point is a state, in a hypothetical scenario — and I note that we are inviting some speculation here — in a position to be able to effectively manage the risks that you have identified in the context of the report?

Mr MISCHKULNIG — I think the appropriate answer to that is that, as we have discussed with the committee previously, this audit was intended to be a little bit more forward looking and looking at where the state currently is and where the strengths and weaknesses of the current regulatory system and approach are. I do not think we can answer your question directly. Obviously it is not a matter that the audit specifically addressed. But I think the principles and the issues that we have raised are those that we think need to be considered through this process and by government. We are in a privileged position, as we have mentioned in this report, that we are not playing regulatory catch-up, as other states have done, where this industry has emerged very quickly. We have got the opportunity to look at some of the issues that we have identified in the report in preparation for that.

Ms SHING — Just following on from that, the timing of the report itself is an interesting one, and the audit, in the context of the moratorium in effect from 2012 and then the scope of this particular inquiry. What was it that prompted the audit to be conducted in the way that it was — noting the fetters that operate as far as an expression on the merits of policy or otherwise — when this question was known for some time to be the subject of a parliamentary inquiry?

Mr MISCHKULNIG — Initially this audit was flagged a couple of years ago when we do our annual planning and environmental scanning. The area of mining activity had been an area that the office had not looked at for quite some time, and so we had on our forward plan to do this sort of an audit. During the planning of this audit in 2014, from the middle of 2014 when we started planning it, we were looking at ways to carve up that work, either in a single audit or a series of audits. During our consultation with government and key stakeholders we decided to look at exploration in the first instance and then some of the risks associated with that, and unconventional gas came up as something that had been going on in the state and that we thought would be a useful framework in which to look at how well new risks emerging out of activities are responded to and managed by the state. Although the moratorium was in place, the inquiry was not announced until later in that year.

Ms SHING — Later which year?

Mr MISCHKULNIG — 2014.

Ms SHING — Finally, if I may, Chair, the issue of risks covers regulatory risks and impacts as well as observations of systemic operation and shortcomings. What about the community and risks associated with community engagement, in terms of attitudinal responses and in terms of the way in which this debate has been raging for a very long period of time and has had temperatures rising across the state for many years? How does that fit within the way in which this audit was conducted and the way in which that was taken into account?

Mr MISCHKULNIG — Again, I think we believed that as an independent office we would be able to report on what we saw as the issues and risks and try to understand them in the context of this state. A lot of that anxiety that we saw in the initial planning was reflective of activities that were particularly happening in Australia, in Queensland and to some extent New South Wales, and the extent to which they were transferable to this state was less obvious.

Mr DALLA-RIVA — Thanks to VAGO again for presenting. I am interested in some of the conclusions that were referenced and a comment that Dallas made. I do not want to put words in your mouth, but you mentioned the department's capacity or lack of capacity to deal in a regulatory framework with unconventional gas. There was a paragraph you read out about the department, about earth resources. What was that again?

Mr MISCHKULNIG — That is when we looked at that the earth resources group within the department have not effectively overseen compliance and regulatory requirements to date.

Mr DALLA-RIVA — And the ineffectiveness of that?

Mr MISCHKULNIG — Yes. As we referenced in the report, we did an audit in 2012 looking at compliance across a number of agencies, and we identified some issues that required to be addressed. When we looked at that area within this — we referenced in the report some of the examples where, as I mentioned, the risks were not fully understood, the compliance activities were not targeted to those risks and there were some breaches that were identified but not really addressed in any meaningful way.

Mr DALLA-RIVA — Would it surprise you — this is a question without notice and perhaps without knowledge — that some of the evidence we have been given by certain departments indicates that they have got adequate risk coverage? Would that surprise you?

Ms BETHEL — As part of our follow-ups to our audits we put the recommendations to the department to answer, and the department has recently answered against our compliance and enforcement recommendations that came out of the 2012 audit. Even that response, which was a month ago, itself indicates that the earth resources regulation has been very slow to address our recommendations. Other groups within DEDJTR have addressed those recommendations and implemented those recommendations, being fisheries and biosecurity, but earth resources are still yet to.

They have commenced on some of them, and we identified that they had implemented 2 out of the 22 recommendations. They have now started work on some others. Mostly they are about being a risk-based regulator, of which the principles are well known, and it is well accepted that that is what our regulators in Victoria should be moving towards. Looking back, if you look at the EPA, they went through a whole process to become a risk-based regulator. Those principles, as I said, are well accepted, well known and seen as best practice but still not implemented within earth resources regulation, but they are beginning on that journey.

Mr DALLA-RIVA — I note that on page 33 of your report you say:

Numerous reports from 2005 to 2012 raised issues with the capacity of the system to effectively regulate conventional petroleum and minerals industries even prior to questioning its suitability for unconventional gas activities.

Is that the basis of what you make your statement on there, Maree, in relation to the slow uptake —

Ms BETHEL — Yes, exactly.

Mr DALLA-RIVA — adapting to the new — —

Ms BETHEL — Partly. Some of those reports were internal departmental reports conducted by consultants on behalf of the department, and they recognise some systemic issues, but also adding to that, we looked at what are best practice risk-based regulator principles. We have done that in a number of audits that the Auditor-General has conducted, and we have also added those in addition to those internal departmental reviews.

Mr DALLA-RIVA — If I may, Chair, just one more question: are they referenced at figure 3D on page 42? Are those the codes of practice used in Victoria, Queensland — —

Ms BETHEL — No. They are separate. Figure 3D was specifically looking at codes of practice and best practice regulation controls against the risks that unconventional gas poses. The things that I am talking about are the principles of what a good risk-based regulator are — things like identifying high risks and prioritising your resources to those risks, determining how many compliance audits you will undertake, determining what you will focus on as your core issues over 12 months and keeping a watching and view on others. There are a whole of principles associated with being a good risk-based regulator. This here is referring to codes of practice about specific risks that unconventional gas poses.

Mr DALLA-RIVA — We did not do too well, though, based on that figure.

Ms BETHEL — No, and that brings it back to what you referred to before. As part of the audit we looked at codes of practice that had been implemented across a number of countries, and even within New South Wales and Queensland, around unconventional gas. Admittedly, though, those places have an unconventional gas industry; Victoria does not as yet. They were required to do those codes of practice out of a need, because the industry existed, and they identified that their regulatory system did not address those risks of unconventional gas that they were seeing. Theirs was, if you like, what we call catch-up regulation in those areas. We have not

seen any jurisdiction yet, except maybe one, that has been on the front foot around a whole lot of identifying and managing the risks.

Mr DALLA-RIVA — Which one was that?

Ms BETHEL — Norway. We have seen Norway has some good examples of —

Mr DALLA-RIVA — I am on the next flight out.

Ms BETHEL — what we would call performance-based outcome, and they have got some really good examples, but it is also difficult for us to comment because we are not there auditing their system. But on the surface it looks good.

Mr LEANE — In the roles of the regulators, something I think that we found surprising in evidence on this particular reference is water authorities gave evidence that they play no role in any regulation of any mining process, even in current ones. Is that something you took into account in your report as a recommendation — that those authorities should be in play, particularly with the resources that they are charged to take care of?

Ms BETHEL — That was one of the areas we looked at, that we also found there were inconsistencies. Water corporations and DELWP were not clear on whose role was what and whose responsibility was what, and I could use the wrong terminology here, in terms of putting boreholes down — who licenses those boreholes, who is responsible for that. Our clear understanding is that it is the water corporations' responsibility, but when you look at those licences, they mostly focus on issues around quantity and the licence conditions are around those. There is not a lot of licensing around quality and impacts from those boreholes.

We talk about that in our report. We talk about responsibility around decommissioning and around abandonment of those boreholes, and it is unclear. It seems that it is DEDJTR's responsibility in relation to abandoned boreholes, but in terms of decommissioning, again when we talked to the water corporations and DELWP, as the administrator of the Water Act, there was a lack of clarity around roles and responsibilities in that area. The report highlights that, but it makes no specific recommendation except to say that there is a regulatory gap around it.

Ms BATH — Thank you for your submission. I am following up on Mr Dalla-Riva's point with regard to the earth resources department. I am interested to learn more about the risk-based regulations. You listed a couple of them, or three of them. Where could we access that or an example of those full lists?

Ms BETHEL — A very good example I guess of a process and also the principles of what a risk-based regulator is in the review of the EPA undertaken by Stan Krpan. He looked worldwide to see what the principles of a good risk-based regulator were, and he reviewed the EPA and wrote a report about the key things that they needed to implement to become a better risk-based regulator. We then went in and audited the EPA around landfills and whether they were applying those principles. You can see within this audit report we make reference to a number of areas that we think are very applicable for managing unconventional gas risks and impacts. I would refer you to that review.

Mr RAMSAY — Thank you for your time this afternoon. I had the pleasure of responding to your report in Parliament three or four weeks ago. A couple of issues I want to draw out of that. One goes to the Chair's initial question about the separation of conventional and unconventional gas. We have had conventional gas onshore; there are a number of wells. We have heard evidence in south-west Victoria that they have seemed to have worked well under the current regulatory framework, but indications from yourselves for unconventional gas are there are certain risks attached. I assume the regulatory framework is okay for conventional but not so for unconventional. The question I am posing to you perhaps is in relation to the water authorities, not the statutory ones but the water board authorities, like Wannon Water and Barwon Water, who say they are not consulted or required to be consulted under the Petroleum Act or the mining act or minerals act. Do you have some commentary around their involvement, particularly in relation to redefining the regulatory framework for unconventional gas?

Ms BETHEL — Under the petroleum framework, as you mentioned, there is no requirement to consult. That is I guess initially because that legislative framework was written for offshore activities. I cannot comment about whether they have or have not been consulted, but certainly there is no requirement to consult them under

the act. And the Water Act, again the roles and responsibilities are quite unclear, but we did not specifically look at conventional gas. We looked at it in relation to unconventional gas. I am not sure if I have responded to your first question, I am sorry.

Mr RAMSAY — You are not actually offering an opinion whether you think they should be actually consulted under a new framework.

Ms BETHEL — Whether they should be consulted. That would depend, at the end of the day, on what the regulatory framework looks like. I think if you look at our recommendations, we talk about the regulatory framework being fragmented under numerous acts. If it is brought under the one act with I guess what we would call a key regulator responsible for regulating, and not as it is at the moment where you have a number of regulators responsible. I would not want to offer an opinion on whether they are or they are not right now, and in future it would depend on what the regulatory framework was and where the roles and responsibilities lie.

Mr RAMSAY — Part B, if I may, Chair, your report notes that the rights of landholders are not fair and just. How do you suggest these rights are strengthened for the farming community?

Ms BETHEL — From reviewing what is happening in other states, I guess there are two issues there. One is around the monetary value of our compensation and who can be compensated. At the moment it is limited in who can be compensated under our act. That is in relation to compensation. In relation to access and land access, currently what the act allows, it says that you should obviously consult with the landowner but if that ends up in VCAT, consultation could be seen as you have tried to come to an agreement and VCAT can then just determine that access is granted. In terms of rights, I guess we made the comment that we did not believe they are fair and just, because there were no criteria around what sort of negotiation is seen as what we would call better practice, but it just said you must negotiate.

Ms DUNN — Thank you for your submission today. Just looking at your report and the conclusions that you came to, you say:

Victoria is not as well placed as it could be to respond to the environmental and community risks and impacts that could arise if the moratorium is lifted allowing unconventional gas activities to proceed in this state.

You then go on to say that the Department of Economic Development, Jobs, Transport and Resources:

... has not comprehensively assessed the likelihood and consequences of the risks associated with unconventional gas activities in Victoria. As a result, there are significant gaps in scientific information that need to be filled to understand the likelihood, scale and consequences of the risks associated with this industry.

In terms of an absolute guarantee to the health and safety of the population and the environment, is it your view that really taking all of that into account at this point in time a ban on unconventional gas activities is the only way to guarantee health and safety in relation to the population and environment?

Mr MISCHKULNIG — I think as we said at the outset, we cannot make that sort of commentary in our audits. It is not appropriate for us to do so. What we can do and what we have done in the audit is identify that that conclusion is based on the fact that from the early 2000s through to 2012 there were all sorts of issues driving the approach taken by the department to respond to that, from assuming that the risks are understood and could be controlled under the framework to the lack of growth of the industry, the lack of industry interest in this space. I think that as the landscape changed in that 2010–12 period, the department's approach to it also changed. As we note in the report, from 2012 onward the current department's approach has been a lot more systematic and appropriate to trying to understand those risks, but there were limitations again, because of the moratorium and because of instructions being provided that we were informed about.

Ms DUNN — Thank you for that. In terms of looking at risks and impacts, did you explore issues around managing risks around contamination and who picks up the bill for that and ultimately where those responsibilities lie?

Mr MISCHKULNIG — Ultimately again that is a decision for government — to decide where to allocate those risks. What we did look at is what the range of those risks are — as I mentioned earlier, whether it is soil contamination or air contamination from fugitive emissions, whether it is well integrity problems. The literature and international experience seem to suggest that if you understand the risks in your context. They can be managed.

The issue — the big message in this audit — is that what needs to happen is that we need better information about geology, hydrogeology, what sort of resources are available, the extent of them, the overlay with other land uses, to try to understand the extent to which those risks are likely to emerge and our ability to control them. Whether that is mandating codes of practice as we suggested earlier or whether or not there are other approaches that need to be explored is a matter for government.

Ms BETHEL — And clearly at the moment if there is a pollution or contamination incident, it lies under the legislation — the environment protection act — and the environment protection authority would be responsible for the management of a pollution incident.

Ms DUNN — Thank you for that. Just to clarify, in terms of those matters around understanding risk, you talked about a whole range of different things, whether it is geology, hydrogeology, resources, land use and those matters. In relation to the audit is it your understanding at this stage that there is not enough work done as yet to really detail and understand what those risks are in relation to those different matters?

Mr MISCHKULNIG — I think that comes from the earlier point I made that we need to better understand where the resource is, the extent of the resource, the type of the resource. We make the reference in the report that predominantly we have brown coal here in Victoria. There has not been the commercial exploitation of that resource as a coal seam gas resource anywhere, so we need to look at: what are the risks for the state, given that it is more likely to be tight and shale gas; they have a different risk profile than that for coal seam gas.

Ms DUNN — Thank you.

Mr YOUNG — Thank you for your time here today. Reading through the report, it is fairly clear that the opinion is that Victoria is not suitable, as far as the regulatory framework goes, to go ahead with an industry like this. Was there any work done — because I am not getting a good sense of this — on where the threshold is, where we would be suitable? Given that there are many recommendations of better practice examples, how many of those need to be implied? Is there a point we get to where the opinion would sway back the other way?

Mr MISCHKULNIG — I think again it comes back to that we need to understand what the resource here is, what the risks are — you know, whether it is aquifer risk, whether or not it is competition with other land uses and water entitlements et cetera. There is a whole raft of things, so I do not think there is an answer where you can say, 'This is the threshold'. What we have got to understand is: what is the resource, what are the risks associated with that and then how do you manage that across — as we reference in the report — looking at the sedimentary basin work or the play-based model that is out of Alberta's thinking. It is quite a complex area; you need to piece together that information before you can make that call about what is the standard.

Mr YOUNG — I do not want to put you on the spot or anything, but do you think that if this kind of report was done in another state such as New South Wales or Queensland, which you have indicated do have better practice, do you think the opinion would be somewhat different?

Mr MISCHKULNIG — I really cannot comment on that. We did not do audits in the other states.

The CHAIR — Have there been any audit reports of any type done in other states?

Mr MISCHKULNIG — Yes. We spoke to a number of people in a number of different jurisdictions both here and internationally to look at how they responded, and there is that point we make in the report around a regulatory catch-up. And yes, they are better situated now, but I really cannot comment on whether or not that is appropriate.

The CHAIR — I was just really following up. Specifically, have the audit offices in the other states done any? They have.

Ms BETHEL — They have done some reviews and reports but not any audits that we are aware of. Throughout this report we worked with a number of people from New South Wales, particularly the chief scientist office, who did that large assessment of risks. They are involved in terms of us understanding what the risks are and what they saw as better practice in New South Wales, and they had reviewed what they thought as better practice in Queensland, so we tapped into their knowledge.

The CHAIR — In a similar vein — there may be other points that people want to quickly flesh out on this — the water and aquifer material that the department has produced, the more detailed information recently released, seems to me almost to be coming a little bit too late for your report, or did you have access to all of that?

Ms BETHEL — No, we had access to those studies, and as I think Dr Davies said, the priority of doing the water resources was good. That is what we would call one of the show-stopper risks — like if you are having an impact to groundwater or if the groundwater is not available. I think in our report we saw that as a good start, but those reports are what we would call — I am trying to think of the word, sorry. They are based on information that is currently available, and that information has some significant gaps. The department put a proposal to go out and collect more information, but that was knocked back at the time because, as Dallas spoke to before, there were things saying, ‘Well, you can’t do that because that is pre-empting the decision’. Both departments were certainly aware that there needed to be more information and data collected to make those reports more comprehensive and more sound, but they are a good first indicator or a high desktop sort of study. We did have access to them.

Ms SHING — Further to the answer around fair and just treatment of landowners, and just as a point of clarification if I may, the terms ‘fair’ and ‘just’ are actually quite positional and loaded, without a context around them to my mind. I assume that that is by reference to comparative jurisdictions. Do you have comment on that in light of the fact that VAGO is not in a position to be able to comment on the merit or otherwise of policy positions?

Mr MISCHKULNIG — Again we do not see that as a comment on policy. What we have looked at is — and Maree talked about it earlier — the caps on compensation and the extent to which affected parties can or cannot be involved, from neighbours to communities. In the report we make reference to some of the models in Queensland and in other states, where they have a different way of dealing with the distribution of the revenue to potentially impacted communities.

Ms SHING — Are those other systems of compensation and regulation fair and just? You see where I am going there as far as the terminology that is being used.

Ms BETHEL — Absolutely, yes. I would say what we are seeing is they are better than what we have in Victoria, so we have probably jumped to the fair and just. They were the wordings that were used, and so we adopted them. But what I would add to that — and I will get the name wrong — the minister had its own earth resources advisory committee that looked at this question of fair and just rights compensation and land access. It made a list of recommendations that the department was working towards. Again, it put a project scope together, a working brief, but that work again was halted. So nothing that we have identified in this report is new to the department.

Ms SHING — So ‘fair and just’ references an existing set of terminologies that have their own reference points?

Ms BETHEL — Yes.

Ms SHING — I just noted that there are no inverted commas around ‘fair and just’ that ties it back to another system —

Ms BETHEL — It is a fair point.

Ms SHING — which is grounded in rules that are not positional and require an essence of policy position.

Ms BETHEL — Yes.

Ms SHING — Okay; thank you for that clarification.

Ms BATH — In relation to the earth resources, you said that 2 out of 22 recommendations you had made.

Ms BETHEL — Yes.

Ms BATH — Where we would find the list of the 22 recommendations?

Ms BETHEL — In our — I forget the year.

Mr MISCHKULNIG — In 2012.

Ms BETHEL — In our 2012 compliance enforcement audit report, which is on the auditor's website.

Ms BATH — Thank you.

The CHAIR — I thank you for the presentation, and I thank the audit office for its work in this area. It has been very helpful for the committee, and I want to record that formally.

Mr VLAHOS — Thank you.

Mr MISCHKULNIG — Thank you.

Ms BETHEL — Thank you very much.

Witnesses withdrew.