TRANSCRIPT OF PROCEEDINGS

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2014 HAZELWOOD MINE FIRE INQUIRY

MORWELL

TUESDAY, 17 JUNE 2014

(15th day of hearing)

BEFORE:

THE HONOURABLE BERNARD TEAGUE AO - Chairman

PROFESSOR EMERITUS JOHN CATFORD - Board Member

MS SONIA PETERING - Board Member

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MS RICHARDS: Good morning. Now we come to the culmination of the public hearing process. After three weeks of evidence this is the point where Counsel Assisting and the parties' representatives make submissions to you about what is to be made of all of the evidence that 10.03AM we've heard over the last three weeks and what recommendations the Board should make for future improvement.

Just to outline the procedure over the next two days: I wrote to representatives appearing for the 10.03AM parties in the course of last week indicating that oral submissions would be today and tomorrow and that Counsel Assisting proposed to address the three themes that have been addressed in evidence and, under each heading, to identify commendations, criticisms and 10.03AM recommendations to be made and that is the form that Counsel Assisting's submission will take this morning.

I also asked the parties to indicate to me whether they wished to make written or oral submissions today and tomorrow and have indicated to all of the parties 10.04AM that, should anything arise in the course of the next two days that they feel they have a need to respond to, that they will have an opportunity to do that in writing after the hearing has concluded tomorrow.

The proposed order of submissions over the next 10.04AM two days is, Mr Rozen and I will present our submissions to you this morning and it's our intention to complete that by lunchtime. Then we will hear from Environment Victoria who were granted leave to appear in relation to the issue of mitigation and prevention 10.04AM only and they've indicated that they will need about

45 minutes.

We will then hear from the United Firefighters Union. Mr Marshall of the Union will be attending to make their submissions this afternoon. Again, he's indicated that he will need about 45 minutes in relation to the issue of firefighter safety which is the issue on which they were granted leave to appear. 10.05AM

Then GDF Suez will make its submissions, and Ms Doyle's indicated that she needs about two hours to do that and. Likewise, Dr Wilson for the State has indicated that he will need about two hours to present the State's final submissions. 10.05AM

It's not proposed that Counsel Assisting make any reply. The opportunity over the next two days is as much for the parties to present the Board with their submissions about findings and recommendations that should be made and for the Board to have an opportunity to interact with the parties' representatives and ask questions and have those questions responded to in this public process. 10.05AM

There's only one caveat to that proposed outline. It is conceivable that the State may make some submissions that are adverse to GDF Suez. I don't know if that will occur. If it does, then Ms Doyle has indicated that she may wish to make some oral submissions after the State has made submissions tomorrow and, if time permits, then it would be desirable for that to happen. But, in any event, there will be an opportunity to make written submissions about any adverse comment that's made by the State. 10.06AM

That's the proposal. If we all stick to the time

limits that we've indicated, we should finish comfortably by 3 p.m. tomorrow.

The structure of Counsel Assisting's submissions will be as follows: I will address the origins of and response to the fires and I will also address issues of health and environment that were explored during the second week of the hearing. 10.06AM

Mr Rozen will deal with the discrete topic of firefighter safety that we dealt with in week 1 but which also has a lot of connections with the health issues raised in week 2 and he will then finish by dealing with mitigation and prevention. Under each of those headings we will put to the Board a number of commendations that the Board, we submit, can make based on the evidence it has heard, a number of criticisms or adverse findings that we propose that the Board should make in its report, and a number of recommendations that we propose the Board should consider making. 10.07AM 10.07AM

Before I move into those four areas of discussion or the two that I'm responsible for this morning, there is one over-arching submission that I make at the outset and that is that, in response to evidence from a number of witnesses that the fire was unprecedented, that it was unpredictable, that it could not have been foreseen: The fire was unprecedented in terms of its size and its impact on the community of Morwell and the broader Latrobe Valley; in every other respect the fire was not unprecedented. It was not the first time that a bushfire, or a rural fire as Mr Incoll described it, had entered an open cut coal mine. It was certainly not the first time that fire in the landscape had 10.07AM 10.08AM 10.08AM

threatened an open cut coal mine. All of the fire planning documents that are in evidence identify specifically the risk of an external fire entering an open cut coal mine and propose various treatments or measures to control that risk. 10.09AM

With respect to those who were surprised by the entry of a rural fire into an open cut coal mine, it is in this landscape a very obvious risk. This is a notoriously bushfire prone part of Victoria and coal burns, that's why it is mined. In our submission, the 10.09AM Board should not be deterred from a close examination of risk management practices and response to fire by evidence that suggests that this was somehow a surprising event. It was not, it was an entirely foreseeable event and it was one that should have been 10.09AM planned for.

Moving then to the first theme, the origins of and response to the fires. What I propose to do under this heading is to set out a number of basic factual findings that the evidence permits the Board to make 10.10AM about the origins of the fires that took hold in the mine and the response to them. I will do that in a fairly neutral way to begin with and then I will come in more detail to some commendations that we submit can be made and then some criticisms that we submit should 10.10AM be made.

It was clear by the Friday, 7 February, which was the fifth anniversary of Black Saturday in 2009, that the conditions forecast for the weekend, and in particular for Sunday the 9th, were going to be the 10.11AM worst since Black Saturday. That was well-known, it

was well publicised and, on the strength of an extreme fire weather forecast, the Chief Officer of the CFA declared a total fire ban, not only for the Saturday, but also for the Sunday.

Also on the Friday, the evidence reveals, a fire started at Hernes Oak at about mid-afternoon. Hernes Oak, as we now know from our familiarity with local geography, is roughly to the northwest of Morwell and it was a fire that was responded to quickly by the CFA, was contained but was never brought under control; certainly not on that Friday or over the weekend. 10.11AM 10.11AM

In relation to the origins of the fire, there is in evidence a report prepared by a CFA Investigator that concludes that the fire was caused by inadequate control of a camp fire. Notwithstanding that conclusion, the evidence from Victoria Police in the form of Detective Inspector Roberts' affidavit, is that Victoria Police regard the fire as suspicious and it is the subject of an ongoing investigation. What police can definitely tell us and have told us is that they have excluded both lightning strike and power asset failure as a cause of the fire, so that is where we must leave the evidence about the origin of the fire; the precise origin of it is a matter still being investigated by police. 10.12AM 10.12AM 10.12AM

The Hernes Oak Fire was managed locally on the Friday but on Saturday the 8th control of it was transferred to the Traralgon Incident Control Centre which is a Level 3 Incident Control Centre. That transfer had the effect that the fire was then regarded as a Level 3 fire. 10.13AM

Incident Controller Laurence Jeremiah gave evidence about his appreciation of the risk posed by that fire and his determination to apply an aggressive strategy to it during the course of the Saturday. By the evening of 8 February the fire was contained but was still burning within its perimeter. 10.13AM

The Incident Management Team at Traralgon, and in particular Mr Jeremiah, was acutely aware of the risk that the fire would pose to Morwell and also to the Yallourn and Hazelwood Open Cut Mines should it break its containment lines the following day. Based on that assessment, Mr Jeremiah asked his planning officer, Mr McHugh, to provide Essential Gippsland Essential Industries Group with Phoenix prediction mapping that showed the scenario that might occur if the fire did break containment lines. That was done by providing at least one prediction map to Mr Demetrios, who's the Chair of the Central Gippsland Essential Industries Group. The Board will remember the evidence about the role of the Central Gippsland Essential Industries Group as a conduit for information between essential industries, including the power stations and the open cut mines in the Latrobe Valley and the Emergency Services. 10.13AM 10.14AM 10.14AM

Mr Demetrios forwarded one Phoenix prediction map to Mr Roach, who is the Security and Emergency Services Manager at Hazelwood at about 4.30 on the Saturday afternoon, and that map indicated the potential for fire to spread into the northern batters of the mine by shortly before 2 a.m. on the Monday morning. I will return to the significance of that communication later 10.14AM 10.15AM

on.

It's a matter of record now that the weather conditions on 9 February were almost exactly as forecast; it was hot, it got hotter, it was windy, it got windier, and the relative humidity was extremely 10.15AM
low. And critically, from 1 o'clock the wind moved around to the west and then at approximately 1.40, as nearly as the Bureau of Meteorology can place it, a strong southwesterly wind change reached Morwell. That wind blew all afternoon with very strong gusts and 10.16AM
didn't begin to abate until well into the evening.

As we've heard, there was another fire that broke out mid-morning on Saturday the 9th, the Jack River Fire that broke out near Yarram. That was a fire that was managed by the Traralgon ICC and absorbed a good 10.16AM
deal of its resources and attention. The fire at one stage, before the wind change, was threatening the township of Yarram.

Closer to Morwell, at about quarter past 1 in the afternoon, the Hernes Oak Fire did break its 10.16AM
containment lines, still under the influence of strong northwesterly wind. Its broke its containment lines in the northeast rather than the southeastern corner of the fire which is where firefighters had been concentrating their efforts. Having done that, it 10.17AM
moved very quickly towards Morwell and towards the Hazelwood Open Cut Mine, so quickly that it was not safe for firefighters to attack the fire directly.

Not long afterwards, the wind changed redirecting the flank of the fire towards Morwell and, as we've 10.17AM
heard, creating a spot fire on the other side of

Morwell that eventually threatened the APM at Maryvale. That fire involved at least one timber plantation, and you will recall the photographs that were presented during the Phoenix presentation that showed a large smoke plume that was bent over by the strong winds. 10.18AM

To compound the threat posed by the Hernes Oak Fire, at about 1.30 another fire, or should I say fires, ignited at Driffield on the Strzelecki Highway. In relation to the origin of this fire, which is known as the Driffield Fire, police have told us that they 10.18AM believe this fire to have been deliberately lit and it is the subject of an arson investigation, and again, that's not an area into which the Board need go further. Police have been able to exclude both lightning strike and power asset failure as a cause of 10.18AM that fire and it remains under police investigation.

That fire started almost at exactly the time that the wind change came through and, under the influence of very strong southwesterly winds, that fire took off in the direction of the open cut Hazelwood Mine and the 10.19AM power station. It was responded to very swiftly by both the CFA and the mine's firefighting resourcing and, as things transpired, the fire front did not pass over the Morwell River diversion, it acted an as a very effective fire break and the fire was pulled up at that 10.19AM point.

Fire was first observed inside the mine, and of course it's that fire that the Inquiry is most interested in, just before 2 o'clock that afternoon. The first direct evidence of fire that the Inquiry has 10.19AM is from James Mauger who saw smoke in the southeastern

batters, his designation, at about 5 to 2. Shortly after that, at about 2.30, he saw some smoke on the northern batters. Shortly after 2.15 David Shanahan observed fire on the floor of the mine and also fire on two, possibly three, levels of the northern batters; or at least that had escalated to two, possibly three levels by just before 3 o'clock. 10.20AM

As the day went on the fires in the southeastern batters grew and extended to the eastern batters and the fire in the northern batters involved all of the levels. The fire in the southeastern batters in the floor of the mine eventually merged and became one area of fire that had to be suppressed later on. 10.20AM

In relation to the cause of the fires in the mine, our submission is that the Inquiry can make the following findings: The fires in the mine started, in our submission, as a result of ember throw from the Hernes Oak Fire. It is possible, but much less likely that the fires were ignited by ember throw from the Driffield Fire. Although this suspicion was raised in numerous submissions to the Inquiry, there is no evidence before the Inquiry that the fires, particularly the fire in the northern batters, started from internal sources. 10.21AM 10.21AM

Notably, there is very clear evidence before the Inquiry that the fire in the northern batters started about 300 metres to the west of the fire hole that had been clay capped and has been referred to in evidence as "Old Faithful". You will recall a very clear photograph that was taken by Mr Shanahan that shows the relative positions of Old Faithful and the beginnings 10.21AM 10.22AM

of the fire in the northern batters. That submission is based on the direct evidence of witnesses, in particular Mr Mauger and Mr Shanahan, but is confirmed by the Phoenix simulation that was presented to the Board on the second day of the hearing that indicates that the most likely source of ignition was ember throw from the Hernes Oak Fire. 10.22AM

Importantly, there is no clear evidence before the Board that fire established in the west field of the mine on 9 February. There was a small fire during the morning that was reported to WorkSafe, and so we have some quite specific details about that fire that was caused by a mechanical fault on an idler, but that fire was rapidly extinguished in the morning and didn't form part of the matrix of events that afternoon. 10.22AM 10.23AM

There is a secondhand report in Mr Shanahan's statement of fire in the west field, but no direct observation, and it is not possible to be certain that there was any outbreak of fire in the west field during the course of the afternoon. What we do know is that, by the time the CFA took over and developed its Incident Action Plan from the next morning, there was no fire in the west field to contend with; anything that did start, was clearly put out quickly. 10.23AM

With fire in several worked out areas of the mine, at shortly before 3 o'clock Mr Harkins declared a full-blown emergency and asked Mr Prezioso to assume the role of Emergency Commander, which he did at about 3.20, formally activating the Emergency Control Centre at the mine. 10.23AM 10.24AM

In terms of the mine's firefighting resources and

their response to the fire, they were understandably initially focused on the western perimeter of the mine dealing with the very direct threat of the Driffield Fire advancing towards the operational area of the mine. Mine personnel were able to reach both the fire in the southeastern batters and the fire in the northern batters at a very early stage but, as described particularly in Mr Mauger's statement, they were unable to extinguish either of those fires. 10.24AM

Mr Prezioso, once he took control as Emergency Commander, maintained the focus on the western perimeter of the mine and also brought in a crane monitor in the southeastern batters in an attempt to prevent that fire from spreading to the west towards important infrastructure essential to the mine and to the power station's operations. 10.25AM 10.25AM

Shortly after that Mr Shanahan turned on sprays in the northern batters; that created a very effective water barrier, and again, contained the fire from spreading towards the operational face of the mine and the western end of the northern batters. 10.25AM

Although it's not entirely clear how they found out about it, by 2.30 the Traralgon ICC was working on the basis that there was fire in the mine. Mr Roach's evidence was that he spoke with Mr McHugh at the ICC at about 2.45 and told him that there was fire spotting inside the open cut in addition to talking about the situation with the Driffield Fire. By that time the resources available to the Traralgon ICC were heavily committed to the Jack River Fire and also the Hernes Oak Fire that was threatening lives and properties in 10.26AM 10.26AM

the west of Morwell and later was creating difficulty on the other side of Morwell near the APM Mill at Maryvale, and also of course the Driffield Fire.

The evidence indicates that the only Fire Service resources that were deployed at the mine during the 10.26AM afternoon of 9 February was an aeroplane and a helicopter that dropped some loads of water and retardant on the fire in the northern batters.

At some stage in the evening, probably between 6 and 7, the fire ran out of the eastern batters onto the 10.27AM grassed area at the top of the mine and threatened Energy Brix and also damaged the conveyor that supplies Energy Brix. There was at that point CFA assistance deployed initially to Energy Brix but then to the mine. As best we can pinpoint, those resources arrived at the 10.27AM gate, and Mr Lalor was among that strike team, at about 6.45. There had been another strike team that attended earlier in the afternoon but, as soon as they reported, they were called away to deal with the Driffield Fire.

At about the same time, again we don't know the 10.27AM exact time, but it was between about 5 and about 7 in the evening, the mine lost power. The reason for that was that the fire had burned poles for two separate SP AusNet lines that run down the northern batters, and they supply the mine's power including the power for 10.28AM the dredger and the conveyor belts from mains power external to the mine. Without power, the pumps that pressurised the Fire Services pipe network couldn't operate and water supply was reduced at best to a trickle, and of course as dark fell the Emergency 10.28AM Command Centre was unable to see what was going on.

By that stage there was not much that could be done to suppress the fires in the batters and efforts focused on asset protection around the perimeter of the mine, particularly on the northern batters and the eastern batters near Energy Brix. 10.29AM

The CFA arrived with more resources in the course of the evening and formally took control of the fire at about 10 o'clock that night. Mr Lockwood of the CFA became the Division Commander. The Incident Control Centre was still at that stage based in Traralgon. The 10.29AM Board will recall the handwritten Incident Action Plan, that is a very clear summary of how things stood at daybreak on 10 February.

There was a separate Incident Management Structure fairly rapidly set up to deal with what was clearly 10.30AM going to be a long-term fire and that was in place from 11 February. The Incident Controllers at various stages for the fire are identified in paragraph 24 and we've received evidence from a number of them.

The initial suppression strategy that was adopted 10.30AM focused very much on containment and preventing the fire from spreading and affecting any critical infrastructure. It's fair to say that little, if any, progress was laid in the first week actually putting out the fire. 10.30AM

There was a shift in gears, if you like, on 13 February when the State Controller, Mr Lapsley, declared that in addition to it being a fire it was a HAZMAT incident and that was largely due to the carbon monoxide that was being emitted, threatening both 10.30AM firefighters and the broader community.

Over the next week a much more sophisticated suppression strategy was developed and applied steadily over the next month. The Board members will recall the evidence of Mr Barry who described the process as like eating an elephant and described the six stages that he went through or that the Incident Management Team went through with each 100 metre section of the elephant. 10.31AM

During that long attempt to bring the fire under control and eventually extinguish it altogether, the weather continued to be on occasions hot and dry and there were a number of forecast spike days, as the Incident Controllers referred to them. In addition to suppressing the fire, it was also necessary to plan on those days to prevent the fire from spreading. 10.31AM

Mr Barry gave evidence about the lengths that were taken, particularly on 25 February, to prevent fire from spreading out of the worked out areas of the mine towards infrastructure and on 25 February towards the power station and the coal bunker. That planning was effective and enabled the spread fire to be suppressed almost immediately. 10.32AM

There was a very effective working relationship established between the Fire Services and the mine personnel as the fire fight went on. Mr Dugan described this in some detail in his evidence. The efforts of the mine personnel in large part were taken up with laying additional pipes to supplement the existing Fire Services network. Mr Dugan described the liaison arrangements and the regular meetings that took place between him and those responsible for the fire fight at the mine and at the Incident Control Centre. 10.32AM 10.33AM

What was notable from that evidence, however, is that the mine and the Fire Services maintained parallel Incident Management Teams throughout that period, although there was very close liaison between them.

Two significant dates of course are 10 and 25 March. On 10 March the fire was declared controlled in that it was no longer spreading and sufficient resources were on hand to prevent it spreading, and then on 25 March it was declared safe. Mr Lapsley explained that that means that the fire is out and it won't create smoke although, it being a brown coal mine, there may remain hot spots or areas of heat that may flare up from time to time. 10.33AM 10.34AM

Moving now to the commendations that arise out of that basic factual history, and of course there's a great more detail in the evidence that the Board may include in its report, we come to the commendations. I just note at this stage that natural justice or fairness requires that parties be given notice of potential adverse findings that may be made against them and that has the sometimes undesirable effect of requiring us to focus on the negative, but there is much that can be said that is positive about both the preparation for 9 February and the response to the fires around and in the mine. 10.34AM 10.34AM 10.35AM

The first thing that can be said is that the Fire Service were generally very well prepared for the extreme fire weather conditions on 9 February and, in particular, the Traralgon ICC was established with an experienced Level 3 Incident Controller in place and almost a full complement of personnel. It was already 10.35AM

managing a fire in the Hernes Oak Fire, but the state of readiness contrasted very favourably with the state of unreadiness that the Bushfire Royal Commission commented on in some instances on Black Saturday.

The CFA and the mine personnel responded very rapidly to the Driffield Fire, and between them, on either side of the Morwell River diversion, they were able to prevent the fire from crossing the Morwell River diversion and entering the operating area of the mine. It could indeed have been a great deal worse had that fire not been pulled up when and where it was. 10.35AM 10.36AM

While fire did take hold in the worked out batters, there were effective steps taken by mine personnel to prevent the fire from spreading westwards towards the operating face of the mine and critical mine infrastructure. Again, it could have been a lot worse than it was had those steps not been taken. 10.36AM

Once the Hernes Oak Fire escaped its containment lines, the CFA's response was rapid and effective and there were, critically, no lives lost in the west of Morwell when the potential for loss of life was clearly there. 10.36AM

The Board can find, in our submission, that the allocation of resources in the Latrobe Valley by the Traralgon ICC was consistent with the State Controller's intent or the strategic priorities that were set by Mr Lapsley and explained in his evidence that prioritises the protection and preservation of life over the protection of critical infrastructure and community assets. 10.37AM 10.37AM

Mine personnel worked hard and in extraordinarily

difficult conditions on the evening of 9 February to restore power, which was not only important to enable the fire fight to continue, but was important to enable the mining of coal and the production of electricity to continue. The achievement of doing that in the conditions that they faced is not to be underestimated. Also not to be underestimated is the fact that GDF Suez was able to maintain power production at its power station throughout the entire incident. 10.37AM

The fire, however, was vast and very difficult to extinguish having, as it did, an almost inexhaustible supply of fuel and the suppression strategy that was developed and implemented is also to be commended. The fire had the potential to burn for a great deal longer than six weeks and it is to the credit of all of those involved that it was controlled as soon as it was. 10.38AM 10.38AM

The other aspect of the fire fight that deserves special mention is the very careful planning and placing of resources for the forecast spike days; that prevented fire spreading further on those days, and in particular on 25 February, prevented fire from entering the coal bunker and threatening the power station. So there is much that can be commended in the preparation and response to the fires on 9 February but there are also a number of things that could have been done better. 10.39AM 10.39AM

The first of the criticisms identified by Counsel Assisting relates to the Fire Service's preparation. Mr Jeremiah was acutely aware of the risk posed by the Hernes Oak Fire on 8 February and, in anticipation of the weather conditions forecast for the following day, 10.39AM

he requested some additional resources; three strike teams and also a number of aircraft. Rather than three strike teams, two were made available but, more importantly, the additional aircraft that he requested on the afternoon of 8 February didn't arrive in the 10.40AM
Latrobe Valley until about noon the following day. That meant, in effect, that he was not able to use those resources to attack the Hernes Oak Fire and we will never know whether those resources may have assisted in containing that fire, but it is regrettable 10.40AM
that, having identified the need for those resources, acutely aware of the risk that the fire posed to both Morwell and critical infrastructure, that those resources were not in place and able to be used even on the evening of 8 February. 10.40AM

The other criticism that needs to be made of the Fire Services preparedness is that, contrary to joint Standard Operating Procedure 2.03 which deals with readiness arrangements for Incident Management Teams, there was no base Incident Management Team in place at 10.41AM
the Yarram Incident Control Centre. As events transpired, there was a fire that would have been managed from Yarram had there been an IMT in place there; the Jack River Fire. That fire was managed from the Traralgon ICC and necessarily diverted a good deal 10.41AM
of its attention that was required to deal with the developing situation around Morwell.

Had there been a base IMT in place at Yarram, it wouldn't have created additional resources to respond to the fires in and around the Latrobe Valley; there 10.41AM
still would have been that constraint on their

response, but it would certainly have enabled Mr Jeremiah and his team to focus on the very complex situation that was developing around Morwell in the course of that afternoon more than they were able to do. 10.42AM

The next series of criticisms is directed at the mine and those who were responsible for its management. In our submission, personnel at the mine did not sufficiently appreciate the very grave risk that was posed to the mine by the Hernes Oak Fire burning to its 10.42AM northwest and the extreme fire weather predictions that were forecast for the Sunday. Instead of planning for the worst, they hoped for the best.

There is repeated in the evidence of GDF Suez witnesses an air of injured surprise that this should 10.42AM have happened because it had never happened in their experience. As I submitted at the outset, it was a risk that was entirely foreseeable in a general sense, and in the conditions that prevailed on the Saturday evening it was a very real risk indeed. 10.43AM

The mine fire preparedness and mitigation plans which are supposed to be put in place for days of high fire danger had been prepared on the Friday morning and had not been updated to include the rather critical fact that there was a fire then burning to the 10.43AM northwest of the mine.

Despite having been provided with a Phoenix prediction map on the Saturday afternoon that indicated the potential for fire to reach the northern batters of the mine by 2 a.m. on the Monday, Mr Roach, the 10.43AM nominated Emergency Services Liaison Officer, didn't

pass that information on to anyone at the mine who was responsible for fire preparation or response. He didn't pass it on to Mr Shanahan or to Mr Faithfull, saying that he preferred to see what would eventuate the following day. 10.44AM

He didn't obtain updated information either from the Central Gippsland Essential Industries Group, although he did have a discussion with Mr Demetrios the following morning, or directly from the Traralgon ICC. He had no direct contact with the Traralgon ICC until 10.44AM after the fires were well alight.

So while being critical of GDF Suez for not appreciating the significance of that Phoenix prediction map, it also needs to be said that that information could have been provided to it in a more 10.44AM helpful way. The map that was actually provided to Mr Roach appears to have been the least helpful of the three that were available to the Traralgon ICC and it would clearly have been useful for Mr Roach and for anyone else looking at that information to have had 10.45AM some explanation of its significance; for example, that it was a scenario, the events that the scenario was based on, the fact that the scenario might be different in the event of different weather conditions or in the event of a different breakout of the Hernes Oak Fire. 10.45AM

That also highlights the dangers of relying on indirect means of communication at times where there is a very real threat looming, because of course passing the information through a third party does create the risk that a message will not be clearly understood. Of 10.45AM course, the Board's not heard evidence from either

Mr McHugh or from Mr Demetrios. Although, Mr Demetrios was put on notice by us of the mentions of him in the evidence and we've not heard further from him, so the Board's unable to make detailed findings about which individuals bear responsibility for what appears to have been sub-optimal communication of risk, but our submission remains that the mine, having been given this piece of information, this prediction map, should have appreciated the grave risk that it faced and should certainly have been more proactive about finding out what the prediction map signified. 10.46AM 10.46AM

The next criticism to be made of the mine's preparedness is that it did not pre-populate its emergency command structure in anticipation of a fire. The Board will recall that the mine's Emergency Response Plan nominates a number of Emergency Commanders, ranging from the Mine Director to the Shift Supervisor for the 2x12 shift, which is essentially the supervisor of the people who are mining the coal. 10.47AM

None of the senior mine personnel who were designated as Emergency Commander were on site when fire broke out. All of them were away from Morwell: Mr Wilkinson was in Queensland; the acting Mine Director, Mr Faithfull, was in Inverloch; Mr Dugan had gone to Mallacoota; and Mr Kemsley, the Technical Compliance Manager, was not on site either. That left the most junior in the mine's management hierarchy, Ian Wilkinson, the shift supervisor, as the only nominated Emergency Commander on site. He obviously had operational responsibilities on that day and there's no evidence to suggest that he actually assumed the role 10.47AM 10.47AM 10.48AM

of Emergency Commander at any time on the afternoon of 9 February.

That state of readiness is to be compared with the Traralgon ICC which was in place with almost a full complement of people in all of the IMT roles, with an experienced Incident Controller leading that team. It is also to be contrasted with the mine's state of readiness on an earlier occasion when Mr Prezioso was the Emergency Commander, an occasion of protest outside the front gates of the Hazelwood Power Station, which was an incident that, in our submission, posed a much less grave threat to the operations of the mine and the power station, and yet there was Mr Prezioso already in place in anticipation of things not turning out well. 10.48AM 10.48AM

That lack of preparedness meant that, when fire did break out in the mine on the afternoon of the Sunday, mine personnel were essentially caught flat-footed and that explains why, in our submission, the implementation of the Emergency Response Plan was so slow. 10.49AM 10.49AM

Fire had been burning in the mine since just before 2 o'clock on the earliest witness's account, but the Emergency Response Plan was not implemented until 3.20, and only then after somebody who really sits outside the emergency command structure, Mr Harkins, had taken control and declared a full-blown emergency. 10.49AM

Even then, after the Emergency Response Plan had been activated and the Emergency Command Structure was in place, no one thought to take the basic step of checking whether the CFA had been notified by calling 000. It is absolutely plain in both the mine fire 10.50AM

instructions and in the emergency response plan that that is the first step to take and it was not taken.

The next two criticisms both relate to infrastructure at the mine that was critical to the fire suppression effort. There was no backup power supply at the mine when power was lost. Without power, the Fire Services water system was reduced to a trickle and was essentially ineffective until power was restored, and the Emergency Command Centre was in darkness, had no access to working computers or to printers. 10.50AM 10.51AM

There is a certain irony in a power generator being without power during a critical incident and it is something that is addressed in the recommendations that I will come to shortly. 10.51AM

The other criticism is that the efforts to suppress the fires, both early on and as the fire continued, were hampered by limited reticulated water in the worked out batters of the mine. As Mr Polmear explained to the Board last week, pipes were removed between the mid-1990s and 2007 and were not replaced. There is a very close correlation between the pipes that were removed during that period and the new pipes that were laid during the fire fight. 10.51AM

Moving to the recommendations that we submit should be made in response to those criticisms, or indeed observations: The first of those is that for future incidents the mine and the Fire Services should operate integrated Incident Management Teams which incorporate both the Emergency Services personnel and the Hazelwood personnel in one Incident Management Team 10.52AM 10.52AM

responding to an incident.

There are two things we submit should happen to bring that about: The first is that the Emergency Management Commissioner and the CFA should work with GDF Suez, and also other essential industry participants - this could well have happened in another open cut mine or in another essential industry run by another private operator - to implement the Australasian inter-service incident management system or AIIMS which is in use by Fire Services here in Victoria and across Australia and has proved to be a very useful incident management system allowing interchangeability of personnel from a whole range of different settings in one integrated Incident Management Team. Then, to enable that to happen, GDF Suez should ensure that those people who are nominated in its Emergency Response Plan as Emergency Commanders should undergo incident management training to achieve Incident Controller accreditation; not necessarily to Level 3 but at least a basic level of Incident Controller accreditation so that they achieve proficiency in AIIMS and can manage an incident team in response to an incident at the mine or at the power station. 10.53AM 10.53AM 10.53AM 10.54AM

The Board will appreciate, from having seen the evidence of Mr Jeremiah, Mr Barry and Mr Haynes, that incident management is a skill; it is not just something that can be done applying common-sense and management experience, and it is a skill that no doubt can partly be learned by experience but also benefits from some formal instruction and, in our submission, 10.54AM 10.54AM

this is an investment that GDF Suez and indeed any operator of essential industry should make in its staff.

CHAIRMAN: Does that involve the further step of saying that the system should provide for the personnel at GDF Suez to be integrated so that, when the fire agencies take over, the personnel are treated as part of that team rather than two teams working together? 10.54AM

MS RICHARDS: That is the intent of the proposed recommendation. 10.55AM

CHAIRMAN: You've not specifically said. You think as part of the review talking together that should be one of the things that they should address?

MS RICHARDS: There's no review proposed, it's a straight recommendation that's proposed, and the starting point is that there should in future be integrated Incident Management Teams to incorporate - - - 10.55AM

CHAIRMAN: And that's, you'd say, a necessary incident of that process?

MS RICHARDS: Yes. So initially what one would envisage is that there would be a GDF Suez person managing the incident and, if the incident can be dealt with without involving external agencies, then well and good. But Incident Controller accreditation will undoubtedly be of use in managing even small incidents. If the incident is taken over by an external agency, in this case the Fire Services, what we submit should be recommended is that, that person manage an integrated Incident Management Team in which mine personnel participate, rather than the two parallel teams that were in operation during this mine fire. So that's the 10.56AM 10.56AM

first of the recommendations arising out of the response to the fires.

The second is that GDF Suez, in our submission, should revise its Emergency Response Plan to increase its state of readiness on days of total fire ban and 10.56AM that should include requiring pre-positioning of an accredited Incident Controller as an Emergency Commander and pre-establishment of an Emergency Command Centre.

If a fire is burning anywhere in the mine, it's 10.57AM not a good time to be opening rooms and making sure the chairs are there and the computers are turned on; that should have already been done so that a person who is already there and has the training and the skills to take command of a complex situation can immediately 10.57AM swing into action.

The third of the recommendations arising from this part of the evidence is that GDF Suez should review its power supply arrangements in light of its experience this year and should put in place back up power supply 10.57AM arrangements that do not depend wholly on mains power. These backup power supply arrangements should, at a minimum, ensure that the Emergency Command Centre can continue to operate if mains power is lost and that there is some remaining capacity in the Fire Services 10.58AM water system.

This is as simple as installing a generator to power the Emergency Command Centre. It is less simple in relation to the fire water system because it is so vast, but in our submission the feasibility of having 10.58AM some internal generation capacity should be explored.

We note that, in installing the pipes during the recent fire, there was for the first time some internal generating capacity included.

Mr Graham gave evidence on Friday about a number of proposals to create redundancy to change the switching arrangements and I don't pretend to have followed that evidence. It's clear that there's a great deal of thought and expertise from electrical engineers that's gone into it. The fault, it seems to me with the proposal, is that it still relies entirely on mains power entering the mine and it is a very common experience during a fire for mains power to be lost, not necessarily because of conditions on your property, but because of conditions at some distance and in our submission it's appropriate for the mine operator to examine its backup power supply arrangements. 10.58AM 10.59AM 10.59AM

CHAIRMAN: Can I just raise one potential criticism that you have not addressed and that is that, in relation to the power situation, there might have been a reassessment of appropriate priorities so that, whilst it was clear that attending to the fire or minimising the risk of fire in the operating section, priority should have been given to the potential impact of the fire on the northern area where the power lines were because it might have reasonably been anticipated that what did happen might happen, and so the priority should have accorded greater priority than was given to the possibility of the poles being set on fire and therefore compromising the power. 10.59AM 11.00AM 11.00AM

MS RICHARDS: Yes, there's no indication, and really the

first person who gave evidence of being in a position of command of the incident and assessing where resources ought to be placed was Mr Prezioso, who didn't step into that role until after 3 o'clock.

CHAIRMAN: So in a sense you're saying that that might be seen as an incident of the lack of preparation? 11.00AM

MS RICHARDS: In my submission it could be found that those responsible for responding to the fire at the mine didn't appreciate the significance of the power lines that enter the mine. And, although they are duplicated, they do actually run through the northern batters side-by-side, so a fire in the northern batters always had the potential to affect both of them. 11.01AM

MEMBER CATFORD: Could I just ask a couple of questions? Do you have a view about timelines for these recommendations? Is there a sense of urgency bearing in mind the fire season is going to be on us within a few months? 11.01AM

MS RICHARDS: In relation to the first two proposed recommendations, in our submission there's no reason why those things could not be in place by the next fire season. 11.01AM

In relation to the third of the proposed recommendations concerning the power supply, the implementation of that will rely on technical matters that are very much outside our expertise and there's no real evidence before the Board that could assist it in determining what a reasonable timeline is. Certainly the generator for the Emergency Command Centre ought not to be a complex matter, but internal generation capacity to pressurise the Fire Services pipe network, 11.02AM

in my submission, is not something that could have a definite timeline put on it.

MEMBER PETERING: Ms Richards, thank you, that was very clearly put out. The recommendations, would they be in addition to those recommendations that GDF Suez proposed on Friday through Mr Graham's evidence? Some of those were around training in the Phoenix modelling, training firefighting and equipment, fire training specific to Hazelwood. 11.02AM

MS RICHARDS: As I understood Mr Graham's evidence, those were things that GDF Suez is planning to do in any event. 11.03AM

MEMBER PETERING: Okay.

MS RICHARDS: Our proposed recommendations picked up matters that we didn't apprehend that they were planning to do in any event, and perhaps refined or put a different cast on the proposal that there be further training in firefighting. In our submission, there's a particular need for incident management training so that there can be an effective coordinated response given that the evidence is all one way, that the best way to deal with fire in a mine is to put it out as quickly as possibly, so that for an effective response GDF Suez is going to have to be self-sufficient in most instances. If it's necessary for the CFA to take control of an incident, then the fire has already spread out of control. 11.03AM 11.03AM 11.04AM

MEMBER PETERING: I think that's cleared that up, that the recommendations will be in addition, as you say, to those that GDF Suez have committed to.

MS RICHARDS: Yes, I'm sure I'll be corrected if I've misunderstood that, but I did understand Mr Graham's 11.04AM

evidence to be that these were things that GDF Suez were proposing to do in any event, having had the experience that it had in it February and March and having listened to and reflected on the evidence that's been presented in the course of the public hearings. 11.04AM

MEMBER PETERING: Thank you.

MS RICHARDS: Moving to the second area of submissions. In the second week of the public hearings we covered a very large stretch of activity ranging from air quality monitoring to public health, to relief and recovery, 11.05AM decisions made in relation to schools and communications. Time has not permitted an outline of basic factual findings that we propose be made in relation to that week's evidence, so I'll move straight into the commendations, the criticisms and the 11.05AM recommendations that arise.

Firstly the commendations, and the first two of these relate to the Environment Protection Authority's activities during the fire. The EPA was able to deploy an impressively qualified group of air quality 11.06AM scientists to undertake monitoring in the Latrobe Valley after it was requested to do so on 11 February. It was able to provide indicative air quality data from around 13 February and then, with quite impressive rapidity, it was providing validated air quality data 11.06AM from 19 February from South Morwell and earlier than that at the Hourigan Road site in East Morwell.

Although it didn't have suitable air monitoring equipment for rapid deployment in an emergency, and that's an area that I will return to, that was quickly 11.06AM sourced from Interstate. Although some criticism is

made later of the EPA in relation to its starting position in an emergency, given its starting position it responded very quickly and effectively and with, as I say, impressive expertise.

The other area for commendation, in our submission, is the EPA's preparedness to seek peer reviews of the Carbon Monoxide Protocol that was developed together with the Department of Health during the fire, and also the programs that it had undertaken for monitoring and assessment of air quality, soil and ash and water. On each of those three areas the EPA went to external experts and said, "Are we doing the right thing? Are we monitoring the right thing? Is there more that we should be doing? Should we be placing the monitors in other places?" 11.07AM

While that was commendable, the benefits of the activity would have been greater had the fact that this external validation been sought been shared with the public, so the public would have had that assurance of other experts having reviewed what the EPA was doing and having given it their approval. Although, as I will return to, the peer review that the EPA obtained of the Carbon Monoxide Protocol was not an affirmation of that protocol. 11.08AM

Moving next to the Department of Health, which includes the Chief Health Officer. A matter of very strong commendation should be, in our submission, the establishment and operation of a Community Health Assessment Centre in Morwell from 21 February right through to the end of March. That centre was, as is evident from the evidence of a number of community 11.08AM

witnesses, a welcome source of information and reassurance during the uncertain weeks of the smoke from the mine fire. Professor Brook's evidence was that over 2,000 people had attended it during the fire and it was clearly a very welcome measure and well used by the community. 11.09AM

That said, its benefits again would have been enhanced had there been greater involvement of local health services providers and in particular general practitioners in the establishment and operation of the centre; not necessarily as clinicians, but as another means of informing the community and reassuring the community to the extent that it was possible to do so. 11.09AM

Also commendable was the action taken by the Department of Health to seek peer reviews of both its Carbon Monoxide Protocol and the PM 2.5 Protocol that was developed during the fire. It also obtained a Rapid Health Risk Assessment from the Monash University School of Public Health and Preventive Medicine which is a very thorough and impressive document. Once again there is a caveat, however, that the benefits of this external expertise would have been enhanced if the fact that they were being sought had been shared with the public and, in relation to the Rapid Health Risk Assessment, if it had been obtained at an earlier date. 11.09AM 11.10AM 11.10AM

The third area of commendation, in our submission, is the long-term health study that the Department of health has also embarked on subsequent to the fire. This is a study that will benefit both the local community who were exposed to the smoke by providing monitoring of any long-term adverse health effects and 11.11AM

it will also, in addition to having real health benefits for those who were here breathing in the smoke, it will also address an existing gap that became clear during the course of the fire in medical understanding of the long-term health effects of 11.11AM exposures such as were experienced this year and will assist health authorities and others in their future policy development and their responses to similar incidents in future.

There are some areas for improvement in the 11.11AM proposed long-term health study and these are addressed in the recommendation that I will come to in a while.

Under the heading of "Communications", there should in our submission be recognition of the clear communications during the acute phase of the fire on 11.12AM 9 February before it became established as a mine fire and it was simply a bushfire situation. ABC local radio and local commercial radio provided timely and responsive information, and the CFA provided again timely and helpful community information and warnings 11.12AM through a range of different platforms, including its FireReady app, its website and text messages that a number of community witnesses have confirmed that they received on 9 February.

The Fire Services, and in particular the CFA, 11.12AM should also be commended for their sustained efforts to provide the community with information during the course of the fire right through February and into March. Fire Services Commissioner Lapsley was widely appreciated in the community for the forthright 11.13AM and honest way that he presented information to the

public.

Community witnesses also commented favourably on the frankness of Incident Controllers at community meetings. It was more welcome to hear that, while Fire Services didn't know how long the fire would take to put out, they were doing all they could to bring it under control. 11.13AM

As the fire fight went on the CFA was highly visible in the community and engaged in communication with the community through a range of quite innovative face-to-face means. The community information bus was a successful measure, community meetings were - with one exception that I'll come to - and the engagement of the Morwell Neighbourhood House was a successful means of reaching the community. 11.13AM 11.14AM

Mention should also be made of a range of community leaders and networks, for example Morwell Neighbourhood House and Voices of the Valley who are identified because we've heard specifically from people involved in those organisations, who utilised social media and arranged community meetings and filled what was perceived by many in the community to be an information gap. 11.14AM

Moving next to the area of schools and children's services. The first commendation goes to the Latrobe City Council and its decisive action in closing the Maryvale Crescent Early Learning Centre from 10 February. As we've heard from a number of witnesses, that early learning centre is extraordinarily close to the mine and it wasn't necessary for anyone to wait for air quality data or 11.14AM 11.15AM

decision-making protocols to make a judgment that it was untenable for children to be there.

The Department of Education and Early Childhood Development also acted relatively quickly, although not as quickly to relocate children from Commercial Road Primary School in Morwell to other primary schools in Moe and Newborough and it did that from 20 February. 11.15AM

Although we've not heard evidence specifically from the Catholic Education Office, it's apparent from Mr Jackman's evidence to the Board last week that the Catholic Education Office relocated Sacred Heart Primary School, which is just near Commercial Road Primary School, on the same day. 11.16AM

A range of other schools and children's services in Morwell were closed or relocated at various stages during the fire, but it would appear that all of them had either closed or relocated by 20 February; these are schools that were on the southern side of Commercial Road. 11.16AM

Another commendation is both to the Department of Education and Early Childhood Development and the Catholic Education Office for arranging comprehensive cleaning of both of the primary schools in Commercial Road - the Sacred Heart Primary School and the Commercial Road Primary School - before children returned to the school at the beginning of Term 2. 11.16AM 11.17AM

Moving to the areas of relief and recovery, there's been a good deal of community criticism about aspects of the relief and recovery effort, and in particular in relation to the respite and relocation payments that were administered by the Department of 11.17AM

Human Services. But in our submission it should be acknowledged that these were payments that did not have to be made and that they were made relatively quickly, displaying fairly flexible application of a pre-existing program, in particular the personal hardship assistance program. 11.17AM

The benefits of these payment schemes were diminished, and I'll come to this in a little while, by a poorly explained eligibility criteria, but that should not detract too much from the fact that they were made available in the first place. Clearly there were a lot of people who had access to assistance that need not necessarily have been provided at all. 11.18AM

There were a range of other respite initiatives that were made available through the leadership of DHS and all of these helped in varied ways to alleviate the effects of the smoke during the mine fire. Some of these were quite innovative and one of the most appreciated appears to have been the free V/Line traffic that just allowed people to leave Morwell either to go to a neighbouring town or to travel into Melbourne to take advantage of other respite measures that were available such as free visits to the zoo. 11.18AM 11.18AM

We've had a little evidence about this from Mr Hall of DHS and Mr Mitchell of the council and also from Ms Brooke Burke who runs a small business of her own about support and assistance that was made available for small businesses in Morwell; and again, that was a reasonably significant amount of money that was made available and clearly, in Ms Burke's case at least, it has assisted to defray some of the costs that 11.19AM 11.19AM

were incurred by her business due to the smoke from the fire.

GDF Suez has provided additional stimulus to the Morwell business community, particularly the retail sector, through its Revive Morwell initiative and it is also looking to inject $500,000 into the Morwell community through its Community Social Capital Committee which is working with a range of community organisations to identify projects that will build community social capital in Morwell. 11.19AM 11.20AM

Another measure that we shouldn't overlook because we've all been passing by it every day during these hearings is the community information and recovery centre that was established in this building at the end of February. It has operated to provide a central location for a whole range of assistance to affected members of the community, ranging from the loan of vacuum cleaners, through to the availability of insurance brokers to provide advice to people about their insurance claims and indeed to assist them with their claims. Mr Mitchell gave evidence of a quite successful initiative that has come from those insurance brokers' work. 11.20AM 11.20AM

Moving from the positives to the things that could have been done better. The first criticism relates to the EPA's state of readiness to respond as a support agency during an emergency. The EPA is designated in the Emergency Management Manual as a support agency for emergencies and, of course, it has one emergency for which it is the control agency, pollution of inland waterways. Notwithstanding its role in emergency 11.21AM 11.21AM

management, it just was not well equipped to measure air emissions from an emergency within a short time of that emergency commencing.

Although it sourced and deployed the required equipment fairly quickly, there was still an 11.22AM
unsatisfactory delay in providing air quality data for decision-makers, including the Incident Controller and the Chief Health Officer, and that delay between the request to the EPA to start providing air quality data and when it began providing high quality validated data 11.22AM
from the mobile laboratory at the bowling club encompassed that weekend of 15 and 16 February when conditions were acutely bad. During that weekend, only indicative data was available and, as we shall see, that indicative data was not acted upon by the 11.23AM
Department of Health over that weekend.

There are a number of areas of criticism, in our submission, of the Department of Health and the Chief Health Officer. The first of those relates to the Carbon Monoxide Protocol that was developed by the 11.23AM
Department of Health on 16 February. The Board will recall the series of events over that weekend, these are outlined probably most helpfully in Commander Katsikis's witness statement. There were readings of carbon monoxide in the community on Saturday, 11.23AM
15 February that exceeded those levels identified as acceptable for the community in the Health Management and Decontamination Plan that was being applied by Fire Services to their firefighters. On that basis, the Incident Controller issued a watch and act message that 11.24AM
several witnesses have attested to receiving on their

mobile phones.

On 16 February there was a change implemented to the way in which this information would be assessed and advice given about whether a warning was necessary, and integral to that was the development of the Carbon Monoxide Protocol on 16 February by officers of the Department of Health. Again, we've not had detailed evidence from the people involved in developing that protocol on the day and the influences on them, but what is apparent from the face of the two documents, the Carbon Monoxide Protocol and the Health and Decontamination Plan, is that they apply very different exposure levels, and perplexingly we see that levels that are not considered safe for firefighters who are fit adults who have already undergone screening before they're permitted onto the fire ground, are greatly exceeded in the Carbon Monoxide Protocol that was developed by the Department of Health in mid-February. 11.24AM 11.25AM 11.25AM

The reasons for the differences between these two sets of exposure levels has not been satisfactorily explained to the Inquiry, in my submission, and Mr Lapsley certainly was not able to do so on Friday, and there was really no effort to explain the reasons for the discrepancy. Accepting that one adopts an acute exposure standard developed in the United States and the other applies the Safe Work Australia standard here in Australia, it remains completely unclear why the community should tolerate exposure standards that would not be expected of firefighters. 11.25AM 11.26AM

This confusion on our part is confirmed by the peer reviews that were obtained of the Carbon Monoxide 11.26AM

Protocol by the EPA. It went to two respected epidemiologists and sought their opinion and, at the risk of oversimplifying what those peer reviews say, and these are attached to Mr Merritt's statement, both of them said that in a prolonged event the levels that were applied in the Carbon Monoxide Protocol were too high and should be reduced. 11.26AM

Mr Merritt's evidence was that he expected that those peer reviews would have been provided to Dr Lester; Dr Lester's evidence was that she was not aware of them. In any event, we are all aware of them now and it is clear that those two protocols for carbon monoxide exposure, one for firefighters and one for the community at large, need to be reviewed and need to be made consistent one with the other. The advice of the epidemiologists who undertook those peer reviews of the Carbon Monoxide Protocol should be heeded. That's something I will return to when I come to the recommendations. 11.27AM 11.27AM

That criticism about the Carbon Monoxide Protocol and the levels that were adopted in it is connected with the next area of criticism which relates specifically to the response to reports of high carbon monoxide levels in southern Morwell on 16 February. 11.27AM

On the evening of 16 February the EPA reported very high levels of PM 2.5 and dangerously high levels of carbon monoxide to the Department of Health, and that report was in an email from Dr Torre of the EPA to Vikki Lynch of the Department of Health. What the email showed, and at this stage it was only the indicative data, it was not the high quality data that 11.28AM 11.28AM

began to be produced from the bowling club mobile laboratory later on in that week, but it indicated a number of things:

The first was that during the morning, from half past midnight to 8.30, there had been an 8-hour average 11.29AM level recorded between 25-45 ppm. The second thing that it showed was that, during a 5-hour period that afternoon, between 1.30-6.30, there were a series of five-minute readings that were at alarmingly high levels. At the Morwell Bowling Club levels were 11.29AM recorded over that period between 25-57 ppm and at the Maryvale Kindergarten they were recorded between 20-44 ppm.

These were five minute readings but they were taken using the same kind of monitors that firefighters 11.29AM use on the fire ground. If the readings were taken at intervals over a 4-hour period it was, of course, possible to arrive at an indicative conclusion about what the average readings would have been. And, if those readings did represent average carbon monoxide 11.30AM levels in those areas, they were high enough to warrant at least a watch and act message to shelter in place even under the high levels that were adopted in the Carbon Monoxide Protocol developed by the Department of Health that day. 11.30AM

Notwithstanding that indicative data, the Department of Health determined to take no action other than issuing a routine bushfire smoke advisory for the following day. There was no action taken that evening when carbon monoxide levels were known to be high and 11.31AM in excess of the high standards that the Department of

Health had identified.

Professor Campbell in his evidence said that "sometimes to make no decision is to make a decision" and this was one of those occasions. In our submission, the inaction on that evening was dangerous and it is fortunate that, as far as we know, no harm resulted. 11.31AM

A further area of criticism relates to the Chief Health Officer's advice on 28 February that those vulnerable groups living south of Commercial Road should consider temporary relocation. The criticism doesn't relate to that advice as it stood; the criticism relates to the timing of that advice. In our submission, it was provided too late. 11.31AM

The State Emergency Management Team had been advised from 12 February that the fire was likely to burn for up to a month and would have significant long-term implications for the community. In light of that advice, in our submission, it was not appropriate for health authorities to operate on a day-by-day basis in the advice they were giving to the community. There was sufficient indicative air quality data available from the EPA by at least 16 February based on Dr Torre's rough calculation that the levels in the south of Morwell were two to three times the levels that were being recorded at Hourigan Road for the Chief Health Officer to be satisfied that the levels of PM 10 and PM 2.5 vastly exceeded ambient air quality standards and were likely to do so from time to time for a number of weeks. 11.32AM 11.32AM 11.33AM

Providing advice to consider temporarily

relocating if you are in a vulnerable group in an area heavily affected by smoke is a very gentle measure to suggest. It was not an evacuation and there was certainly nothing compulsory about the advice that was proffered. But, as we have seen from evidence, a 11.33AM number of people were waiting for that advice, almost that permission, to leave. It should have come earlier. It would have been, from at least 16 February, consistent with the Precautionary Principle that appears in the Public Health and 11.34AM Wellbeing Act to proffer that advice to the community and it would not have been disproportionate to the risk faced.

Another area of criticism of the temporary relocation advice is the basis on which the advice was 11.34AM limited to those living south of Commercial Road. Dr Lester in her evidence was quite definite that the basis for choosing Commercial Road as the dividing line was based on different readings from the Morwell Bowling Club and the Hourigan Road air monitoring 11.34AM station. She did not refer in her evidence to a map that identified more nuanced spatial understanding of the fall in PM 2.5 levels across Morwell.

It emerged almost by accident in Mr Mitchell's evidence that there had in fact been a map discussed in 11.35AM a meeting that morning on 28 February and we remain hopeful that that map will ultimately be produced to the Inquiry. It is a map that provides a spatial depiction of travel blanket readings of PM 2.5 levels and, if it is the map that we believe it is, it does 11.35AM provide a clear basis for choosing Commercial Road as a

dividing line.

This proved to be a very divisive matter in the community, that suddenly this new suburb of South Morwell had been created and was seen and understood by the community as an arbitrary dividing line. It could, by reference to this travel blanket data plotted on a map, have been readily explained to the community and, in our submission, it is a mystery why it was not. 11.35AM

MEMBER PETERING: Ms Richard, just on that point. If it is the map that we are thinking of, with the colours on it, if there could also be a legend provided, so what does red mean, blue mean and green, so just an explanation of the colours on the map would also be greatly appreciated. 11.36AM

MS RICHARDS: It would have been very helpful if the witnesses who generated that map had discussed its significance with us when they gave their evidence at the Inquiry, but we'll continue to make that enquiry of those representing the State. 11.36AM

Moving to the area of communications. Although community meetings were an integral and in large part successful part of the Fire Services good communications during the fire, the community meeting held on 18 February was an exception. There had been terrible conditions in Morwell over the weekend of 15 and 16 February and, in light of those conditions, more care should have been taken in setting up the meeting, ensuring that a skilled facilitator was available to run the meeting and ensuring that there were representatives at the meeting who were able to provide authoritative information on behalf of the agencies 11.36AM 11.37AM 11.37AM

they represented.

There were guidelines in existence for setting up and running community meetings that Mr Rozen took Ms Tabain to last week; had those guidelines been followed, the meeting on 18 February may not have been such an angry and disappointing event. 11.37AM

Criticism in our submission should also be made of the bushfire smoke advisories issued by the EPA and the Chief Health Officer jointly throughout the fire. These were repetitive, poorly focused and really quite unhelpful, increasingly so as the fire went on. It was of little use to a person who lived in Morwell to be told that it was going to be smoky. 11.38AM

The advice should have, in our submission, been better tailored to the actual conditions that were prevailing and the prolonged nature of the fire, and could have contained some more practical advice about measures to be taken to avoid the impact of the smoke. 11.38AM

In similar vein, the health alerts and advisories issued by the Chief Health Officer that were targeted at health practitioners and service providers were also repetitive and did not actually contain information that assisted practitioners' advice to patients and clinical decision-making. It's of little assistance to tell a practitioner that someone with asthma should follow their asthma plan, when the practitioner is the person responsible for helping them device and implement an asthma plan. 11.38AM 11.39AM

A good deal of information provided to the community during the fire by the State and its agencies didn't, in our submission, and in the opinion of the 11.39AM

two communications experts who gave evidence, meet best practice in crisis communication which requires, to put it simply, quick, consistent, open and empathetic public communications during a crisis.

There are a couple of examples that I have drawn out in paragraph 9 of information sheets issued by the EPA and the Department of Health that pose questions - for example, "The data on the EPA's website looks as though we've exceeded air quality standards, is that right? And, could the current smoke exposure affect my long-term health or that of my family?" But then failed to provide answers. The answers to those questions are, "Yes" and, "We don't know for sure but we think it's unlikely." Those are answers that could be simply and clearly stated and, in our submission, it created confusion and undid a lot of the good work that had been done in the communications area to provide information that was evasive and unhelpful and inconsistent with the experiences of people living in the community. 11.39AM 11.40AM 11.40AM 11.41AM

The temporary relocation advice of course was more than just advice, it was a communication and it was understandably seen by many in the community as inconsistent with earlier advice and also inconsistent with a bushfire smoke advisory issued by the EPA quoting the Chief Health Officer that very day. In our submission, advice that the best precaution to take was to stay out of the smoke, including by leaving town, could and should have been given from a much earlier stage in the fire. 11.41AM 11.41AM

Finally on the subject of communications, in our

submission GDF Suez was conspicuous in its absence in public communications throughout the fire, and in its public utterances demonstrated little concern for the community and the effect that the fire was having on people living in the community. As Professor Macnamara and Mr Drummond identified, this was contrary to best practice crisis communications, which requires those involved in a crisis to communicate quickly, consistently, openly and empathetically with those affected. 11.42AM

In relation to schools and children's services, although the relocation of the Commercial Road Primary School and the Sacred Heart Primary School was relatively quick, and that's been commended, it remains the case that it could have been quicker. It wasn't necessary, in our submission, for those administering those schools to obtain advice, which almost appears to have been a sort of permission from the Chief Health Officer before making that decision. As it transpired, the advice that was given was advice during a conversation, followed up by an email, that was not based on air quality data or a decision-making protocol but on a secondhand report of the impact on children at a daycare centre close to these two schools. 11.42AM 11.43AM

In our submission, those administering those schools should have, like the Latrobe City Council did, assess the conditions in the southern part of Morwell for themselves and made a call that they were plainly untenable for children and for staff and not conducive to quality education from the very beginning. 11.43AM 11.43AM

Finally, in relation to relief and recovery, the

eligibility criteria for the relocation and respite payments were not well articulated or explained; they appeared to be arbitrary and were inconsistently applied. Of particular concern was the income requirement, that was not clearly explained in public information issued by the Department of Human Services, also the geographic criterion which was a consequence of the advice issued by the Chief Health Officer that, as I've already submitted, was poorly explained. 11.44AM

Finally, a criticism needs to be made of the clean up assistance package that was made available. Acknowledging that clean up assistance of this sort is not ordinarily made available in the event of a fire or a flood, the self-clean package that was provided - a bucket with a mask and some gloves and a car wash voucher and a laundry voucher was wholly inadequate to the scale of the cleaning task that faced members of the community. The council knew this and explained this to Local Government Victoria, including bringing them here to Morwell and taking them on a tour of various residences, but the clean up package was fixed at State level and, as we have heard from community witnesses, was perceived to be inadequate. 11.44AM 11.45AM 11.45AM

The clean up assistance package was not announced until 18 March, more than a week after the fire had been declared controlled, and there were then further delays in implementing the assisted cleaning package because council had been unable to put those contracts out to tender until the package was announced. This really meant that the assistance provided was too little, too late; many people had already made their 11.45AM 11.46AM

own arrangements by the time the assistance package was made available.

Moving then to the recommendations, and there are a number of them under the heading of "Environment and health". The first relates to the need for a national 11.46AM compliance standard for PM 2.5. In our submission, the Victorian Government should take the lead on this issue. There is an indication of an intention to develop a compliance standard in the gazettal notice that Ms Richardson referred to during her evidence with 11.46AM Dr Torre, and Counsel Assisting accept the desirability of moving forward as a nation on this important issue. But there are limits and, if it can't be achieved within 12 months, then Victoria should take the lead and should, in our submission, establish its own 11.47AM state-based compliance standard, as indeed it did in relation to food safety laws some years ago.

Additionally, in our submission the Board should recommend that the EPA undertake monitoring of PM 2.5 at all of its permanent monitoring stations in 11.47AM Victoria, which is something that it does not currently do; it's only very recently commenced monitoring PM 2.5 here in Traralgon and it was not monitoring PM 2.5 in Traralgon at the time of the fire.

One of the purposes for having an advisory 11.47AM standard in the National Environment Protection Standards was to start the monitoring so that more information would be available for setting a compliance standard and, in order for that to happen, the monitoring must take place and it would appear it has 11.48AM not.

There was evidence before the Board that there had previously been some discussion with the EPA about the need for air monitoring in Morwell as opposed to simply in Traralgon for the entire Latrobe Valley. In our submission, an appropriate recommendation arising out of the experience of the fire this year is for the EPA to establish an automatic monitoring station in southern Morwell close to the mine to monitor a range of substances, but in particular fine particulate matter. Those readings should be available for the public and that monitoring station should, in our submission, remain in place for at least five years. This is a project that the State could invite GDF Suez to contribute to as part of its corporate social responsibility plan. 11.48AM 11.49AM 11.49AM

Moving to the EPA's emergency response capacity: In our submission, the EPA should equip itself to be able to respond in an emergency rapidly with portable equipment that will enable it to provide reliable data for decision-making within 24-hours at most of an incident occurring. This is a recommendation that was put forward jointly by Dr Torre and Ms Richardson, and it, in our submission, is a very sensible and relatively low cost way for the EPA to be more prepared to respond in an emergency in future. 11.49AM 11.50AM

Consistent also with suggestions made by Dr Torre and Ms Richardson, in proposed Recommendation 5 we've identified two research and development projects for the EPA; one relating to development of low cost simple ways for anyone in the community to measure and record airborne particulate matter; and the second is to build 11.50AM

on the excellent Phoenix RapidFire prediction tool and produce an equivalent air quality prediction tool that can be used by Emergency Services in their decision-making and planning and warnings.

CHAIRMAN: You have a mention there the matter of planned burning which can of course be a matter of concern to a variety of Victorian towns. 11.51AM

MS RICHARDS: Including here in the Latrobe Valley as we heard from Mr Merritt, and of course that prediction tool would have an application to planned burning as well as to unplanned fires. 11.51AM

The long-term health study, while welcome, at the moment is only proposed to be for an initial term of 10 years due to tendering requirements as we understood the evidence. In our submission, that allows the tail to wag the dog and the Department of Health should commit to at least a 20-year health study, long-term health study, and should put in place the contractual arrangements to give effect to that commitment. The study should, in our submission, have a governance structure that includes both community representatives and the Latrobe Valley health advocate who I'll come to in a while which should publish regular progress reports. 11.51AM 11.52AM

It was notable during the course of this fire that very heavy reliance, and with it some pressure, was placed on the Chief Health Officer as the sole source of health advice during an emergency. In our submission there is capacity for that pressure to be alleviated by the establishment in advance of a public health emergency expert panel who can be available as a 11.52AM 11.53AM

source of advice during an emergency on a range of different areas; whether it be communicable diseases or air quality issues or indeed anything else. This is a panel that could be established by the Emergency Management Commissioner and the Chief Health Officer in 11.53AM combination, and could identify in advance of any incident occurring a range of expertise, both local, interstate and international.

The next recommendation that we propose builds on the Bushfire Smoke Protocol in a way suggested by 11.53AM Dr Torre and Ms Richardson in their joint report. In light of the experience this February and March, in our submission it should now be possible to develop a more comprehensive Victorian Smoke Management Guide that would comprise a suite of documents, including various 11.54AM protocols that were developed and should be revised following the fire, and information for employers to be developed by WorkCover.

The next recommendation relates to the revision of the Carbon Monoxide Protocol and the PM 2.5 Protocol 11.54AM that were developed by the Department of Health and the EPA during the fire, and in particular revising the community Carbon Monoxide Protocol so that it is consistent with the standard in place for firefighters. This should, in our submission, be done by the 11.55AM Emergency Management Commissioner and should be in place by the beginning of the next fire season in November this year and it should be reviewed by an independent expert panel.

The next recommendation proposed is that the 11.55AM Victorian WorkCover Authority should develop and

publish information for employers about occupational air quality standards, including the compliance standards that are set by reference to the Safe Work Australia Hazardous Substances Information System. The Board will recall that information was provided by 11.55AM
WorkSafe employers in extremely general terms, and there are in fact occupational standards that are referenced in the Occupational Health and Safety Regulations, and it would be of assistance to tell employers what those are and to give them some 11.56AM
practical advice about how to ensure that they're being complied with.

The next recommendation arises from suggestions made by Board members, and in particular Professor Catford in discussion with Professor Brook and 11.56AM
Dr Lester. It is notorious that health outcomes in the Latrobe Valley are worse than those for the remainder of Victoria. The smoke from the mine fire in February and March this year added insult to an already poor situation. 11.56AM

In our submission, this is an opportunity to take that insult and to turn it into a basis for improvement of health outcomes in the Latrobe Valley and this could be done by declaring the Latrobe Valley a health conservation area and appointing a person in whom the 11.57AM
community has confidence as a health advocate for the Latrobe Valley. That person would, as we have already submitted, have a defined role in relation to the long-term health study, but could act as a champion for improved health in the Latrobe Valley more generally. 11.57AM

The next series of recommendations relate to

communications and I'll touch on these fairly quickly. The first is that Emergency Management Victoria should take the lead in ensuring that all agencies involved in emergency response have the capability and the resources that they need to respond with effective 11.58AM public communications during an emergency. This can include a range of matters. It should include training in crisis communication. It should also include the availability of specialist communications staff to provide rapid assistance during a complex and prolonged 11.58AM incident.

Members of the Board will recall that Ms Tabain spoke about her assessment that it would have been helpful to have a senior and more experienced communications practitioner here on the ground in the 11.58AM Latrobe Valley at a much earlier stage in the incident.

The third matter is the development of communications capabilities in all media and all forums; everything from facilitating community meetings and having trained facilitators available for that kind 11.59AM of communication, to effective use of social media to inform the community during an incident.

The next recommendation that's proposed arises from Mr Lapsley's evidence about the importance of a community engagement model for Emergency Management 11.59AM planning and is also consistent with what is written in the Victorian Emergency Management formal White Paper on community engagement. It should be an integral component of Emergency Management planning so that, if and when an incident occurs, trusted networks in a 11.59AM community are already known and are already available

to Emergency Services as a means of communicating with the community.

The next two recommendations relate to GDF Suez: The first concerns the need to include a private operator of essential infrastructure such as GDF Suez in the co-ordination of public communications during an incident. There was quite an elaborate co-ordination process for communications by public sector agencies and GDF Suez were not included in that, and Mr Harkins accepted when I put it to him that that would have been useful. 12.00PM 12.00PM

Then finally, arising out of the reports of Professor Macnamara and Mr Drummond, in our submission GDF Suez should review its own crisis management communication strategy in line with international best practice. 12.00PM

So, those are the recommendations proposed in relation to environment and health. Unless there are any questions, I propose to give Mr Rozen a turn now and he will address the Board in relation to firefighter safety and also in relation to the very critical subject area of mitigation and prevention. 12.00PM

MR ROZEN: The present Inquiry is the third major Victorian Inquiry in recent years to consider firefighter safety. The Board may recall Mr Lapsley's evidence about the challenges that confront emergency organisations in relation to what can be sometimes conflicting legal obligations; the duty on them to suppress fire and at the same time the duty on them to protect the firefighters who they are deliberately deploying into harm's way. In that respect Emergency Services are 12.01PM 12.01PM

unusual as an employer in having to comply with their obligations under legislation in those circumstances.

The evidence before the Inquiry indicates that a very large number of firefighters were deployed to the fire fight at the Hazelwood Mine. No lives were lost amongst the firefighters, many of whom worked in very hazardous and difficult circumstances, and further no serious injuries were suffered other than by one MFB firefighter who suffered complications from a cut to his hand that necessitated a number of surgical interventions. 12.02PM 12.02PM

It's pleasing to note, having regard to that evidence, that a number of the recommendations from the Inquiries - that is, the Linton Bushfire Inquiry in 2002 and the Royal Commission in 2009 into the Black Saturday Bushfires - a number of the recommendations from those early Inquiries were implemented at Hazelwood. For example, the agencies made extensive use of Safety Officers, a matter that I will return to. 12.02PM

The fire fight at the mine was complex and vast and, as my learned friend Ms Richards has noted, the fire was very difficult to extinguish. The fire exposed both firefighters and employees to serious health hazards, and first and foremost the focus of these submissions will be the exposure of those firefighters and mine employees to carbon monoxide. 12.03PM 12.03PM

The evidence before the Inquiry is that 14 firefighters presented to hospital for carbon monoxide exposure. A number of those incidents, most of them, were notified to the Victorian WorkCover Authority under the Occupational Health and Safety Act. The 12.03PM

Inquiry will recall the evidence it heard from the two volunteer firefighters, Mr Lalor and Mr Steley, who were amongst the first firefighters to attend at Hazelwood on 9 February.

Mr Steley, in particular, referred to the effect of the fire on his health and the health of other members of his local brigade, the Heyfield Brigade. He thought that six members of that brigade alone had suspected carbon monoxide poisoning. In addition, there were 12 mine staff who were sent to hospital as a result of high carbon monoxide readings. 12.04PM 12.04PM

None of this should have been a surprise, because brown coal fires are notorious for emitting carbon monoxide due to the incomplete combustion that occurs, and the Board will remember Professor Cliff's detailed examination of the way in which brown coal fires burn and also a community witness, Mr Gaulton, gave evidence about that too. 12.04PM

Equally well-known are the harmful effects of carbon monoxide. The Board has evidence from Dr Torre of the EPA and also Dr Lester and Professor Campbell. Dr Torre explained that inhaling high levels of carbon monoxide can cause headache, nausea, vomiting, dizziness, blurred vision, confusion, chest pain, weakness, heart failure and difficulty breathing. He also noted that breathing lower levels of carbon monoxide during pregnancy can lead to slower than normal mental development of the child. Finally, he noted that prolonged exposure at lower levels can cause tissue damage and people suffering from cardiovascular or lung diseases are more vulnerable to the toxic 12.04PM 12.05PM 12.05PM

effects of carbon monoxide.

There are also well-established workplace exposure standards for carbon monoxide. These are promulgated by Safe Work Australia and include an exposure standard for carbon monoxide - that is, workplace exposure standard, calculated on an 8-hour time weighted average of 30 ppm. There are also short-term exposure limits which are set out in paragraph 8 of the proposed findings of our outline. 12.05PM

Given that the brown coal fires are notorious for emitting carbon monoxide and that the deleterious health effects of carbon monoxide exposure are well-established, and that there was an established exposure standard as at February 2014, it's somewhat surprising that the Emergency Services had so much difficulty, as the evidence indicates, in grappling with this problem. 12.06PM 12.06PM

Reports into previous fires at the Hazelwood Mine had referred to these dangers and to the need for there to be in place appropriate procedures to deal with carbon monoxide exposure. To pick just two of those reports that are in evidence, there was a report prepared for GDF Suez by its consultants GHD into the 2006 fire, and it recommended that a procedure for dealing with carbon monoxide during firefighting, including the use of carbon monoxide monitors, should be developed since personnel safety is a major responsibility and concern in fighting coal fires. 12.06PM 12.07PM

There was also a separate report prepared by the CFA into that same fire, focusing on its firefighters and, after noting at page 30 of the report that a 12.07PM

number of firefighters fighting the 2006 fire were overcome by carbon monoxide exposure, the report states, "Any similar fires in this environment in the future will require the careful management of this now known risk." 12.07PM

Unfortunately, as with much of what was learnt in reports prepared in relation to previous fires - and I'll return to this topic in relation to mitigation and prevention - not all of the lessons that should have been learnt from those earlier fires and earlier 12.08PM reports were learnt.

Volunteer Firefighter Steley told the Inquiry that he was provided with some basic advice about carbon monoxide exposure when he was deployed to the mine on the night of 9 February. He was given a carbon 12.08PM monoxide monitor. He was told, if it beeps once you've got 8 hours of time in the area before you'll have ill-effects; if it beeps continuously, get out.

In the first Incident Action Plan that was the hand-drawn document that the Board will recall hearing 12.08PM evidence about, Station Officer Ross Mal from the Morwell Station did address in broad terms the issue of carbon monoxide exposure. He is to be commended for recognising at that very early stage the need for there to be appropriate protection provided to the 12.09PM firefighters. The incident action plan noted that health monitoring and HAZMAT detection team to monitor carbon monoxide levels of personnel as required, but it didn't identify exposure levels other than noting that there should be total withdrawal at 200 ppm. 12.09PM

What the evidence reveals is that over the

following three or four days there were what could probably best be described as faltering attempts to come to grips with this issue which ultimately resulted in a documented procedure or protocol that was in place on 14 February, some five days into the fire fight at the mine. 12.09PM

We've set out in the outline those developments which started on 11 February with a reference to a peak reading of 150 ppm, with that being a trigger for withdrawal to what was referred to as a "clean area". Then on the same day, following presentation at Sale Hospital of a number of firefighters complaining of exposure to carbon monoxide, the Incident Controller ceased firefighting at the mine pending a review of Safe Work arrangements. 12.10PM 12.10PM

On the following day there was implemented an upgraded system of work to manage the risk of carbon monoxide exposure and, as Mr Lapsley explains in his second statement, the components of that protocol - firstly, crew leaders were to wear personal carbon monoxide monitoring devices and monitor carbon monoxide levels in the surrounding atmosphere; the readings were to be reported every 15 minutes; where atmospheric carbon monoxide measured over 50 ppm firefighters were to wear breathing apparatus for the maximum time allowed. It will be recalled that the Safe Work Australia exposure standard is 30 ppm. Finally, where atmospheric monoxide measured over 75 ppm, firefighters were to don breathing apparatus and leave the area. 12.10PM 12.10PM 12.11PM

The Inquiry has heard that there were practical

difficulties associated with the use of breathing apparatus in the context of this particular fire fight, and those difficulties stemmed from the considerable distances that firefighters had to travel from the staging area to the places in the mine where they were deployed and the limited amount of time that you can actually work wearing breathing apparatus. That came to the attention of the Fire Services on 13 February, which was also the day that there was a HAZMAT declaration made in relation to the fire by the State controller. 12.11PM 12.11PM

On the following day, 14 February, a documented Health Management and Decontamination Plan became operational. There's already been some reference made to that in the context of community carbon monoxide exposure earlier today. At page 17 of the plan there was a table that set out safety zones and action levels, and the table stated that the levels were designed to minimise the risk of personnel exceeding the biological exposure limit of 5 per cent carboxyhaemoglobin. It stated that carbon monoxide concentrations below 30 ppm - that is the Safe Work Australia exposure standard - firefighters could work in what was referred to as standard personal protective equipment or P2 respirators. Where there were readings between 30-50 ppm the table states as per site, self-contained breathing apparatus crew rotation procedure. Where there were readings over 50 ppm the document stated as per site procedure for essential works. There was further explanation of this at page 15 of that plan. 12.12PM 12.12PM 12.12PM 12.12PM

It will be recalled that the Inquiry heard from Commander Katsikis of the Metropolitan Fire Brigade HAZMAT unit. He gave evidence both about the issue of firefighter safety and also, as Ms Richards has already referred today, about community exposure to carbon monoxide. 12.13PM

Commander Katsikis is a highly experienced fire officer; it will be recall that he has been at the brigade for many years, and in fact attended the Coode Island incident in 1990, I think is the correct date. 12.13PM

He was deployed to the Hazelwood Incident Management Team on 15 and 16 February as the Deputy Incident Controller. He gave evidence, importantly, of a Carbon Monoxide Protocol that he oversaw which differed from the one described as operational by Mr Lapsley. It will be recalled that Professor Catford drew this to Mr Lapsley's attention and asked him if there was "a potential for confusion amongst firefighters in circumstances where there is apparently conflicting advice and changing plans which seem a bit on-the-run from our perspective", that is the Board's perspective. Mr Lapsley agreed and recognised that this was the result of the absence of what he referred to as a solid plan. 12.13PM 12.14PM

That 14 February 2014 plan or protocol governed the management of the carbon monoxide exposure at the mine from the time it was promulgated right through to the conclusion of the fire fight. 12.14PM

The Inquiry has before it in evidence a submission from the United Firefighters Union. In the submission the Union has raised a number of concerns with the 12.14PM

above developments. The submission points out that the protocols were not consistently applied and were difficult to apply in practice.

Importantly, the UFU submission draws to the attention of the Inquiry some advice that was received early on in the development of the exposure plan from an Occupational Hygienist, Mr Robert Golec of AMCOSH Pty Ltd. In a letter of advice provided to the Metropolitan Fire Brigade on 13 February, Mr Golec raised serious concerns about the way in which carbon monoxide exposure was being managed at the mine. In particular, he queried whether the 5 per cent carboxyhaemoglobin level was an appropriate limit to use. He suggested a limit of 2.5-3 per cent, in line with the Safe Work Australia exposure standard. Importantly, what Mr Golec said in that letter echoes to some extent what was advised to the EPA and Department of Health about the community protocol - that is, about the standard being set too high for an event of this duration. 12.15PM 12.15PM 12.15PM 12.16PM

Mr Lapsley's evidence before the Inquiry is that Mr Golec's advice was not followed in its entirety by the Emergency Services for the reasons explained in his statement and expanded upon in evidence in the Inquiry. But, from the perspective of Counsel Assisting, just as the position with community exposure of carbon monoxide was not explained satisfactorily to the Inquiry, nor was this aspect of the evidence explained satisfactorily either and I will return to that in the recommendations that are proposed in this part of the Inquiry. 12.16PM 12.16PM

Before leaving these issues, it's important to note that the Firefighters Union has made a complaint to the Victorian WorkCover Authority, the Regulator of health and safety in this State, about these matters and has asked the WorkCover Authority to investigate if the CFA and the MFB complied with the Occupational Health and Safety Act in relation to the management of this issue. The Inquiry should note that, in response to that letter, the Chief Executive of the WorkCover Authority wrote to the Union and advised that the Union's letter had been "referred to the enforcement group for a comprehensive investigation to be undertaken in relation to the allegations raised by the Union to establish whether any contraventions of the Occupational Health and Safety Act 2004 have occurred." 12.17PM

Another aspect of the evidence before the Inquiry that is relevant to the issue of firefighter safety is a draft Standard Operating Procedure, SOP, entitled, "Latrobe Valley Open Coal Mines - Response to Fires." This draft SOP was placed before the Inquiry by Mr Lapsley, and an examination of it reveals that it contains a detailed protocol for managing carbon monoxide exposure, albeit that it was in draft form and not formalised. It sets out the importance of bringing to the attention of firefighters the dangers of carbon monoxide and the adverse conditions likely to be encountered, and it also makes reference to pre-existing medical conditions that might mean that particular firefighters are more vulnerable to carbon monoxide exposure than others. 12.18PM

Disturbingly, the draft before the Inquiry bears

the date 29 April 2010. It was nearly four years old at the time of the February 2014 fire and still in draft form. Given the recognition in the CFA report into the 2006 fire of the need to implement just such a protocol for the management of this serious health and safety risk, it is deeply concerning that the SOP had not been finalised and implemented prior to 9 February 2014. It's clear that, had it been finalised and implemented, the problems that were experienced particularly during the first week of trying to have in place appropriate procedures and developing them on-the-run in the context of a very difficult fire fight, could have been avoided. 12.19PM 12.19PM

Mr Lapsley was candid in his concession that the best explanation for the failure to finalise that draft SOP was that it hadn't been a priority of the CFA to have it signed off. He accepted that on an issue of such importance that was not good enough and that, in light of the experience of earlier fires, the procedure should have been in place ready to be rolled out immediately the fire fight in the mine commenced. 12.19PM 12.20PM

Another aspect of the evidence before the Inquiry is that there would appear to be inadequate, perhaps non-existent, procedures in place for the fire agencies, particularly the CFA, to be aware of whether or not its volunteer firefighters may have pre-existing conditions that mean that they should either not be deployed to coal mine fires, or at least they should be provided with information to enable a personal judgment to be made about whether or not deployment is a good idea. 12.20PM 12.20PM

It was noted earlier that there are categories of people and, therefore, categories of firefighters that are particularly susceptible to suffering ill-effects from carbon monoxide; these include pregnant women or women of child bearing age and those with pre-existing heart or respiratory conditions, and there is also some evidence before the Inquiry that smokers are a vulnerable group as a result of their higher than normal pre-existing carbon monoxide blood levels. 12.21PM

The evidence before the Inquiry is that the CFA has no records of the pre-existing health of its volunteers. The position is different in relation to its career firefighters, where records of health background are available. This is clearly a cause for concern that the CFA deploys its volunteer firefighters to mine fires where they are likely to be exposed to carbon monoxide without any knowledge of any pre-existing susceptibility those volunteers may have. 12.21PM 12.21PM

This matter was raised with Mr Lapsley, the Fire Services Commissioner, and his response was that historically the approach that had been taken was that volunteers with such conditions were required to self-manage. The evidence of the two volunteers the Inquiry has heard from, Mr Lalor and Mr Steley, was that they were provided with little, if any, information in advance of their deployment to the mine. It will be recalled that they were both from brigades some distance from Morwell and that they had no personal prior experience of fighting fires in mines and knew little of what they were in for, if I can put it that way. 12.21PM 12.22PM 12.22PM

It's clear that any decision to self-manage has to be an informed decision - that is, for self-management to work, the person who is self-managing must have a full understanding of the risks involved.

Clearly, the deployment of firefighters in these vulnerable groups to a fire fight where they're likely to be exposed to carbon monoxide compromises potentially the health and safety of those firefighters but also of their colleagues who might have to attend and evacuate an affected firefighter. 12.22PM 12.23PM

We also note that, in addition to carbon monoxide exposure, there were other safety issues that arose in the context of the fire fight for firefighters, including batter stability and water contamination, and there is evidence in Mr Lapsley's statement and also the statement of Mr Kelly from WorkSafe about the way in which those risks were managed. 12.23PM

Turning to the question of carbon monoxide exposure, management of that risk by GDF Suez in relation to its own employees: It was noted earlier that a number of GDF Suez mine employees were also hospitalised due to carbon monoxide exposure. It was also noted that the recommendation from the 2006 fire report squarely raised the need for the development of a procedure for dealing with carbon monoxide for mine workers, just as it did in relation to firefighters. 12.23PM 12.24PM

The 2008 report - that is, two years after that fire - noted that the recommendation about the development of a Carbon Monoxide Protocol within GDF Suez had only been partly implemented. There's evidence before the Inquiry from Mr Dugan that that was 12.24PM

a reference to a page in the mine fire instructions that addressed this issue in general terms.

Mr Harkins, it will be recalled, said that in accordance with those instructions mine workers were provided with carbon monoxide monitors, canaries he called them, during the fire fight and they were also required to comply with the CFA's testing regimes which have been discussed above. 12.24PM

Mr Harkins conceded that the instructions that were in place for GDF Suez' employees in February of this year were extremely general. He accepted that there was definitely room for improvement in GDF Suez's management of carbon monoxide exposure. 12.25PM

It is perhaps fortunate that GDF Suez was able to provide protection to its own employees by piggybacking in a sense on the CFA's procedures that were in place from 14 February. 12.25PM

The final aspect of the factual findings that Counsel Assisting submit ought be made in relation to this topic concerns the attendance of the Victorian WorkCover Authority at the mine in response to notifications to it that mine workers had been suffering from carbon monoxide exposure. Those notifications are attached to Mr Kelly's statement and it will be recalled that Mr Kelly, who heads-up the Earth Resources Unit within WorkCover, that is the unit that's responsible for the regulation of health and safety in mines, told the Inquiry that there had been visits to the mine on 14 February and also 21 February where WorkCover Inspectors were dealing specifically with this issue of carbon monoxide exposure. 12.25PM 12.26PM 12.26PM

On both of those occasions the Earth Resources Unit Inspector was accompanied by an Occupational Hygienist, Mr Grayson, who is also an employee of WorkCover, albeit not part of that unit but part of their general Inspectorate. Mr Kelly was not 12.26PM personally involved in those inspections, and in those circumstances was unable to advise the Inquiry about what standards were being used by WorkCover Inspectors in assessing whether the arrangements in place were sufficient and adequate to meet the obligations of the 12.27PM Occupational Health and Safety Act. The Inquiry was subsequently provided with a letter which informed it that the standards were the Safe Work Australia exposure standards, the 30 ppm level that was referred to earlier. 12.27PM

On each occasion that the WorkCover Inspectors attended they were satisfied that what was in place complied with the requirements of the Occupational Health and Safety Act. It's already been noted that there is an ongoing investigation by WorkCover's 12.27PM enforcement group in relation to that matter.

Turning then to the commendations that Counsel Assisting submit are appropriate in this matter: The first is that the CFA, the MFB and GDF Suez are to be commended for deploying air carbon monoxide and 12.28PM carboxyhaemoglobin monitoring for firefighters once the risk of the exposure of firefighters and mine employees to carbon monoxide was detected. As with a number of the commendations that we submit ought be made in respect of environment monitoring and health matters, 12.28PM it's important to recognise what was done, but at the

same time noting that it was in some respects too little, too late, and it was done on the run. I'll return to that in relation to the criticisms we say ought be made.

The second commendation returns to the question of Safety Officers. It is very pleasing to see, especially after the evidence that was led at the Black Saturday Royal Commission where so many Incident Management Teams were set up without Safety Officers, that having regard to the important role that Safety Officers play under the AIIMS system, here at this fire fight, with the possible exception of the first two days, 9 and 10 February, all of the Incident Management Teams made extensive use of Safety Officers and advisors to assist in addressing these difficult issues and for that the fire agencies are commended. 12.29PM 12.29PM 12.29PM

It will be recalled that Mr Lapsley gave evidence at the end of the first week of the Inquiry that there remains an issue about there being sufficient numbers of properly trained Safety Officers within the fire agencies, and he indicated to the Inquiry that that's a matter that's firmly on his agenda and it's pleasing to see that that's a matter that continues to be addressed as it's obviously very important in this area. 12.29PM

Turning then to the criticisms that Counsel Assisting submit ought be made: The first is that the Country Fire Authority should have responded well before February 2014 to the recommendations in its 2007 report into the 2006 fire at the Hazelwood Mine by developing a procedure for dealing with exposure to carbon monoxide during firefighting. It should not 12.30PM 12.30PM

have been the case that this procedure was being developed alongside having to deal with a very difficult and vast fire fight at the mine. Similarly, GDF Suez should have had in place a comprehensive procedure for managing the exposure of its employees to carbon monoxide during a mine fire. 12.30PM

Finally, in responding to carbon monoxide exposure at the Hazelwood Mine Fire, the fire agencies demonstrated poor communication, confusion, policy-on-the-run and sub-optimal responses and in the proposed findings we have detailed the basis for that criticism. 12.31PM

Turning then to the recommendations that Counsel Assisting submit ought to be made in relation to firefighter safety: The first is that the Emergency Management Commissioner should, with the assistance of the Chief Health Officer, the EPA and WorkCover, develop a Firefighting Carbon Monoxide Protocol. The protocol ought to be finalised by November 2014 and so it would be in place for the forthcoming fire season. Before being finalised, the protocol should be reviewed by an independent panel appointed by the Emergency Management Commissioner and the protocol should specify the types of monitoring equipment to be used, frequency and types of locations suitable for monitoring, how the results will be assessed to provide information for decision-making, the trigger levels for action for the general community and those in specific risk categories, and response actions according to each trigger level. 12.31PM 12.32PM 12.32PM

Importantly, the Firefighting Carbon Monoxide

Protocol should be developed in tandem with the Community Carbon Monoxide Protocol which is Recommendation 9 in the Environmental and Health section referred to earlier. Once finalised, it should be widely disseminated in the Victorian coal mining industry and other industries in which carbon monoxide poisoning is likely to occur in a fire or similar situation. 12.32PM

The second recommendation is that GDF Suez should adopt and apply the Firefighting Carbon Monoxide Protocol. 12.32PM

Finally, the CFA, MFB and GDF Suez should highlight the risks of carbon monoxide poisoning to firefighters with pre-existing respiratory or cardiac conditions or who may be pregnant. This should occur during recruitment, selection, training deployment of both employed and volunteer firefighters at the start of each fire season to address the knowledge gap identified earlier. Firefighters should be encouraged to self-disclose if they have a pre-existing respiratory or cardiac condition or if they are a female of child bearing age, whether they are or could be pregnant. 12.33PM

Before deploying to an incident, firefighters should again be reminded of these risks. A short educational video should be developed and made available, and it will be recalled there was evidence that such a video could be played, for example, in the staging area before firefighters are deployed onto the fire ground. 12.33PM 12.34PM

Unless any Members of the Board have any questions

about those matters, I'll move on to the fourth topic which is mitigation and prevention.

As Ms Richards has already indicated, mitigation and prevention of fires in mines is obviously a crucially important topic. The third of the terms of reference that the Board has to consider is the adequacy and effectiveness of the application and administration of relevant regulatory regimes in relation to the risk of and response to fire at the Hazelwood Coal Mine. 12.34PM

The Board may recall the evidence of Professor Cliff in relation to the difficulties associated with putting out brown coal mine fires as if it was necessary given all of the other evidence about the difficulties faced by the fire agencies here. 12.35PM Professor Cliff's response to those difficulties in his report was quite a simple one, and that is, it's far better to avoid brown coal mine fires than have to try and work out how to put them out.

Ms Richards said earlier that the best way to address a coal mine fire is to put it out early and of course that's true, but without wanting to be seen to disagree with my learned leader, the best way to deal with a brown coal mine fire is not to have them in the first place and that's why prevention is obviously so important. 12.35PM

In this part of our submissions we set out in the same manner the proposed findings that ought be made as well as commendations, criticisms and recommendations. Because of the complexity of the regulatory regime that exists in Victoria, the proposed findings are quite 12.36PM

lengthy, but it is important to have a proper understanding of the regulatory framework.

If I can start then with the regulatory framework in relation to the regulation of mines: As we know, mining in Victoria is regulated under the Mineral Resources (Sustainable Development) Act. One of the purposes of that Act is to establish a legal framework aimed at ensuring that the health and safety of the public is protected in relation to work being done under a licence. The Board will have noted that there was a deal of evidence given by Ms White from the Mine Regulator and Mr Niest from the WorkCover Authority about their attitudes to regulation of the risk of mine fires, and will return to that, but it's important not to lose sight of that basic starting point, that the legislation that regulates mining has as one of its objects the protection of the health and safety of the public in relation to work being done under a mining licence. 12.36PM 12.36PM 12.36PM

The principal form of regulation under that Act is a licensing regime, and we know that GDF Suez has held a licence since 1996, a 30-year licence. The Act is regulated by the Earth Resources Regulation Branch of the Department of State Development, Business and Innovation, DSDBI, and in accordance with the manner that the issue was approached earlier in the Inquiry, I'll refer to that branch as "the Mine Regulator", whilst noting that since 1 January 2008 the Victorian WorkCover Authority has also had a role as Regulator for occupational health and safety in mines. 12.37PM 12.37PM 12.37PM

In addition for the requirement to be the

licensed, the Act under s.40, the Mineral Resources (Sustainable Development) Act, requires the licensee to have an approved work plan to undertake mining work. The head of the department approves a work plan which may be varied and conditions may be imposed about the way in which work is carried out. 12.38PM

The evidence indicates that until 2010 there was a requirement for a work plan to address occupational health and safety. That requirement was removed from the relevant regulations in that year as part of the transfer of responsibility for regulating occupational health and safety in mines from the Mine Regulator to WorkCover and I will return to that issue. 12.38PM

The Mine Regulator was asked what its responsibility was in relation to mitigating the risk of fire in open cut mines. The answer given by Ms White on behalf of the Mine Regulator was very clear; it has none, she told the Inquiry. According to Ms White the lead agency for managing fire risk in the worked out batters of the mine is the WorkCover Authority. 12.38PM 12.39PM

Turning then to the role the WorkCover Authority plays under the regulations in operation in Victoria, it's fair to say that the regulation of occupational health and safety in mines in Victoria, the history of that regulation is complex. Ms White's statement sets it in out in some detail. 12.39PM

Of particular significance to this Inquiry is a report commissioned by the Victorian Government in 2006 which recommended the transfer of regulatory responsibility for OH&S in mines from the Mine 12.39PM

Regulator where it sat at the time to the WorkCover Authority. The Inquiry has before it a copy of that report from Neil Pope. In the report, the recommendations of which were accepted by the government, Mr Pope recommended that transfer and it did took effect on 1 January 2008. 12.39PM

It's important to note that the principal piece of legislation administered by WorkCover, the Occupational Health and Safety Act 2004, includes a very different regulatory model from that which exists under the Mining Act. It's not predicated on licensing and approval of work plans. 12.40PM

As Mr Niest explained to the Inquiry, the Executive Director of Health and Safety at the WorkCover Authority, the Act is based on what he called the "Robens Model" of regulation, a reference to an English report from 1970. The adoption of this model, Mr Niest told us, involved a shift from detailed prescriptive standards to a more self-regulatory and performance based approach. 12.40PM 12.40PM

As he explained it, instead of describing how to do or not to do something, the Act requires the owner of the risk, referred to as the duty holder, to take responsibility to achieve the desired outcome. It will be recalled that Mr Niest in his evidence referred to the owner of the risk being required to manage it in accordance with the regulatory scheme. 12.41PM

For present purposes the main provision of the Occupational Health and Safety Act is s.23 and, because there has been a deal of evidence about it, it's probably worth reminding ourselves of its contents. It 12.41PM

provides that, "An employer must ensure, so far as is reasonably practicable, that persons other than employees of the employer are not exposed to risks to their health or safety arising from the conduct of the undertaking of the employer." 12.41PM

It's necessary to briefly refer to two other provisions of the Act to better understand that. The first is s.20 which addresses the concept of "reasonably practicable", and it provides that, "Where a duty such as s.23 requires a person to ensure, so far as is reasonably practicable, health and safety, that requires the person to eliminate risks to health and safety so far as is reasonably practicable and, if it's not reasonably practicable, to eliminate risks to health and safety to reduce those risks so far as is reasonably practicable." 12.41PM 12.42PM

Finally, there is a principle of health and safety protection in s.4 to which reference should briefly be made which is as follows, "The importance of health and safety requires that employees, other persons at work and members of the public be given the highest level of protection against risk to their health and safety that is reasonably practicable in the circumstances." 12.42PM

With that brief understanding of the Act in mind, it is necessary to look briefly at the evidence before the Inquiry about how WorkCover sees those provisions applying in the circumstances of the subject matter of the Inquiry, a fire in the worked out part of the Hazelwood Mine. 12.42PM

Mr Niest was asked about the application of s.23 to the fire before the Inquiry. His evidence on the 12.43PM

issue, it is submitted, is difficult to follow and appears to be internally contradictory. He was asked a direct question about WorkCover's view about whether the 2014 mine fire arose from the conduct of the undertaking of the operator of the mine. His unambiguous answer was, "No". He explained that that view is because, "The undertaking is to extract brown coal from the earth and transport the brown coal to a power station. There is nothing in that conduct that caused the fire." 12.43PM 12.43PM

Counsel Assisting submits that this seems to be an unduly narrow approach to the operation of s.23 of the Occupational Health and Safety Act. Surprisingly, it also seems to be inconsistent with what the Inquiry has been told is an ongoing investigation into the fire that is being conducted by the Victorian WorkCover Authority itself. There is before the Inquiry a statement from Mr Watson, who's the Manager, Investigations of the Victorian WorkCover Authority and he's advised the Inquiry that WorkCover has commenced an investigation into the fires that burned at the mine. 12.44PM 12.44PM

It seems that there are two parallel investigations being carried out by WorkCover; the one relating to carbon monoxide exposure and focusing on whether or not the fire agencies met their duty under the Act, and also an investigation into the fire itself, presumably to determine if GDF Suez met its obligations under the Occupational Health and Safety Act. 12.44PM 12.44PM

These matters are certainly of far more than

passing interest to the Inquiry because the application of s.23 is highly significant as it defines the regulatory reach of the Victorian WorkCover Authority in relation to risks to public safety as a result of mine fires. It's recognised that WorkCover's role must necessarily be limited by s.23 of the Act. 12.45PM

If Mr Niest's narrow view, what Counsel Assisting say is a narrow view of s.23, is accepted, that the Act does not apply to fires in worked out parts of mine, then it follows that there may well be a gap in the regulatory framework. That is because of the clear evidence given to the Inquiry by Ms White from the Mine Regulator about the Mine Regulator's attitude to the regulation of mine fires - that is, that it's the province of the Victorian WorkCover Authority. 12.45PM 12.45PM

It seems to Counsel Assisting that there are two issues here that need to be grappled with: There's a legal issue about the construction of s.23 and there's a factual issue about whether, having regard to that construction, the evidence before the Inquiry indicates that a fire in the worked out batters of the mine falls within s.23. 12.46PM

We submit the legal issue is relatively straightforward. Without going into the detail of the cases that have interpreted s.23, those cases indicate, we submit, that s.23 and also equivalent provisions in other similar statutes have been interpreted broadly and in a matter that is consistent with the objects of the Occupational Health and Safety Act. They also indicate, we submit, that generally speaking where an activity or an event occurs at the place at which the 12.46PM 12.46PM

undertaking is carried out, it will be considered to arise from the conduct of the undertaking. We have referred in our submissions at footnote 27 to the relevant cases as we see them.

We also submit that the factual issue identified is not particularly complex. The northern batters of the mine, as the extensive evidence before the Inquiry shows, are in no sense non-operational. It's been explained by witnesses such as Mr Faithfull of GDF Suez, the extensive infrastructure on and around the northern batters, for example high voltage powerlines, pipes, watering systems and geotechnical monitoring equipment, is integral to the mine's operations. The presence of this infrastructure is said to be one of the main reasons why the area cannot be rehabilitated prior to the end of mining operations. 12.46PM 12.47PM 12.47PM

Counsel Assisting submit that, despite the evidence of Mr Niest, the Inquiry should conclude that the risks to public safety that arose from the fire in the worked out northern batters of the Hazelwood Mine are risks that arose from the conduct of the undertaking of GDF Suez. However, even if that submission were to be accepted by the Inquiry, in the light of the evidence of Mr Niest of the WorkCover Authority and Ms White of the Mine Regulator, it is still necessary to consider the important question of whether there is a gap in the regulation of mines in Victoria. 12.47PM 12.48PM

Mr Niest was asked directly if he thought there is a regulatory gap and he said, "Yes, there may be." In fairness, he subsequently gave evidence which seemed to 12.48PM

suggest that he thought there may not be a gap, but ultimately he recognised that any such gap needed to be filled.

He was asked directly who the Regulator was in respect of public safety that was unrelated to the conduct of the mine's undertaking, and he told the Inquiry that he was unaware of the identity of the Regulator in relation to that matter. 12.48PM

Counsel Assisting submit that, on the basis of the evidence before the Inquiry and a proper understanding of the regulatory regime that there is a gap in the regulatory regime, although it's perhaps not as wide as would be the case if one accepted Mr Niest's narrow interpretation of the operation of s.23. We will return to what should be done about filling the gap in the recommendations that we propose ought be made. 12.48PM 12.49PM

Before doing that, it's necessary to say a little about Part 5.3 of the Occupational Health and Safety Regulations 2007. It's been noted that the Occupational Health and Safety Act imposes duties on employers, including of course GDF Suez, but there are also duties imposed by the regulations and they are important in the context of this Inquiry. 12.49PM

The starting point is a recognition that the mine is a prescribed mine for the purposes of the regulations. What that means is that it must comply both with the general requirements set out in Part 5.3, which apply to all mines whether prescribed or not, as well as the more onerous obligations that are imposed only on prescribed mines. 12.49PM 12.50PM

Under those provisions GDF Suez was and is

required to identify all mining hazards at the mine and to assess the risks to health or safety of any person associated with those hazards, to adopt risk control measures that eliminate, so far as is reasonably practicable, any risks to health and safety or, if it's not reasonably practicable to eliminate such risks, is required to reduce those risks so far as is reasonably practicable. It is also required to review and, if necessary, revise each of - and that should read (a)-(d) there in paragraph (e) above, after any incident involving a mining hazard occurs at the mine. Finally, it's required to conduct a comprehensive and systematic safety assessment of all major mining hazards. The Inquiry heard evidence about major mining hazards. 12.50PM 12.50PM 12.51PM

What is clear is that a fire explosion that could cause a risk to health or safety is included in the definition of a mining hazard under the regulations. It is submitted that this clearly included and includes a fire in the worked out parts of mine. Such fires may also be major mining hazards in that they have the potential to cause an incident that would cause or pose a significant risk of it causing more than one death. 12.51PM

As the evidence before the Inquiry indicates, the difference between a major mining hazard and a mining hazard is not always an easy distinction to apply in practice. 12.51PM

The evidence before the Inquiry is that the WorkCover Authority has concentrated its regulatory approach on compliance by GDF Suez with Regulation 5.3.23 in relation to mine fires that meet 12.51PM

the definition of major mining hazards. The Inquiry will recall that Inspector Hayes of WorkCover was one of a team of three who carried out an audit at the mine in 2012 in relation to this matter. He issued an Improvement Notice as a result of the findings of the audit, requiring GDF Suez to comply with Regulation 5.3.23, and some months later when he returned to the mine, in October 2012, he concluded that there had been compliance. 12.52PM

In his evidence before this Inquiry he conceded that he may not have checked on compliance with all aspects of Regulation 5.3.23, and in particular an examination of the documents produced in response to the Improvement Notice suggests that the matters set out in Regulation 5.3.23(4)(c)-(e) about the process by which risk controls were determined is not addressed in that material. 12.52PM 12.53PM

In his report to the Inquiry, Professor Cliff, a health and safety in mining expert from the University of Queensland, questioned whether GDF Suez had complied with the regulation. However, it is noted that he modified his view on this matter in light of further information provided to him after his report was completed. 12.53PM

Crucially for this Inquiry, Counsel Assisting submit that there is no evidence that, as part of its attempt to comply with Part 5.3 of the regulations, GDF Suez assessed the risk of a fire in the worked out batters of the mine as required by Regulation 5.3.7. 12.53PM

Whatever may be the position in relation to compliance with Regulation 5.3.23 concerning major 12.54PM

mining hazards, Counsel Assisting submit that there is a question about compliance with Regulation 5.3.7 in relation to the assessment of risks and appropriate controls being put in place to deal with the risk of fires in the worked out batters or worked out parts of the mine. 12.54PM

As Professor Cliff explained, the failure to address this issue seems to be because the focus of GDF Suez was on multiple fatality under the major mining hazard definition. Professor Cliff's attention was drawn to the evidence of Mr Polmear of GDF Suez about minimum compliance with the Fire Service Code, a matter to which I'll return. Professor Cliff's response to that was, "Compliance with the code is not thinking, you just follow the recipe. It doesn't evaluate the risk or the effectiveness of anything, it's just, do as you're told." 12.54PM 12.55PM

Counsel Assisting submit that the evidence before the Inquiry suggests that GDF Suez did not assess the risks associated with fire in the worked out batters of mine in accordance with Regulation 5.3.7(1), did not control those risks in accordance with Regulation 5.3.7(3) and, as a result, failed to review those measures after the fire in a non-operational part of the mine in September 2008 as it was required to do by Regulation 5.3.9(2)(b). 12.55PM 12.55PM

What is particularly concerning is that the internal investigation into the September 2008 fire conducted for GDF Suez by consultants GHD highlighted the need for this very risk to be addressed. At page 4 of that report its authors, GHD, noted that, "The 12.55PM

significant factor in this fire [the 2008 fire] was the escalation to an uncontrollable fire within a short time due to mine personnel being unable to mount an effective initial response as the non-operational areas have very difficult access and there were insufficient firefighting facilities available." 12.56PM

That finding informed a recommendation that was made to GDF Suez, Recommendation 6, which was, "A risk assessment should be undertaken on the non-operational areas to determine if further prevention work is required. The risk assessment should include a cost-benefit analysis." 12.56PM

Given that on the evidence before the Inquiry there are some obvious similarities between the 2008 fire and the 2014 fires, it is of considerable concern that GDF Suez did not conduct such a risk assessment as was recommended. Had it been done and appropriate control measures implemented in accordance with the outcome of the assessment and the requirements of the regulations, to which reference has been made, the 2014 fires in the worked out areas of the mine may not have occurred. Even if they had occurred, they may not have had the catastrophic impact that they in fact had. 12.56PM 12.57PM

The evidence before the Inquiry, we submit, establishes that a risk assessment of the non-operational areas of the mine was not undertaken between December 2008 and 9 February this year. This is notwithstanding the recommendation to do it that I've referred to, but also an internal audit that was conducted by GDF Suez's Mine Technical Compliance Manager, Mr Kemsley, in 2012. Mr Kemsley in his audit 12.57PM 12.57PM

in 2012 concluded that Recommendation 6, the one that's just been referred to from the 2008 report, had not been implemented - that is, that the risk assessment recommended had not been completed.

The Inquiry has before it a statement from 12.58PM
Mr Prezioso and it will be recalled that Mr Prezioso gave evidence towards the end of last week on this topic. In his statement he identifies a number of steps that were taken subsequent to the 2008 fire to identify hot spots and some other relevant matters. 12.58PM
However, he ultimately conceded that no risk assessment had been conducted as recommended and he was unable to advise the Inquiry if the issues identified in Mr Kemsley's 2012 audit had been revisited since that time. 12.59PM

It's noted that Mr Kemsley remains employed by GDF Suez - that's the evidence before the Inquiry - and there's been no reason advanced for why he hasn't given evidence. Given the focus of the Inquiry on the failure by GDF Suez to implement this vital 12.59PM
recommendation from its 2008 report, it is surprising that the Inquiry has not had heard from Mr Kemsley.

Before leaving the topic of this 2008 report, it is necessary to refer briefly to the evidence before the Inquiry about the Regulator's awareness of the 12.59PM
report - that is, the VWA. It is to be recalled that the VWA assumed responsibility for regulating health and safety in mines on 1 January 2008 and this fire occurred on 14 September 2008. The evidence before the Inquiry is that a VWA Inspector attended at the mine on 01.00PM
both 16 and 22 September in response to being notified

of the fire.

On the second of those visits the Inspector was informed that an environmental and engineering consultancy firm, GHD, had been contracted to investigate the fire incident. The evidence is that 01.00PM
WorkCover never asked for a copy of the report and, as a result, obviously they are in no position to monitor the implementation by GDF Suez with the recommendations. It is most unfortunate that that opportunity was not taken up by the Regulator. 01.00PM

The approach of WorkCover in relation to that report stands in stark contrast with the evidence of what the Mine Regulator did in a similar situation some two years earlier in relation to a report into the 2006 fire. Ms White explained to the Inquiry that an 01.01PM
Inspector of her Department issued an Improvement Notice to GDF Suez in February 2007 requiring it to comply with the recommendations made by GHD in its 2006 report, and the Inquiry was advised that this led to a review by GDF Suez of its Fire Policy and Code of 01.01PM
Practice which was one of the recommendations made.

I note the time, I'm about to go on to another topic.

CHAIRMAN: All right, we'll resume at 2.

LUNCHEON ADJOURNMENT 01.44PM

UPON RESUMING AT 2.20 P.M.:

MR ROZEN: If the Board pleases. We'd reached a point before the luncheon adjournment where I think I'd got to paragraph 43 of the findings in our outline in respect of the fourth topic. I've been considering the 02.03PM regulatory structure in Victoria in relation to mines and health and safety, and then I had discussed the issue of compliance, GDF Suez with the regulations and the implementation by it of recommendations from previous fires. 02.04PM

If I could turn then to the issue of fire mitigation practices by GDF Suez itself which is a matter raised for the Inquiry by the second of its terms of reference.

Although there's been a good deal of concentration 02.04PM on the regulatory structure and the implementation of the regulatory structure by the regulators, it is important to bear in mind Professor Cliff's observation from his report that a focus on any failures of regulation should not obscure that the primary 02.04PM responsibility for the management of risk rests with GDF Suez's and not the Inspectorate.

The evidence before the Inquiry is that a work plan for the Hazelwood Mine was approved by the Mine Regulator in September 1996 and it's been varied 02.04PM several times with the most recent variation taking place in 2009. The approved work plan for the mine reflected the work plan submission which had been submitted by the Hazelwood Power Corporation in June 1995. There are two clauses in that submission, and 02.05PM the submission of course ultimately became the approved

work plan which are relevant to fire mitigation. Clause 7.4 deals with the Bushfire Mitigation Program which I won't read out, and 7.7 deals with the Fire Protection Policy.

Under the heading "Fire Protection Policy", the submission and therefore the approved work plan states as follows, "HBC adheres to the Latrobe Valley Open Cut Mines - Fire Service Policy and Code of Practice issued April 1994. The Fire Service Policy and Code of Practice contains the essential requirements and operating procedures for fire protection services for the mine and its surrounding area. An extensive network of water reticulation and sprays has been established in the mine for fire protection." Then there's a reference to figure 13A, "Fire Service network schematic." This has been referred to in evidence before the Inquiry, it's a schematic that depicted the fire reticulation pipe network in place in the mine at the time; that is, at the time of the approval in 1996 and it depicted a network that surrounded the mine. 02.05PM 02.05PM 02.06PM 02.06PM

This has already been referred to today by my learned friend, Ms Richards, but the evidence before the Inquiry establishes that the reticulated water network at the mine was extensively altered from about 1995 onwards, extensive particularly in the area of the northern batters. 02.06PM

The evidence of Mr Polmear from GDF Suez is to the effect that the pipes that were removed were in the northern batters part of the mine. Mr Polmear explained that the pipes which were removed were 02.06PM

corroded and unserviceable, and Counsel Assisting submit that it ought be accepted that that was a legitimate basis for their removal. However, the more important question is why the pipes were not replaced once they were removed. 02.07PM

It will be recalled that Mr Polmear was asked this and his answer is, "They didn't need to be in accordance with the policy." The policy referred to by Mr Polmear is the Fire Service Policy and Code of Practice issued in April 1994. 02.07PM

The Inquiry heard from a bushfire fire expert, Mr Incoll, and he explained, "The effective cover of exposed coal surfaces with water sprays requires a reticulation system capable of delivering water in the volumes required for dampening down of exposed coal in all sectors of the mine." 02.07PM

It's important to appreciate that the reticulated water supply in a mine such as the open coal mine at Hazelwood serves at least two purposes; firstly, it serves the purpose of being able to prevent fires, that is the wetting down of the coal surfaces on high fire danger days reduces the risk of a fire starting in the first place. The Inquiry's heard from a number of witnesses right back to Mr Brown on day one, about the historical wetting down of the coal surfaces so as to prevent fires. Of course, the piped water also assists in the suppression of fires once they are started, so the pipe network clearly serves a dual purpose both in relation to prevention and suppression. 02.08PM 02.08PM

Returning to Mr Incoll's evidence, he noted that the difference between the pipe work in 1996 and that 02.08PM

in 2014 indicated that the northern batters supply is no longer in place. It is of course recognised that during the fire fight itself considerable additional pipe work was placed in the northern batters area, which an examination of the maps before the Inquiry shows that the pipe work that was reinstated was in much the same area as where the pipe work had been removed. 02.09PM

Returning to the policy that Mr Polmear referred to, it has, since 1994, set out minimum requirements for fire protection in the worked out batters. The words "minimum requirements" are important because that is just what the code stated, they are the minimum for fire protection. The current requirements are in s.3.4 of the most recent iteration of the document, the 2013 Code which is before the Inquiry. The principal requirement is to have tanker filling points located in positions such that a tanker on any part of the worked out batters is within five minutes travel of a tanker filling point. 02.09PM 02.09PM

On the evidence before the Inquiry, it is unclear if even this minimum requirement was met by GDF Suez. Mr Polmear believed it had when he was asked. He assumed that some testing had been done to confirm compliance but no document evidencing such testing has been placed before the Inquiry. 02.10PM

In any event, tanker fill points are only relevant to fire suppression, not its prevention. What is needed for prevention, as Mr Incoll explained, is either covering of the batters with soil or some form of fire retardant or water to wet down the worked out 02.10PM

batters on days of high fire danger.

Perhaps of greater significance is what Mr Polmear's evidence reveals about the historical approach of GDF Suez to its responsibilities to manage the risk of fire in the worked out parts of the mine. 02.10PM The Inquiry has heard that Suez is certified to Australian and New Zealand Standard 4801 concerning occupational health and safety systems. Despite that, there's no evidence that GDF Suez conducted any risk assessment to examine whether the removal of the 02.11PM pipes - that is the evidence of Mr Polmear - contributed to a reduction in the level of fire preparedness or mitigation and hence of safety.

As Professor Cliff explained in his evidence to the Inquiry, the failure of GDF Suez to assess the 02.11PM risks associated with the removal of pipework is both unacceptable and inconsistent with the approach to be expected of a company certified under Australian Standard 4801. As Professor Cliff said, "To say we don't do it because we don't have to is not a 02.11PM management technique."

The evidence is that the policy was updated by GDF Suez in the years after privatisation. The Mine Production Manager, Mr Dugan, explained that the 2013 iteration of the Mine Fire Service Policy and Code of 02.11PM Practice is based on the 1994 document which in turn is based on the 1984 SEC Latrobe Valley Open Cuts Fire Service Policy. Mr Lapsley's attention was drawn to this evidence - that is, that the present code dates back to a 30-year-old document and he described that as 02.11PM "amazing".

From Counsel Assisting's perspective, it is at the very least concerning that what's in place currently is really no more than an updated version of a document that was produced 30 years ago in circumstances where it applied to all three of the open cut mines which were then of course being run by the SEC. I will return to this issue in our recommendations. 02.12PM

Surprisingly, the removal of the pipe network on the northern batters was not the subject of an application to vary the work plan. It will be recalled that the work plan includes a schematic of the pipe work as it existed in 1995. 02.12PM

Ms White of the Mine Regulator gave evidence that such work would have to be by way of a variation to the work plan. However, she also agreed with the proposition advanced by counsel for GDF Suez that, as long as the standards in the 1994 code continued to be met, that would constitute compliance with the requirements of Clause 7.7 of the approved work plan. Ms White also told the Inquiry that, as far as the Mine Regulator was concerned, GDF Suez had not breached any of the provisions of the Mineral Resources (Sustainable Development) Act. Counsel Assisting submits that, on the basis of the evidence before the Inquiry, that conclusion would appear to be correct. 02.12PM 02.13PM 02.13PM

Turning then to some recent amendments to the Mineral Resources (Sustainable Development) Act which are of significance as far as future management of these risks is concerned. The Act is the subject of recent amendments of significance for the Inquiry. The Mineral Resources (Sustainable Development) Amendment 02.13PM

Act 2014 amends the Mineral Resources (Sustainable Development) Act by inserting a new s.40. S.40 is the provision concerned with the requirements for there to be a work plan.

This is a complicated set of amendments to understand. Summarising them the best we can, there is essentially two sequential amendments to s.40 that are affected by the Amendment Act. The first is affected by s.16 and it need not concern us, but that amendment takes effect on 1 November this year. More importantly is s.16 which further amends s.40 by inserting a new subsection (3). This further amendment will not be operative until 31 December 2016 unless it is earlier proclaimed. The Inquiry will recall the evidence given by Ms White about the need for there to be regulations in place before those amendments take effect. 02.14PM 02.14PM 02.14PM

Importantly, once s.16 of the Amendment Act is proclaimed a work plan will be required, among other things, to identify the risks that the work may pose to the environment, to any member of the public or to land or property in the vicinity of the work, and specify what the licensee will do to eliminate or minimise those risks as far as reasonably practicable. I will return to the significance of those amendments in terms of the recommendations that Counsel Assisting submits ought to be made to ensure that in the future these risks are appropriately managed. 02.15PM 02.15PM

Before doing that I need briefly to refer to the topic of Integrated Fire Management Planning which has been the subject of some evidence before the Inquiry and is obviously an important part of the fire 02.15PM

prevention and mitigation puzzle.

The evidence before the Inquiry is that integrated Fire Management Planning occurs relevantly at both regional and local level. Mr King, the Coordinator of Emergency Management at Latrobe City Council gave 02.16PM evidence that Integrated Fire Management Planning involves looking in more depth at risks associated with fire on an all-agencies approach and including the owners of the critical infrastructure.

The Inquiry has before it the Gippsland Regional 02.16PM Strategic Fire Management Plan and also at the local level the 2011 and 2013 Latrobe Municipal Fire Prevention Plans. Of significance to the Inquiry is the question of effective implementation of these plans. The evidence suggests the plans are not 02.16PM implemented at all, nor have they been reviewed by the affected agencies to check that the suggested treatments are possible or within the jurisdiction of the agencies referred to.

Mr Incoll dealt with the issue in his standard 02.16PM common-sense way, he said, "There's no enabling legislation that says, "Once you've made that plan, here's how it's going to be implemented." Mr Lapsley gave similar evidence and so did Mr King from the council. 02.17PM

Mr Lapsley was asked if he could assist in relation to providing an answer and he suggested the first step was to modernise the legislative basis for Fire Management Planning, and Counsel Assisting accepts Mr Lapsley's characterisation of Integrated Fire 02.17PM Management Planning as a necessity. The Inquiry ought

note his commitment in his new role as Emergency Management Commissioner to continue to drive the process.

The evidence before the Inquiry was that the Mine Regulator plays no role in Integrated Fire Management Planning at any level. Ms White of the Mine Regulator said it was the responsibility of the VWA. Mr Niest of the VWA saw no problem with the VWA not being referred to as one of the existing treatments in the regional plan. His evidence was, the plan was concerned with the protection of infrastructure and was not concerned with health and safety in the workplace. It is submitted that this response demonstrates the gap in a practical sense that exists in Integrated Fire Management Planning. 02.17PM 02.18PM 02.18PM

On a related topic, there is some evidence before the Inquiry about s.43 of the Country Fire Authority Act and it will be recalled that it imposes a general duty on councils and public authorities to take all practicable steps to prevent the occurrence of fire and minimise the danger of the spread of fire. It's an historical anomaly that before privatisation that provision applied to the Hazelwood fire. Subsequent to privatisation it does not. It is submitted that the position is anomalous; that the only reason the provision has no application to a piece of critical infrastructure like the Hazelwood Mine and Power Station is because they're not publicly owned. This is the subject of a recommendation which I will come to. I note that Mr Lapsley agreed with the suggestion that consideration should be given to extending the reach of 02.18PM 02.18PM 02.19PM

s.43 along the lines suggested, which is that it ought to apply to critical state infrastructure regardless of whether it's publicly or privately owned.

If I could turn to the important topic of filling the regulatory gap. It will be recalled that Counsel Assisting's submissions is based on the evidence before the Inquiry that there is a regulatory gap in relation to the impact on public safety of fires that do not arise from the conduct of the undertaking of the mine operator. The evidence in the Inquiry has raised a number of concerns about the manner in which the WorkCover Authority has exercised its regulatory powers in relation to OHS at the mine, particularly concerning the risk of fires in the worked out parts of the mine. 02.19PM 02.19PM

We've listed some of those concerns and they do call to mind Professor Cliff's reference in his report to the difficult position a generalist OHS Regulator is in where it's regulating a small mining industry. It will be recalled that Professor Cliff's evidence is that in what he calls the mining states in New South Wales, Queensland and Western Australia there is a dedicated Mines Inspectorate that is concerned with OHS as well as other aspects of regulation of mines. 02.20PM 02.20PM

Victoria, like the position in New Zealand, has a generalist OHS Regulator that is responsible for a small number of mines. The reference to New Zealand is significant because Professor Cliff, based on his experience of the Pike River disaster in New Zealand, was able to refer the Inquiry to the difficulties faced there by a very small Department of Labour Inspectorate dealing with a relatively small mining industry. 02.20PM 02.20PM

Aspects of the evidence that are concerning in this regard are listed in paragraph 72 of the findings and they include that the large-scale transfer of staff from the Mine Regulator to the VWA that was recommended in the Pope Report didn't occur. No explanation was provided to the Inquiry of why the staff that were recommended to transfer across to VWA, bringing with them obviously the experience and knowledge of the mining industry - with one exception, I think one of the Inspectors did transfer across - but otherwise it seems that didn't happen. 02.21PM 02.21PM

Similarly, it seems, the transfer of files. There's a recommendation in the Pope Report that there be electronic access to the Mine Regulator's files. The evidence of Inspector Hayes was that he did not have access to pre 1 January 2008 files. There is also the evidence of the failure to monitor the implementation of the recommendations in the 2008 GHD Report that were referred to earlier, and finally, there is the less than thorough manner in which the question of compliance with Regulation 5.2.23 by GDF Suez was examined or overseen in that process referred to earlier. 02.21PM 02.22PM

Both Mr Niest and Ms White were asked about the future of the regulation of fire in the mine. Mr Niest accepted that his Earth Resources team at the VWA needed to be supported with systems safety specialists to assist them in judging whether the risks are being properly controlled. He's committed to addressing this deficiency, as he perceives it, in the WorkCover Authority and that is a matter that is to be commended. 02.22PM 02.22PM

Ms White suggested the Mine Regulator, the VWA and the fire agencies could come together to discuss what possible changes were needed. She also made a number of suggestions concerning the rehabilitation timetable, while noting that rehabilitation can have an indirect effect on mitigating fire risk. 02.23PM

Ms White also accepted that the amendments to s.40 of the Act she administers that were discussed above will require a licensee to engage in, "A much broader assessment of risks than we currently have now with the work plan that I have to currently oversight." 02.23PM

Counsel Assisting submits that the amendments to s.40 of the Mineral Resources (Sustainable Development) Act provide an opportunity for the Mine Regulator to re-engage with regulation of the risk of fire in the mine generally and in the worked out areas of the mine specifically. 02.23PM

It is our submission that it has been an unfortunate and perhaps unforeseen side effect of the transfer of occupational health and safety regulation to the VWA that the issue of public health and safety has been given far less priority than it should have been. The inclusion of risk management in approved work plans provides an opportunity for this to be addressed. 02.23PM 02.24PM

It's relevant in this regard that the test in the new s.40(3)(c) is consistent with that used in the Occupational Health and Safety Act and the regulations; that is, risks will be required to be controlled so far as is reasonably practicable. This should enable the Mine Regulator and the VWA to approach their respective 02.24PM

regulatory tasks consistently.

It may be said that, if this approach is followed through, that there will and an overlap between the areas of responsibility of the Mine Regulator and the VWA in this regard. To that observation Counsel Assisting make the simple response that it was preferable to have an overlap than for there to be a gap. 02.24PM

One thing that is of concern is the timeframe for the implementation or the coming into operation of the new provision. The evidence before the Inquiry is that the amendment may not be operational until December 2016. The people of the Latrobe Valley, and Morwell in particular, are entitled to see any regulatory gap closed at the earliest opportunity. It is unclear if existing work plans, such as GDF Suez's, will need to be revised to meet the new requirements. 02.25PM 02.25PM

Ms White was asked about this and informed the Inquiry that there will be a transitional phase but it is not entirely clear what is envisaged. The Amendment Act at the moment does not provide any detailed answer to that question. 02.25PM

Significantly, Ms White also noted that the changes will, "Flag a very strong intention to change the approach to work plans, and given that this is already in the public domain I would consider that a mine operator would consider this in light of what they are doing today." 02.25PM

Counsel Assisting submit that the impending change to s.40 and the requirement to address risk in a broader way in work plans presents a real practical 02.26PM

opportunity for the industry, and GDF Suez in particular, to seize this opportunity to put into effect some of the things that Mr Graham said were being examined in the evidence that he gave to the Inquiry. To use a colloquial expression, it's an opportunity for GDF Suez to put its money where Mr Graham's mouth is. It is to be hoped that GDF Suez grasp that opportunity. 02.26PM

We also submit that the Inquiry should ask the Victorian Government to bring forward the commencement date of s.16 so that it commences as soon as possible. If work on regulations has to be done, it's difficult to see why that should take two and a half years given the significant risks that this Inquiry has been examining. 02.26PM 02.27PM

We also consider that the changes present an opportunity for GDS to give effect, as I have said, to the commitments made by Mr Graham; that is, to embrace a best practice, continuous improvement approach throughout the mine, including the worked out areas, rather than the minimum compliance approach about which evidence has been given. 02.27PM

Before turning to the proposed commendations and criticisms, I'll refer briefly to land use planning; it is an area about which evidence has been given to the Inquiry and Counsel Assisting note that there's a large gap between the fire protection policies outlined in the Latrobe planning scheme and the reality of land use in the vicinity of the mine as the Inquiry has heard about. It is trite to say there's no buffer zone between the mine and the town of Morwell despite the 02.27PM 02.27PM

provisions of the planning scheme requiring a buffer zone of up to 1,000 metres. It's also noteworthy that there are at least three timber plantations within a kilometre of the mine licence area, and disturbingly, as Mr Incoll emphasised, they're all to the west of the mine, perfectly located to enable them to catch fire and potentially throw embers into the mine. 02.28PM

Although the scheme currently provides that a permit is required for timber plantations in the Special Use Zone and the Public Use Zone, the council has no records of permits being issued in respect of the plantations. 02.28PM

Land use planning can be an effective means of reducing fire risk, but it's a long-term measure and can only operate prospectively. It should at least be possible to ensure that no further timber plantations are established in close proximity to open cut coal mines, particularly in the vicinity of their western perimeter. 02.28PM

Turning then to the commendations that Counsel Assisting submit ought be made. Firstly, GDF Suez is commended for recognising, through the evidence of Mr Graham, that it needs to adopt a new approach to the management of risk of fire in the worked out batters of its Hazelwood Mine. The Inquiry has before it a document prepared by Mr Graham which he spoke to, and it will be recalled that it was a document of relatively recent origin and it's apparent that a great deal more work needs done, particularly in relation to internal discussion of that within GDF Suez and external communication with regulatory agencies and 02.29PM 02.29PM

others, but it is a commendable start.

Secondly, the VWA is commended for recognising that its Earth Resources Unit needs additional resources to fulfil its functions under the regulations in the Act that it administers. 02.29PM

Turning to criticisms: Firstly, GDF Suez is criticised for not meeting its obligations under the Occupational Health and Safety Regulations to assess the risks associated with fire in the worked out batters of the mine in accordance with 02.30PM Regulation 5.3.7, to control those risks in accordance with Regulation 5.3.7, and to review those measures after the fire in a non-operational part of the mine in September 2008 as required by Regulation 5.3.9(2)(b).

GDF Suez should have implemented Recommendation 6 02.30PM of the GHD Report into the September 2008 fire by conducting a risk assessment into the risk of fire in the non-operational parts of the Hazelwood Mine.

Thirdly, GDF Suez, as an international company accredited to Australian Standard 4810, should not have 02.30PM adopted the approach of minimum compliance to the risk of fire in the worked out batters of its Hazelwood Mine, but rather, should have taken a full risk assessment of key risks to the mine and possible controls to minimise the likelihood or consequence of 02.31PM the various risks occurring.

Turning then to the proposed recommendations and there are seven: The first is that GDF Suez should ensure that it embraces a sound enterprise risk management framework that considerably enhances a more 02.31PM sophisticated corporate culture in respect of the

management of risks. And, as has been noted, Mr Graham's evidence to the Inquiry would seem to suggest that there is a recognition that that is desirable.

2. GDF Suez should engage reputable external consultants to conduct a thorough risk assessment of the likelihood and consequences of the risk of fires in the worked out batters of the Hazelwood Mine. The assessment must considerate the most effective fire protection for the exposed coal surfaces, including final rehabilitation, water coverage, coverage by earth or some other substance, treatment with a fire retardant or a combination of these or other approaches. GDF Suez should implement the suggestions in the report concerning the controls and treatments to minimise the impact of the risk. 02.31PM 02.31PM 02.32PM

3. GDF Suez should thoroughly review its Mine Service Policy and Code of Practice to ensure that, taking a risk assessment approach, it is suitable for mitigation, prevention and suppression of fires in all parts of the mine. The reviewed policy should as a minimum address the regular removal of vegetation - a matter discussed by Mr Incoll - the ability to prevent and suppress any fires that commence or burn into the worked out parts of the mine; the use of thermal detection and other imaging technologies by which fires can be spotted as soon as they commence, and the ready availability of compressed air foams that are capable of operating in an open cut mine environment supported by camera and other technologies. The review document ought to be incorporated into the approved work plan 02.32PM 02.32PM 02.32PM

for the mine.

Turning to the regulatory structure: From the date upon which s.16 of the Mineral Resources (Sustainable Development) Amendment Act 2014 commences, the issues of fire pretension, mitigation and 02.33PM suppression should again be addressed in approved plains under the Mineral Resources (Sustainable Development) Act 1990. This will mean, importantly, that from that time both the DSDBI and the VWA are responsible for regulating the risk of fire in mines, 02.33PM the DSDBI being able to bring its extensive mines expertise and the VWA drawing on its occupational health and safety management expertise.

5. The Emergency Management Commissioner should assume responsibility for Integrated Fire Management 02.33PM Planning in Victoria from 1 July 2014 and should sponsor legislation that will underpin Integrated Fire Management Planning and provide legislative authority for the development and implementation of regional and municipal Fire Management Plans. 02.34PM

6. Section 43 of the Country Fire Authority Act should be amended so that it applies to essential State infrastructure such as the Hazelwood Mine and Power Station, whether they're in private or public ownership. 02.34PM

7. The final recommendation we submit ought to be made is that the Department of Transport, Planning and Local Infrastructure and the Latrobe City Council should review the Latrobe planning scheme to ensure that, so far as is reasonably practicable, it minimises 02.34PM the risk of embers from external rural fires, in

particular timber plantations, from flying into open cut coal mines in the Latrobe Valley.

They're the submissions that we make in relation to this matter and, unless there are any questions that Members of the Board have about the topics that I've addressed, it's probably time to give the parties a chance to say something. 02.34PM

MEMBER CATFORD: I just had one question, Mr Rozen, about again this sense of urgency, whether you have a view about timelines or speed of action? 02.35PM

MR ROZEN: I anticipated you might ask that question, Professor Catford. Most of the recommendations that we make in the two topics that I've addressed - that is, firefighter safety and the regulatory arrangements - are recommendations really which ought to be addressed as a matter of urgency. 02.35PM

The one recommendation where that may not be possible concerns the coming into operation of the Amendment Act and including in approved work plans the matters of fire risk and other risk management. It would be hoped that that could be addressed, if there's some flexibility about the commencement timeframe for those amendments. Thank you. If the Board pleases. 02.35PM

MS NICHOLS: If the Board pleases. May I start by making some general observations about Environment Victoria's position and the approach I intend to make to these submissions. Environment Victoria submits that the fire itself, or at least the extreme extent of it, was avoidable. It was avoidable by the adoption of mitigation measures, and by the adoption of those same mitigation measures a repetition of the event in the 02.36PM

future can be greatly reduced, or the prospect of that can be greatly reduced.

Environment Victoria has a limited remit in terms of its grant of leave. We are granted leave in relation to the question of mitigation and we do not intend to repeat what has been submitted by Counsel Assisting. On the question of mitigation and the regulatory issues associated with mitigation, Environment Victoria adopts and supports the submissions of Counsel Assisting. 02.37PM

I will focus in these submissions on the question of rehabilitation of the mine. It's Environment Victoria's submission that rehabilitation of the mine is a powerfully effective tool to protect the community against the risk that happened in February 2014 from ever happening again. There is no doubt the obligation of GDF Suez, that it had to progressively rehabilitate the mine, can be accelerated and there is no good reason why it shot not be accelerated for the purposes of mitigating fire risk. 02.37PM

A sensible question and a necessary one is, what is a good and practicable way to de-risk a brown coal mine against fire risk? In our submission rehabilitation, meaning accelerated progressive rehabilitation, is a solution which must be given considerable weight when answering that question, in short for these reasons: Its risk mitigation potential is both powerful and well known, and once it's done, it's done in the parts of the mine in which it occurs. 02.38PM

Second, it's a tried and true method in which the operator of the mine has undoubted expertise; it's not 02.38PM

new, it's known.

Third, it's already the subject of a statutory obligation. That obligation, as has been acknowledged by GDF Suez in its evidence, is the quid pro quo for the licensee's right to dig coal out of the ground and it do it in such close proximity to the township of Morwell. It's a core obligation under the Act to progressively rehabilitate in the course of doing the work. Mr Faithfull accepted that that obligation was, in his words, "Part and parcel of being a community wise and environmentally wise mining business." 02.39PM 02.39PM

Rehabilitation costs money and it's complex, like every other aspect of mining. A lot has been said about cost and it's really cost that's implicitly behind the resistance of GDF Suez and aspects of the regulatory regime to accelerate rehabilitation. It's not suggested that cost is irrelevant, it's not suggested for a moment, but in basic terms there are some fundamental economic relationships that need to be observed, in our submission. 02.39PM 02.40PM

First, what happened in February of this year was one of the worst public health and environmental disasters in the State's history. The costs to the community were vast and there is, of course, if mitigation measures are not taken, a risk of repetition carrying with it risks of very significant costs. 02.40PM

On the question of costs, the costs of rehabilitation is a cost that the mining company must already incur. Of course, there are incremental costs attached with doing it sooner, accelerating it, but those have not been quantified. There's not been a 02.40PM

scintilla of evidence from GDF Suez about how much more it will cost to do it more quickly.

The third element of cost is that there is presently much less financial incentive on GDF to accelerate remediation than there could be, and there is much less financial incentive on it to get the job done in its entirety before the mining licence finishes, and that's the issue of the rehabilitation bond. Rehabilitation as a fire mitigation measures has affirmative support from some important witnesses. 02.41PM

Mr Lapsley said that, "To improve the efficacy of the current fire risk mitigation measures there should be a review of the rehabilitation regimes in and adjacent to the mine for mitigating entering and leaving the fire mine site." That is an important piece of evidence before the Board, it is submitted. 02.41PM

Mr Niest accepted, after being cross-examined, that the question of reasonable practicability was not off the table when it came to rehabilitation for the purposes of mitigating fire risk. 02.42PM

Ms White from DSDBI accepted and welcomed the potential enhancement of the powers under which her Department operates to include rehabilitation specifically for the purposes of fire risk. It's really GDF alone who is not really offering anything more than what it was previously doing. 02.42PM

In these submissions it is accepted that the Board must necessarily focus on solutions for the future and it's in that context that we do make some criticisms and do submit that the Board make some criticisms about events that have happened in the past, but that is for 02.42PM

the purpose of improvement rather than for blame.

The question of rehabilitation and its role in things is necessarily tied to aspects of the regulatory regimes, and for that reason we make some submissions about parts of those regimes. 02.43PM

We submit that the Board needs to take a multi-pronged approach. It's not really a question of whether there is one single right way of fixing fire risk. Rather, amendments to the regulatory regime and recommendations attaching to GDF need to be as fulsome 02.43PM and multi-faceted as is possible. We say this for these reasons: Both the mine operator and the regulators have evidenced a tendency to too readily draw demarcation lines around their particular area of operation and to ignore the question of fire risk. 02.43PM

The other reason is that, on the question of rehabilitation, if we may say so with respect, the attitude of the mining company is that it's all too hard, it's too difficult, it's very costly and we would prefer to stick to our plan. 02.44PM

It's necessary that some of the recommendations that the Board will ultimately make will need to provide for further reviews and Inquiries. An important theme of the evidence in our submission is that in the past reviews Inquiries and processes have 02.44PM really been exactly that - reviews, Inquiries and processes and they have not really led in many cases to practical outcomes. For that reason, Environment Victoria goes further than Counsel Assisting do on the question of recommendations concerning rehabilitation 02.44PM of the mine. In our submission the Board ought insofar

as it can be pointed, practical and specific in its recommendations.

We've indicated to Ms Richards that we will supplement our oral submissions in writing. Given that, I will just refer in fairly general terms to the evidence so as not to take too much time. We will also in our written submissions set out the precise recommendations that we propose, however I will address those orally as well. 02.45PM

Having made those general remarks, there are 10 propositions that in our submission support a very serious consideration in relation to rehabilitation of the mine for the purpose of preventing fire risk. I hope that you're not alarmed by the No.10 because I can go through them quite quickly. 02.45PM

The first proposition is this: Fire was a reasonably foreseeable consequence of unrehabilitated batters. I don't need to go into the evidence supporting that proposition because it has been done by Counsel Assisting. Suffice it to say that, in our submission, there appears to have been significant institutional knowledge failure on behalf of the operators of the mine. The risks to the community of Morwell were never taken seriously. 02.45PM

A statement from Mr Graham exemplified that attitude when he said in giving evidence, "Now it has been proved that this thing can happen." That sort of attitude, we say with respect, completely misunderstands the role of risk management. Both DSDBI and the Victorian WorkCover Authority were also sufficiently aware of the relevant risks. 02.46PM

The second proposition is that there is a clear link on the evidence between rehabilitation of the mine and mitigation of fire risk. The evidence, and I mention it only briefly, comes from Mr Incoll who said that "exposed earth needs to be covered by earth"; Mr Cliffe/Mr Niest, who accepted that covering coal is good for fire risk mitigation; Mr Faithfull and, importantly in the work plans of 1996, 2009 and passingly in the work plan of 2013. 02.47PM

It's really quite unsurprising that in the work plan of 2009 there's a very clear link drawn between rehabilitation of batters by covering them with overburden and fire risk. It's because that's a very natural connection. The risk is caused by stripping away earth from coal batters, it's fixed by rehabilitating the mine. The alacrity with which both GDF Suez and the regulators thought to step away from s.6.5 of the work plan was breathtaking. 02.47PM

The third proposition is that there is a fundamental obligation to progressively rehabilitate on the mining operator, but that obligation has in practical terms been attenuated by a very weak rehabilitation plan that contains no real milestones. The obligation to progressively rehabilitate is a core obligation under the Act. It finds its effect in the mining licence. But in that context what has happened is that the substance and effect of the obligation necessarily depends on the quality of the work plan. The licence ties progressive rehabilitation, of course, to an approved work plan. 02.48PM

The 2009 work plan, in short, allows four stages

of overburden rehabilitation and it's tied to the availability of overburden within the mine. That is one important consideration, but in our submission it ought not be the only consideration. What it means is that progressive rehabilitation is not required to be done until, on the most optimistic view, overburden becomes available as a by-product for mining operations. That document is a key regulatory document. 02.49PM

The most stunning example of there being no clear milestones in that plan was exhibited in the difference of view between Ms White of DSDBI and GDF Suez when, on the very important question of when the next phase of rehabilitation would be done, there were diametrically opposed views and, according to Mr Faithfull, the Regulator's expectation had never been discussed. If ever there was an example of the cooperative form of regulation breaking down, that is it, and it needs to change, in our submission. 02.49PM 02.50PM

The fourth proposition is that the attitude of GDF Suez on the question of rehabilitation has been one of blindness to the obvious link between rehabilitation and fire risk mitigation. Mr Faithfull's evidence was important on this score. He is the person practically in charge of rehabilitation, and rehabilitation very obviously is the most major practical significantly effective means of mitigating fire risk. When he was asked about the 2009 plan, he didn't recognise it, barely. He had not turned his mind to the link between fire and rehabilitation. When he was asked about the alternatives for fire risk mitigation he accepted that 02.50PM 02.50PM 02.51PM

there were two; extinguishment or insulation. His working assumption was that, where batters are not covered, they will be covered by the Fire Service, but he had made no enquiry about whether the Fire Service would operate effectively. 02.51PM

Proposition 5 is that the complexities and costs described as impediments to rehabilitation are not really impediments, they're simply complexities and costs that occur in the nature of a mining enterprise and are intrinsic to rehabilitation. They are not such as should, in my respectful submission, encourage you not to make strong recommendations about rehabilitation. 02.51PM

Mr Faithfull agreed that the stages in progressive rehabilitation that he identified in his witness statement must occur ordinarily regardless of when remediation is done. He said that none of the steps identified could not be done in a progressive sense, he simply said that it was costly and complicated. He asserted in very general terms that there would be increased costs if the progress of rehabilitation was taken out of synch with the existing mining plan. 02.52PM

Now, it doesn't take long to imagine why it is important that the progress of winning coal needs to have a good relationship with rehabilitation. It doesn't follow however, in my submission, that one can never change a plan for rehabilitation, including by looking at the plan for mining coal itself. 02.52PM

There were no particulars provided about the incremental cost, and on so-called practical constraints, when Mr Faithfull was asked about whether 02.53PM

or not he could or couldn't move infrastructure, which was a major reason apparently for not accelerating rehabilitation, he said, "I haven't checked."

One of the issues was the availability of overburden. There is a high proportion of coal to overburden in the Hazelwood Mine. Ideally GDF Suez position is that it would want to use the overburden that is close to the areas that it is rehabilitating. That is an understandable preference, but in our submission preferences cannot always be met, and that preference is not a reason to assume that, because of the availability of overburden, rehabilitation cannot be accelerated or the sequence in which it be done changed. 02.53PM 02.53PM

Proposition 6 is that there is in fact a clear opportunity to change the rehabilitation plan and to accelerate it. Just pausing on the question of overburden. Ms White said, interestingly, that DSDBI had been discussing, I think with VWA, whether it would be possible to get overburden from the overburden dump within the mine. The Board is not in a position presently to know the results of those conversations and they did sound rather preliminary, but that is a question that is being asked and in our submission should be asked. It is clearly possible to investigate whether there are other sources of overburden, whether overburden for example can be obtained from parts of the mine and used to rehabilitate other than simply in the way it is done now, which is that overburden is only obtained in the course of extracting coal and used close to the area in which the coal extraction occurs. 02.54PM 02.54PM 02.54PM 02.55PM

Ms White said that she would welcome the opportunity to consider whether the rehabilitation plan can be amended so that rehabilitation can be brought forward. She also said, however, that there are a number of issues to consider, and that GDF are 02.55PM responsible for determining whether and to what extent the program can be brought forward. She made the point that it was GDF who has the technical expertise rather than the Mine Regulator. That's a point that is of real concern. 02.56PM

It's not suggested that Ms White's concerns about resources were not valid or genuine. However, if the Mining Regulator does not possess sufficient expertise to keep ahead of the mine operator, the end result is that from a regulatory perspective no-one is leading 02.56PM and the mine operator has the opportunity really to run its own race. It will necessarily, and on one view quite properly, have at the forefront of its mind its own commercial considerations. But in a context such as this, it is absolutely important in our submission 02.56PM that the Regulator play a leading role.

When the Mining Regulator has expressed the view that change is welcome but there is a concern about expertise, and that ultimately the question of whether rehabilitation is brought forward is a question for the 02.57PM mine, that is not in our submission an appropriate state of affairs.

On the question of timing, we make two submissions. One is that the schedule for rehabilitation should be the subject of a major review 02.57PM to see what areas of the mine can be rehabilitated

sooner, specifically with a view to fire mitigation, and the question about sequencing and the structure of the plan itself be reviewed.

On this count it should be noted that what's been offered by GDF in the document put forward by Mr Graham the other day is in fact nothing new. The nine hectares identified to be rehabilitated are those that were already identified for work in January 2014. 02.57PM

The second submission we make is that, even if and to the extent that for the time being the existing plan stays in place, there are a number of things that can happen to assist the timing of rehabilitation. First, it's been made pretty clear that the Department expects that, for example, the 2019 phase of remediation should be completed by 2019 subject to the progress of the mining works themselves. GDF has a different understanding. It is preferable in our submission, clearly, that the Department apply a requirement that the works be completed rather than commenced by that date. Within that rubric it is important that the Department impose upon GDF some clear time milestones. 02.58PM 02.58PM 02.59PM

It was plain from the evidence of Mr Faithfull that very little has been done, if anything, to progress the next phase of rehabilitation. The four stages of rehabilitation do not all require overburden. Stage 1, for example, involves assessment of stability. That could be done, no reason why it could not. It has not been started and there was no reason why it has not been started. That example illustrates why it is necessary and appropriate in our submission for the Department to start imposing some real milestones that 02.59PM 02.59PM

are concrete, that are tied to specific activities, and are based on time.

That kind of regulation may not suit the preferred regulatory style of DSDBI, but in our submission it's not appropriate at all for a general preference for a regulatory style to prevent proactive regulation in these circumstances. 03.00PM

Proposition 7 is that, there are certainly alternatives to rehabilitation as a fire mitigation measure. Presently these are untested, and the evidence about them before the Inquiry when taken in the context of the evidence about rehabilitation, should lead to the conclusion that a major emphasis on rehabilitation should be made in the Board's findings and recommendations. 03.00PM 03.00PM

You will recall the evidence of Mr Faithfull when he was re-examined by Ms Doyle, and he identified in series a number of practical objections and concerns about temporary rehabilitation measures. We don't suggest or submit that those concerns ought be taken at face value at all. However, in contrast to rehabilitation, those measures were said to raise a number of specific issues: Clay capping was said to potentially interfere with access to roads, drains and horizontal bores on the batters. 03.01PM 03.01PM

On the question of the system to wet down batters, reticulated water systems are obviously an important consideration. We are not in a position, and I don't think Counsel Assisting are either, to make detailed submissions on what a reticulated water system would look like and how effective it would be to mitigate 03.02PM

risk. We do note, however, that considerations might arise to do with electricity supplies to that water system.

It is true that technology requires power that can fail at critical times. Rehabilitation, however, 03.02PM although it is complex, although it involves a process, once it is done, it is done.

I commenced these submissions by saying the Board should embrace and make recommendations in a multi-pronged approach. It's not our submission that 03.02PM one should make recommendations only about rehabilitation of the mine, but not to make strong recommendations about rehabilitation of the mine would be remiss, and certainly there is no evidence that any alternatives to rehabilitation would be as powerful or 03.03PM as effective as a fire mitigation measure.

The eighth proposition we have is that, there have been significant failures or limitations in the regulatory regime which fracture the natural relationship between rehabilitation and mitigation, the 03.03PM effect of which is to effectively allow the mine to run its own race. By failures we mean either limitations in the regime itself or in the way the regime is applied.

For the purposes of making recommendations for 03.03PM change, it matters not, however a close analysis of those limitations is important in order to guard against the same kind of errors that have happened in the past. As I said in the beginning, we adopt Counsel Assisting's submissions on the regulatory regime but we 03.04PM do want to make some observations.

Prior to the fire neither DSDBI nor VWA considered it was their responsibility to ensure that appropriate fire risk assessment and management was undertaken specifically in the context of the worked out areas of the mine in order to protect the population of Morwell. 03.04PM There is a slight caveat to that in the case of the VWA in that, if it considered that s.23 applied to the operations of the mine in the particular context of the relevant cause of fire, then it would regard itself as having an obligation. 03.08PM

The position of DSDBI and Ms White has been summarised by Mr Rozen. The Mining Regulator's position was indeed very stark and perhaps surprising. The position was taken notwithstanding that the objectives listed in s.2 of the Mining Resources 03.08PM (Sustainable Development) Act are, amongst other things, to establish a legal framework aimed at ensuring that mineral and stone resources are developed in ways that minimise adverse impacts on the environment and the community and that the health and 03.08PM safety of the public is protected in relation to work being done under a licence.

There was quite concrete examples of risks being made quite plain to the department that appeared in Ms White's witness statement, and that was when the 03.08PM 2009 plan was being changed and there were amendments to the Latrobe Planning Scheme. The panel convened to consider the EES, gave great attention to the question of fire risk and it was said that DSE itself had recommended during the course of that Inquiry that 03.09PM batters be flattened and capped for rehabilitation

purposes, but also, and I quote from an extract in Ms White's statement, "To achieve the not insubstantial benefit of mitigating the risk of fire."

Whilst it is understood that those who have regulated have done so because they take properly a conscientious view about the limitations of the field in which they operate, it is nevertheless quite extraordinary that this kind of risk can be sidelined and effectively ignored because a view is taken about the parameters of the field in which the regulator operates. 03.09PM 03.10PM

It is important however, in the context of recommendations, that DSDBI recognise that change could occur and Ms White said she was not unwilling to accept change. It was said however, to quote her, "We don't have fire expertise." 03.10PM

Our submission is that, in order to progress rehabilitation as a fire risk mitigation measure, no more fire expertise is needed or no more knowledge is needed than currently exists. The mine operator has all the expertise it needs in rehabilitation and so ought the department. Nothing more needs to be known about the potential for rehabilitation to mitigate fire risk. 03.10PM

It's not said, in our submission, that either GDF or the VWA should not obtain extra resources and expertise - in fact, they should. But the acceleration of rehabilitation as a fire risk mitigation measure does not need further expertise; more learning, more knowledge. 03.10PM 03.10PM

In answer to a question by Professor Catford about

who determines what gets remediated and when, Ms White said in effect that she did not regard her Department as a passive Regulator, but the answer was really that it was the responsibility of GDF for preparing and implementing the plan. 03.10PM

Now, that might be true as a matter of technicality, but one must ask again, who leads and who is responsible? Who asks the hard questions? Who thinks outside the square? There is a vacuum here that has had very real consequences and needs to be fixed. 03.10PM

Ms White indicated, however, that she welcomed reform, as I have said. Mr Rozen has already addressed s.40(3) and we support Counsel Assisting's submissions and proposed recommendations in that regard.

Ms White took a very limited view of her role, and 03.10PM I don't mean this personally, it's a view that represents the Department's position, because of the description of - I say this in the context of rehabilitation - because of the description of what ought to appear in a rehabilitation plan in Schedule 15 03.10PM of the regulations made under the Mineral Resources (Sustainable Development) Act. In our submission, Ms White's reading of that schedule was very limited indeed and a broader reading is more than open and indeed correct. We needn't dwell on that, however, 03.10PM because Ms White said she would be happy for an amendment to be.

In the context of the VWA we won't repeat Mr Rozen's submissions, but we do note the very, very narrow interpretation given to s.23 and the qualified 03.10PM answer to the question, "Who protects against the risk

of fire?", the answer being, "Well, it depends which precise risk is being protected against."

Proposition 9 is that rehabilitation is a reasonably practicable measure for the mitigation of fire risk and at the very least on the evidence before the Board it cannot be excluded as not being a reasonably practicable measure and, as you know, whether it is a practicable measure for mitigation goes to the obligations on GDF under the OH&S Act and regulations. 03.11PM

Mr Niest started off putting quite confidently the view that it was likely that rehabilitation and also the construction of a reticulated water system would not be a reasonably practicable measure. So some concern that both of the potential rehabilitation measures were dismissed in this way. Mr Niest's ultimate conclusions were that it could not be concluded that rehabilitation is not a reasonably practical measure that could be used to control the risk of fire in the mine. Mr Niest said that, "Clearly after the fire all of the parameters have changed. It is now known that it can occur so the whole risk has to be re-assessed." 03.11PM 03.12PM

One must ask, what really had changed? But focusing on the solutions, at the very least on the evidence, including Mr Niest's evidence, it must be accepted that rehabilitation was a very strong contender for being a reasonably practicable measure. 03.12PM

I won't labour the points in s.20(2) in the interests of time, but if I may just remind the Members of the Board about a couple of important pieces of 03.12PM

evidence. On the likelihood of a risk eventuating, just going through the factors, Mr Niest agreed that the likelihood of the risk of fire was high. On the question of the availability and suitability of ways to eliminate the risk or reduce the hazard, Mr Niest 03.13PM agreed that it was most relevant that the mining operator itself had identified in its rehabilitation plan that rehabilitation was a way of eliminating fire risk. He also agreed that it was most relevant that the mine owner is committed under its licence to 03.13PM progressive rehabilitation. It's an already existing measure that it must take, it is therefore available.

On the question of cost, it was also agreed that it is highly relevant that it is a cost the mine operator must already incur. You will remember the 03.13PM policy document on cost. VWA's policy said, among other things on the question of cost, that once other factors are established safety measures should be implemented unless the cost of doing so is so disproportionate to the benefit in terms of reducing 03.14PM the severity of the hazard that it would be clearly unreasonable to justify the expenditure.

Of course, that is a policy document and ultimately the meaning of s.20(2) is a question of statutory construction. However, Mr Niest agreed that 03.14PM was the right way to interpret the relevant costs. Considering the issue more generally, looking outside of the strict matrix of s.20(2) for the purposes of the Board's deliberations, it is our submission that that statement about cost is an appropriate and clear way of 03.14PM encapsulating the relevant considerations.

The mine has resisted any suggestion of faster rehabilitation as I said before on what are in our submission vague grounds without any real support. As a matter of logic one can well understand that changing the sequence of rehabilitation will have the result of incurring additional costs. But it's noteworthy that, having heard Mr Graham's evidence, GDF has quite precisely quantified rehabilitation costs and no doubt was in a position to quantify incremental costs but it has not done so. 03.15PM

Finally on the question of costs, you will recall that Mr Lapsley confirmed that the costs of the emergency operation were about $32.5 million. Mr Alan Hall from the Department of Human Services gave evidence that in short the financial assistance provided by the Government was in the range of $7.35 million. The total calculated costs of the fire is therefore about $40 million, not taking into account the value of volunteer labour. That is a very relevant metric when considering whatever the incremental costs of doing rehabilitation more quickly might be. 03.16PM

I want to briefly address the question of the bond, and I should say I am almost finished. The rehabilitation bond - the facts concerning it are these in short: It's in the amount of $15 million. It was fixed in 1995. It has not been amended since. It was not amended in 2009 when the area covered by the mining licence was expanded significantly. DSDBI has a current methodology for assessing rehabilitation liability but it has not used it in this instance. 03.16PM 03.17PM

The Minister has a power under s.79A of the Act to

require a mining operator to assess its liability and to have that liability audited by an independent auditor; that has not been done. DSDBI has engaged in a review process which it started as late as 2010. It stopped it in 2012 and started it again in 2013. 03.17PM There's no suggestion about when that might be concluded.

Ms White agreed that it was highly likely the bond was inadequate to cover rehabilitation costs at the end of the life of the mine. Mr Graham volunteered a 03.17PM figure of $800,000 to remediate nine hectares of land. It's accepted that not every hectare will cost the same because it will be in a different part of the mine and so on. He then disclosed that in fact he thought the costs would be more like $995,000. 03.18PM

On the figures raised by GDF in their cross-examination of Ms White on the area of the mine remaining, if those figures are correct, just applying that to get some sense of the magnitude, it would be at a cost of $118 million to finish remediation. 03.18PM Mr Graham said he thought that in his budget the numbers were less than $100 million or 80-something. Clearly there's a vast difference between the amount of the bond and the amount of the remediation costs.

In our submission, read properly in its statutory 03.18PM context, which is Part 7 of the Act, the principal purpose of the bond is to shift the risk of uncompleted remediation to the mining operator. It of course serves the purpose also of being an incentive, a very powerful economic incentive to complete remediation. 03.19PM In this regard I won't take time, but I refer to the

context being sections 79A, 80, 81 and 82 of Part 7 of the Act.

Of course the Minister can recover as a debt any outstanding money if the Minister requires to do the clean up himself, but that leaves the risk of recovery resting on the Victorian taxpayer. This is a situation, in our submission, which is wholly unsatisfactory. Mr Graham argued that the purpose of the bond was, to quote him, "some kind of retainer" which implicitly would cause the mine to be incentivised on the pain of not getting its bond back, but clearly it's a much lesser incentive than it would be if it equated to the outstanding costs of remediation. 03.19PM 03.19PM

One must ask rhetorically, why would it be that the Minister would not require an assessment under s.79A of the rehabilitation costs and order its assessment, and why would it not be that the Minister would require the posting of an additional increased bond? The ball in our submission is very clearly in the court of the Minister in this case. 03.20PM 03.20PM

Without an adequate bond, the risk remains with the State of Victoria and ultimately the Victorian people. The mining operator is not being required to pay a cost of its operation from which it gains substantial benefit. 03.20PM

In conclusion, before I turn briefly to our proposed recommendations, it seems to us that there are some striking facts about the events and the surrounding circumstances for the February 2014 fire. There was a known risk of fire that is a natural 03.21PM

consequence of mining and mining so close to the town of Morwell. Unsurprisingly it eventuated. There is a natural connection between fire risk and rehabilitation. The regulatory framework within which this is considered tears those two things apart. 03.21PM

There is a rehabilitation plan that has no milestones other than those tied to the mining schedule. On this, the mining operator and the Regulator have diametrically opposing views about what it means. Those views were not apparent through the 03.22PM cooperative regulatory process. They became apparent during the course of this Inquiry. There is an inadequate security bond that has not been revisited since 1995.

Finally, both Regulators have adopted an extremely 03.22PM narrow reading of very important empowering Acts and regulations. They have a Memorandum of Understanding that has not delivered a holistic approach to the risk of fire. In this respect regulation is not working. There are, however, real opportunities for improvement 03.22PM that start with revisitation of the rehabilitation plan.

It should not be business as usual for the coal mining industry in Victoria after what has happened. The people of Victoria, and in particular the people of 03.22PM Morwell, deserve a lot better. The current system of regulation means that the mine will do as little as possible for as long as it can and the regulatory system permits that. At the moment GDF Suez is being left to balance the costs between itself and the 03.23PM community. It can't really be expected to do that

balancing exercise other than in its own commercial interests. That balancing exercise needs not to be left to it because every time the community will come last.

By ensuring an appropriate rehabilitation program takes place through good enforcement and a suitable bond, the Inquiry has the opportunity to ensure that the legacy of coal mining in this locality is one of good, cheap power rather than one of environmental destruction and community suffering. 03.23PM 03.24PM

Can I mention the recommendations that we propose and, as I've indicated we will provide these in writing to the Inquiry through Counsel Assisting.

Firstly on the question of rehabilitation: We support Counsel Assisting's recommendation at paragraph 77 regarding s.40(3). We also suggest, as part of a multi-pronged approach, that amendment be made to Schedule 15 of the Mineral Resources (Sustainable Development) Regulations to specifically require that rehabilitation plans include within work plans for a mining licence consideration of the means by which progressive rehabilitation may mitigate fire risk. 03.24PM 03.24PM

Thirdly, it should be recommended that both DSDBI and VWA acquire as a priority the expertise necessary to monitor and enforce compliance with respect to measures to mitigate fire risk. 03.24PM

On the rehabilitation plan itself: Environment Victoria proposes first that DSDBI with assistance from external consultants review the 2009 rehabilitation plan and the proposed 2013 plan with a view to the 03.25PM

following:

First, identifying areas of the mine in which rehabilitation can feasibly be accelerated for the purposes of fire mitigation.

Second, determining whether the rehabilitation schedule should be generally amended, examining the role of legitimate operational constraints such as infrastructure, specifically with a review to fire mitigation. 03.25PM

Third, to the extent that, and while the existing schedule remains extant, DSDBI clarify its requirements in relation to those areas that are nominated under the current plan and indicate by what time it requires them to be completed. Preference should clearly be given to commencement sooner than later. In that connection DSDBI should require time-based milestones for the achievement of the next planned phase of rehabilitation, and as revised progressively. 03.25PM 03.26PM

Finally, DSDBI should specifically investigate the sources of overburden for the use in rehabilitation. 03.26PM

Next, at a minimum there should be an annual review of progressive rehabilitation targets to ensure that scheduled rehabilitation is both underway and a planning process for future rehabilitation has commenced. 03.26PM

There should be an amendment to the Act to require the public reporting of progressive rehabilitation work plan compliance.

Environment Victoria also supports Counsel Assisting's recommendation at paragraph 4.4 of their submissions concerning a full risk assessment of the 03.27PM

likelihood and consequences of the risk of fire and the most effective means of fire protection of exposed coal surfaces, including final rehabilitation. The only caveat we make is that we read "final rehabilitation" in counsel's document to include a reference to "progressive rehabilitation". 03.27PM

Finally on the rehabilitation bond we propose two recommendations and they work in tandem although they are quite different. First, that the Inquiry recommend that the Minister exercise the power under s.79A to require the licensee to conduct an assessment of its liability and that that assessment be audited. 03.27PM

Second, that recommendations be made to support a review of the Department's methodology and the parameters for assessing the quantum of the rehabilitation bond it will accept under s.80, specifically concerning this mine, but we accept that may apply more generally to the mines in Victoria. 03.28PM

The relationship between these two recommendations is that under s.79A the mining company will assess its own costs of rehabilitation. The second step deals with what it is that the Department will accept as a rehabilitation bond, because of course there remains the prospect that the Department or the Minister will say, "I will accept a bond that is less than the costs." 03.28PM 03.28PM

In our submission, an appropriate way of doing this would be to recommend that the Auditor-General conducts that review. That can be probably done in two ways: (1) that a direct recommendation be made that the Auditor-General conducts that review; or (2) that 03.29PM

DSDBI request a review, and that is a mechanism that is clearly available under the Audit Act.

If the Board pleases, those are our submissions and if there are no further matters, we thank the Board for the opportunity to make submissions. We were wondering whether we might be excused from further appearance at this point, or alternatively at the end of the day? 03.29PM

CHAIRMAN: There's a question.

MS NICHOLS: I beg your pardon. 03.29PM

MEMBER CATFORD: Ms Nichols, thank you very much, that was a very full exposition on rehabilitation. Of course, you have got leave to discuss other matters. Can I raise this issue about land use planning, whether Environment Victoria has got a view about that particularly with regard to plantations or other vegetation near the mine? 03.30PM

MS NICHOLS: I'll just need to get some instructions on that.

I can't really assist, other than to say we support Counsel Assisting's submissions. I'm sorry, that's not particularly helpful to contribute an answer to the question. 03.30PM

CHAIRMAN: Yes, I see no reason why you should not be excused. 03.30PM

MS NICHOLS: Thank you.

MR MARSHALL: First, let me thank the Board for allowing us to appear today, thank you very much. My name's Peter Marshall. I'm the National Secretary of the Firefighters Union. We have provided two submissions to the Inquiry, one was on 20 May. I apologise, I 03.31PM

don't think it was dated when we sent it, then there was a second submission on 6 June.

May I state firstly that, I'm sure this is in agreeance, one of the greatest assets of Victoria is its firefighting staff, in particular the career and 03.31PM volunteer firefighters, I think that's not in question. What is disappointing, though, is that at the moment their concerns are only being voiced through their Union, being the United Firefighters Union. Unfortunately, we've been unable to bring to your 03.32PM attention significant matters that they would like to because of potential adverse consequences which I'll deal with later on.

But if I could, could I take the Board through our submission in brief and then some recommendations if 03.32PM possible?

Effectively, just for the record, and I apologise, I haven't done this before for a long time, the United Firefighters Union is a Federally registered organisation. We represent approximately 10,000 03.32PM firefighters in Australia. We have appeared before Tribunals, Coronial Inquests and Senate Inquiries. In particular, we have a very legitimate concern about firefighter contamination. We appeared before the Senate Inquiry into the Safety Rehabilitation and 03.32PM Compensation Amendment - Fair Protection For Firefighters Bill in 2011. That was in relation to cancer related illness that firefighters contract in the course of their employment. That Senate Inquiry accumulated a report from the Australian Senate that 03.33PM actually found that firefighters are more susceptible

to certain types of cancers, approximately 12 types of cancers, as a result of continual exposure.

It is an unavoidable risk for firefighters and I think it's important I traverse this ground because they're predominantly a lot of our concerns. It's an unavoidable risk for firefighters for this simple reason: that their uniform must breath. It provides them with protection from radiated heat and from being engulfed in flame. It's a state-of-the-art protection that as we know currently exists globally and we're actually part of a global alliance that keeps checks on these things. 03.33PM 03.33PM

But it also has to release metabolic heat build up, so the uniform must breath. So whenever a firefighter is deployed into a combat situation, they're exposed to the toxins in that environment. 03.34PM

There are numerous reports now and there's no debate in the scientific community that firefighters are more susceptible to cancer as a result of their service to the community. The Senate Inquiry found that firefighters forego quantity and quality of life in protecting the community, and that is paraphrasing but essentially I think that's at the end of their report. 03.34PM

Hence, decontamination procedures are very real for us, it is very real because the illness is very real. The Australian Parliament as a result of that Senate Inquiry adopted legislation, it's called Presumption Legislation, that recognises that firefighters do have that increased risk and there is a reverse onus placed on proving that illness on the 03.34PM 03.34PM

employer or the insurer as a result of the circumstances for firefighting.

For example, previous to that legislation Federally, firefighters had to prove which fire, which toxin out of tens of thousands that caused their cancer to be able to make a claim for compensation. It was an impossible task, hence they actually implemented that legislation with the reverse onus. It's a rebuttable presumption, so there's checks and balances. 03.34PM

I make that point because it's not just about compensation. As part of that Senate Inquiry what came out of it was an awareness that we could do things better, being decontamination. In the old days, when I was a firefighter on shift you used to surrender your dirty uniform. You can't do that. We didn't have the knowledge that we do have now. 03.35PM 03.35PM

Employers adopted procedures, in particular procedures of decontamination, the quick turn around of dirty personal protective equipment, to ensure that there is limited exposure to those carcinogens so that they don't leach into the skin, in through the pores of the skin of the firefighters, they're working, they're hot, their pores are opened, I've explained how the uniform must breath, so whatever's in the atmosphere leaches into their skins. So decontamination procedures are very important. 03.35PM 03.36PM

Apart from the Senate Inquiry in 2011 we appeared before the 1997 Dandenong Inquiries before Coroner Johnstone in relation to the death of a number of citizens in Dandenong fires, and indeed as a result of our appearance a number of recommendations were made 03.36PM

and they're included in that Coronial Inquest Report.

We also appeared in the Longford Explosion as a wider representation for trades or council. We also appeared at some length in the investigation/inquest into the wildfire and deaths of firefighters in Linton 03.36PM in December 1998. As a result of that a number of our submissions were picked up, in particular the requirement for Safety Officers.

In 2009 we looked at the border reference and we appeared before an independent border reference to look 03.36PM at standards of fire cover for Victorians. In 2009 also we appeared before the Royal Commission, Victorian Bushfires. The reason that I bring these matters to the Board's attention is that we have a long history of appearing before this type of Inquiry. 03.37PM

If I can go to our submission. Without going to the legislative framework of the CFA and the MFB, essentially it's about protecting life and property and I don't need to take the Board to that, I'm sure you're well aware of it. 03.37PM

But if I could just briefly go through this submission. Essentially the chronological events are simply this: On page 10 of our submission, on 16 February it was brought to our attention by the firefighters that we represent that there was a number 03.37PM of significant concerns in relation to them being deployed at the Hazelwood, Morwell, Yallourn Fire, in particular the length and tour of duration, including meal and rest breaks. Fatigue is another known factor that causes firefighter injury as well as potential 03.37PM exposure to injury and even worse.

Mandatory breathing apparatus wearing is direct which does not conform with two-hour turnaround or current BA procedures, 30 minutes per cylinder and changeover BA to occur in clean environment. We couldn't see how the standard procedures that 03.38PM firefighters had actually been trained on could be implemented in the circumstances where the duration of the set was not long enough. Not only that, the area, the rehabilitation area, was also in a, if you like, in a hot zone. 03.38PM

Personnel were instructed to wear BA and not doing so. In some circumstances it was impractical, but there were alternatives which weren't brought to the attention of this tribunal, and that is there are long duration breathing apparatus available. Essentially 03.38PM they used to be what they call BG174s, superseded by what they call BG4s. As I said, I am somewhat embarrassed that firefighters are not able to give this evidence themselves because they would dearly like to be here today. 03.39PM

Rest areas, in hostile environments exposure to unnecessary levels of heat and exposure to carbon monoxide. We note Counsel Assisting's recommendations to the Board, and we appreciate that, the fact that firefighters were unnecessarily exposed. 03.39PM

Clean dirty areas are not uniform among CFA and MFB causing unnecessary potential exposure to toxins, both known and unknown. I place that in the context, the reason why I opened up with the 2011 Senate Inquiry, it is a known occupational illness being 03.39PM cancer related for firefighters, an unavoidable risk.

The very least that can happen is that procedures be put in place to minimise that exposure through having clean areas, dirty areas. Now, that did not occur until very late in the fire fight.

Alternatively, firefighters - there's evidence in our submission that show that firefighters were actually required to wear dirty PPE, personal protective equipment, for long protected periods. In fact, they didn't have replacement PPE. Now, I'm not distinguishing between volunteer career firefighters because they're all firefighters. Indeed, that is dangerous. It is dangerous in the sense of acute exposure over a long period of time, but more importantly danger in a sense that it's a known factor recognised by the Australian Parliament. 03.39PM 03.40PM 03.40PM

Asking whether monitoring equipment is being used for excessive carbon monoxide levels globally and individually. I mean, that's also contained in our submission and there's evidence from firefighters on that particular issue. 03.40PM

Is the carbon monoxide monitoring equipment collaborated for accuracy? There's a letter to the Chief Fire Officer, an email from the Chief Fire Officer from myself on behalf of the firefighters and also to the Fire Service Commissioner, Craig Lapsley. 03.40PM

What other testing is being done for toxins in the atmosphere? Asking for tests re mercury in the water and the surface of the coal and atmosphere and to provide the results for your view. We are extremely disappointed that we actually had to conduct our own independent testing that later revealed that the water 03.40PM

was indeed contaminated and had high levels of E.coli and some other factors which I'll go to in a moment that indeed were not revealed to the firefighters, but most importantly, weren't tested for in the first instance. We have to ask the question, why we had to 03.41PM engage independent testing for this to be discovered. The responsibility is on the employer. Indeed the very least we can do is to make sure that known risks to firefighters are discovered at an early stage of an incident. They were not. 03.41PM

Accommodation facilities for firefighters were inadequate. At one stage there they had to change the staging area because it was on a coalface. It was totally engulfed in smoke. So they had to set up a whole command post, whole staging area where 03.41PM firefighters need to rehabilitate and shift it away. Now, that's simply poor planning and not good enough.

Look, I say this as constructive criticism, it was a fire fight, it was very long, dirty, hard job, we acknowledge that. The firefighters went probably 03.42PM beyond what they normally would because we understand it was a major asset, or they understood it was a major asset for the public of Victoria if the power stations had of been knocked out, so we do understand that so it's constructive criticism to make sure it doesn't get 03.42PM repeated.

So that's a letter essentially encapsulating some of the issues we spoke about with the Fire Service Commissioner and the Chief Fire Officers at an early stage. Can I say, unfortunately there was more 03.42PM conversations and more conversations.

If I can briefly go over the paragraphs, our chronological events of our involvement in this fire and representation by our members are contained in our report in our first submission.

Clean dirty areas, 3.2.2 of our submission on page 14 is extremely important and I've explained why and I appreciate and I don't mean to be lecturing the tribunal, but it is something that's very real for us, and indeed we set it out in great lengths. 03.42PM

Paragraph 3.2.3, amenities and further equipment issues on page 15. Mess areas were not enforced, specific personal protective equipment, clean areas. Can I say that, in the old days it used to happen but we know better now, and what they were doing is, they were bringing in dirty uniforms, the material from their firefighter boots, sometimes it was the company, sometimes it was people that weren't educated, into an area where they were eating their food and supposed to be rehabilitating. That's against procedures and it was wrong and we had to raise those issues on a number of occasions. 03.43PM 03.43PM 03.43PM

Exposure testing: We're very concerned that firefighters were not given the AMCOSH Report in the early stages, in fact it only come to our attention in March. At the end of the day there may have been more information, different information; we haven't received that. More importantly, the firefighters have a right know what they were being exposed to. Indeed the AMCOSH Report recommended procedures that weren't brought to the firefighters' attention and we're disappointed in that. 03.44PM 03.44PM

Safety equipment on 3.2.5 of page 16 of our submission. A number of firefighters informed us that the company employees were wearing what they call P3 masks, whereas we were being issued with P2 masks that filter out particulates. We requested P3 masks but they weren't forthcoming. It's probably an internal matter between the Fire Services and their technical people, but we just raise that issue. 03.44PM

Breathing apparatus on 3.2.6 of our submission on page 17. Those procedures simply were not applied. The standard operating procedures were just simply not applied, and whether it was not practicable to do so was not an answer, because firefighters have a right to be deployed safely as much as possible. 03.45PM

Indeed, the information that the firefighters were given in relation to wearing breathing apparatus differed at various times and indeed the evacuation or total exiting of the fire fight area, that was indeed different at different times. 03.45PM

It also was reported, the last paragraph of page 18 of our submission, that there was not enough breathing apparatus, sets and cylinders to protect all the firefighters on the fire ground for the duration of a two-hour or more deployment in the mine. I can't really understand that because there is large scale capability of breathing apparatus, I'm not sure what went wrong there, but again, firefighters should not be deployed without having the proper safety equipment at least accessible. Even if they weren't wearing it initially, it may be required because of changed circumstances that indeed they would have to don 03.45PM 03.46PM

breathing apparatus very quickly to protect their own health and safety or to provide a rescue for someone.

Fatigue is a significant issue, which was highlighted by firefighters down at this particular fire fight. Some firefighters were working up to 18 or 22 hours consecutively; that is simply not safe. It's not safe for a number of reasons as well meaning as it may be, or alternatively logistically, the co-ordination was not there. Essentially 18-22 hours as a firefighter is simply too long. People become fatigued, they make bad decisions and indeed someone can get hurt. 03.46PM 03.46PM

Additionally it's that exposure I talked about also, as well as the fact that the uniforms, they actually conduct a fair bit of heat. So wearing a firefighting uniform for 18-22 hours is just not good, although we do acknowledge in some cases they were using a lesser hot uniform, being a wildfire uniform. 03.46PM

There are numerous incidents where firefighters worked excessive hours which directly impacting on health and safety. Firefighters reported working 12-16 hours at the Hazelwood Mine with little or no breaks during the fire fight. 03.47PM

Contaminated water: We understand that the water supply was scarce and it's often that firefighters often use what we call open water, but there was enough time and indeed the testing didn't reveal the fact that that water was contaminated. One firefighter sustained a very severe injury we think as a result of that. Firefighters were regularly exposed to this water on their face, nose, eyes, mouth, ears, hands, body and 03.47PM 03.47PM

legs, often soaking right through their personal protective equipment. Again, the importance of having replacement PPC rather than them sitting around in wet and contaminated uniform.

Following a series of safety briefs at the Hazelwood incident, UFU undertook to have its own independent testing. As we know, the testing was in response to reports a firefighter reported getting a serious infection, septicemia, from a paper cup whilst at Hazelwood. 03.48PM

The results indicated that the water contained high levels of chloroforms and E.coli, pseudo aeruginosa, and if I haven't pronounced that correctly I apologise, was also detected. This testing was commissioned by the Union on the back of other testing that had been done that didn't reveal this contaminant. That's wrong and we say that no expense should be spared in trying to provide firefighters with a safe environment. That testing should have been done in the early stages or at least before we actually requested the independent testing. 03.48PM

Staging areas and divisional command, 3.2.10 on page 20. Second paragraph, firefighters reported to the UFU that the staging area at one stage was set up close to the mine edge and the divisional command was moved on Saturday night, 15 February, due to a wind change and the entire area being overcome by high CO levels and ash and smoke. Again, this is constructive criticism in hindsight and we understand it's in hindsight. 03.49PM

Firefighters have also reported that due to the

staging area being close to the powerlines the staging area radioed to the front gate was constantly cracking and in the end CFA staff were forced to use their personal and/or work mobile to communicate with staff to facilitate the moving of appliances. It is a known fact that the powerlines interfere with the radios when it's in close proximity. 03.49PM

CFA personnel reported that mine employee staff tried to take away CFA log records as the books - movements of people in and out of the mine. We say that as constructive as it's a management issue that really is the Fire Service's responsibility to make sure they log the movement of their personnel. 03.49PM

There was an issue regarding staffing which I won't go into because it can be seen as too political, but it's there for the record and there was an issue regarding staffing and running out of people down at that particular fire fight. 03.50PM

Emergency roster was implemented, that highlights our concerns as being legitimate and that's at 3.2.11. There was an issue regarding crewing of appliances. Some of these matters have been referred to the Victorian Work Authority for investigation. 03.50PM

Most importantly this one here on 3.2.13 just should not have happened. In the context of a previous coronial inquest, in particular Linton, Sector Commanders need to be trained. You cannot deploy someone to be a Sector Commander position without having the training. On numerous occasions there was people deployed who did not have either the training, or alternatively in some cases there wasn't a Sector 03.50PM 03.50PM

Commander. That flies in the face of previous recommendations from the coronial inquest, but most importantly standard operating procedures and again goes to the very health and safety of the firefighters.

I won't go into how that's actually governed but it's set out at page 22 of our initial submission. 03.51PM

Communication: There was an issue regarding communication. The firefighters' main concern, 3.2.15 of our submission, second paragraph, the firefighters' main concern was lack of communication for firefighters on the fire ground to divisional sector commands in regards to firefighters' well-being and health and safety. Information on how the firefighting was progressing. Wherever an appliance was in the optimum position to fight the fire, communication was very much one way from the sector command. There was problems with communication and I think that, if you traverse every Coronial Inquiry, including the Royal Commission, there's always been problems with communication. 03.51PM 03.51PM

Mine guides and maps was an issue. In some cases firefighters were left on their own to find their way, and indeed some got lost. Statements of firefighters: We've actually underpinned what we actually submit to this Inquiry by appendixing statements from various firefighters who actually were deployed but are unwilling to be named because of fear of potential adverse consequences. 03.51PM 03.52PM

I say this with respect as to - the Inquiry to be able to determine exactly what went wrong or what went right or what was done properly needs to get the information. On 20 February the MFB put out an email 03.52PM

asking for employees to submit improvements that could have been placed as a result of their deployment to Hazelwood. They also put a further one out, I think it's on 26 March, I'll have a look at that date because I have got the date here, and that was from HAZMAT technicians. The HAZMAT technicians were the ones who were trained specialists in relation to the exposure of the community and the firefighters. I know from reading the evidence here that a lot of that information didn't come to this Inquiry. You've all heard about Firefighter L. Well, Firefighter L brought it to our attention because he was dismayed the fact it hadn't been raised here. 03.52PM 03.53PM

I don't know if the Inquiry has the scope to be able to - for future Inquiries to put in a procedure where the operational firefighters who are at the coalface, without fear of consequences, can bring to the Inquiry matters of concern that they experience. I think that is a severe limitation on any Inquiry to get to the bottom of what actually happened. We say that as constructive criticism. I have spoken to numerous firefighters, both MFB and CFA, who have valuable information that they would like to bring to this Board's attention but can't do so because they're fearful of retribution. 03.53PM 03.53PM 03.53PM

We've made a number of recommendations and they're set out in our submission on page 24. Essentially, if I just go to some of them. Page 25, Recommendation 4, that the CFA and MFB must have health and safety HSRs at major fires and incidents. We note in the coronial inquest into Linton Safety Officers were raised. The 03.54PM

UFU was actually asked to be part of this fire fight; it's not appropriate for us, it's not our role. So they wanted to embed us in the structure, it's just not appropriate. So what we did do, we actually asked for health and safety representatives, coordinators to be deployed at all times. 03.54PM

A lot of problems were averted or rectified because of that deployment of HSRs. They are firefighters who have been trained in health and safety and have qualifications. We think that should be a standard procedure for large scale incidents, indeed protracted incidents. 03.54PM

We point out that in 1998, December, into the deaths of five firefighters at Linton that there was a recommendation for a Safety Officer, and indeed we embrace that with open arms. 03.55PM

We are concerned, and we respect this Board as well as Counsel Assisting, but we're not quite sure and we didn't have the resources to be able to afford counsel for cross-examination, but essentially we had an email that actually referred to the lack of Safety Officers being able to be found by the CFA and a request for the MFB to try and find Safety Officers. We're unsure, and I'll bring to the tribunal's attention exactly what that was, I think it was annexed as Attachment 5.1 of 11. It's from the Emergency Command Centre on 4 March 2014 to all station, all platoons, which means it goes to every station and ever firefighter, "The ICC at Hazelwood require a Senior Station Officer/Commander/Acting Commander to act as Safety Officers for the nights of 6th, 7th, 8th and 03.55PM 03.56PM

9th, night shifts covered as a block as the CFA are unable to fill those position." We say this in the context that there's no contrary information, other than Mr Lapsley's evidence before this Commission, about Safety Officers, and I've explained why we were unable to fund, if you like, resource cross-examination. 03.56PM

Can I also say that, many of the safety issues we have raised, if there were Safety Officers there at all times would have been checked by the Safety Officers. They were not, so we have concerns about that. 03.56PM

We say that the CFA and MFB Recommendation 7, that the CFA and MFB enforce decontamination procedures in areas of the incident to prevent ongoing exposure to the firefighters; of toxins, including the prevention and wearing of used PPC outside of the fire or incident zone. What we're asking for there is a reinforcement on what is known, and what has been determined by the Senate of Australia and the Parliament of Australia based on evidence, and that is, it is just totally unacceptable in this day and age for contaminated PPE to be traversed into clean areas. It is totally unacceptable for firefighters to be left in contaminated PPE and not have replacements. Again we put that as constructive criticism. 03.57PM 03.57PM

We go on to deal with Recommendation 8, and indeed in the early stages of the fire fight there was very little amenities for rest and recline or rehabilitation, if you like. That evolved over the period to be one of a sophisticated nature and we acknowledge the fact it was protracted. However, there 03.57PM

was a considerable period of time there where firefighters didn't have a proper rehabilitation area.

Our Recommendation 9 on page 25, MFB/CFA must monitor all firefighter staff so excessive hours are not recorded during major fire incidents. Firefighters are good people, as you know, and they want to protect the community. Unfortunately some of them are their own worst enemies where they'll work excessive hours so you have to have checks and balances. We are aware where people exceeded enormous hours down there, and that is very dangerous because it can result - as well meaning as it may be, it can result in injury or death. It's a very serious issue. 03.58PM 03.58PM

Then I suppose in relation to communication and interoperability, this issue's contained in our first submission regarding the Royal Commission 2009 final report, recommendations regarding communication, in particular compatibility, inter-operability, communications systems between the fire agencies. 03.58PM

I'm somewhat embarrassed to bring to your attention that essentially the MFB and CFA after all the Inquiries still have separate systems and they're not compatible. For a CFA or an MFB firefighter to be able to liaise with each other, they need to have the others' radio capability. I don't understand whether that's part of artificial parochial barriers, I don't know, but it just simply does not work and it's not in the interests of the community or the firefighters. 03.59PM 03.59PM

Having said that, that's briefly our first submission that I would like to bring to the Board's attention and indeed I do so with all respect. 03.59PM

Can I say that on 6 June we put in a further supplementary submission and that was from Firefighter L who is a qualified HAZMAT technician. I'm not sure of the rules of evidence, however I have corroborated what he has said, as he has done with his colleagues, and they concur entirely. Again, I raise the issue and it's probably outside the terms of reference of this Board, but there needs to be a procedure where firefighters can come forward without fear to be able to highlight problems if they exist. 03.59PM 04.00PM

It's not in the public interest that you have an agency that could have been found to be adverse. You could have made an adverse finding against either Fire Service as I understand it.

It's not appropriate that they collate the information and then only disseminate to this Inquiry what information they want to come before you. That is not an open Inquiry, and I say that with respect. It's a serious allegation, it's one we stand behind, and it's one that's been asked to be put to you by our members. There are a number of people that would dearly have loved to give evidence; qualified HAZMAT technicians that were deployed into the community, that were deployed into the fire fight that are unable to do so because of the fear of retribution. Now, that's wrong. 04.00PM 04.00PM 04.00PM

Firefighter L, as I said, bravely has actually put his statement in but he wouldn't go as far as - and despite us asking for immunity and the Government solicitor giving that to us, not four days after there was an email put out by the employer of Firefighter L 04.01PM

saying that, if you give your view/information, you're potentially in breach of your contract of employment and you could lose your job or words to that effect. We've supplied you with a copy of that email.

So, despite those assurances, not four days afterwards we get an intimidating email that actually suppresses any proper enquiry from the people at the coalface as to what happened. That's wrong. 04.01PM

Having said that, respectfully they are our submissions and we make a number of recommendations and, as I said, I'm not sure if we've actually gone outside of your terms of reference, but we believe they're matters of importance that should be brought to the Inquiry's attention and we do so on behalf of firefighters. 04.01PM 04.02PM

I should have said that we represent, out of the 10,000 here in Victoria, we have a 98 per cent membership amongst the workforce, so we are representative of the people who were actually at that fire fight. 04.02PM

For background, I have also been an operational firefighter, although I have been at the Union for some time now.

Firefighter L and his colleagues are somewhat suffering some stress because of not being able to communicate. If you have a look at his statement, they were ordered not to tell the public that the levels were actually changed from 30 to 70, and indeed they had been exceeded, even though they were there amongst the members of the public being asked. 04.02PM 04.03PM

That is an excruciating position for a firefighter

who, he's not interested in the politics or the rights or wrongs, he's just interested in what he's trained to do and that is protecting life and property. Firefighter L eloquently puts that in his statement, but it also comes from his colleagues. 04.03PM

We're hoping that there is a change of attitude from the agencies. We understand that you need to ensure that you don't instill panic in the community, but this was not reckless information; this was vital information that should have been communicated but 04.03PM wasn't. I again emphasise that it hasn't been brought to this Inquiry's attention by either Fire Service because, essentially, they gathered the information and they actually provided you with what they wanted to provide you, even though I know Firefighter L and his 04.03PM colleagues did put the information to the agency, so that's a concern.

Counsel Assisting's Recommendation 12(a), it says, "The provision of training in crisis communication that addresses the human relations and effective dimensions 04.04PM as well as the provision of simple and meaningful information". We embrace that. I think that goes to the heart of it but we say it should be broader.

Again, I'm not here to score points but I am here to send their message, and they had vital information 04.04PM they would like this tribunal to have, but they're unable to do so.

I respectfully thank you for your time and, as I said, we submit this with all respect and we are submitting what our members wanted you to hear but they 04.04PM could not say. Thank you.

CHAIRMAN: Thank you, Mr Marshall.

MS DOYLE: If the tribunal pleases. My client's been allocated two hours, I'm in the tribunal's hand. There are some themes I could open up this afternoon using say 15 or 20 minutes, and then, if possible, I'd prefer to resume in the morning by which time I'll anticipate I'll have written submissions that I can supply as well, or I could hold it all over until tomorrow, but if the tribunal's willing to sit on I could open up those themes. 04.05PM

CHAIRMAN: We'd prefer to sit on.

MS DOYLE: If the tribunal pleases. There are five themes that I'd like to touch on this afternoon and then descend to a more detailed analysis of the evidence and response to the submissions that you've heard thus far when we go into that in more detail tomorrow. 04.05PM

The five themes I want to open up this afternoon are as follows: First, the use to be made of evidence. Second, a topic that I call in a shorthand way the good old days. Third, the question of shifting goalposts during this Inquiry in relation to the applicable occupational health and safety standard. Fourth, the distinction between rehabilitation and fire risk management, and fifth, the approach to lessons learned. 04.06PM

There are many more topics and there are many more sub-topics and I'll expand on all of those tomorrow, but for the purposes of this afternoon it seems, in light of the submissions that have been made so far and some of the key themes that have emerged during the three weeks of the hearing, that it's worth elucidating these five themes. 04.06PM

The first I mention is the use to be made of evidence. In the submissions that have been presented to you so far a number of observations have been made about evidence that you've heard over the last three weeks, but it's the submission of GDF Suez that before 04.06PM this tribunal moves from hearing the evidence to that evidence finding life as either a finding of fact, a criticism, an adverse finding or a recommendation, that a number of questions need to be asked which are addressed to causal links. 04.07PM

You've heard a huge amount of evidence, but before any passing observation or remark about particular items of evidence is crystallised into a finding or a criticism, we make the following submissions about the approach to that task: It's relevant to ask whether a 04.07PM particular item of evidence is capable of or would have been capable of changing in any material manner what was done or what was not done during the fire fight. In other words, does any particular item of evidence demonstrate that it possessed the capacity to alter the 04.07PM course of this fire?

I'm going to give you an example. There was a deal of evidence about the question whether or not anyone at the mine rang 000 and, by those means, alerted the CFA to the fact that fire had begun 04.08PM spotting into the mine. Even at this stage, after three weeks of evidence, the materials that the Inquiry has before it are not in the form of a comprehensive minute-by-minute chronology with respect to that single item of fact. There is some material, and as late as 04.08PM Friday more material was coming in in the form of logs

produced through VGSO.

One could devote days, if not weeks, to trying to analyse in minute detail that particular item of evidence, but in circumstances where there is other evidence which demonstrates that there is no question 04.08PM that the CFA knew that fire had spotted into the mine by 2.30 - and I refer here to the evidence of Commissioner Lapsley who referred in his evidence to reports and minutes that are available that demonstrate that through the hierarchy of the CFA that knowledge 04.08PM had been obtained by 2.30 - and other evidence which demonstrates that the CFA had assets that were putting the fire out by 2.45 - I'm referring here to the evidence of aerial bombing of the fire - in those circumstances one has to ask, does it matter whether or 04.09PM not there is a particular item of evidence that demonstrates the precise minute at which any 000 call was first made by mine staff or others in the community specifically reporting the spotting of this bushfire into the mine? 04.09PM

Further, one has to ask what difference could it have made if it could now be shown positively that a 000 call was made at a particular time, because Counsel Assisting for example do not point to any particular thing that it is said that the CFA would have done 04.09PM differently had they received a 000 call at a particular time. Commissioner Lapsley has certainly never suggested that that is the case.

Counsel Assisting also does not point to anything that it is said GDF Suez would have done differently if 04.10PM one of its staff had called 000. Further, there's no

evidence, and there's nothing that's been put to any witness, that suggests that any of those hypothetical things, had they been done, would have altered the course of this fire and/or the extreme efforts applied to putting it out. 04.10PM

To turn it around the other way, if one assumed that there was firm evidence of a particular call being made through to 000 at a particular time, could it also be said that the response of the CFA would be, "Thank you for bringing that to you are attention, we have ample resources which we will now deploy post haste to the mine"? No, because the other body of evidence reveals that the CFA was stretched and that it was acting according to its priorities in terms of deployment of its resources. 04.10PM

Would placing such a call have increased the appropriate sense of urgency or the efforts being made at the mine? No, there's no evidence that any witness would have acted differently simply because they would have dialled 000. 04.11PM

Would placing such a 000 call have changed the reality about what now appears to be significant deficiencies in the redundancy of power supply through to the mine? No. So in those circumstances it can be seen that that item of evidence, while it attracted interest and appropriate exploration, at the end of the day shouldn't be capable of sustaining any negative observation about a failure to put that call or place that call. 04.11PM

That's just one example, and obviously in developing the sub-topics I'll draw the tribunal's 04.11PM

attention to others of a similar ilk.

The next theme identified is one called "the good old days". What I want to say about that is a tension which emerged in the evidence during the running of the Inquiry. On the one hand a number of submissions, and 04.12PM
a good deal of evidence from community witnesses in particular, harked back to the days of pre-privatisation and lauded the standards applied by the SECV. The evidence is of course that the way that the Fire Code or the policy has developed in the valley 04.12PM
is that there was a 1984 code adopted by the SECV and used across the three mines in the valley, it was modified to a degree by 1994 but still applied in the hands of Generation Victoria at this mine, and then adopted almost without change in the 2013 document 04.12PM
which is in use as at today by GDF Suez.

It's certainly ironic then that, given there was a great deal of evidence and submissions of that ilk - namely, that things should have stayed the way that they were in 1994 - it's ironic and there is that 04.12PM
tension I referred to, that in the latter part of the evidence GDF Suez has been criticised for adhering to the tenets of the 1994 policy.

By way of example, it was elicited from Commissioner Lapsley that he found it amazing that the 04.13PM
1994 policy was still applied. When Mr Graham was being cross-examined by Counsel Assisting, it was put to him a number of times that the 1994 code was prepared many years ago in a different world. He was pressed as to whether or not the mine should develop a 04.13PM
document suitable for the second decade of the 21st

Century. In that way, it can be seen that there was a shift from a desire to hark back to the so-called good old days, to a call for that very policy or those standards to be modified in light of current realities.

It's interesting, too, that a number of the submissions and evidence from community witnesses as well as Mr Incoll tended to assume that the SECV standard was of a certain type or produced a certain result, and often when facts were brought to witness's attention it had to be conceded that that was not necessarily the case, and it was also often assumed that that was the counsel of perfection or the standard that should be adhered to, when in fact there may have been misinformation about what the standard involved. It's submitted that that background is important when we then come to look at some of the sub-topics that I'll develop further tomorrow. 04.14PM 04.14PM 04.14PM

The third question that I've identified is that of the shifting goalposts in relation to occupational health and safety standards. As the evidence developed in these proceedings, Professor Cliff 's report, when it became available, expressed his opinion that there had been a deficit in the approach by GDF Suez to the question of safety assessments as required by Regulation 5.3.23. By the end of Professor Cliff's evidence it became clear that he had retracted that opinion by reason of two important matters being brought to his attention which he'd given further appropriate consideration. 04.14PM 04.15PM

The first matter brought to his attention was the distinction between mining hazards and major mining 04.15PM

hazards under the Victorian regime when compared with other regimes with which he was more familiar and on which he'd been focusing.

Secondly, there were a number of additional materials brought to his attention that he gave additional consideration to which caused him to retract that view. 04.15PM

Now we find today that the focus has shifted from Regulation 5.3.23 and the notion of safety assessments that hang off major mining hazards, to a suggestion that there is a deficit in the mine's approach to two different regulations, 5.3.7 and 5.3.9. While some of the elements of Regulation 5.3.7 directed to risk assessments were traversed with witnesses, including Professor Cliff and others, the requirements of Regulation 5.3.9 have not squarely been put to any witness, were not the subject of Professor Cliff's report, and have not been engaged in in the same manner in which the first line of attack pursuant to the safety assessment regime were. 04.15PM 04.16PM 04.16PM

The evidence in relation to that is something that I will develop in more detail tomorrow, but it should be said at the outset that the findings urged by Counsel Assisting with respect to these regulations, 5.3.7 and 5.3.9, are rejected on the basis that they are not consistent with a full reading of the evidence, and that certain elements of them were not put in terms to the relevant witnesses, so there couldn't be a safe foundation to draw the conclusions that are urged upon the tribunal. 04.16PM 04.17PM

The fourth theme that I wanted to open up this

afternoon is the difference between rehabilitation and fire risk management. It's submitted that there is a significant difference between the following three concepts about which you've heard a deal of evidence. Some witnesses used the terminology in different ways, but at the end of the body of evidence it appears that there were three concepts upon which witnesses touched. 04.17PM

The first is the notion of progressive rehabilitation undertaken during the life of an applicable work plan. The second concept is that of final or end of mine life rehabilitation. 04.17PM

The first two elements are obviously governed by and creatures of the regulatory regime, conditions of mining licences, and the content of work plans. But the third notion, which doesn't have a fixed and, in our submission, a term of art meaning, the third notion that came to be spoken of was so-called temporary rehabilitation. 04.18PM

Mr Faithfull in his evidence said he hadn't really heard that term before and it wasn't a term that he used in his work. It may be a handy label, but we submit it has significant limitations, because it turned out what it really meant or what it really describes as a catch-all is a collection of ideas that some people in the community and Mr Incoll and Professor Cliff came up with. 04.18PM

There were different variations on them, each of them in one way or another was a suggestion that an application of a body of clay or earth, or clay mixed with cement or clay mixed with ash, might in some way be applied to the exposed coal in the worked out 04.18PM

batters. Those who put up these suggestions tended to make them in very brief form, over one or two lines in submissions or witness statements and, when pressed about them, sometimes were non-committal about whether they were suggesting it be applied to slopes as they now stand, almost vertical, or to slopes that were laid back a little or laid back a lot. In short, there was very little detailed propounded by those who advocate these fixes. 04.19PM

What was notable about each one of them was the following: Not one was put before this tribunal as having already been the subject of any risk assessment; not one was put before this tribunal as ever having been the subject of a practical application. The closest we got was a suggestion by Professor Cliff that he was aware of a coating being put over some exposed coal and some stocks of coal in an underground mine. In terms of the way he gave his evidence it appeared clear he was talking about lying on the ground, not at a near vertical surface or a steep incline. 04.19PM 04.20PM

Those who were pressed in relation to these sorts of topics, including Ms White, including Mr Faithfull, and including Mr Incoll and Professor Cliff, all agreed in the final analysis that these were ideas that might be able to be considered but that on any view, would themselves have to be the subject of a detailed risk assessment of two kinds: Firstly, the doing of the work would have exposed those doing the work to risks in carrying it out, but secondly and more fundamentally, would itself create another suite of problems. 04.20PM 04.20PM

A number of the problems were highlighted for the Inquiry's attention; some related to batter stability, a very significant matter that Ms White spoke of at length as did Mr Faithfull. Others referred to concerns they had about whether, for example, applying 04.20PM an impervious surface would reduce the current capacity of those experienced with these mines to monitor any shifting of the surface in the worked out batters or to see whether or not any hot spots are on the move. Others expressed concern that it would have an impact 04.21PM upon the horizontal bores and that questions were raised about how they would continue to perform their vital drainage function.

Each of these ideas may well have been worth raising, but each of the concerns and difficulties 04.21PM raised by others in response need to be given serious consideration. So we land at the end of the day with a number of suggestions borne of good intentions, no doubt, but none of which have been subjected to the appropriate rigorous risk assessment process that would 04.21PM need to be conducted, it's clear, both using one's DSDBI hat, what does this do to the mine? And using one's WorkSafe hat, what other risks does this present to those applying this mode of fire risk mitigation and to those who then live with it and the other suite of 04.22PM problems it might deliver?

The final theme I wanted to open up this afternoon is the question of lessons learned and the approach to lessons learned. It's submitted that GDF Suez was the only participant to attend the Inquiry and propose a 04.22PM significant suite of recommendations pursuant to which

it had already undertaken to initiate change and to spend its own money, to put it frankly.

Many times the Inquiry heard evidence from bureaucrats who were prepared to go away and start considering things, have discussions with other people, 04.22PM set up a committee, write a list, advocate change, think about it, talk about it; very little doing of it.

It was Mr Graham, the Asset Manager, who came here and said, and he stood alone in this regard, "I have the authority to make these changes, I have consulted 04.23PM those below me and who sit with me in the management team. I have consulted those with the expertise, the electrical engineers, those who tell me they know about rehabilitation. I have formed a view about what can be done. I have formed a view about what should be done." 04.23PM

I'll quote what Mr Graham said at transcript page 2234, "Irrespective of whether the tribunal recommended them [and he was speaking about the text in his chart marked in red] we think they add value and we would wish to implement them." 04.23PM

It was Mr Graham who was forthright about the lessons he'd learnt from the fire and the reason that he didn't want them to be repeated.

As he said, "I'm not going anywhere, I'm an Australian citizen now, I'm retiring here and I'm going 04.23PM to be in the community. Certainly, I don't want to be in this position again. I don't want the community to be in this position again."

We say his evidence was of a different nature than that which had been put before the Inquiry by others; 04.24PM as I say, who while they evinced a preparedness to

consider legislative change, regulatory change, systematic change, much of it sounded as if it was a long way off in the future, and much of it sounded as if it rested upon others making the same commitment, in particular, where gaps or possible gaps were identified as between the regulators. 04.24PM

But it was Mr Graham, as I say, who stood alone who said, "I have seen at least these problems." He was frank in acknowledging that the tribunal may well recommend many more different or additional matters, but he was willing to say what the mine was prepared to do, was able to do and will do. 04.24PM

If the tribunal pleases, there are a number of matters that emerged today that I would like the opportunity to address tomorrow and we think we'll be able to do that quite efficiently because we're in the process of having written submissions finalised that will do that. If we can tailor them a little more to some of the recommendations that have been made, I anticipate I can simply use the balance of the time allocated to me tomorrow, and of course, I'm in the tribunal 's hands - - - 04.25PM 04.25PM

CHAIRMAN: I think the difficulty is just making sure that we do finalise in time. If you say that there's material going to be in writing, obviously that will be of assistance to you and to us. It may be a 9.30 start. 04.25PM

MS DOYLE: I was just going to say that that may assist.

CHAIRMAN: It may be the better way on the basis, if you've still got of the order of an hour and a half - - - 04.25PM

MS DOYLE: Looks like Dr Wilson's not here, he must have

nothing, so we'll be done.

CHAIRMAN: Dr Wilson, or Mr Burns might in his absence, has got approximately two hours. That means we have a reasonable prospect of going until 1 o'clockish and, if we don't have to go long beyond that, there's still this matter that has been raised by Counsel Assisting that if some matter takes either by surprise, there's the capacity to put in appropriate written submissions that deal with odd matters, but hopefully not extensively. 04.26PM

MS DOYLE: Yes.

CHAIRMAN: Does that seem the appropriate course, to finish now but to resume at 9.30 in the morning?

MS DOYLE: Certainly.

MS RICHARDS: Yes. 04.26PM

CHAIRMAN: We'll do that.

ADJOURNED UNTIL WEDNESDAY, 18 JUNE 2014