

**ECONOMIC DEVELOPMENT AND INFRASTRUCTURE COMMITTEE**  
**Inquiry into greenfields mineral exploration and project development in Victoria**

Melbourne — 29 August 2011

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Witnesses

Ms. S. Gafforini, Manager, Policy and Professional Standards,  
Mr A. van Krieken, Director of Member and Branch Services, and  
Professor N. Phillips, Consulting Economic Geologist, Australasian Institute of Mining and Metallurgy.

**The CHAIR** — Welcome. This is an all-party parliamentary committee and is hearing evidence today on the Inquiry into greenfields mineral exploration and project development in Victoria. All evidence taken at this hearing is protected by parliamentary privilege; comments you make outside the hearing are not afforded such privilege. Who is going to go first?

**Ms GAFFORINI** — I will start.

**The CHAIR** — Sarah, can you please state your full name and business address?

**Ms GAFFORINI** — My name is Sarah Gafforini from AusIMM. We are at 204 Lygon Street, Carlton.

**The CHAIR** — Are you appearing personally today or are you representing a company?

**Ms GAFFORINI** — I am the Manager of Policy and Professional Standards at the AusIMM.

**The CHAIR** — Would you like to make a brief oral presentation?

**Ms GAFFORINI** — Sure. Firstly, I want to thank you, Chair, and the Committee for affording us the opportunity to provide a submission and to attend today to talk to you and answer any questions you may have. The Australasian Institute of Mining and Metallurgy, or the Minerals Institute, is the leading organisation representing minerals sector professionals in the Australasian region, primarily in the disciplines of mining engineering, metallurgy and geoscience. Given the technical expertise of our members and their firsthand practical experience of the sector, we feel our members are uniquely placed to comment on greenfields exploration, and I will pass over to Neil shortly.

The submission you have before you is a collection of opinions of our members and also research that the policy team in the Institute has conducted over the last five years, primarily around greenfields exploration. Today with me is Ashley van Krieken, the Director of Member and Branch Services. He will give you some more information around our members. Neil Phillips is a consulting economic geologist and owner of Phillipsgold. Neil is also a member of our geoscience society, so he will be speaking to you about his experiences particularly as they relate to gold and also the research that he has conducted. Then I will quickly finish off by talking to you about what we feel are two of the biggest barriers for our members in exploration. I will pass over to Ashley first.

**The CHAIR** — Would you like to state your name and address?

**Mr VAN KRIEKEN** — Ashley van Krieken, Director of Member and Branch Services for the AusIMM. My business address is 204 Lygon Street, Carlton. AusIMM is a global organisation with 11,424 members. Around 80 per cent of those are based in Australia but many also predominantly do work offshore. Within that membership we have 26 branches and numerous overseas clusters, student chapters and societies. This is where a lot of our expertise draws from, not just from within Victoria, but across multiple jurisdictions. Of that membership around 11 per cent of members are based in Victoria. The majority are located around the Melbourne area, but we also have a large number of members in the goldfields area and also in the Gippsland area.

In terms of the Victorian membership, 40 per cent of all Victorian members have indicated that they have an area of interest or are involved in geology, and around 15 per cent are in the exploration development area. The majority of AusIMM members are professionals; they are working across a range of companies and government sector, research, education and tertiary institutions. As I said before, they tend to be quite well travelled and to be across a lot of the developments occurring overseas. I think that is probably where I will leave it for the moment. That was really just to give you a sense of what sort of people are contributing to this submission.

**The CHAIR** — Would you state your name and address, please?

**Prof. PHILLIPS** — My name is Neil Phillips, and my address is 1 Coppin Street, Malvern East.

**The CHAIR** — Are you appearing on behalf of yourself or on behalf of the company?

**Prof. PHILLIPS** — I have been asked to come along with AusIMM. I am a member of AusIMM Geoscience Society and former Chair of that society. As Sarah mentioned, I run my business in gold consulting in different countries around the world. I am also a professor of geology at the University of Melbourne and the University of Stellenbosch in South Africa. My role at both of those universities is partly teaching, where I teach the geology of gold, and partly research, and my research for my whole career has virtually all been on gold.

I have been asked to address three different things today. One is endowment or prospectivity. The question was raised earlier: is there any gold there and how do we quantify that? The second is the perception or image that people outside have of Victorian industry. The third is to touch on what might be done in collaboration on the research side, the teaching side and the training of people. Of the commodities here I am going to constrain my comments very much to gold. Obviously there is more than gold but gold has clearly been important in the past and I believe will be in the future.

As far as prospectivity goes, which is making an informed estimate of what there might be still to be found in Victoria, we have gone about that by way of taking the whole State, cutting it down and saying there really is not much prospectivity because of the geology outside that area; so we have reduced the size of the State. Then we looked at that strip in the middle third, if you like, and said, 'These are the places where prospectors 150 years ago would have stood a very good chance of finding gold'. We believe they were very good. Then we say, 'These are the areas that we have identified that geologically should hold gold and this is where the prospectors would have virtually no choice'. We have then said, 'That is the ground left to be explored'. The ground that is left to be explored we have then divided into two or three different parts. One is to say where there is gold which will start in the top 200 metres and where will it be more than 200 metres down to the very first indications. The reason for doing that is that once you get quite deep, particularly 200 metres or more, it will be unattractive for companies to explore, it will be very expensive to explore and it is probably going to be left for quite a long while.

We then cut it down again, and on that basis we have done calculations that are relatively easy to replicate and suggested that Victoria has produced 80 million ounces of gold and there is possibly 150 million ounces of gold left to be found. What does 150 million ounces of gold mean? Australia produces about 9 million ounces a year. I am not suggesting that we would find that 150 million ounces overnight, but clearly once a start has been made then people look more, know how to look, are prepared to take bigger risks, and one thing leads to another. As far as prospectivity goes, I have said and my colleagues have said in articles around the world that the prospectivity we believe is very good and we can justify it with an argument. I think that is one of the contributing factors to why investment has come to the State over the last 10 or 20 years.

The second one as far as perceptions go — and keep in mind I am a consultant in the gold industry and an academic and researcher so I am not actively exploring like some of the people earlier were — if I am talking at conferences overseas, particularly in North America or London, somewhere like that, and talking about Victorian gold in a positive sense, there will always be people who bring up three or four particular reasons why they would not explore here. I think it is probably worth mentioning those. Certainly the experience of Ballarat over the last 20 years of getting going and getting going is used over and over again.

There is the experience at Bendigo of doing the same thing. In both cases large sums of money have been invested and it is very difficult to show for the State or for investors the type of reward and return they would expect for that amount of investment.

The third one — I will just use one example — relates to a small prospect well north of Stawell which was technically and scientifically a very good discovery; its name is Kewell. Kewell was used a lot in overseas talks. People keep coming back and saying, 'What is going on there?', knowing full well that nothing is going on there. To some extent the larger 'we' spoke too early and spoke too much about things that, as a Victorian gold community, we have not, until now, delivered on. That is the sort of perception in places that talk geology, be it Toronto, London, Denver, Vancouver and those sorts of places, if someone gets up and speaks about Victorian gold.

The other thing people would say — and I am really just backing up in very general terms what I heard mentioned earlier — is that Victoria is perceived to be a difficult place to deal with, whether that be in Western Australia or other places. Clearly there are lots of people exploring in Western Australia and they explore other

places too, particularly West Africa and so forth. They get a cross-section, look and say they believe it is too hard to explore in Victoria, but that is a perception.

Turning thirdly to some of our institutions, I will talk about GeoScience Victoria and the universities. I believe, and there is public supporting evidence, that we have very good universities, and we have very good geoscience geology departments at these universities, so we are very well endowed in that way and we clearly have good students going into those. A large number of people would look at those and say, 'Wouldn't it be nice if there was a lot more collaboration between individuals and universities, and particularly with GeoScience Victoria?. That is not being necessarily critical of any of those; it is just that one stands either inside the system or outside the system, or talks to industry using that and saying, 'That has not talked to that and that has not talked to that'. I am exposed to examples around the world, and South Australia is certainly the closest, where there is very good collaboration between the different parts that can then contribute to industry, listen to industry and make it much more attractive to explore, but also much easier to uptake research that has come out. The research is more targeted usually because people are talking.

**The CHAIR** — That is the full submission?

**Ms GAFFORINI** — I just wanted to touch quickly on the two biggest barriers that our members feel about exploration in Victoria. The first one — —

**The CHAIR** — You can take that as my first question, by the way.

**Ms GAFFORINI** — It is about the Victorian regulatory process and the need to minimise the negative aspects of regulatory restrictions. For us that does not mean no regulations. It simply means removing unnecessary duplication of it. It is similar to what the MCA said before: it is not about removing; it is just about streamlining. As we have already talked about, Victoria is nationally and globally viewed less favourably than any other Australian state or territory, as an exploration destination, and most of that is due to those duplications and silos within departments and their reporting processes.

Our members believe if processes were reviewed and streamlined this would be highly beneficial to explorers in Victoria, and that the current regulatory framework is the major reason other operating costs are skewed towards paperwork and compliance costs other than actual exploration activity and ensuring better success rates. Our members also believe there is a lack of understanding around the value of a mineral tenement and how this relates to the security of tenure and therefore available expenditure to undertake exploration. As we have stated in our submission, the downstream influences of harsh and unnecessary administration processes on exploration activities will, and does, affect the company's willingness to explore. It is widely viewed by industry that compliance costs, corporate overheads and delays in permits are taking a proportionately larger slice of exploration investment in Victoria, and economies of scale definitely favour Western Australia and South Australia and will not change without immediate action by the Government.

The other area that I would like to touch on, just quickly, is about land access. Land access is not just a Victorian issue, it is a national issue, yet it seems to be a bigger issue here in Victoria. As we have heard before, there is the attitude that farming and other land uses are totally incompatible, and that is well entrenched in Victoria. Our members think that part of that is because, on the whole, Victoria does not have a memory or a view and little exposure to mining, except for archived media footage, visits to Sovereign Hill or Bendigo to go down the mine, and apart from Latrobe, most of the major mining activity is offshore and out of sight, so we do not actually see that.

For our members, when it comes to land access we think that there are no surprises from our side for landowners. We feel that we undertake appropriate negotiations and that there should not be any surprises once an exploration company turns up on the land, because all of that has actually happened. You might see things in the media: 'I did not even know, I went out to lunch and they were on my land'; that just does not happen. Appropriate negotiations always take place, so that just does not happen.

Sustainability arguments about land access are a given. The minerals industry is too highly skilled and experienced in environmental and financial imperatives to risk environmental catastrophe, so the industry knows what it is doing. But greater communication by the minerals industry with government, in collaboration with government, is essential to assist those increased exploration activities. Care must be taken to support explorers, explaining to land-holders that usually only a small area of land is required for exploration, and that

the land will be restored or rehabilitated to the same organic condition before exploration began, and it does not mean that mining starts the next day.

Our members know and accept that not all land will or necessarily should be available for exploration, and that areas such as forests and national parks, water catchment areas and even some areas of agriculture should to varying extents be limited. But it should not be applied across the board; it is just limiting exploration. Industry accepts and expects that approach, that sometimes some land will be limited, but what we do not expect or accept is when our members feel that there is a lack of serious land use evaluation when declaring parks and reserves in Victoria.

It is seen that the Victorian approach to environmental regulation is excessively obstructive in restricting exploration in some non-park reserves, essentially making them the same as national parks. In the past the Government has sought input into environmental management practices and then changed its mind without any explanation, and closed the process. There is not much confidence to — —

**Mr FOLEY** — Engage.

**Ms GAFFORINI** — Yes, to think that future consultation will happen again. For our members it displays a lack of understanding of exploration, the exploration processes and land management practices utilised by exploration companies in Victoria.

**The CHAIR** — We will have to leave it there, and we will go on to some questions, if that is all right.

**Mr SHAW** — Thank you for your presentation today. I think it is coming through pretty clearly what you are after, and it is not a handout really. It is really just cutting some of the red tape and bureaucracy to let you go ahead with the job. Would that be a correct summation?

**Ms GAFFORINI** — Yes, definitely. It is not just about that. Land access is a great example in that it is a collaboration and it is about talking to people. It is just knowing, I suppose, where everybody stands, and you can work together to get an outcome out of that.

**Mr NOONAN** — I am just trying to determine where Victoria places globally in relation to prospectivity and testing this view about whether Victoria is mined out, essentially. What is it that is really driving this perception that you should go elsewhere globally? I was interested, Neil, in your depth number of 200 metres. I am essentially trying to understand, when you say in your submission that Australian companies are increasingly voting with their feet and going elsewhere to explore more friendly regions overseas, whether that is because of regulation, whether that is because of perception or whether that is just because it is easier to go and mine in areas where whatever you are mining for is closer to the surface, if you like, because as I understand it, it becomes more costly the further you go down. It is really just trying to get a summation from you, because we are hearing lots and lots about what is really driving businesses away from Victoria based on all these sorts of things we are hearing.

**Prof. PHILLIPS** — I think I could probably answer the first one or two parts. The first part is, taking away all people and everything for the moment, asking the question: is there gold there? I do not think there is very much doubt about that at all. The second question is still, ‘Will I be able to find it economically?’. That depends on the depth. Two hundred metres is actually quite a long way. It is not a long way to mine it once you have something already, because we have shafts going down kilometres, but it is a long way to explore, because it is expensive looking through even 50 metres of blank nothing. That is the second question. Analogies with other parts around the world — for example, Nevada in the USA and others — suggest that we should be able to do that.

The third part, of course, is the overlays of people and government. That is a completely different thing, but I would be confident with those first two — the gold is there, and one should be able to find it at 50 metres depth.

**Mr NOONAN** — Just to go to this, it is a question of whether a company might go to South Africa, for example, in terms of mining gold, or other countries, in terms of the costs of doing those sorts of things and the likelihood, given that some of those countries that mining companies might go to may not have had the level of exploration that Victoria has had over a long period of time. I am just trying to understand, from this inquiry’s point of view, how much that is driving decisions globally about where to put that effort. Clearly you can go all

over the place in terms of putting your exploration hat on; it is really trying to come to terms with that. Is the perception that we are mined out, if you like, really the biggest driver in terms of why companies are going to other countries?

**Prof. PHILLIPS** — I do not believe so. I do not think it is because we are mined out, which was my first point. On my second point — ‘Will I be able to find it economically?’ — I actually do not think that is the case, because people can logically say, ‘You have 50 metres of cover over there. You have Bendigo, one of the world’s great gold deposits; we should be able to find something’. So it is more than that.

Why do companies go to different countries? At least half a dozen reasons. They are prepared or not prepared to deal with national risk — sovereign risk. They are comfortable there or not comfortable there. There is security, and then it gets on to geology, ease of finances and all that other stuff. There is a whole range, and the fact that all companies do not go to one country indicates that the balance — the basket — is different for everyone.

**Mr FOLEY** — I want to follow up on that. You said you do not believe so, but is there kind of a ‘group think’ going on in the sector that has some basis either in reality or in history of the three examples you chose to refer to in your submission? Is there a disconnect between what you say as a consultant and academic in the sector and what, if you like, people with a dollar to risk might think in the sector? Has the regulatory environment contributed to the difference between what you say objectively would be the case in the geological surveying — ‘Yes, it is there, let’s hone it down’ — versus someone with a dollar to spend and a risky global business saying, ‘Because it is small and I perceive it to be mined out and there are a lot of people, I am going to Botswana’, or Canada or Russia or wherever it is?

**Prof. PHILLIPS** — I do not think there is a disconnect or contradiction in the parts I say, because people are not coming back and actually challenging it and saying, ‘That is nonsense; I believe there is no gold in Victoria’. They are not challenging it at that level. They are actually saying that for other reasons outside the ones I spoke about that that company or this company prefers not to go to Victoria. Those things are actually outside the inherent geology of the terrain. Some of those are real, and some of those are obviously perceptions.

**Mr FOLEY** — Just one more question, on the issue of the conflict that is getting lots of media and seems to be, particularly in Queensland, conflict over land access and different use. As a national organisation, how do you see, whatever way we go in Victoria, that we do not head down that path of institutionalising the conflict between private land-holders and exploration and, hopefully, development? Did you have a separate view to the MCA or a particular approach to it?

**Ms GAFFORINI** — I think our overarching view is that when it comes to exploration and land access there should not be any surprises if you do the consultation process properly. Where that breaks down we fully support the example the MCA gave around the use of the Wardens Court and how that process used to operate, but for us, we encourage our members to make sure that the consultation process is done properly, and there should not be any surprises. That is where most of the issues come up — if there is that misunderstanding or not actually understanding what has happened.

**Mr FOLEY** — Fortunately, I think, the MCA indicated that it has never actually got to VCAT in anyone’s claim in living memory in that institutionalised dispute process. How do you avoid the dichotomy of one or the other, and do you perceive that as a risk in Victoria?

**Ms GAFFORINI** — I do not see it as a greater risk in Victoria than anywhere else. It is a standard practice for us.

**Mr FOLEY** — One last thing. Are you part of the stakeholder group in terms of discussing the next stage of the review of the MRRT process?

**Ms GAFFORINI** — Yes, I am.

**Mr FOLEY** — Are you happy with that process?

**Ms GAFFORINI** — Because we represent the actual professionals in the field, for us it is more about ensuring the professional standards of the person who will be doing the valuation in the end. We do not know taxation, so we leave that up to the MCA and its members to make sure that happens.

**Mrs PEULICH** — One very small follow-up question: one of the recommendations in your submission is to reclassify all historic mining sites pre-1980 — and I can understand where you are coming from — as greenfield exploration sites. Can you just explain the basis of the recommendation to the Committee?

**Ms GAFFORINI** — We put that in there just because if you are exploring around existing sites like Ballarat — again, it comes back to the perception — it might be perceived as being all mined out when we know that the miners and explorers of today have better technology and can actually get in there.

**Mrs PEULICH** — Better data. So it can yield.

**Ms GAFFORINI** — Of course.

**The CHAIR** — Thank you very much. You will be sent a copy of today's proceedings within the next two weeks, and you will be able to make alterations where there are errors but not changes to substance. Thank you very much for allowing us to listen.

**Mrs PEULICH** — And for good recommendations.

**Witnesses withdrew.**