

Royal Commission on the Pike River Coal Mine Tragedy Te Komihana a te Karauna mōte Parekura Ana Waro o te Awa o Pike

UNDER THE COMMISSIONS OF INQUIRY ACT 1908

IN THE MATTER OF THE ROYAL COMMISSION ON THE PIKE RIVER COAL

MINE TRAGEDY

Before: The Honourable Justice G K Panckhurst

Judge of the High Court of New Zealand

Commissioner D R Henry Commissioner S L Bell

Commissioner for Mine Safety and Health, Queensland

Appearances: K Beaton, S Mount and J Wilding as Counsel Assisting

J Haigh QC and B Boyd for Douglas White

J Rapley for Neville Rockhouse

S Moore SC, K Anderson and K Lummis for the New Zealand Police

N Davidson QC, R Raymond and J Mills for the Families of the Deceased

S Shortall, A Rawlings, A Glenie, D MacKenzie, A Gordon for certain managers, directors and officers of Pike River Coal Limited (in

receivership)

C Stevens and A Holloway for Solid Energy New Zealand

R Buchanan for Fire Service Commission and West Coast Rural Fire Authority

K McDonald QC, C Mander, and A Boadita-Cormican for the Department of Labour, Department of Conservation, Ministry of Economic Development and Ministry for the Environment

G Nicholson and S Steed for McConnell Dowell Constructors

G Gallaway, J Forsey and E Whiteside for NZ Mines Rescue Service

B Latimour for Coal Services Pty Ltd

N Hampton QC and R Anderson for Amalgamated Engineering, Printing and Manufacturing Union Inc

TRANSCRIPT OF PHASE TWO HEARING HELD ON 7 SEPTEMBER 2011 AT GREYMOUTH

COMMISSION RESUMES ON WEDNESDAY 7 SEPTEMBER 2011 AT 10.00 AM

LEGAL DISCUSSION – EMAIL DATED 28 OCTOBER 2010

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EXHIBIT 16 PRODUCED – BUNDLE OF EMAILS

THE COMMISSION ADDRESSES WITNESS - ON FORMER OATH

CROSS-EXAMINATION: MR HAMPTON

- 10 Q. Am I correct in thinking Mr White that the underground workforce that you inherited when you came to Pike was to a considerable degree an inexperienced workforce?
 - A. There was a fair percentage of inexperienced people at Pike River when I started, yes.
- 15 Q. A higher percentage than you had experienced at other mines?
 - A. No, not particularly. I had worked at other mines before, especially mines starting up where the experience level was of similar proportion.
 - Q. Was that in Queensland or in the UK?
 - A. Yes it was in Queensland.
- Q. Queensland. Was that degree of inexperience of workforce one of the reasons for your implementing shift changes, that you've explained yesterday?
 - A. Yes it was, it gave more time to train.
 - Q. More time to train the inexperienced?
- 25 A. Yeah.
 - Q. Was that of some concern to you on your arrival, the lack of training of the inexperienced?
 - A. It was, I wouldn't say it was a concern, it was an issue that had to be addressed.
- 30 Q. An issue. I just want to get clear in my own mind Mr White, you've told us yesterday, I think it's in paras 20 to 24 of your brief of evidence, statement of evidence, about the aggregation of roles that were given as

the course of 2010 rolled on from February through to October, were you concerned with the amount of responsibilities that were being put upon you?

- A. Not particularly, no sir.
- 5 Q. That wasn't a matter that you felt was putting too much pressure on you?
 - A. No.
 - Q. You've told us of assuming the statutory mine manager's role and that was a concept familiar to you from the UK and from Queensland?
- 10 A. Correct.
 - Q. In your experience in those jurisdictions, that's UK and Queensland, had you had occasions where mine incidents/disasters had occurred where emergency services had to be bought in for rescue and recovery?

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- 15 A. The only disaster that I can make any reference to was Moura in 1994.
 - Q. And your position at that stage?
 - A. I was an underground coal mine deputy and also a -
 - Q. At Moura?
- A. No, no, not at Moura, at Gordonstone Coal Mine, I was also an active member of the Mines Rescue Service at that time too.
 - Q. In that role, the mines rescue role, were you called in to Moura?
 - A. I wasn't actually called in to Moura, I got a phone call, I can remember it quite distinctly at 1.00 am in the morning and the panel that I was working underground to tell me Moura had blown up and that as an active member that I was now to be considered as on standby ready for call-up.
 - Q. You've told us about, in effect, your control as statutory mine manager being taken from you without your knowledge following the explosion at Pike, no discussions held as you've told us, did you you nod your head for that did you have the opportunity or did you take the opportunity to raise at any stage with anyone, say the police or the Department of Labour for that matter the resting of control from your hands and the appropriateness of that, in your view?

- A. It was mentioned no occasion. I do recall talking about it to individuals, certain I can't remember who they were, but I did voice an opinion that it was unusual that as the manager of the mine that in an event like this I wouldn't actually have control.
- 5 Q. So you mentioned that to individuals
 - A. It was mentioned during the course of the first couple of nights.
 - Q. Did you raise it formally with anyone?
 - A. Not to my recollection, no.
- Q. Given your knowledge of the history of the position of statutory mine manager, did you not think it would have behoved you to at least raise a formal protest about your being supplanted in the way you were?
 - A. I think in fairness sir there was more important things to be thinking about than what I thought as my role as statutory manager or not.
- Q. With the benefit of what went on post-explosion at Pike, have you a view as to whether the statutory mine manager should be the person who remains in control of the events post-incident?
 - A. It's a really hard question to answer that because the scale of the disaster as it was, I think it may well have been appropriate for the agencies that run the disaster, ended up running the disaster to do so, but I certainly do think there could've been more emphasis put on the advice that the, the experts on site were giving people.
 - Q. Do you include in that the advice that would have been available from yourself?
 - A. Yes I do.
- 25 Q. Did you feel that the advice that you could've given with your experience and knowledge was not available by the agencies who took over?

- A. I think it's fair to say that on some occasions it was, I wouldn't say overlooked, but not acted on with any vigour.
- 30 Q. But there seemed to be a failure to, in others from outside agencies, to recognise the standing of the statutory mine manager, what that position meant?
 - A. I can't answer that one.

- Q. Turning to some specific matters you mentioned yesterday, the tag system, if you would please and you told Mr Davidson about the UK system, the brass tags and so on?
- A. Yes.
- 5 Q. In Pike, did it rely really, the tag system, on everyone remembering to place and take off their tags?
 - A. Yes.

- Q. First, could there not have been a system whereby at the end of a shift, someone was responsible to check to make sure that the appropriate tags had been taken off?
- A. There could've been but the system at Pike was not inconsistent, as I said yesterday, with the systems that are currently in place in Australia.
- Q. Well, is that correct, Mr White? In Queensland, don't they at the end of a shift, have an under manager or a control room operator who cross-checks the tags on the board with the self-rescuers and the cap lamps?
- A. Not to my knowledge.
- Q. To ensure, no?
- A. Not at any coal mine I've worked in Queensland, no sir.
- 20 Q. Never any checking system like that?
 - A. There are checking systems in place but not done as you describe.
 - Q. Well, what checking systems are in place in Queensland please?
- A. There are checking systems, if in the event like this was to happen, that they do exactly what we tried to do at Pike River, was to establish who was underground by confirming which lamps were out of the rack, which rescuers were out of the rack and which tags were on the board. It's unusual for any mine, and I can only talk about the mines I've worked in, that someone actually goes and checks the people in and out of the mine, other than the shift under manager who, or the deputy, who records the names of the men in his panel or the shift under manager recording the names of the men on his shift and where he placed them.
 - Q. I take it you never thought of implementing a system similar to what you were familiar with in the UK?

- A. It's something over the last 20 years I've thought about but I've never actually seen it implemented anywhere.
- Q. And yet from what you told us yesterday, it was robust, it seemed to work in the UK?
- 5 A. It was relatively robust, yep. It was never a great enthusiasm to take up issues from the UK, that was my experience in Australia anyway.
 - Q. I don't mean this in any light-hearted way but how many unders and overs were there on the 19th of October in terms of the tags on the board. How many tags were on that related to men that had in fact left the mine and how many tags weren't on for men that were in fact under the mine?
 - A. Going from memory, there were at least two tags on the board for people that definitely were not in the mine and there was at least one tag for the people who has been since proven to be in the mine.
- 15 Q. Given the recency of that talk that you gave, that's somewhat disturbing isn't it, the talk you gave about tags?
 - A. Yes.

- Q. You told us about yesterday?
- A. Yes, it is.
- Q. Was there any system where occasionally an audit would be carried out by management? Look at the tag board, see who's underground, see who's got tags on properly, see who hasn't got tags on when they're underground and so on?
- A. I'm not aware of an audit, but that's not to say that it didn't happen. I'm just not aware of it.

- Q. So it was just, from what you've described yesterday, just ad hoc. You would ring up if someone's tag was found to be on that shouldn't be on there?
- 30 A. I wouldn't describe it as ad hoc. I would describe it as a system that relied on people doing the right thing to make sure it operated.

- Q. We heard on Monday from, it may've been Mr Strydom, concern about contractors using miner's self-rescuers. Did you ever hear of that as a concern?
- A. I'm sorry?
- 5 Q. Did you ever hear of that as a concern yourself?
 - A. Yes, I did.
 - Q. On how many occasions did you hear about that as a concern?
 - A. I'd heard it on more than one occasion. I couldn't be, I couldn't attest to exactly how many, but I did. It was raised with me as a concern.
- 10 Q. And what was done about it please?
 - A. Again, what was done, it was addressed in the morning meetings and in the form of toolbox talks, the importance of people taking their own lamps and making sure that the for example, for the contractors, the short term contractors may not have actually been issued with their own lamp, they were issued with a spare lamp and in events where there may not have been a spare lamp available, they were issued with someone's lamp who was off shift, but then that was recorded on a book in the control room as to which lamp and which rescuer they had.
 - Q. Do I take it that despite the toolbox talks, this still continued as a problem, contractors using miner's self-rescuers?
 - A. Yes.

- Q. Just on self-rescuers, the cache underground, the cache boxes and you talked about the open lid to one yesterday, did they have anti-tamper tags on them, those boxes?
- 25 A. They didn't have anti-tamper tags on as such, they just had, well, when I say lockable latches, I don't mean lockable, I mean they clip into position.
 - Q. And did the mine have regular inspections of those caches to make sure
- 30 A. Yes. it did.
 - Q. How often?
 - A. I couldn't exactly say how often sir, but I know that the particular caches in question had been inspected the day before the blast.

- Q. Gas matters and I'm not going to go into the tube-bundle system, and obviously the tube-bundle that came to you from Oaky Creek Mine, your contacts there, that was invaluable post-explosion, wasn't it?
- A. Absolutely.
- 5 Q. Do you know what a gas litter is?
 - A. A gas?
 - Q. Litter?
 - A. I think you're referring to a stretcher-type arrangement that has a number of gas detectors on it, yes sir, if that's what you're talking about?
- 10 Q. Yes, that's what I'm talking about.
 - A. Yes.

- Q. In use in Queensland?
- A. In use, sorry, I'll qualify that. The last time I left rescue they were still in use and that was a number of years ago, but they were in use by the Mines Rescue Service.
- Q. This was a stretcher that can be, if I got it right, lowered into boreholes and give you the ability to monitor a wide range of gasses from down the bottom of the bore?
- A. No, you don't have it strictly correct. You don't lower the stretcher into the borehole. The stretcher contains a gas monitoring equipment and you lower a rubber tube from the gas monitoring equipment into the borehole.
 - Q. Thank you, it's my misunderstanding what I was told.
 - A. Yep.
- Q. As soon as I said, "You drop the stretcher down", it seemed not to make sense, thank you. Did you ever think of having such a gas litter available here in the absence of a tube-bundling system?
 - A. The short answer is no.
 - Q. Why not?
- 30 A. It's not a common -

OBJECTION: MR HAIGH (10:19:48) – PHASE THREE ISSUE

THE COMMISSION ADDRESSES WITNESS

CROSS-EXAMINATION CONTINUES: MR HAMPTON

- Q. Did Pike give consideration to acquiring a gas litter so that in the event of something happening underground readings could still be obtained?
- A. No they did not, but I'd also like to say that the mines I've worked in in Queensland there's not one of them has a similar gas litter either. Those gas litters are normally kept with the New Zealand, sorry New Zealand, Queensland Mines Rescue Service.
 - Q. This is litter spelt L-I-T-T-E-R?
- 10 A. Yes sir.
 - Q. Again another separate discreet topic, fresh air bases. Daniel Rockhouse told us of the this is going to be decommissioned as we now know fresh air base or as he found out the fresh air base at about 1500 metres into the mine?
- 15 A. Yes.
 - Q. And we saw the photos of it; it was a shipping container in effect, wasn't it?
 - A. It could be described as that yes.
- Q. And he described going through two doors to get into it, an outer door and then an interior door and you're supposed to shut one before you open the next?
 - A. That's correct.
 - Q. Was that to keep the atmosphere inside that from being contaminated by the atmosphere in the drift itself?
- 25 A. That's also correct.
 - Q. So you could effectively seal it?
 - A. It provides an airlock sir.
 - Q. The fresh air base established at the slimline shaft, was just in a stub wasn't it?
- 30 A. That's correct.

- Q. And Mr Davidson asked you something about it yesterday and you said that the door to that stub, to that fresh air base was a rolled up was still rolled up, the brattice was still rolled up?
- A. That's correct.
- 5 Q. So no ability to seal, create an airlock in that stub?
 - A. No.
 - Q. Isn't that a defect with that fresh air base Mr White?
 - A. I wouldn't describe what was in that stub as a fresh air base, more of a place to changeover a rescuer. It wasn't a purpose-built fresh air base.
- 10 Q. After the decommissioning then of the fresh air base at 1500 metres, was there a fresh air base, so-called left in this mine?
 - A. If you're referring to an actual purpose-built one?
 - Q. I'm referring to an actual purpose-built, your terms, "Fresh air base." Was there one left in this mine?
- 15 A. No.
 - Q. When was the fresh air base at 1500 metres decommissioned please?
 - A. I can't remember from memory. It was some weeks prior to the event of the 19th.
- Q. And was decommissioned before or after the de facto fresh air base, if I can call it that, at the slimline shaft was established?
 - A. It would've been decommissioned after.
 - Q. What was the supply of air to that fresh air base at 1500?
 - A. Compressed air.
 - Q. Why wasn't it left open why was it decommissioned?
- 25 A. It was decommissioned in as much that the self-rescuers that were in it were taken up to, up to the stub at the Slimline shaft.
 - Q. Yes.
- A. There were still the ability to have compressed air on it and there were still, as far as I believed, a telephone in it. So the only thing as far as decommissioning is concerned was the ability to be able to get a self-rescuer from that location.

- Q. So the fact that Daniel Rockhouse couldn't get compressed air out of it that day of the explosion was because of the explosion itself do you say?
- A. No I'm not saying that at all sir.
- 5 Q. Well, should there still have been compressed air available in that fresh air base?
 - A. To my knowledge there should've been.
 - Q. Just like the phone should've been working?
 - A. Correct.
- 10 Q. Does it disturb you at all that the phone having been decommissioned, you didn't know about it?
 - A. It doesn't disturb me, I'm not made aware of every time a phone gets moved in the mine.
- Q. Would it disturb you if the air had been shut off from that fresh air basewithout you knowing about it?
 - A. The air could've been disconnected for a number of reasons. The air could've been taken off, for example, if someone's vehicle had broken down in the drift and they'd taken the air off to start the vehicle and not put it back. So there's too many potential scenarios to be answered with any accuracy.
 - Q. The fresh air base at the Slimline shaft, the de facto fresh air base, would be reliant on the mine's ventilation system and barometric pressure to ensure air kept on coming down into it wouldn't it?
 - A. In general, yes.

- Q. Given that it wasn't an airlock, as we've discussed, and therefore susceptible to the affects of an explosion, it is unlikely, isn't it, that fresh air would keep coming in to that de facto fresh air base?
 - A. Over the course of the nights and weeks that followed the explosion, it was actually proven on many occasions that fresh air actually did go down that shaft, dependent on the, as you mentioned, on barometric pressure and also dependent on the temperature of the day.
 - Q. The diurnal changes?
 - A. Correct.

- Q. But immediately post-explosion, it would be most unlikely, would it not Mr White, that air would be coming down that Slimline shaft?
- A. Immediately post-explosion it would be unlikely, yes.
- Q. And for sometime post-explosion, as the gases and so on exited from the mine, it would become a chimney in itself wouldn't it?
- A. I think it was more likely to become a, as it proved later, it become an actual flue rather than a chimney for air getting into the mine.
- Q. Was there work underway to establish proper air-tight seal, fresh air base anywhere else in the mine?
- 10 A. No there was work underway, planning underway, I should qualify that, to extend and build a proper fresh air base at that location.
 - Q. How far away was that?
 - A. It would've been a matter of weeks.
 - Q. And how was that going to be accomplished please?
- 15 A. That was going to be accomplished by further excavating the stub in question and kitting it out properly with airlock doors, tables, fairly much the same equipment that was in the stub but in a more, I'm struggling for the word I'm looking for here, it's a bit more organised.
- Q. Wasn't it premature then to move all the stuff from the fresh air base at 1500?
 - A. No.

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- Q. Would it not have been better to keep two sets then, one at the fresh air base at 1500 and one at the Slimline?
- 25 A. In hindsight, that is correct.
 - Q. The delay to establishing the new fresh air base, was that due to the emphasis being put on development into the coal at the time –

OBJECTION: MR HAIGH (10:35:38) – **QUESTION PUT TO WITNESS**

CROSS-EXAMINATION CONTINUES: MR HAMPTON

30 Q. The second egress, Mr Davidson asked you some questions about it yesterday. Your experience as the deputy chief inspector of mines coal

- in Queensland, would you have seen that ventilation shaft in Pike as complying with the Queensland regulations?
- A. Queensland's regulations required that there was two exits from the mine, both in fresh air. So the short answer is no.
- 5 Q. Yet you have told us that when you came to Pike, new to New Zealand, you tried to apply Queensland's standards?
 - A. As far as practicable, yes.
 - Q. So doing something about the institution of a second proper egress was not something you saw as practicable?

10 OBJECTION: MR HAIGH (10:37:30) – QUESTION PUT TO WITNESS

THE COMMISSIONER ADDRESSES MR HAMPTON

CROSS-EXAMINATION CONTINUES: MR HAMPTON

- Q. I asked you before about the issue raised by miners about, for example, the self-rescuers and so on, what about hearing, did you hear of concerns about unavailability of transport to and from the face where the men were working?
 - A. There were occasions where due to vehicle breakdowns that transport wasn't available.
- 20 Q. Do you say that that was not a regular problem, unavailable transport to take the men to and fro face?
 - A. I certainly would not say it was irregular.
 - Q. Was it not raised as a matter of concern quite often during your time at Pike?
- 25 A. It was raised.
 - Q. How many times?
 - A. I couldn't answer that with any accuracy.
 - Q. What, we're talking 10s or 20s or just a fist fall or what, you don't know?
 - A. I'm sorry I couldn't answer that.
- 30 Q. And the answer to those concerns being raised from management was what?

- A. The answer to the concerns about transport was to try and increase the reliability of the machines in question and also to increase the amount of machines in question. To that end we put, I think it was described as a –
- 5 Q. Taxi.
 - A. A taxi, that's it.
 - Q. But that only went to the end of the drift didn't it?
 - A. That's correct.
 - Q. Because it wasn't modified enough to go any further?
- 10 A. That's correct but the intention was that the taxi only had to go at the end of the drift and the other vehicles would travel from that point up to the faces, thus reducing the amount of exposure they had to the distance and try and increase their reliability.
 - Q. What about state of smoke lines, was that ever raised?
- 15 A. Yes.
 - Q. How many times?
 - A. Again, I couldn't tell you how many times.
 - Q. And the answer to that was what?

- A. The answer to that was to repair the smoke line and on the occasion of the last intake of trainees, one of the jobs that they were given with experienced people was to replace the smoke lines up into the replace the damaged ones and extend them up into the panels.
- Q. Were there ever any drills conducted with the men to show them how to use the smoke lines?
 - A. Not to my knowledge.
 - Q. We heard something, I think, from Daniel Rockhouse about that being something that happens, I think it was in the Queensland mine that he was in. Are you familiar with those sort of exercises being carried out in Queensland mines?
 - A. Yes, I am.

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Q. On a regular basis?

- A. Possibly four times a year and I say that dependent on the number of shifts that are in the mine.
- Q. Did you institute any such system here with Pike?
- A. I'd discussed instituting that very system with the safety manager, Mr Neville Rockhouse.
- Q. You discussed it. Do I take it the answer is no, you didn't institute any such system at Pike?
- A. It hadn't actually been instituted, no.
- Q. Was it slated to be instituted?
- 10 A. Yes, it was.

- Q. When?
- A. Exactly when, I can't answer that.
- Q. Did it ever get back to you questions of lack of emergency drills within the mine, evacuation, emergency evacuation drills?
- 15 A. I'm sorry, can you repeat it?
 - Q. Did it ever come to you, concerns expressed on behalf of miners, the men underground as to lack of emergency evacuation drills?
 - A. No.
 - Q. Did it ever come back to you about the absence of toilets underground?
- 20 A. Yes.
 - Q. Something done about that?
 - A. Yes.
 - Q. Being?
- A. Being the purchase of a transportable toilet, as a trial, and another four of those being on order ready to be implemented.
 - Q. Could I ask you a couple of things about immediate post-explosion please? Or first, I guess it's my naivety, but the explosion seems to have happened about 3.44 pm on the 19th?
 - A. Yes, it did.
- 30 Q. And it's not until Mr Strydom who's gone underground and emerges at 4.25, 41 minutes later, that realisation occurs that, he reports in and realisation occurs that there's been an explosion underground?
 - A. That's also correct.

- Q. It's my naivety I know, but why is it that Pike didn't pick up the fact that there had been an explosion for some 41 minutes?
- A. At that time there was no actual physical signs that said in my brief with the respect to the failure of the comms system and the failure of the power that those instances had happened before. It's not a usual instance, but it had happened before and it was about confirming that we actually did have an incident.
- Q. If there'd been the tube-bundling system in the mine, would that have picked up and shown the explosion?
- 10 A. Not in the time frame probably that you're talking about, because it probably would've taken that long for a sample to reach the monitor.
 - Q. You had the images from the portal and an explosion coming out of the portal, they were on monitors at the control room?
 - A. Yes, they were.
- 15 Q. So was that the only possible way that someone would've picked up that this explosion had occurred, if someone had been watching that monitor screen?
 - A. At that time, yes sir.

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- 20 Q. I know with hindsight, but should not those monitor screens have been, being scrutinised by someone at all times?
 - A. They were in fact being scrutinised by someone at all times, but not the person in question would not be watching all screens at all times, I would suggest that his attention would've been on the screens that were indicating there was a fault.
 - Q. How many screens would he have to cover?
 - A. From memory I think there was six.
- Q. Looking back, can you suggest any way, the way that Pike was set up, anything that could've been changed within those systems to ensure that this explosion was picked up earlier than the 41 minute delay?
 - A. Not right off the top of my head, not sitting here right now, no.
 - Q. Do I take it that the control room and so on are too far away from the portal itself to enable the sound of the explosion to be heard?

- A. The control room's approximately 1.2 kilometres from the mouth of the portal.
- Q. Around the bend a bit?

- A. Around the bend a bit and in total about two and a half kilometres to the vent shaft.
 - Q. Should any of the gas reading equipment you had in the mine have alerted someone that methane levels were rising inside this mine?
 - A. The gas, the hardwire telemetric system that was in place certainly would've done, but it didn't because of the instancy of the explosion.
- 10 Q. Well we now know post the explosion you go down to the portal mouth and we saw you on the video yesterday, when you looked in and you'd have been used to looking into that mine, did you not notice the absence of the reflectorised sticks on the conveyor belt?
 - A. I can't recall noticing that, no.
- 15 Q. Well we saw some graphic imagery of what came out of that mine on the portal of the mine on the explosion, including the intact or seemed to be intact quite substantial reflectorised strips, did you not see them on the ground outside the portal?
 - A. No I did not see any evidence of them on the ground outside the portal.
- 20 Q. Subsequently when you went back, was there such debris lying around?
 - A. I can't recall seeing it.
 - Q. You thought of restarting the conveyor belt, you told us about yesterday?
 - A. Correct.
- Q. Am I right in thinking that at least in Queensland if a conveyor belt stops, before its restarted someone's got to walk in and inspect it to make sure that there's not someone, amongst other things, to make sure that there's not someone trapped in or under or on top of that belt?
 - A. It depends what reason it was stopped for.
- 30 Q. Was there ever a no gone or a no-go zone or a blast radius zone established by Pike around the portal area post explosion?
 - A. Yes there was.
 - Q. When was that done please?

- A. Oh, exactly when I can't remember, but some time I think before the 21st of November. I really don't know.
- Q. Who established that no-go zone please?
- A. Again, I can't answer that with any accuracy.
- You see it's been suggested by the QMRS people, the Queensland mine rescue people, that that no-go zone, blast radius zone in front of the portal wasn't established until after their arrival a number of days later. I'll get the date exactly, but can you comment on that?

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- 10 A. I think that's absolutely incorrect.
 - Q. You think it's incorrect. Where could we find, if there is such a place, some record of the no-going, or no-go or blast radius zone being established.
 - A. It may have been something that was recorded on the whiteboard in the IMT or electronic whiteboard records all of which have been kept.
 - Q. And who would've established it if it's not you?
 - A. It may've been established by New Zealand Mines Rescue, it may have been established by my alternate.
 - Q. Mr Ellis?
- 20 A. It may have been established by anyone in the process.
 - Q. Shouldn't it have been something you, as statutory mine manager, established.

OBJECTION: MR HAIGH (10:51:15)

CROSS-EXAMINATION CONTINUES: MR HAMPTON

- 25 Q. Can I ask you a couple of things then about matters that arise out of some evidence then on behalf of the CMFEU, the union in Australia?
 - A. Would that be the CFMEU?
 - Q. Sorry, yes I always get it wrong. Firstly, the polyurethane fire that occurred around the portal during the sealing in of the GAG machine, the container that was going to house the GAG machine. Did you have
- the container that was going to house the GAG machine. Did you have a part in that, it's not mentioned at all in your brief?

- A. No I was actually on nightshift, as I've said in my brief and that activity had taken place when I was asleep in bed.
- Q. So you didn't have any part in discussions about the use or otherwise of the polyurethane?
- 5 A. Certainly discussed the use of polyurethane, but the actual implementation I was not part of.
 - Q. In your discussions of the use of polyurethane and the sealing around that portal, were you in favour of its use or were you opposed to it because of the possible fire through exothermic reaction?
- 10 A. I was in favour of its use if in the way it was supposed to used was spread thinly, which is common practice. In the event it would appear it was spread rather too thickly and caught fire.
 - Q. Spread too thickly it has that ability.
 - A. Yes it does
- 15 Q. The exothermic reaction happens and catches fire?
 - A. Yes it does.

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Q. Perhaps I'm better to ask Mr Ellis about it. Can I ask you something else about activities at the portal and I wonder if I could get up, please, a photograph. It's in that large book of photos which I don't think has an identifying number as such at the moment, but it's a photo, if I can, 0916 of November 24th 2010? Page 69.

WITNESS REFERRED TO PHOTOGRAPH BOOKLET - 0916

- Q. Now, again, I don't know the actual author of this photo and exact time it was taken, it's labelled as being 24th of November 2010. But it's a photo of the portal of the mine itself and to the bottom left, just passed the green hopper or whatever it is, we see the entrance of a large tube which then bends around to the left and goes into the portal?
- A. That's correct.
- Q. Was this part of a large auxiliary fan?
- 30 A. That is actually an auxiliary fan, yes.
 - Q. That is the auxiliary fan itself?
 - A. Yes.
 - Q. When was that put in place into the portal of the mine please?

- A. It was put into position sometime after the explosion, either the first night or during the day of the next day.
- Q. So immediately post the first explosion?
- 5 A. Yes.
 - Q. Who put that in place please?
 - A. The actual person?
 - Q. No, no. Well who authorised that to be put in place please?
 - A. I did.
- 10 Q. The purpose?
 - A. The purpose was in the event that we could prove that the atmosphere underground indicated there was no combustion, that that was a means of ventilating the mine due to the fact that the main fans had been destroyed.
- 15 Q. Was it ever operated?
 - A. No it was not.
 - Q. Because if it was operated that would be like, and there was a chance of a fire underground, or there was a fire underground, that would be like blowing on your hot ashes in your own fire, wouldn't it?
- 20 A. That's right, that's why it was not operated.
 - Q. Why was it not mentioned in your statement of evidence, Mr White?
 - A. I don't see it's significant.
 - Q. Well it doesn't seem to be mentioned in anybody's statement of evidence. Is that because you didn't see it as being significant?
- 25 A. I can't answer for anyone else sir.
 - Q. It was wired up ready to go though I take it?
 - A. Yeah, it had been wired up ready to go if needed.
 - Q. Were there ever any concerns expressed to you by the Queenslanders when they arrived at the GAG about that auxiliary fan being there?
- 30 A. Not to me directly, no.
 - Q. You heard some concerns about it indirectly did you?
 - A. No, the only concerns I've read is in the statement of Mr Tim Whyte of the CFMEU.

Q. I just want to ask you finally something about an answer you gave to Mr Davidson yesterday, and it's at page 190 of yesterday's transcript. When Mr Davidson was asking you about egresses, suitability of secondary egress, and he asked you a question about midway down that page, "Was that a matter of concern to you the egress matter?" And you replied, "I think it's fair to say that having never actually considered the possibility of the mine blowing up in the time that we had, as I said earlier planned the proper second egress, it was not a matter that overly concerned me." Can we take your words as literal, that you'd never considered the possibility of the mine blowing up?

OBJECTION: MR HAIGH (10:58:35) – **QUESTION PUT TO WITNESS**

THE COMMISSION ADDRESSES MR HAMPTON

CROSS-EXAMINATION CONTINUES: MR HOLLOWAY

- Q. Mr White, I act for Solid Energy and as I'm sure you know several

 Solid Energy employees were part of a team who assisted with the drill hole that's referred to as PRDH43?
 - A. That is correct.
 - Q. The reason for me jumping up is simply to clarify some things you said in evidence yesterday about that drill hole 43. You're aware, I assume, that that team of people who drilled the hole got mobilised quickly and started on their endeavours in order to achieve a sampling point inbye the ventilation shaft, is that your understanding of the purpose?

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- A. Yes, I'm aware of that, yes.
- 25 Q. And ahead of the second explosion there was only one drilling rig up on site?
 - A. That is correct.
 - Q. And there's no suggestion, I take it, that that one drilling rig and team of people could have been engaged in drilling more than one hole at once?
- 30 A. No.

- Q. In evidence yesterday you said that the drillhole 43 was completed on Monday the 22nd of November, and that you wanted another hole started as quickly as possible, subsequent to that, is that correct?
- A. That's correct.
- 5 Q. You also said yesterday in evidence, or you acknowledged I think fairly that at some point you stopped taking notes and therefore your evidence was relying on your recollection of events?
 - A. That's also correct.
- Q. And I take from that it's possible that one or two facts may be mis-remembered?
 - A. Absolutely.
- Q. I just want to take you to one document please if I may, which is the reference SOL.381667.004, and page 2 if I may of that document. This is attached just for context to the statement of Craig Smith who's the general manager, underground mining for Solid Energy, and his evidence will be that this is what I think is referred to as a drilling calendar and that it was put together contemporaneously at the time by someone called Dr Rob Boyd, who's a geologist and who also works for Solid Energy. And you'll see there on page 2 that the drilling calendar has drillhole 43 been completed on the 24th of November which was the Wednesday?
 - A. Yep.
 - Q. And the evidence will go on to say that that was when sampling was possible from that hole?
- 25 A. That's correct, yep.
 - Q. Well, given that calendar and that I've shown it to you, do you accept now that it was impossible on the Monday for that rig to have commenced another hole, because it was still busy doing its job on hole 43?
- 30 A. That's correct, yep.
 - Q. And are you aware that when drillhole 43 holed through, or didn't quite hole through, but it established a connection with the underground workings early in the morning on the Wednesday, subsequent to that

and ahead of the second explosion, it was being prepared so that it could be transferred to another site at Pike River and be available to drill a subsequent hole if it was needed?

A. I'm not aware of that detail, no.

5 **CROSS-EXAMINATION: MR MOORE**

- Q. Yes, Mr White, from the 19th of November, your relationship, your working relationship with the police went pretty well, didn't it?
- A. I'd say it was, I wouldn't quite say exemplary, there were moments of frustration, but it was a very good working relationship, yes sir.
- 10 Q. And would it be fair to say that you're able to frankly and co-operatively work with the police both on site but also in Wellington?
 - A. Up to a certain level sir, yes.
 - Q. So as far as Superintendent Gary Knowles was concerned, as the incident controller relationship with him worked well, your ability to discuss?
 - A. It was first class.

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- Q. And while there maybe times, I think to use your words, that your own views may not have been acted on with, I think you said, necessary vigour or something like that. It'd be fair to say, wouldn't it, that your views were at least received and considered, that was your impression anyway wasn't it?
 - A. Again, I'd say up to a certain level, yes sir.
- Q. Yes, and while I accept obviously that for you it was a difficult emotional time because you knew almost all of the missing men personally, you did from time to time didn't you, contact Assistant Commissioner Grant Nicholls in Wellington?
 - A. On a number of occasions yes.
 - Q. What sorts of occasions would they be?
- 30 A. One or two of the occasions were to complain about the expert advice or the lack thereof and on one or two occasions it was just, quite frankly, for a chat because I found him very supportive.

- Q. Right. And was that a two-way dialogue, he might talk to you and you might talk to him on times when you thought it was appropriate?
- A. Yeah, I had his cellphone number so I could call him at any time and he had mine too.
- 5 Q. Now this whole question of the lead agency was obviously delivered to you, the police's role in that as something of a fait accompli, would that be fair from your perspective?
 - A. That's fair, yes.
- Q. Who do you think, given the exigency of the situation that was faced on the 19th of November and clearly the size and the magnitude of what was going on, what agency do you think was in the best position to take the lead at this time?
 - A. At the time, if you're asking at the actual time of the explosion or are you asking what my –
- 15 Q. I'm talking about from the afternoon of the 19th of November onwards?
 - A. With the resources available to the police, as I've mentioned in my statement, they were most likely the best agency.
 - Q. Now there's another matter I just want to touch on and that's Pike River's emergency response management plan, and if we can have that document up, it's PIKE.139568/1.

WITNESS REFERRED TO DOCUMENT

- Q. Did do you recognise that document as the first page of the ERMP for Pike River Coal?
- A. Yes I do.

- 25 Q. And you've seen that document before?
 - A. Yes I have.
 - Q. It's quite apparent isn't it when we look at the face of the document and the date that it was created about 13 months before you started at Pike didn't it?
- 30 A. Yes it is.
 - Q. And it appears to have originated from Neville Rockhouse and authorised by Peter Whittall, both on the 20th of February 2009, is that right?

- A. Correct, yes.
- Q. And you're familiar with that document?
- A. I'm fairly familiar with it, yes.
- Q. Yes and you were as at the 19th of November last year, is that correct?
- 5 A. That is correct.
 - Q. What was it to your knowledge ever reviewed, do you at least your time as part of the management team of Pike River Coal?
 - A. I can't comment on whether that particular document was reviewed, but there was a process put in place to review a number of management plans.

- Q. What about whether it was revised at all over, at least, the period you were engaged at Pike River Coal?
- A. The only time it was revised, to my knowledge, was when I reviewed it and revised it for the purposes of maintaining insurance just prior to when I left Pike River.
 - Q. Was it updated to your knowledge at all during your tenure?
 - A. No sir, no.
- Q. And to your knowledge was it tested at least while you were in the position that you were holding at the time?
 - A. Not whilst I was in any position that I held in Pike.
 - Q. The ways it might be tested might be either by way of a practical exercise, an actual physical drill in the mine mightn't it?
 - A. Correct.
- 25 Q. Is there another way of testing it which is a sort of a drill-all process, I think it's called a desktop test where you have a fictional scenario and you play around with ideas around the table as to what you might do presented with particular risks or events?
 - A. That is correct.
- 30 Q. Was that exercise undertaken while you were in the job?
 - A. I can't confirm that anything was undertaken, but I can confirm that that process, I had spoken to with Mr Rockhouse and the hours training

- available every day and the Friday training sessions were available to do the very thing that you mentioned sir.
- Q. Thank you. I'd just like you, for a moment, to look at another document, which is DOL7770030013/1 first of all.

5 WITNESS REFERRED TO DOCUMENT DOL7770030013/1 – CORPORATE SAFETY MANUAL

- Q. Do you recognise that as the Corporate Safety Manual for Pike River Coal?
- A. Only because that's what it says sir.
- 10 Q. You're not familiar with the document at all then are you?
 - A. No I'm not.
 - Q. It appears to be dated 2008 but is this the first time you've seen it?
 - A. In that form, yes. I can't remember ever seeing that document before.
- Q. Sure. If we turn over a few pages, do you see that under paragraph 7.5,
 there's a reference to trial evacuations being carried out every six months. Do you see that passage about a third of the way down?
 - A. Yes sir.
 - Q. Was that undertaken to your knowledge, certainly at any time that you were in a management position at Pike River Coal?
- 20 A. No.

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- Q. Do you know or are you familiar at all with the New Zealand Co-ordinated Incident Management System, otherwise known as SIMS?
- A. I'm not familiar with it no, I have heard of it but I'm not familiar with it.
- Q. Do you know if anyone else at Pike River Coal was familiar with the New Zealand SIMS system?
 - A. I can't confirm or deny that no.
 - Q. I'm referring now to document Pike.19568/37.

WITNESS REFERRED TO DOCUMENT – PIKE.19568/37

- Q. You're familiar with this part of Pike River Coal's emergency response management plan are you?
- A. I'm aware of it, yes.

- Q. And in that part of the plan, it goes through six potential events which could be the catalyst for an emergency which would require an emergency response, do you see those? Earthquake, flood?
- A. I can see three on the screen.
- 5 1115
 - Q. Yes, well turn the page over, and then I think there's major slope failure?
 - A. Slope failure.
- Q. Underground fire and then over the page again, explosion and outburst.Do you see those?
 - A. Yeah.
 - Q. Well just if we could go back to earthquake, which is two pages back. Just dealing with each of those scenarios, as far as the earthquake is concerned there are a number of suggested actions that might be put in place recognising that it's obviously a possibility in this area which is covered with faults, you'd agree?
 - A. Yes sir.

- Q. And the plan recognises that the integrity of the coal water supplies, Pike line needs to be checked for leaks and damage, and ensure that the water supply to the site is shut down, you see those as suggested actions?
- A. Yeah.
- Q. And then if we turn to, "Flood," the next one down. Obviously graphically flooding is probably unlikely but in any event there are suggested actions that should take place in the event of a flood. You can see those?
 - A. Yes.
- Q. Go to the next one, which is, "Pipeline rupture," going into the detail of that but again actions which would be recommended that management should put into place in the event of a pipeline rupture?
 - A. Yeah.

- Q. Over the page we go to, "Major slope failure," and there's a need there, isn't there, recognised to check the integrity of the cold water slurry pipeline flush with water, agreed?
- A. Agreed.
- 5 Q. Next is, "Underground fire," and that's recognised as a real risk isn't it?
 - A. Correct.
 - Q. Having regard to the environment, and it talks about how that risk needs to be reduced to an acceptable level and what needs to be put in place for that. You see that?
- 10 A. Correct.
 - Q. And then if we go over the page to, "Explosion and outburst," there's a recognition there, at least a statement there, that the risk of outburst is considered as being low and gas build-up is minimised et cetera, et cetera. You see that?
- 15 A. Yeah.
 - Q. Were you aware of that statement in that document during your tenure in management at Pike River?
 - A. I would've been aware of that, yeah.
- Q. And other than some mitigation practices do you agree that part of the document seems to be silent in terms of what strategies might be put in place in the event of an outburst or an explosion?
 - A. I think it would be fair to say concerns itself more with prevention rather than action after the event.
- Q. So in terms of, "The plan," are you aware of any document which
 25 Pike River had which focused on what strategies needed to be adopted in the event of an explosion?
 - A. No I'm not aware of any specific covering explosion, no.
 - Q. Do you accept the proposition that if there was any chance of anyone being alive in that mine there was really no question of sealing it?
- 30 A. It would've been a very difficult position to have made that, yes.
 - Q. Do I take it you agree with that proposition then?
 - A. It would be unlikely to seal a mine in those circumstances.

- Q. And in fact in a brief of evidence which has been presented to this Commission by a Mr Kenneth Singer, he in fact used the expression that it was necessary to conclude beyond reasonable doubt there was no prospect of survival. Would you agree with that as a proposition?
- 5 A. Yes, I would.
 - Q. And even after the second explosion before sealing it was still necessary, wasn't it, to be absolutely satisfied that there wasn't anyone who could have survived, or was still alive in that mine?
- A. After the second explosion, I was part of a team that was asked to confirm for the Coroner that that in fact was the case, that it was practically, though I don't remember using the term practically impossible, but it was beyond any doubt that there could be no one alive underground.
- Q. Right. And it was really only at that time that you were prepared to accept finally that there was no one left alive in the mine, would you agree?
 - A. Finally, yeah.
 - Q. Yes. And that of course, then provided at least the mechanisms to be put in place to give the green light for a sealing?
- 20 A. Yes.

- Q. I wonder if there's something you can help me with. There are some images of the outside, the vent system at the Slimline and I'm wondering if we can have in the big booklet of photographs the image that I'd like to start with would be 0804. This is page 20 and I'm going to be going from page 20 through to 23. I don't think you have the booklet in front of you, do you?
- A. No, I have the photograph, but not the booklet.
- Q. We've got it on the screen anyway. It's an imperfect shot, in the sense it's rather difficult to get a perspective in it, but I take it you would recognise at least some features in that photograph that would allow you to tell us what we're looking at?
 - A. Yes.
 - Q. What is it?

- A. This here is the top section of the Slimline shaft. It, this appears to be some roll of some form of cable, the actual type of cable, I couldn't confirm. It looks also like there's a gas sample bag lying there.
- Q. And if we could look now at image 0805, it's on page 21? That's a photograph taken from a similar shot but we can see more clearly in that photograph the interface between what looks like the end of the Slimline shaft and the beginning of a chimney and we can see bolt holes which would've held the two together, do you see that?
 - A. Yes.
- 10 Q. And there appears to be a rope and something else which looks like it's an electric fence coil. What is that?
 - A. I don't think it's an electric fence.
 - Q. No.
 - A. It's only a it is actually a fence around that particular structure.
- 15 Q. Right, I was actually looking more at the white drum with the red handle?
 - A. Yeah, that's what I'm saying, that's a roll of cable of some description.
 - Q. Right, do you know what it was?
 - A. I'm not sure what it was, no.
- 20 1125
 - Q. Do you know what the rope is that disappears down into the slimline shaft?
 - A. This is the first time I've ever seen this picture.
- Q. Right. Now normally wouldn't the chimney or the structure on top of that flue or vent, be placed so that it would be one structure with the bolts holding the two together?
 - A. That's correct.
 - Q. And it would appear that someone has unbolted that?
 - A. That's also correct.
- 30 Q. We know from these photographs that this photograph was taken on the 19th of November, so it's quite apparent that it's at night time, so it's a photograph that was taken latish that day, do you know anything about that?

- A. I would make an assumption that, as I mentioned earlier in evidence, that a bucket was dropped down the, was dropped down the slimline shaft, I would make the assumption that that was the occasion that that was done.
- 5 Q. Right. Was this discussed at any of the IMT meetings, this particular
 - A. I can't remember it being discussed, but that's not to say that it wasn't.
 - Q. What did you understand may have been dropped into the mine from that point?
 - A. My understanding was a bucket with a radio and a cap lamp in it.
- 10 Q. Right. Do you know what sort of radio it was?
 - A. It may well have been a radio that the Mines Rescue Service use, no I can't comment on that.
 - Q. Did anyone talk to you about doing that before it happened?
 - A. I recall it being mentioned.
- 15 Q. When?
 - A. Oh, exactly when I couldn't recall.
 - Q. When in terms of that afternoon did it occur later on did you learn about it for the first time on the 19th of November?
 - A. Oh, sometime yes sometime during that night.
- 20 Q. From whom?
 - A. It may have been Rob Smith, but I wouldn't like to confirm that.
 - Q. Was it discussed with anyone else?
 - A. That I don't know.
 - Q. To your knowledge was it discussed with anyone else?
- 25 A. To my knowledge it may well have been discussed in the IMT room and in that case there would've been other people present.
 - Q. Yes and do you remember that?
 - A. Do I remember the discussion?
 - Q. Mhm.
- 30 A. I remember a discussion.
 - Q. In the IMT room?
 - A. I don't remember that particular discussion no.

- Q. Did you know anything about a Solid Energy SMV, which I'm told is a specialised mining vehicle being parked in the drift about 30 metres in from the portal that evening, that's the evening of in fact it wasn't that evening I think it was the following day, the 20th of November. Do you remember that happening?
- A. I don't remember the actual event happening 'cos the following day I was actually home in bed.
- Q. Right, so you didn't know anything about that event?
- A. I knew it had happened, I was informed of it when I came back on shift around about 6 o'clock.
 - Q. Do you know why it was parked up the drift?
- A. My understanding was it was put there so if, if a rescue attempt could be made that people can drive a normal vehicle up to that point, 'cos it takes some time to drive a vehicle like an SMV from the administration building which is 1.2 kilometres up the hill, uphill these things do five kilometres an hour, between five and 10 kilometres an hour, but I'm assuming it was put there so the amount of time that was taken was reduced by just driving in a normal vehicle up to the portal and then people could get in the SMV and drive up the drift if that was the case, in fact gonna happen.
 - Q. Now it's my understanding that the vehicle was removed on the 22nd of November, did you know anything about that?
 - A. I can't recall that no.

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- Q. Was the presence of this vehicle in the drift a matter that was discussed, to your knowledge, at any of the IMT meetings?
 - A. Not to my knowledge at the IMTs no.

COMMISSION ADJOURNS: 11.30 AM

COMMISSION RESUMES: 11.50 AM

CROSS-EXAMINATION CONTINUES: MR MOORE

- Q. Mr White, I think before we took the morning break I inadvertently led you into error and for that I apologise. When I was asking you about the tests, test evacuations being needed every six months, I think there is the document I actually showed you, I believe actually relates to above ground evacuations, but, we just confirm that, if we could bring up please DAO.011.00254? That's an evacuation report, do you see that?
- A. Yep.

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- 10 Q. That would perhaps tend to suggest that there were trial evacuations but the document I was referring you to, dealt with above ground rather than below ground. Does that seem right to you?
 - A. As I said earlier, I've never actually seen that document before, so it doesn't, it's not right or wrong as far as I'm concerned.
- 15 Q. Okay, I just wanted to clarify that. Now, as far as this decommissioned fresh base was concerned, the one in the drift, the intention was to re-commission that up in the area of the Slimline where the other fresh base, or I think you called it changeover area was, is that correct?
- A. The intention was to extend that area, not necessarily move the fresh air base at 1500 metres, but definitely to extend that area and make it more suitable.
 - Q. What was the intention in relation to the container that we can see in the photographs that was equipped in the fashion it was?
 - A. I can't rightly recall having any intentions with that at all.
- 25 Q. Right, whose container was that? Was that Pike's equipment, or McConnell Dowell's, or whose?
 - A. I can't answer that with any certainty.
 - Q. So certainly the intention was, whether you were going to use that container or not, to commission a much more sophisticated system up there underneath the Slimline, have I got that right?
 - A. Yes, you have.

Q. And in terms of the more sophisticated system that would have large volumes of compressed air coming in, is that correct?

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- A. No I can't answer that one, no.
- 5 Q. Well what was it that you were expecting up there with the newly commissioned fresh air base?
 - A. The one that was planned or the one that was in?
 - Q. The one that was planned.
- A. The one that was planned was going to be extended out to a larger area for one. The reliance on the Slimline shaft as a means of providing air was discussed. It's obvious that so long as the main fan is running the negative pressure generates somewhere in the region of eight to 10 cubic metres per second of fresh air down that shaft. The consideration had to be, had to and was given to what if the fan failed, and in the final set with that location there was gonna be a fan on top of that that if the main power ceased the emergency power would kick in and power a small fan on top of that shaft to provide air, fresh air into that area in the event that the main fan failed.
- Q. Just so I've got it right then, you were reliant on the negative pressure from the main fan sucking fresh air down the Slimline shaft to aerate that area, is that what you're saying?
 - A. At that point yes.
 - Q. Right. Well what was the contingency if as a result of an explosion or a fire and the fan fails, and gas and the fumes are going the other way, up the slimline, what was planned for that?
 - A. I'm sorry do you mean planned –
 - Q. Well you have an explosion in the mine.
 - A. Yeah.

- Q. Or you have a fire in the mine, and the fan goes off –
- 30 A. The main fan?
 - Q. The main fan goes off, and fumes and smoke and gasses then go up the slimline don't they?
 - A. Are we talking about what was planned or what actually happened?

Q. No we're talking about what would happen in the event of a fire?

OBJECTION: MR HAIGH (11:55:20) – **PHASE THREE AREA**

THE COMMISSION ADDRESSES MR HAIGH

THE COMMISSION:

Mr Moore can I just ask this, Mr White has explained already as I understand it what was intended in relation to an improved fresh air base at the Slimline shaft and he's referred to the use of an auxiliary fan at the surface to kick in in the event that the main fan is not functioning. I'm not sure we hit it either, where are you at the moment?

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MR MOORE:

Where I am sir, is I want to ask this witness how long he believed people, that would be my next question, would be able to stay in the modified fresh air base before exiting, for being able to make the election to exit and how long he would expect it would be, based on his knowledge of the mine, before conditions might present themselves in a way that would allow people to exit either using rebreathers or without rebreathers and that's the direction I'm going.

THE COMMISSION:

Well I may be alone in this but as I understood from what Mr White was saying, had the fresh air base been developed in the way that was planned, or intended, I'd understood that it would've been sealed and hence I could not understand the questions you're asking about the main fan failing and fumes being drawn up there but I may be misunderstanding and I must say I wondered whether you and he were also at cross purposes as to what your question was about.

MR MOORE:

Right.

THE COMMISSION:

Whether you were talking about this position in the mine after the intended fresh air base was developed, how it would work then.

5 **MR MOORE**:

Thank you for that.

THE COMMISSION:

Where that gets us with Mr Haigh and his concern I'm not altogether sure but.

10 MR MOORE:

Well perhaps we can just wait and see what Mr Haigh wants to do in relation to that and if I can continue to –

THE COMMSSION:

Well can we establish are you asking him about the position as it would attain after the development of the intended fresh air base or the situation as it was 19 November.

MR MOORE:

No, I'm happy to, and I will ask questions in relation to what was anticipated and if I can continue from that point sir I'd appreciate it.

MR HAIGH:

I've no objection to that except to repeat I have no idea what this has got to do with the police, however.

25

MR MOORE:

I'm happy with that, sir.

CROSS-EXAMINATION CONTINUES: MR MOORE

Q. As far as what was expected in terms of the newly commissioned or to be commissioned fresh air base was concerned, that was an entirely sealed unit. Is that correct, that's what you're expecting?

- A. I'd say there was a more, the intent was have a more robust sealing mechanism in the shape of a door being built into the process but also one that would allow when the fan that I talked about kicked in it would obviously have to allow the exit of air through a vent.
- 5 Q. Now in the event that it was necessary for miners to take refuge in that fresh air base, how long do you think they would have been able to remain in there?
- A. That's a fairly hard question to answer. The whole purpose of, I would rather call them changeover stations, not fresh air bases. That's not a term I'm particularly happy with, a fresh air base, but certainly changeover station, the purpose of which, as it suggests, is to give somewhere for you to go to change from one rescuer to another in clean air and then make your way out the mine, they're definitely not intended as places to stay for any length of time. And when I talk about a length of time, may well be a place that you could stay for a number of hours, certainly not a place you'd want to be staying for a number of days.
 - Q. The self-rescuers that were in or intended to be deployed in that fresh air base, were they the big ones or the smaller ones?
 - A. They to my knowledge were 50 minute self-rescuers and they weren't intended to be deployed, they were actually in there.

- Q. Now, I think it was your evidence, that as early as Monday the 22nd of November, there was a discussion about trying to inertise the mine using a GAG, is that right?
- 25 A. I had certainly discussed the use of the GAG, yes.
 - Q. And that was repeated at a meeting on the 23rd of November with Superintendent Gary Knowles and the then Commissioner of Police, Commissioner Howard Broad, Mr Whittall and Darren Brady from SIMTARS does that seem right?
- 30 A. That is correct.
 - Q. And certainly in your brief, you said that it was made clear to you that the GAG would not be ordered because it would like people had given up hope, and I'm referring to paragraph 143 of your brief?

- A. That's also correct.
- Q. Now, in answer to a question from Mr Davidson yesterday just before the Court rose, you said that you believed that the GAG should have been brought out and should have been used earlier, do you remember saying that?
 - A. I said, "The GAG should've been brought out earlier," yes.
 - Q. Was it your view that it should've been used earlier?
 - A. Yes it was, it could've been used some stage earlier, yes.
- Q. When would you say was the earliest appropriate time to commission and have in operation the GAG?
 - A. My opinion is that possibly by the fourth day, when it was becoming more likely that there was no survivors underground, that may well have been the time to use the GAG.
 - Q. To actually deploy the GAG and have the GAG running into the mine?
- 15 A. Yes.

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- Q. Was that something that you actually conveyed to anyone in authority?
- A. From memory I conveyed that very subject, not the actual timing of the GAG, but I conveyed my opinion about the GAG to the Commissioner on the meeting that you mentioned. For the very reasons that I said, also, that unless we took some steps to try and inertise the mine, the mine would continue to blow up.
- Q. And wasn't the result of that meeting that it was agreed that the GAG should be prepared, ready to be deployed. Wasn't that the outcome of that meeting?
- 25 A. Not to my knowledge, no.
 - Q. Well, perhaps we could look at document, and it's PIKE01842, page 36.

WITNESS REFERRED TO DOCUMENT – PIKE01842

- Q. Do you remember that there was a woman, I think her name was Barbara Dunn, in the room who was taking notes at the time of the meeting?
- A. I vaguely remember a woman being there, her name being Barbara Dunn is?
- Q. But, do you remember a woman taking notes?

- A. I think I do yes.
- Q. And if you take it from me that those are some of the notes taken at that meeting, do you see the second to last line on that page, "Prepare GAG ready to come." Do you see that?
- 5 A. Yep, see that.
 - Q. Is it still your belief that even after that meeting the police were reluctant or unprepared to bring the GAG over for perceptual or other reasons?
 - A. Well, none of these notes I remember being conveyed to me, so, when I left the room, yes, it certainly was my opinion.
- 10 Q. Did you ever contemplate, because of the gassy nature of the Pike River Coal Mine, actually having a facility or some kind of adaptation that would allow a GAG to be used in the event that it was necessary to use one? Infrastructure, the sort of pad, pipes, venting –

- 15 A. Can you ask that question again?
 - Q. Did you ever contemplate putting in place modifications in or around the mine that would be capable of being used to connect up a GAG in the event that it was needed to be used at Pike?
 - A. No, it would've been very difficult to do what you're suggesting.
- 20 Q. Why's that?
 - A. Just because of the actual physical location of the drift and of the fan shaft.
 - Q. It was done though ultimately, wasn't it?
- A. Ultimately it was done in a, I wouldn't say a haphazard way, it certainly was effective, but it was certainly not the way that you would've done it in a normal working coal mine that would have to have those facilities there.
 - Q. To your knowledge, did Pike River Coal have a contingency plan to be able to access a GAG without delay if there was a need?
- 30 A. No, not to my knowledge.
 - Q. When was it that you first believed there'd been an explosion in the mine?
 - A. When I spoke to Mattheus Strydom.

- Q. After he came out of the -
- A. No, no, from when he communicated to the control room.
- Q. Just so that we've got the sequence right and it might be helpful if we've got this document put up on the screen. It is SOE.015.00001/10. This is a timeline which deals with the images taken from the portal. Just put that up and just look at that for the moment, you can see the times there towards the right-hand side there, you can see 'Start time'? See that column?
- A. Yep.

- 10 Q. So that's measured in the 24 hour clock down to seconds and then the finish time of the particular clip and we can see at least on corrected time, there in the red italics that Mr Strydom, the clip dealing with him, has him coming out towards the portal in the way that we saw at 16.11 and 44 seconds?
- 15 A. Yep.
 - Q. And then there's a SUV, see that in the next clip?
 - A. Yep.
 - Q. And that I believe is actually you, isn't it? I think you were driving an SUV, were you?
- 20 A. Yes, that's correct.
- Q. And then the next clip is the one that starts at 16.16 and 51 seconds, which is the one that was played yesterday and then the next clip is one starting at 16.18 and 22 seconds and that's when Mr Ridl arrives with John Heads and the two of you walk up to the portal, right? Now, what I'm going to do is I'm going to ask that to be played again and I'm going to ask you to, after we've played it, to comment on some of the mannerisms that we see in that and whether you're able to help us in what it is that we're seeing.

FOOTAGE CAC0016 PLAYED

30 Q. Can we just pause it there? I'm just going to ask you about that particular part. Carry on thanks. Just pause. So that's you there on the left isn't it?

- A. Correct.
- Q. And that's you talking to Mr Heads and Mr Ridl?
- A. Correct.
- Q. Yes carry on.

5 FOOTAGE CAC0016 CONTINUES

Q. Right now if we can carry on with the next clip which is CAC0017, which just continues straight from that.

FOOTAGE CAC0017 PLAYED

- Q. Thank you. Now as far as the first clip was concerned, that's the 0016, there were two occasions that you would have seen when Mr Ridl puts his hands out like that?
 - A. Yeah.

- Q. And he held them out, at least on one of those occasions, for a relatively prolonged period, a matter of a second or so –
- 15 A. Correct.
 - Q. would you agree?
 - A. Yes.
 - Q. Do you remember what he was saying when he put his hands out like that, standing there at the –
- 20 A. No I don't remember exactly what he was saying, but I could make a fairly safe assumption that he was confirming that there was ventilation actually going into the mine.
 - Q. You don't think that he was indicating that no one should enter the mine past that point?
- 25 A. No.
 - Q. Now you've first sensed that you heard about a change in the atmosphere was when you were down at the administration building wasn't it and I think you and Mr Ridl were together when you smelt this –
- 30 A. That's correct.
 - Q. slightly unusual smell? Had you smelt that smell ever before?
 - A. I can't recall smelling a smell like that before.
 - Q. Did you discuss it with Mr Ridl?

- A. We discussed the smell, yes we did. We were trying to wonder what it was.
- Q. What were the options, the various suggestions that you might've made to each other about what it might be?
- 5 A. The main suggestion was that it was a had been a diesel engine.
 - Q. And when you got up to the portal and we can see it in those two clips, one of the things that Mr Strydom told us, he noticed it was particularly dark as he drove in because of the absence of the reflector strips, do you remember him saying that?
- 10 A. Yes I do.
 - Q. Now those reflector strips they, some of them anyway hang from the roof of the drift, don't they?
 - A. No they're actually connected to the conveyor belt.
 - Q. There were none on the roof?
- 15 A. Not to my recollection.
 - Q. And the ones on the conveyor belt, are they just down the side that the conveyor belt's on or are they both sides?

- A. From memory they're on the side the conveyor belt's on, on the walking or driving side to prevent, not to prevent people but to alert people to the fact the conveyor's there and reduce the likelihood of people driving into it.
 - Q. And it didn't occur to you that the tunnel was any darker than usual?
 - A. Not any darker than normal, no.
- 25 Q. And I think you told Mr Hampton you didn't see any debris or remains of broken reflectors?
 - A. I think it's evident from that film clip that there are no remains in the area where I was.
- Q. In the area where you were, but you approached the portal and drove your car around outside other parts adjacent to the portal didn't you?
 - A. Yes I did.
 - Q. And you didn't notice anything there either?
 - A. No I did not.

- Q. I want to ask you about communication failures. There are two quite separate communication systems in the mine aren't there? There's the telemetric system. I think "telemetric" was the expression used by Mr Davidson, which deals with the monitors and some of the systems that operate within the mine?
- A. Correct.

- Q. And they were down. I think there was flashing on the computer indicating that there were multiple failures in that system?
- A. Correct.
- 10 Q. But there's also the telephonic system that operates within the mine too isn't there?
 - A. Correct.
 - Q. And that's in the form, as we've heard, of the DAC and the phones?
 - A. Correct.
- 15 Q. And those, at least, appear to be working within a short time after it was apparent that there were telemetric failures?
 - A. Correct.
 - Q. And I think you told us that when the mine was called there was a dialling tone which would certainly on the face of it indicate that the system was working?
 - A. Correct.

- Q. And when you tested the DAC at the portal that seemed to be working as well didn't it?
- A. It was working, correct.
- 25 Q. So if the phones were working in the mine and no one was answering them wouldn't that mean one of two things, that the men were either ignoring the phones or for one reason or another couldn't physically answer because they were incapacitated one way or another?
 - A. That's correct.
- 30 Q. And did that occur to you at the time?
 - A. Not at the time it didn't, no.
 - Q. Now yesterday in your evidence you said that in December 2010 the police declined PRCs request for entry to the mine to recover the

missing men and they gave no reason. Have we got the transcript there? I'll cite the actual page reference and I'll quote it. yesterday's transcript at page 138. It starts about two-thirds of the way down that page and you said, "Wednesday 15th of December 2010 the police announced publicly they're pulling out of the Pike River Operation, that a meeting was held in the Greymouth station and that the police made sweeping statements about the likelihood of any bodies being recovered due to the intensity of the fire." Then you refer to Dr David Cliff, talking about it would be unlikely after four explosion it be possible to recover any remains or useful information. And then he went on and said, "This statement was challenged by Steve Ellis, Peter Whittall and myself as the actual location of the blast and the magnitude couldn't be verified with any degree of certainty." And then down to about a third of the way down the next page, page 139, you talk about the police rejecting the plan and then Mr Haigh asked you, "Just pause there. Were you told by the police why it was rejected?" And you said, "No." Do you remember that evidence?

- A. I do remember that, yes.
- Q. I'd just like you to look at a document. It's going to be produced as exhibit 17, in fact I'll produce it as exhibit 17 now.

EXHIBIT 17 PRODUCED – COPY OF LETTER FROM NZ POLICE TO MR WHITE DATED 31/12/2010

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Q. We'll just bring it up on the screen.

25 WITNESS REFERRED TO EXHIBIT 17

- Q. Now this is the first page of a letter dated the 31st of December 2010 addressed to John Fisk, who is the receiver of Pike River Coal Limited and copied to you, do you see that?
- A. That's correct.
- 30 Q. Do you recognise that letter?
 - A. Yes I do.
 - Q. This is a letter written to the receiver and copied to you by the Commissioner of Police, Mr Howard Broad, is that right?

- A. Yes.
- Q. And in that letter, and just scrolling it through, he talks about the review of the proposal to enter the mine?
- A. Correct.
- 5 Q. And again, it's on the record so I don't intend to go through it in any great detail, but he deals with seven features in relation to the entry and why, what had been proposed was not adequately explained at that point and what additional information the police needed?
 - A. Absolutely correct.
- 10 Q. And that was dated the 31st of December 2010, is that right?
 - A. Correct.
 - Q. And then following that there was a letter back to the Commissioner on the 5th of January, and if we can put that up, I produce it as exhibit 18.

EXHIBIT 18 PRODUCED – COPY OF LETTER FROM J FISK TO COMMISSIONER HOWARD BROAD DATED 5/01/2010

- Q. Again, don't need to go through it in detail, but this is an eight page letter from Mr Fisk, the receiver, back to the Commissioner setting out some of the detail which the Commissioner sought in terms of an entry plan, is that right?
- 20 A. Yes, correct.

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Q. And then finally, and this is a document PIKE.15325/1.

WITNESS REFERRED TO DOCUMENT PIKE.15325/1

- Q. I'm not sure whether you would've seen this document. Have you seen that document before?
- 25 A. Yes I have, yes.
 - Q. And that again, and I don't intend to go through it, but that again sets out the concerns expressed to the Commissioner by the experts that he retained in terms of Pike River's response, is that correct?
 - A. Correct.
- 30 Q. Yesterday you talked about, I think the expression you used was, "Caches?"
 - A. Caches.

- Q. Caches, sorry. The caches, which contained self-rescuers in the fresh air base below the Slimline, do you remember that?
- A. Yes.
- Q. And you told us that you'd had an opportunity to view the CAL scan and you were of the view that the images in the CAL scan at the Slimline were two boxes, two caches?
 - A. The image contained other things but, yes, certainly two boxes.
 - Q. And I think you went further and said that you believed they were caches, is that right?
- 10 A. I believed they were boxes containing self-rescuers, yes.
 - Q. And one was open?
 - A. One was most definitely open, yes.
 - Q. When you saw that image, in fact, before I ask you that. When do you think it was that you saw that image?
- 15 A. My recollection was that I saw the clear image after we'd had the meeting after the second explosion. The second explosion was Wednesday the 24th, the meeting that was asked to be convened by the Commissioner was the Thursday and it was at some time after that meeting, sometime after 5.00 pm, after that meeting on the 25th.
- 20 1227

- Q. Right, have you seen the image since then at all?
- A. I've seen it on a number of occasions since then, yep.
- Q. Are you aware that since you saw that image, that image has gone to all kinds of laboratories and been enhanced with a view to trying to clarify the images that it depicts and certainly the images which you saw on –
- A. Yes, I'm aware of that process it's gone through, yeah.
- Q. Have you seen the improved or enhanced version?
- A. No.
- Q. No. I'm going to ask you about another kind of box. In addition to the self-rescuer boxes, the caches, were there also other wooden boxes in that vicinity?
 - A. In my recollection there was a wooden firebox there, yeah, with fire fighting equipment in it.

- Q. And can you tell us a bit about those boxes? Who made those boxes?
- A. Oh, I couldn't tell you who made them. I think they were made locally though.
- Q. Yes?
- 5 A. Yeah.
 - Q. Whereas the other ones are a sort of moulded plastic, aren't they?
 - A. The other ones are a standard box that you can buy for camping or storage or a number of other things, in fact, I think the police and fire service used some over the course of the events.
- 10 Q. Now this firebox, was that also to your knowledge, located in the vicinity of the Slimline?
 - A. Yes.
 - Q. And to the best of your knowledge and recollection, whereabouts relative to the self-rescuers –
- 15 A. Oh, exactly where, I wouldn't be able to recall.

LEGAL DISCUSSION (12:29:15) – **EVIDENCE ON FRIDAY**

CROSS-EXAMINATION CONTINUES: MR MOORE

- Q. I have the boxes here, perhaps if we could have the cache box, please, arrange for that to be brought in? Do you recognise that kind of box?
- 20 A. Yes, I do.
 - Q. And is that essentially identical to the self-rescuer caches that you were talking about?
 - A. It would appear to be similar, yeah.
- Q. Would you mind just opening the top of the box for us please? Just open it so it opens up, you can let it go. Right, just again, for the record, you've just opened the box and the lid opens to a little over 90 degrees, would that be right?
 - A. That's correct.
- Q. In fact, I understand it's actually 105 degrees, would that seem about right to you?
 - A. Without a measurement, I think I'd say you're fairly spot on.
 - Q. And it was into that box that the self-rescuers were put, is that right?

- A. That's correct.
- Q. Right, we'll get the other box in now too please. We've brought in another box which is a wooden box, slightly smaller than the self-rescuer box. Do you recognise that?

- A. Yes I do.
- Q. What is that?
- A. That's the fire fighting box I (inaudible 12:32:35)
- Q. Can you open the top of that for us? Let it go back please. Now you may need to speak into the microphone, Mr White, but the firebox top's just been opened and it opens through to and perhaps just a little bit past 180 degrees, doesn't it?
 - A. Yes it does.

CROSS-EXAMINATION: MS MCDONALD

- 15 Q. Now, Mr White I'm representing the Department of Labour just so that you know and I want to just follow on from what Mr Moore was asking you earlier in relation to sealing?
 - A. Correct.
- Q. It's correct isn't it that the Department of Labour's position in relation to the complete sealing of the mine was not acceptable as there was a chance of life?
 - A. That's correct.
 - Q. And I think you've already said that that was in effect your position too, was it?
- 25 A. That is correct.
 - Q. And can you just confirm for me then that any discussion or about the possibility of a prohibition notice being issued by the department, a directive, do you know what I'm talking about by a prohibition notice?
 - A. Yes, yep.
- 30 Q. That that arose in the context of that discussion about the possible complete sealing of the mine when there was still a chance of life?

- A. I can't recall any conversation taking place at all about a prohibition notice.
- Q. And what I was next going to put to you was, the issue of a prohibition notice never really advanced very far because all of the key parties agreed that complete sealing of the mine when there was a chance of life was inappropriate?
- A. That may well be the case.
- Q. Have you read the brief of evidence of Mr Kenneth Singer?
- A. Yes I have.

- 10 Q. Could we just have that up on the screen please, its number SIM0002/19? That's page 19 of the brief Mr White, paragraphs 152 to 157 and I assume that you would've read those if you're familiar with the brief?
 - A. Yes I have read them, yep.
- 15 Q. You'll see there that Mr Singer says at paragraph 152 that in his view the IMT made a correct decision when it agreed not to seal the mine prior to the second explosion. The second explosion may not have ever occurred; however, in my opinion it would have been immoral to seal the mine without concluding beyond reasonable doubt that there was no prospect of survival. You would agree with that?
 - A. Yes I would.
 - Q. And then coming through then to paragraph 157 perhaps, he expresses the opinion that if someone had to had of decided to seal the mine prior to the second explosion it was possible that this would have resulted in a secondary explosion prior to day five. The installed infrastructure at the portal and at the top of the shaft would've been damaged and lives would be put at risk. Do you agree with that as well?

1237

- A. I've made that comment myself also.
- 30 Q. Now just moving on to another issue. You gave some evidence in relation to the second egress and you said in answer to a question I think from Mr Davidson that the Department of Labour inspector,

Mr Poynter regarded it as an adequate means of egress. That was your evidence?

A. That's correct, yes.

- Q. You didn't go on to explain and outline in any way the various discussions and interactions that the Department of Labour inspector had had with Pike River about the egress and the adequacy. Why was that?
 - A. The only discussion I had with the Department of Labour inspector was in fact Mr Kevin Poynter and the only discussion I ever had in the time I was at Pike River was the one that I referred to.
 - Q. You were aware though I assume that there were a number of engagements between the Department of Labour inspector and Pike River?
 - A. I'm aware there would've been a number of engagements, yes.
- 15 Q. This will become this topic of evidence in the next sections of the hearings but do you accept that there were five sets of exchanges between the Department of Labour inspector and PRC about the provision of a second egress in the mine between April 2010 and the 19th of November?
- 20 A. If that's what you're saying, I'll accept that.
- Q. And you'll just need to indicate if you would whether you had direct knowledge of this or not, but I suggest to you that the evidence will show they start with the inspector raising a question about the second egress, being told that this had been raised by the workforce, and that was on the 8th of April, progressing to the inspector noting that a second egress exists but is not a permanent solution, on the 21st of April, and that by the 20th of August he had gained agreement from Pike River that a new egress would be established as soon as possible. Remember that?
 - A. Yes.
- 30 Q. And that there was then a letter from the inspector to Pike River requesting a plan and a timeline for the completion of that work?
 - A. Correct.

- Q. And there was subsequently then a plan and a timeframe submitted wasn't there, to the inspector?
- A. Yes, that's correct.
- Q. And just as a matter of completeness. Mr Poynter, the Department of
 Labour inspector wrote you a letter about this issue and other issues on
 the 31st of August 2010?
 - A. He may well have done, yes.
 - Q. Had you forgotten about that letter until I just mentioned it to you?
 - A. No that letter was shown yesterday as evidence I believe.
- 10 Q. Right.

25

A. Yeah.

CROSS-EXAMINATION: MS SHORTALL

- Q. Mr White, you gave evidence yesterday about it being your idea to develop the second walkout exit from the mine. Do you recall that evidence sir?
- A. Yes I do, I was certainly involved in that process.
- Q. And do you understand Mr White that feasibility studies were prepared in connection with the initial development of the mine?
- A. At some stage there would've been, yeah.
- 20 Q. And those studies would have been before you joined Pike River, right?
 - A. That is correct.

1242

Q. And what I'd like to do is just show you one study, an extract from one study, about which evidence was given in Phase One, Mr White, so I would ask if we could have produced the document at DAO01201187.

WITNESS REFERRED TO FINAL FEASIBILITY STUDY DOCUMENT DAO01201187

- Q. We've just brought up on the screen, do you see that Mr White, a document entitled "Final Feasibility Study"?
- 30 A. Yep.
 - Q. And do you see, sir, that it's dated the 23rd of June 2000?
 - A. I do.

- Q. Do you recognise this document, Mr White?
- A. No.
- Q. You've not seen it before?
- A. I've never seen it before, no.
- Q. I just want to quickly turn your attention, just to one reference in this feasibility study, and it's at the page DAO01201358. And just to be clear, Mr White, what I'm showing to you is a subsequent page in this feasibility study. DAO01201358. It's a different document, there's different volumes, it's part of the same compilation. Instead of, perhaps us having difficulties with the document, Mr White, I'll cut through this. Do you have any reason, Mr White, to believe that other than that the ANC feasibility study back in June of 2000, referred to emergency exits other than the main drift being excavated during the development of the mine at Pike River?
- 15 A. I would expect that that would be contained in such a document, yes.
 - Q. And do you have any reason, Mr White, to disagree that the feasibility study that was in existence since 2000, actually included a plan showing the potential location of emergency egresses?
 - A. I couldn't disagree with that, no.
- Q. Now, let me move on, Mr White, you gave evidence yesterday about you having suggested soon after joining the company, in January 2010, that a tube-bundle system should be acquired, do you recall that sir?
 - A. Yes I do.
- Q. Do you have any reason to believe that the installation of a tube-bundle system had not been considered by Pike management before you joined the company?
 - A. I understand now that had also been considered prior to me coming to the company.
- Q. Now, you were asked several questions yesterday, Mr White, from counsel for the families about whether you had a job description at Pike River, do you recall that?
 - A. Correct.
 - Q. You did receive a written employment offer didn't you sir?

- A. Yes I did.
- Q. And that offer included a job description didn't it?
- A. Not a job description as such which detailed in any detail my roles and responsibilities.
- 5 Q. Perhaps I'll just have brought up, and we'll just take a quick look at it, of the letter.

WITNESS REFERRED TO LETTER OF OFFER FROM MR WHITTALL DATED 2/11/2009

- Q. And we're showing to you, for the record Mr White, a letter dated 2 November 2009 on Pike River letterhead, a directed to you entitled, "Letter of offer," do you see that?
 - A. Yes.
 - Q. And I believe we would need to produce this as exhibit 19.

EXHIBIT 19 PRODUCED - LETTER OF OFFER FROM MR WHITTALL DATED 2/11/2009

1247

- Q. Mr White, this letter is signed by Mr Whittall, is that right?
- A. Correct.
- Q. In his capacity as the general manager of mines?
- 20 A. At that time, yes.
 - Q. Because at this time Mr Ward, Gordon Ward was the CEO at Pike River, is that right?
 - A. Correct.
- Q. And of just turn your attention to the paragraph in the letter at this exhibit headed 'Duties', it's the second full paragraph on the page, sir?
 - A. Yep.
 - Q. Perhaps we could just pluck that out and line it up for you?
 - A. That's all right, yeah, I can see it fine.
- Q. And does that section of the letter describe your duties, and I'm reading from the letter Mr White is, "Operational responsibility for the business performance of production, engineering, health and safety and the coal preparation part. In addition to the aforementioned duties, where appointed to act as statutory mine manager." Is that right?

- A. It's hardly a position description.
- Q. It's a summary of overall duties?
- A. It's a summary of overall duties, that's correct.
- Q. Now let me just move quickly to another topic Mr White, in your evidence yesterday you discussed your recollection of when you sought to have a tube-bundle system purchased at Pike River, do you recall that?
 - A. Correct, yep.
- Q. And you described how as the operations manager you put together by the end of June 2010, a budget estimate for the tube-bundle system, do you recall that?
 - A. Correct.
 - Q. And that estimate was for the year ended 30 June 2011, right?
 - A. Also correct.
- 15 Q. And no one objected to the purchase of a tube-bundle system being included in that budget, did they?
 - A. No, they did not.
- Q. And I just want to ask you a couple of questions around the timing.

 There came a time when the tube-bundle purchase became budgeted for April 2011, right?
 - A. That's correct.
 - Q. And you described yesterday that you believed you pushed your timing out from August 2010 to November 2010 to purchase the tube-bundle system in light of mine development, do you recall that?
- 25 A. Correct.
 - Q. Is it possible Mr White that this timing was January 2011 instead of November 2010?
 - A. It's possible, but improbable.
- Q. You mentioned some Excel spreadsheets yesterday. I just wanted to show you a spreadsheet to see if it was perhaps the one you were referring to or it might otherwise refresh your recollection. If we could just pull up, Ms Basher, the June draft? Now just to orientate you Mr White, sections of this company document have been blanked out to

preserve commercial sensitivity, so what I'm going to do is actually ask if the first section, thank you, can be blown up and I'm going to ask you Mr White whether you recognise the document as a June version of a budget template for the year ended 30 June 2011, for completion by cost centre owners?

- A. It's certainly for the June budget, but from that I can't tell if it's a June estimate or not.
- Q. Do you recall seeing documents like this Mr White when you were with Pike River?
- 10 A. Yes, yep.

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- Q. And do you recall providing information to be included in these types of templates?
- A. Yes, I do.
- Q. I'll just ask if we can turn to the second page of this document and there are two line references to tube-bundle system being the first one and tube-bundle system tubes, do you see those Mr White?
 - A. Yes, I see that, yep.
 - Q. And do you have an understanding as to in the first column there's a reference to PRD, what that relates to?
- 20 A. Production.
 - Q. And is that a cost centre for which you had responsibility?
 - A. Correct.
 - Q. And am I correct Mr White that this document we're looking at reflects January 2011 as the timing for the budgeted purchase of a tube-bundle system at Pike River?
 - A. That's what it portrays, yep.
 - Q. If I could just ask to have this document produced as the next exhibit, as exhibit 20.

EXHIBIT 20 PRODUCED – JUNE VERSION EXCEL SPREADSHEET

- 30 Q. Now you mentioned yesterday Mr White that it was likely Pike possibly would have a goaf area forming in January 2011, right?
 - A. Correct.

1252

- Q. And you wanted to have a tube-bundle system starting to be put in place for the formation of that first goaf, right?
- A. That's also correct.
- Q. Is it possible now that you've seen the document, this exhibit, that you may have proposed January 2011 for the purchase of the tube-bundle system?
 - A. Oh, looking at that, it's possible yeah.
 - Q. Now you were shown some emails yesterday, Mr White, between you and a Mr Harrison concerning potential financing for a tube-bundle system, do you recall those questions?
 - A. Yes, yeah.

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- Q. And you were asked about an email dated the 28th of October 2010 from Mr Harrison to you and you didn't have it before you yesterday and you noted that you would like to see the email to verify what it said before you described what it said. Do you recall that?
- A. Yes.
- Q. Do you now have that email with you -
- A. Yes I do.
- Q. Mr White it has been provided to us and your lawyer referenced it when we began today and so when you were asked yesterday if you recalled any reference in the 28 October 2010 email from Mr Harrison to you that the tube-bundle system was not being required, because it wasn't necessary. You responded that it was something along those lines, but you wanted to verify, right?
- 25 A. Absolutely.
 - Q. Now that we have the email, I just wanted to ask you to verify that the 28 October 2010 email from Mr Harrison to you which is part of exhibit 16 doesn't anywhere say that the tube-bundle system was not being required, does it?
- 30 A. No well it does say, it says, "It was some way off."
 - Q. It doesn't use the words that the tube-bundle system was not required because it wasn't necessary, does it?
 - A. No.

CROSS-EXAMINATION: MR MOUNT

Q. Mr White, can I take you back to the Emergency Response Management Plan DAO.001.00096 please. If we turn to page 10 of that document? On page 10 of the document can you see that there is reference to three levels of emergency?

1255

- A. Yes.
- Q. The most minor of those is level three, minor incidents that can easily be resolved using on-site resources?
- 10 A. Correct.
 - Q. Level two events which pose a threat to life or to mining operations, and level one was the most serious level, and you can see in the box at the bottom it was a situation where there were fatalities or mine personnel trapped, missing or seriously injured?
- 15 A. Correct.
 - Q. A key component of the emergency response plan was the incident management team, the IMT?
 - A. Correct.
- Q. Were you familiar with the concept of an IMT from your time in Queensland and elsewhere?
 - A. Yes.
 - Q. Who did you understand would be part of the IMT for a level one incident at Pike River?
- A. I would have expected, from my experience in Queensland, certainly

 Mines Rescue, certainly members of the mine management and most probably the Mines Inspectorate, that is in Queensland.
 - Q. That's what you would expect in Queensland is it?
 - A. That's correct, yeah.
- Q. Based on your knowledge of the Pike document, who did you expect would be part of the IMT for a level one incident at Pike?
 - A. I didn't have any more expectations outside what I just said.
 - Q. Did you understand that the Pike document essentially was based on the Queensland practice?

- A. I wouldn't have said that, no, it was similar to the Queensland practice.
- Q. In your view, for a level one incident, what size of IMT would be desirable? How many people roughly?
- A. Oh, no more than 10, it becomes a bit unmanageable after that.
- 5 Q. The skills you would see as being desirable on the IMT?
 - A. Probably heavily leaning towards a majority of mining skills in the field of ventilation and gasses and as I say the it would be the expectation there would be a mines inspector involvement somewhere and possibly a some other form of rescue service. Definitely mines rescue.
- 10 Q. So when you say mines inspectorate in the New Zealand context that would be the Department of Labour?
 - A. Department of Labour yeah.
 - Q. And broadly based on your knowledge of the Pike document, how did you expect that the IMT would function?
- 15 A. It would function as a decision-making entity where information would be fed into the IMT and decisions made then fed back out to enact whatever process was needed to be done.
 - Q. So essentially a decision-making body?
 - A. Correct.

20 COMMISSION ADJOURNS: 1.00 PM

COMMISSION RESUMES: 2.00 PM

LEGAL DISCUSSION – TIMETABLING

MR HAIGH:

Your Honour, there's one final matter I wanted to raise before we recommenced and that is my learned friend Ms Shortall, produced to the Court exhibit 19 when she was cross-examining Mr White –

THE COMMISSION:

The sensitivity about it.

10 **MR HAIGH**:

Remuneration.

THE COMMISSION:

Yes.

15

5

MR HAIGH:

Some parts were amended to confidentiality but clearly was an error as to his remuneration. Can I ask for an order Sir, that those details not be published?

20 THE COMMISSION:

Certainly. I guess the other point is they're really not of any moment to us.

MR HAIGH:

No.

25

THE COMMISSION:

If you wanted them redacted, it's the body of the document or the other aspects of the document –

30 **MR HAIGH**:

Yes, I would ask it to be redacted, but also the order's important because the media –

THE COMMISSION:

5 Yes, have seen it.

MR HAIGH:

Thank you, Sir.

10 **THE COMMISSION**:

Right, we make both orders that that document may be redacted as appropriate to preserve those confidential sensitive items and I make an order suppressing the details because they are of no public interest.

CROSS-EXAMINATION CONTINUES: MR MOUNT

- 15 Q. Mr White, we're still on the Emergency Response Management Plan document, if we can look at page 8 of that document, there is a definition of the incident management team, and it appears to contemplate that it will consist of the incident controller, the operations and mine manager that is, plus the technical services manager, plus the mines rescue superintendent. So those three people plus others deemed appropriate, for example, a mines inspector. Was that your understanding of the process that was proposed by the document?
 - A. But that's consistent with what I've said earlier, yes.
- Q. If we turn to page 33 of the document there's a diagram that sets out the structure, perhaps if we zoom in on that diagram to make it easier to see. We have the incident management team at the top. The way that box is represented, it's not quite the same as the definition we've just seen, because here we have the incident controller, duty card 2, and the operations manager and others as required. Do you understand that to be essentially the same as what you've described, or is there a slight difference?
 - A. No, I think that's fairly similar to what I've described, yes.

- Q. And then there would be an information transfer officer linking down to three main groups underneath, a project director, a control officer and an incident support team?
- A. That's correct.
- 5 Q. Do you have any comment on the way that that structure was intended to work?
 - A. None other than the fact that it actually did work. None other than the fact that relatively speaking that's exactly how it worked on the day.
 - Q. Sorry, none other than?
- 10 1405

- A. Sorry that's my answer. When the event, as the event unfolded it worked fairly similar to how that flowchart depicts.
- Q. There's no mention on this plan or in the document about any relationship between the Pike incident management team and the emergency services, police or fire or ambulance, to your knowledge what was the intended relationship between the Pike incident management team and the emergency services?
- A. I can't answer what the intended relationship was, I could only comment on what the actual relationship was on the in the event.
- Q. When I ask about the intended relationship, to your knowledge did the Pike emergency response plan deal in any way with the way the police or other emergency services would relate to the incident management team?
 - A. No.
- 25 Q. Prior to the 19th of November, had you given any thought to the way in which the emergency services would relate to an incident management team?
 - A. No.
- Q. You've already been asked about the CIMS structure used by the police and fire and ambulance and I think you said that you weren't previously aware of that structure, is that right?
 - A. That's correct.

- Q. If we can perhaps pull up document SOE.001.0027 this is a manual that sets out the way that the CIMS structure works and you can see it's entitled, "The New Zealand Co-ordinated Incident Management System," now you won't have seen this no doubt?
- 5 A. I've only seen it in the last couple of weeks to be quite honest.
 - Q. If we turn to page 17 of that document and perhaps zoom in on the diagram at the top of the page, we can see that the fundamental structure under the SIMS model is an incident control at the top and then three sub-groups, planning/intelligence, operations and logistics. Is that consistent with what you now know was in operation at Pike under the police incident management team?
 - A. It appears to be consistent, yes.
 - Q. From your time in Queensland, were you aware of another structure, the Mine Emergency Management System or MEMS?
- 15 A. Yes I'm aware of it.

20

- Q. Is your understanding that the MEMS structure is essentially the same as the SIMS structure in New Zealand?
- A. The MEMS system takes into account not just the mining personnel but it takes into account emergency services including the police, ambulance and mines rescue and I think the fire fighting service as well.
- Q. Had you been familiar with that when you were in Queensland?
- A. I'd be wrong to say I was familiar with it, I was aware of it, yep.
- Q. Were you aware that under that system there was in effect a predetermined or at least there had been some provision made for the co-ordination of the mines response and the emergency services response?
 - A. Yes.
- Q. If we look at document SIM0002 which is Mr Singer's brief at page 11, we have a diagram at the top of the page which sets out the MEMS structure, and again if we zoom in on that diagram. Again we can see the same essentially structure as SIMS with an incident controller at the top and then the same three groups underneath, planning, operations and logistics?

A. Correct.

1410

- Q. Does this structure appear familiar to you from what you understand to be the ordinary practice in Queensland?
- 5 A. It's familiar as far as the main structure is concerned. I think it's important to state that not all mines work under this structure.
 - Q. In Mr Singer's brief he describes the core principles of this structure, and if we turn to page 20 of that document. Perhaps if we begin by zooming in on the top half of the page just so it's easier to read. The first principle is that, "It is essential that one person, the incident controller, establishes control of the incident. This will typically be the mine manager or the most senior mining official." Would you agree with that as a basic principle of emergency management?
 - A. Absolutely.
- 15 Q. And just to move away from the principles for a moment. The situation on 19 November at Pike was that you were, I think, both the mine manager and the most senior official on site at the time?
 - A. That's correct, yes.
- Q. If we turn to the second of those principles, that is functional delegation.
 "A system of delegation should be established to ensure that all management functions are identified and performed." Do you agree with that principle?
 - A. Yes sir.
- Q. The note to that says, "The training in MEMS developed skills and delegation and various other skills." Do you agree with that comment?
 - A. Yes I do.
 - Q. From your perspective, why is it that delegation is so important in an incident management scenario?
 - A. In my opinion, because one person can't do everything.
- 30 Q. If we turn to the third principle, "Management by Objectives." This requires an objective or desired outcome to be identified, written down and communicated to all stake holders. Again, is that a general principle with which you would agree?

- A. Yes I do.
- Q. Fourth the, "Incident Action Planning Process," and I'll let you read through that yourself. Do you agree with the way that this principle is expressed for an incident management team?
- 5 A. In general, yes, yeah.
 - Q. From your observation at Pike, were incident action plans produced by police essentially?
 - A. Essentially yes, but with consultation with the mining personnel on site.
- Q. And if we move across the page to the fifth principle, "Span of Control."

 This I think is related to the principle of delegation and essentially I think suggests that the number of groups or persons that can be successfully supervised by one person is limited. Again, is that something that you would agree with?
 - A. Yes I would, yes.
- 15 Q. To your knowledge were those principles discussed or was there any way in which they were integrated into the Pike Emergency Response Plan prior to 19 November?
 - A. Can't recall them being discussed prior to the 19th of November and I can't comment on whether or not they were integrated in the plan or not.
- Q. If we go back to the Pike ERP, it's DAO0010096, at page 11. And if we look at the top half of the page, it said responsibilities were allocated to the mine manager under the plan, namely ensuring that the emergency response management plan remained valid and was maintained accurately, ensuring that actions taken were appropriate and in keeping with best practice, approving the distribution list and making the decision at which point in time to escalate an emergency event to the crisis management plan. Were you aware of those four responsibilities allocated to the mine manager?

- 30 A. Yes, I was aware of them, yep.
 - Q. And from your perspective, were all of those responsibilities carried out in the case of this incident?

- A. With the exception of reference to the crisis management plan I would say that there were, relatively speaking, all carried out, yes.
- Q. The reference to the crisis management plan, I think relates to a document we have as DAO.003.08346, which we have on the screen now and it's labelled as a draft document.

WITNESS REFERRED TO DOCUMENT DAO.003.08346 - CRISIS MANAGEMENT PLAN

- Q. The date at the very bottom of the page, I'm not sure how accurate this is, but it seems to say the 19th of July 2010?
- 10 A. That would've been when it was printed.
 - Q. Yes. Was that a draft document that you had seen or been aware of?
 - A. No.

5

- Q. Had you become aware of it post 19 November?
- A. Only from viewing it on the Internet as part of this process.
- 15 Q. As part of the Royal Commission process?
 - A. Yes sir, yes.
 - Q. So, I take it that, obviously not being aware of this document, you didn't invoke any corporate crisis response plan or anything of that sort?
- A. No, the only thing that I would say I would've done that involved anything towards involving corporate, was when I contacted Wellington to involve them there had been an issue on site.
 - Q. If we come back to the emergency response plan, another key component of that plan was the duty card system we heard about?
 - A. Correct.
- 25 Q. I wonder if we can pull on the screen, DOL7770030015, which is duty card 1.

WITNESS REFERRED TO DOL7770030015 - DUTY CARD 1

- Q. This contains 12 actions allocated to the control room operator. If we perhaps zoom in on the bottom two-thirds of the page so we can see those 12 actions? There is a space for the person holding this duty card to note down the time that particular actions were carried out. First of all, this card, I think, was allocated to Mr Duggan, is that right?
 - A. That would be correct. He was a control room operator at the time, yes.

- Q. To your knowledge is there a version of this document that has times noted down for each of those actions?
- A. I wouldn't be in a position to confirm that, no.
- Q. Did you see Mr Duggan noting down times on the duty card at any stage?
- A. I don't recall actually watching Dan write anything down.
- Q. If we run down through the actions, we can see that the third one was to activate the tape recorder to record communications. Are you aware of whether that was done?
- 10 A. No I'm not aware whether that was done or not.
 - Q. Number 11, is to ensure that all incoming and outgoing calls are logged, again, are you aware of whether that was done?
 - A. I can't confirm whether that was done or not.

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- 15 Q. And in relation to any of the other actions on that duty card, are you able to say whether they were or were not completed on the 19th of November?
 - A. I wouldn't be able to confirm that those were or were not done, no.
- Q. If we look at duty card 2, which is DOL7770030016, this is a duty card allocated to the incident controller and ordinarily that would be the mine manger, is that right?
 - A. That's correct.
 - Q. Is this the duty card that you took yourself?
 - A. The initial out onset, yes it is.
- 25 Q. Again if we can zoom in on the list of actions, we can see that once again there is a column where you can record the time that each event has been completed, did you fill out any of the boxes on that form on the day?
 - A. No I recall filling out I think there's also a continuing sheet from that one.
 - Q. Yes.

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A. I recall filling out my actions up to a point on the other sheet.

- Q. Perhaps, so that we can see that, if we move to the second page of that document.
- A. That's the sheet that I filled out, yep.
- Q. Do you know where that sheet is now?
- 5 A. I thought I'd provided that to the Commission, if I haven't I can do so.
 - Q. That might be something that we can follow up if you afterwards if it's not somewhere already in the system?
 - A. I can have that sheet probably before the end of the day.
- Q. Thank you. If we go back to the first page, item 5, is to decide if an incident management team is required and initiate their formation. Now I take it that's something that you have told us you did do on the day?
 - A. Yes.

- Q. Are you able to say when that was done on the 19th?
- A. It wasn't right away due to the fact there was only two senior officials on site. It was done sometime after, later on in the evening.
 - Q. You can't say the exact time?
 - A. Not the exact time, no.
 - Q. Item 9 advised the inspector of mines and check inspectors of emergency and status, now I take it the reference there to check inspectors is something that we don't have in New Zealand?
 - A. Not to my knowledge.
 - Q. Does that suggest that this system might be imported from Queensland or somewhere else?
 - A. I would say it has come from somewhere else, yeah.
- 25 Q. Number 10, the point minute taker for the incident management team and get them to set up emergency response centre in the designated room, is that something that you did on the 19th?
- A. Some form of that was done, by the time that the actions were taken to do that the police were on site and I think it was about a I won't say the word confusion in case I'll be misquoted, but certainly a certain amount of confusion as to who was exactly meant to be doing what. But over the period of the next few hours a system was set up.

- Q. Why do you say there was some confusion about who was meant to be doing what?
- A. Because it was. The, as I've said earlier on I think it's surprising that the

 at the time, that the police were the lead agency because I thought
 that was the responsibility of the mine manager. So there was just a
 little bit of confusion as to who should be reporting to who and who
 should be asking what.
- Q. If you were to look at the duty card system and the plan, I suppose you might think that there's not an awful lot of confusion in terms of the way that looks on paper, for example, if we look at number 13, establish clear authority, decision making process, clearly defined goals, objectives and priorities.
- A. Yep.
- Q. That was something which obviously sat on your duty card?
- 15 A. Yep.

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Q. Why was it in particular do you think that it wasn't possible to achieve clear authority, decision making process, clearly defined goals?

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- A. I think due to the fluidity of the event that at no time I'll state that I actually go through this duty card verbatim. I acted a lot from, in fact I probably acted in general from previous training, but I didn't at any point sit down and read through what all my individual duties were. I was aware in principle what my duties were and that again I'd say that's due to prior training. But just to comment that there's nowhere in the system does it involve the New Zealand Police in the process of forming an IMT either, which is when I refer to the confusion, who is actually in control.
 - Q. We've already heard evidence that there was some testing of an evacuation process, in I think October of 2009, before you started at the mine?
 - A. Correct.

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Q. And I think we've heard evidence that there was a proposal or an intention to have a further testing process at some point?

- A. That's also correct.
- Q. Yes. But is it correct that during your time at Pike there hadn't been any exercise or any testing of this at all that you'd been involved in?
- A. That's correct.
- 5 Q. This might seem an obvious question but if there had been some testing of this system, and in particular the way that it would relate to the police, do you think that would've helped on the 19th of November?
 - A. It may well have done. I'm not sure to what extent the police would've been involved in a mock exercise other than the fact that they may well have been informed.
 - Q. Do you think it would have been helpful to have had an exercise involving the police?
 - A. Absolutely.
- Q. Are you able to shed any light on why that might not have happened or why that didn't happen in this case?
 - A. No.

- Q. From your perspective, to what extent was the Pike Emergency Response Plan suitable for requirements on the 19th of November 2010?
- 20 A. I think for the initial response it was suitable. For the actions that were taken by myself and others it was adequate to respond to an emergency. It became obvious with the magnitude of the emergency that there are deficiencies in the plan.
 - Q. What are those in particular?
- A. The continuation of such an emergency. I mean most mines I've been involved in, who have mock exercises, plan for something that may last one or two days. They don't plan for something that, effectively, lasts four or five weeks, and in this case is still ongoing.
- Q. With the benefit of hindsight are there any other aspects to the plan or to the level of preparedness for the incident that you think could have been improved?
 - A. I think it's fair to say that the frequency of training in response could definitely have been improved.

- Q. And in terms of integration with other emergency services?
- A. As I understand the process, in hindsight I think it's essential that those processes are explained in mines emergency plans and how the agencies interact with each other.
- 5 Q. Staying with the topic of preparedness for a moment, you were asked earlier about whether Pike had any plan in place for how, for example the GAG machine could have been utilised at the mine?
 - A. Correct.

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- 10 Q. From your knowledge, in Australia is that something that is sometimes done at mines, that there is a particular way of using a GAG machine?
 - A. We have to qualify what we're taught in Australia. In Queensland it's legislated, in New South Wales it's not legislated, and in Queensland every mine must have a GAG docking station and I'm unaware, and I say I'm unaware, of any mines at all in New South Wales having any form of docking station. It's at this stage in Australia it would appear to be a legislation that's unique to Queensland.
 - Q. In your view and having come through the Pike experience, is it a good idea?
- 20 A. It's certainly a good idea, yep.
 - Q. I think you said earlier that there might've been some technical challenges in having a docking station for a GAG at Pike. Do you think those could have been overcome?
 - A. Oh, they most certainly could've been overcome, yep.
- 25 Q. Is it fair to say that there had not been any advanced planning about how a GAG machine would be used at Pike?
 - A. That's fair to say, yes.
 - Q. Was it a similar position in terms of fully sealing the mine that that is something that hadn't been planned for at any stage before the 19th of November?
 - A. There's no mechanism, or there was no mechanism in place to effect any type of seal at the mine.
 - Q. Is that a type of plan that sometimes exists at a mine?

- A. Again, specifically those provisions are provisions in the Queensland legislation. Again they are not provisions in New South Wales. There's a difference between the legislation in the two States.
- Q. In your view is it a good idea to require a mine to have a plan in place in advance as to how it could be sealed if that ever became necessary?
- A. It's an excellent idea.
- Q. I want to turn now to the particular sequence of events on the 19th of November. You've already told us that you were at a meeting with, I think, Mr Ellis and Mr Mason?
- 10 A. Correct.

- Q. You received a call from Mr Duggan and that was your first alert that something was wrong, apart from the flickering lights?
- A. That's also correct.
- Q. Did Mr Duggan tell you that all communications had been lost with the mine or just that some had been lost? Can you recall?
 - A. I can't recall if he said all or some, but he did refer to communications being lost.
 - Q. Had there ever been an occasion at Pike where all communications with the mine had been lost?
- 20 A. Can't recall an incident where they've all been lost, but I do recall incidents where communications have been lost.
 - Q. So, on those previous occasions was it just some of the data coming out of the mine that had gone down?
- A. From recollection, it was mine monitoring telemetric systems, i.e. for fans and for gas analysis.
 - Q. The situation on 19 November was, I think, that all communications were lost of the telemetric nature, is that right?
 - A. That is correct.
- Q. When did you first become aware that all communications had been lost?
 - A. When I went into the control room, I saw that the screens were, from memory, they were flashing red.

- Q. Did that indicate to you that something had gone wrong of a different magnitude to any previous occasion when communications had gone down?
- A. Indicating that, sorry, indicated something was definitely wrong and yes, it's fair to say that it was different.
- Q. Were you told initially that both communications and power had been lost at the mine?
- A. I can't recall that.
- Q. Mr Duggan's evidence, as I understand it, will be that he told you in that initial phone call that it was both communications and power. I take it you have no specific recollection about whether it was both?

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- A. No. If Dan is saying that's what was said, that's probably what was said.
- 15 Q. What other information did you have from Mr Duggan at that initial stage about the problem underground?
 - A. I can't recall having any other additional information other than the fact that comms had been lost and there was an issue with comms.
- Q. One thing that Mr Duggan says, and I just want to ask you about, is that after the initial phone call he called you back, I think, five or 10 minutes later and in fact, just to make sure we've got this right, if we can have POLICE.BRF.37 up on the screen at page 4?

WITNESS REFERRED TO POLICE.BRF.37

- Q. And if we look at paragraph 16, and you can see on the screen Mr Duggan's statement says that he asked you whether the Mine's Rescue should be put on standby, and you said, "Oh, we won't go there yet, we'll get someone up there." Did you say something to that effect to Mr Duggan?
 - A. I may well have said something to that effect to Mr Duggan, yes.
- 30 Q. And the reference to, "We'll get someone up there," do you know what that related to?

- A. I was referring to confirming what had actually happened, because at that stage there was no actual knowledge of what had happened other than a comms failure.
- Q. And a power failure?
- 5 A. And a power failure, yes.
 - Q. Now, we've already seen the video recording from the portal of you going up to the portal area at around 4.16 pm using the DAC machine and moving a piece of brattice. You've told us that you believed, at that stage, that the ventilation was working normally?
- 10 A. Yeah, appeared to be working normally yes.
 - Q. I just want to ask you about the little tag that can be seen in the video shot, which sometimes is an indication of the ventilation. Perhaps if we can look at CAC0070, which is the video recording from earlier in the day.

15 VIDEO RECORDING CAC0070 PLAYED

- Q. Looking on the right-hand side of the image, underneath the DAC machine, what is the little item that we can see moving there?
- A. It's a piece of cloth, for want of a better word, a thin piece of, it's like ribbon.
- Q. We can see in that shot which was taken, as I say, earlier in the day that it is moving at a noticeable angle, I suppose, as we look at the image it's at about 4 o'clock to 5 o'clock, something like that?
 - A. Correct.

30

- Q. Was that an indication that there was a good flow of air going in through the portal?
 - A. That's what that is indicating, yep.
 - Q. And is that the normal stage of that, if we can call it the tell-tale?
 - A. I'd just like to say that until the event happened I was unaware that that piece of cloth was even hanging there. So, yes, it is fair to say that that's an event the ventilation's working, yes.
 - Q. If we go back to CAC0015 which is the video clip of you present at the portal.

VIDEO RECORDING CAC0015 PLAYED

- Q. Focusing again on the tell-tale as we've called it, is it fair to say that that's just not moving at all?
- A. Yeah, it would appear so, yes.
- Q. Now, you've said that you were of the view that the ventilation system was working at that stage?
- A. Yes.

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- Q. Of course, we now know that there had been an explosion by that stage, total loss of power and indeed severe damage at the top of the ventilation shaft?
- A. Correct.
- Q. So clearly the ventilation was not working at that point?
- A. At that point I could still feel ventilation go past me and that's why I made the assumption the ventilation was working.
- 15 Q. Is it likely that what you felt was just the natural ventilation of air starting to circulate back through the mine?
 - A. It's now known that was a natural ventilation, yeah.
 - Q. And again as we look at that telltale, as that video is played, it just hasn't moved at all has it?
- 20 A. No.
 - Q. There's one matter of timing that I would like to try to clarify with you as best I can. At some point around about 5 o'clock you took a helicopter flight up to see the vents, ventilation shaft?
 - A. Correct.
- 25 Q. And as I understand it when you came back from that helicopter ride you went into the control room and Mr Daniel Rockhouse is on the phone at that stage?
 - A. Correct.
- Q. That part of the sequence as I understand it, is 100% certain that the telephone call with Mr Daniel Rockhouse was after the helicopter flight, is that right?
 - A. I think that's correct yeah.

- Q. Your statement that was read out by your counsel at the inquest, which we had as SOE.001.00002 at page 40, that statement said that your helicopter flight was from approximately 5.02 pm to approximately 5.12 pm, we looking at about line 24 of the notes on the screen there?
- 5 A. That's what it says, yes.
 - Q. Those times 5.02 and 5.12, where did they come from?
 - A. They actually came from memory as I wrote that. Later I was able to confirm that those times actually are not correct.
 - Q. So you had remembered 5.02 had you?
- 10 A. I had 5.02 in my mind for some reason or other, but I've since the notes that I mentioned earlier where that I recorded, I've recorded the correct time on those notes.
 - Q. Right and is it the correct time as now you understand it, recorded in your brief of evidence to the Royal Commission, which states at paragraph 77 that it was from 5.15 to 5.29 –
 - A. That's correct.

- Q. that you were in the helicopter? Do you know whether your watch on the day when you made those notes was telling the correct time?
- A. I can only assume it was.
- Q. The reason I ask that is because the video footage we have of Mr Rockhouse and Mr Smith exiting the portal records that as being at 5.26 pm as I understand it. So clearly there must be some discrepancy in the timing at that point if your note says that you returned from the helicopter at 5.29, that can't be right as it's three minutes after they've emerged from the portal?
 - A. Obviously not.
 - Q. Are you able to give us any help at all in terms of that sequence of timing? Are you able to suggest where the most accurate records will be?
- 30 A. I'm afraid not, no. No.

- Q. One thing you might be able to help us with is whether you are certain that there was just one telephone call from Mr Rockhouse inside the mine?
- A. I'm fairly certain there was only one call where I spoke to Daniel, yeah.
- 5 Q. And just in terms of trying to clarify this, and I'm not suggesting that there's any particular significance in it, but do you know whether there would be a helicopter log or anything of that sort that might clarify the timing?
- A. I would suspect that under aviation rules there would have to be a helicopter log.
 - Q. You haven't seen any of those records?
 - A. I haven't seen the helicopter log, no.
- Q. Now one other point of detail that has arisen in the course of the evidence is the question of when the changeover station at 1500 metres in the drift was decommissioned or perhaps partially decommissioned. I just want to refer you to a document DAO.001.0078, which is a controlled movement of underground emergency equipment form dated 20 August 2010, which appears to relate to self-rescuers. And the notation says, "Already been moved to second fresh air base." Now are you able to help us with whether this sheds any light on when there was that change in the changeover station of a drift?
 - A. That's certainly suggesting it was on the 20th of August or thereabouts, yeah.
- Q. The reference under, "Current Location to M/D crib room," can you just help us with what that relates to?
 - A. That reference is to McConnell Dowell crib room.
 - Q. What was that crib room and where was it?
- A. That crib room, if you can bring a plan up I can show you on the plan. If you could perhaps blow up the area pit bottom south. From memory the
 McConnell Dowell crib room was in the cut through, that I'm going to point to now.

WITNESS INDICATES ON SCREEN

A. Is in this area here from memory.

- Q. Just to the left of 446?
- A. Just to the left of 446, yeah.
- Q. If we go back to the previous document and just turn over to the second page there's a reference to a north crib room and a south crib room.
- 5 Does that make sense to you?
 - A. It may well have been referring to the crib room in the south, being the one that we've just seen.
 - Q. Yes.
- A. And there was a crib room further up the mine towards the working faces.
 - Q. And if we move to the last page of this document, just to be complete. It looks as if that was signed off on the 8th of September 2010 and there's a notation at the bottom, updated plan with exactly what is where will be completed over the weekend?
- 15 A. Correct.

- Q. Now this may be something that we'll need to look for, but to your knowledge was there an updated plan prepared of exactly what was where?
- 20 A. To my knowledge there was, yep.
 - Q. Okay we can have that document off the screen now. I wanted to turn now to a topic we have already covered to some extent and that is your role as the incident controller. Is it right that you assumed the role of incident controller fairly shortly after Mr Strydom emerged from the mine and you learnt from him what he had seen?
 - A. That's correct. In fact, I'd assumed that role prior to him emerging from the mine, as soon as we'd confirmed that there was something seriously wrong.
 - Q. That would suggest it was somewhere around 4.30, 4.35?
- 30 A. That would be correct, yep.
 - Q. What did you do at that stage to advise others that you had activated the emergency plan and taken the role of incident controller?

- A. I don't recall actually doing anything. Again, due to the limited amount of staff that were available, there was, as I said myself and Mr Ridl, it was fairly obvious that one of us had to be the incident controller and I was the most senior mine official on site.
- 5 Q. At what point, if any, did you put on the vest, the duty card 2 vest?
 - A. I remember putting the vest on once I started issuing duty cards. The exact time, I couldn't recall, but the vest is part of the duty card pack.
 - Q. One of the principles that we referred to earlier in terms of an incident management team is the delegation of functions to others and I think you said the reason is because one person can't do everything?
 - A. Correct.

- Q. Can I ask why you made the decision to travel in the helicopter yourself to go and view the vent shaft rather than delegating that to someone else?
- A. I actually wanted to see it for myself because at the end of the day if it was as it turned out to be, it was, but I wanted to confirm that it was a major incident. It's not that I didn't believe if someone else had done that. I actually wanted to confirm that for myself.
- Q. From your perspective, do you believe that tasks were effectively delegated to others in the first hours after you learned of the explosion?
 - A. Yes, I believe they were.
 - Q. You've talked about issuing duty cards to others, can you tell us precisely what cards you did issue and to whom?
 - A. Oh, no, not after this period of time, no.
- 25 Q. We know I think that Mr Duggan had the control officer's card?
 - A. Mr?

- Q. Mr Duggan?
- A. Duggan, yep.
- Q. And I think at some point Mr Ellis was given the surface controller card, does that sound right?
 - A. That's sounds about right, yep.
 - Q. And I think Mr McNaughton may at some point have had the technical services card?

- A. Yeah, he may well have done, yep.
- Q. You're not aware of what other cards may or may not have been issued. Is that fair?
- A. I think it's fair to say that I don't know exactly what cards were issued or when they were issued, but the system was fulfilled with respect to ensuring we had enough people to manage the emergency at the time.

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- Q. You will have seen on Monday that a plan was put up by the police officer, SOE.019.00002, and this is a plan that records the last sightings of men inside the mine, have you had a chance to look at that plan?
- A. Not really, no.
- Q. Just take a minute now and familiarise yourself with it.

WITNESS REFERRED TO LAST KNOWN SIGHTINGS PLAN SOE.019.00002

- 15 Q. Is there anything on that plan that you would either disagree with or shed further light on in terms of the last known sightings of the men underground?
 - A. I wouldn't be in a position to disagree with what's on that other than what's already been challenged, that it's speculative in nature.
- Q. If you look at the top of the document, the sources of information are the survivors, the last drift runner to leave the mine, the contractors and B Crew, I take it all of those sources of information were available to Pike on the 19th of November?
 - A. Yes, that's correct.
- Q. Were steps taken by any one company, to your knowledge, to produce a document of this sort to record those last sightings?
 - A. I think it's fair to say there wouldn't have been steps taken to produce a document like this with a plan on it, but steps were taken to try and account for where people might've been.
- 30 Q. Can you tell us what steps were taken to get information from, firstly the McConnell Dowell Contractors, who had emerged from the mine, as I understand, only a couple of minutes before the explosion?

- A. I'm not sure of what steps were taken to interview McConnell Dowell at all.
- Q. But that's not a matter that was dealt with at the incident management team?
- 5 A. I can't recall that being dealt with no.
 - Q. From any of the members of B Crew?
 - A. Again, I can't recall that.
 - Q. From the survivors, were any steps taken to obtain information from them to your knowledge?
- 10 A. I can't be sure if that did or did not happen, no.
 - Q. In hindsight and recognising how beneficial hindsight can be, do you think more could have been done to obtain that type of information from the people who had most recently been underground?
 - A. In hindsight, that would be fair to say, but only in hindsight.
- 15 Q. Obviously a critical aspect of decision making after the explosion, was obtaining information about the gas position underground?
 - A. Correct.
 - Q. You've already told us that there was essentially no information available immediately after the explosion?
- 20 A. Correct.
 - Q. To your knowledge had there been any planning at the company, prior to 19 November, for obtaining gas data following the explosion?
 - A. Not to my knowledge, no.
- Q. Again, with the great benefit of hindsight, is that something that would've been helpful?
 - A. Again, with the benefit of hindsight, yes, it certainly would've been. 1500
- Q. What access was there to data about the gas conditions in the mine immediately before the explosion? So if we can call it the historical gas data prior to 3.44 pm?
 - A. Yeah, all the telemetric monitoring for gas was recorded in the control room and it's backed up for days, weeks, months.
 - Q. Was that data immediately accessible following the explosion?

- A. Yes it was.
- Q. Was it analysed?
- A. I personally went and checked back for the previous two days and didn't see anything unusual in the data.
- 5 Q. To your knowledge were all of the gas sensors underground working prior to the explosion?
 - A. To my knowledge they were, yes.
 - Q. Were there any limitations or deficiencies in that system that from your perspective affected the quality of the information that you had?
- 10 A. Not to my knowledge no.
 - Q. What I want to do now is just take you through some of the video footage that we have of the subsequent explosions and ask whether, from your knowledge of the mine, there is any comment you could have that may help us to understand what we're seeing. And this of course is against the background, but I don't think you were present at the mine site for any of the subsequent explosions, is that right?
 - A. I was present on the Friday which would be the 25th of November, I think, or 26th of November, that was for the –
 - Q. Third explosion.

- 20 A. third explosion. I can't recall being present for the fourth explosion which I think was on a Sunday, but I may well have been, I can't recall that.
 - Q. Well perhaps if we start with the second explosion on the 24th of November at 2.37 pm. The clip is numbered CAC0033. Just pause it as soon as it starts to play. Just before we play it the object visible in this shot, is that the auxiliary fan that you described earlier on?
 - A. That's the fan that I described earlier on, yeah.
 - Q. And are you able to help us with just exactly what we're looking at there with the auxiliary fan?
- A. The main body of the fan, I suppose the evase of the fan, not the actual fan itself is this part here. It's like the exhaust of the fan. This is again from memory I think 1400 millimetre ducting that if we'd actually intended to use the fan or if we'd actually gone ahead and used the fan

with the right information that ducting would have been advanced into the mine.

Q. Thank you if we can play that clip now.

VIDEO FOOTAGE OF SECOND EXPLOSION PLAYED

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- Q. I think it's completed now. Are you able to help us from your own observations whether there is anything of significance in that clip?
- A. If you're going to compare that blast clip with the original blast clip it suggests that the second explosion was far greater in magnitude than the first. By the time of the second explosion, if you can see the wires that are running along the ground, and I think those wires belong to the army robots that were put into the mine. The film that we recovered from the West Australia robot suggested that the furtherest inbye army robot, which from memory was around about 800 metres, possibly 900 metres, had been picked up and effectively blown for over a 100 metres. Those army robots weigh in excess of 300 kilograms. That information obviously didn't come to light until after the West Australian robot went in the mine and would suggest it was a far more significant blast than the first.
- Q. Now you may or may not have noticed this but what we've referred to as the telltale, towards the end of that clip did it show that air was once again entering the portal before it looked as if, once again air was exiting very quickly. In other words, did the mine breathe in before going into a second burst of air?
- 25 A. They showed, I'm sure it would've actually breathing out first and then as the explosion abated it swung back in again.
 - Q. Swung back in, yes. Perhaps if we can just rewind by 10 seconds or so, see if we can just see that.

DVD FOOTAGE PLAYED

- 30 Q. So we can see there, that's the mine breathing in is it?
 - A. Back in, yeah.
 - Q. And then just at the end of the clip it looks as if there's another rush of air out of the mine?

- A. Correct. There may well have been a further small explosion.
- Q. I'm not asking you to trespass into areas where you're not expert, but from your knowledge is that something that can happen, that an explosion will happen in effectively two waves?
- 5 A. It certainly can happen. It will depend on the type of explosion and the fuel available to it.
 - Q. Is there anything else you would add about this second explosion?
 - A. Other than the fact that it appeared to be stronger in magnitude, no.
- Q. We'll move now to the third explosion on the 26th of November 2010,
 10 CAC0034 at 3.39 pm. From memory actually this clip may take
 30 seconds or so before the explosion commences.

DVD FOOTAGE PLAYED

- Q. Again, do you have any observation to make on that blast?
- A. Only other than it appears to be a lesser magnitude and duration, no.
- 15 Q. Now for this third explosion there are two clips that show the smoke coming out of the ventilation shaft, and the first of those is CAC0035.

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FOOTAGE OF CAC0035 PLAYED

- Q. Is there any significance in the colour or the form of that smoke emerging from the ventilation shaft?
 - A. Other than the fact it's consistent with smoke from a blast, not really, no.
 - Q. The second of these clips is CAC0036.

FOOTAGE OF CAC0036 PLAYED

- Q. Again, I'm not asking you to trespass into areas where you may not have expertise, but there's a different colour of smoke there. Does that tell you anything?
 - A. Brown smoke would normally indicate again, I have to go from memory here, not nitrogen I'm sorry, I just can't remember the particular gas but it's common, it's a common feature in open-cut blasting that once a blast goes off, brown smoke is seen in the area. I'm just having a brain phase at the minute to actually remember the gas that I'd like to try and explain to you, but it's not inconsistent with this type of blast that you would see at an open-cut.

Q. We'll move now to the fourth explosion, and we have – sorry the fourth explosion being on the 28th of November 2010 and if we can have CAC0037?

FOOTAGE OF CAC0037 PLAYED

- 5 Q. Perhaps if we can just pause the image for a moment. In this clip you can just make out some little red and blue and green lines on the screen?
 - A. Yep.
 - Q. Are you aware of what that technology was doing?
- 10 A. I've got no idea what that technology was doing, no. I actually thought it was interference.
 - Q. Do you have any observation about that?
 - A. It appears to be very similar to the third explosion. It may well be that the same amount of fuel was burnt during that explosion.
- 15 Q. We have, I think, another view of this explosion from downhill of the portal, which is CAC0038.

FOOTAGE OF CAC0038 PLAYED

- Q. Perhaps as this is playing, are you able to help us with the cone towards the right-hand side of the screen and perhaps what the men visible in the shot are doing?
- A. I think from memory, the men visible in the shot were starting to prepare what was necessary to position the GAG near the portal.
- Q. And the road cone?
- A. The road cone may've been the start of the restricted zone. I think you can vaguely see some mesh that was also strung across the roadway to keep people away from that area.

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Q. You were talking is that place, we might see that explosion again.

VIDEO FOOTAGE OF SECOND EXPLOSION REPEATED

- 30 Q. Do you have any further comment on that?
 - A. None other than the fact that it would appear that the road cone is well outside the influence of the blast as it didn't move and it's a normal road

- cone made of plastic, had it been any closer it may well have been blown over.
- Q. We have footage of this explosion with a view of the ventilation shaft which is CAC0039.

5 VIDEO FOOTAGE OF FOURTH EXPLOSION PLAYED - CAC0039

- Q. Perhaps if you can just help us with the location of the camera and what we can see?
- A. The camera is located near the Grizzly borehole, and it's looking, not quite sure of what direction, north or south, but it's actually looking up to 10 the shaft. Just prior to the blast what you could see is the main fan evase and now, as you can see, it's gone, it's not there. dislodged by the blast. Suggesting that obviously it could've been loosened, considerably loosened by the previous three blasts but it suggests that that was a fairly significant blast at that point that 15 dislodged the fan evase, because that would weigh somewhere in the region of, I'd guess somewhere around about possibly six or seven tons, so it actually lifted it and moved it somewhere in the region of three or four metres, physically moved it away from the shaft, in fact, some of the photographs in the book that's been developed show just how far the 20 evase had been moved by that blast because that is the resting point of the evase.
 - Q. And the last clip of this explosion, the last clip I'll show you is CAC0040 which is just a continuation of this.

VIDEO FOOTAGE OF FOURTH EXPLOSION PLAYED – CAC0040

Q. What we're seeing now obviously is the emergence of flames on top of the shaft is that right?

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A. Correct, it suggests that that was a – after that point the combustion was happening either in the shaft as it may well have been as it was a rider seam in the shaft or on the other hand it could've been burning from the bottom of the shaft because around about the bottom of the shaft was actually coal.

- Q. One matter that you've touched on in your evidence is the suggestion that on the 24th of November, which is the day of the second explosion there was some discussion about whether it might be safe for mines rescue to enter the mine?
- 5 A. That's my understanding, yep.

- Q. Based on what you know about the information available from your perspective did there ever come a time when it was safe for mines rescue to enter that mine?
- A. I think it's fair to say that with the advent of further information received from the boreholes and the consistent results that were coming from the mine at the time, that it wasn't I think it was fair to say that to make that decision was possibly the right decision at the time, but of course I, I can't comment I was actually at home in bed when that process was going through.
- 15 Q. I just want to make I understand that, when you say, "possibly was the right decision?"
 - A. Well I mean at the end of the day the a fair bit of work had probably gone into that and I say probably because I wasn't there, from the mines rescue teams evaluating the, the information that they had and they would've had to have been happy with the information that was coming back that the gasses appeared to be under control.
 - Q. I think we'll have to ask mines rescue directly about the basis for any determinations they made, what I'm asking is whether from your, your own observation of the data, did there ever come a time when you believed that it was safe for men to enter that mine?
 - A. As I said earlier, the gasses were becoming more consistent and the amount of information coming from the mine was better, and so it may well have been safe at some stage to go into the mine, yes.
 - Q. When you say, "At some stage," when are you referring to?
- 30 A. I'm referring to the fact that a decision had been made to it would appear a decision had been made, I can't confirm that as I wasn't there, to actually do that.
 - Q. So you're referring to the 24th of November?

- A. That's correct.
- Q. From your knowledge and experience, particularly in Queensland, can you think of any instances when miners have successfully been rescued from underground following a methane explosion as opposed to walking out themselves?
 - A. Not from my knowledge of Queensland mine disasters, no.
 - Q. So from your knowledge it's only ever been a situation where men have either walked out themselves or not been able to get out?
 - A. Correct.

10 QUESTIONS FROM COMMISSIONER HENRY:

- Q. Mr White, I've got three areas, I'll try and be quick you've had a long gruelling experience. The first area is the tag board, in your time at the mine was the tag board ever at the entrance point to the mine?
- A. Yes it was.
- 15 Q. And what caused it to be moved?
 - A. The decision was made to move it into a place that it was more accessible in the event that something like this happened it could be accessed immediately rather than have to travel 1.2 kilometres to access it.
- 20 Q. And when was that?
 - A. I can't remember the exact date, sir.
 - Q. Was it within –
 - A. Oh, it would've been, it may well have been within two or three months of me starting at the mine.
- 25 1525

- Q. So that would be about April?
- A. I wouldn't like to confirm that, but yeah, yeah.
- Q. Yes. Now the second area is the Emergency Response Plan which Mr Mount has taken you through. If you can just help me with this, there are 12 cards, duty cards to be issued under the plan?
- A. That's correct.
- Q. Had you read those cards before you had to activate the plan?

- A. Do you mean did I read them on the day or had I read them prior to that?
- Q. No, had you read them previously?
- A. I had read the plan prior to the day, yeah.
- 5 Q. Had you read the duty cards themselves?
 - A. I hadn't read the individual duty cards but the plan itself contains an appendix which explains what each duty card is.
 - Q. Yes. One of those duty cards I noticed was number 7 was the Emergency Services co-ordinator, and that's the person who you as incident controller delegate to organise the Emergency Services. Do you remember that?
 - A. I don't remember that, no.

- Q. No. Did you actually designate anybody as the Emergency Services coordinator?
- 15 A. I can't remember designating anyone as that, no.
 - Q. Were you briefed on the plan and the duty cards when you took over, when you first arrived as mine manager?
 - A. I was certainly made aware that the plan existed and I made it a duty of my own to make sure I was familiar with it.
- Q. Now the final area. I'm puzzled about the telephone conversation with Mr Daniel Rockhouse that you had. If you can just help me with that. Mr Daniel Rockhouse told us that he made two calls. One call was from deep in the mine and the second call was from the portal and that second call from the portal seems to be about the time you arrived back from the helicopter ride. Is it possible that that call that Mr Duggan was talking to Daniel Rockhouse, when you came into the control room is it possible that Mr Rockhouse was already out the portal?
 - A. It's possible that he already was there, yeah.
- Q. So in regard to his call from earlier on inside the mine at a time that's not clear, do we have any idea who spoke to him at that time?
 - A. With the second call or the first call?
 - Q. No, the first call?
 - A. Yes, I spoke to him at that time.

- Q. You spoke to him. So are you saying that you had two conversations with him?
- A. No, I'm saying that I spoke to Daniel Rockhouse.
- Q. Yes.
- 5 A. When he was in the mine.
 - Q. When he was in the mine?
 - A. Yes, correct.
 - Q. Yes.
 - A. I can't recall having a second conversation with him.
- 10 Q. Right. And that first call, in your view, was the call that you took when you came back from the helicopter ride?
 - A. In my view, yeah.
 - Q. Right, thank you.

QUESTIONS FROM COMMISSIONER BELL:

- 15 Q. Mr White, I've got a couple of questions for you. Just getting back to the beginning of your time in New Zealand. I'm interested in how you achieved your First Class Coal Ticket over here, what process you followed for that?
- A. It's an interesting process. It was explained to me that I wouldn't have to have a professional conversation due to the fact that it was thought that there may not be anyone qualified enough to go through that process with me. What I in fact had to do was, the only requirement that was made of me was that I did a gas ticket and instead of going through the gas ticket process, which takes I believe six weeks, I challenge-tested the process by going straight to the exam, and that was conducted by Dave Stewart and I can't really remember the other guy, a Mines Rescue member, but Dave Stewart and rescue member put me through the exam process and I passed that with over 95 percent.
- 30 Q. So the whole process was fairly quick to get from the Aussie ticket to a
 - A. There's no mutual recognition as such I don't think exists. The process was relatively quick in the respect that the only thing I had to do, only

thing I actually had to do, other than provide my qualifications to EXITO was the gas ticket.

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- Q. Talking about gas analysis, I'm just interested when people were sampling the vent shaft, and I accept that it was difficult times, were they wearing self-rescuers when they were pulling gas samples out of there, or some sort of breathing apparatus?
 - A. Not in the initial instance. They were trying to get them from the evase. There was an instance where one of our employees went inside the fan housing to try and get the sample back and he was chastised quite severely for that, because he put himself and others at risk.
 - Q. Well, it just seems to me that evidence in the last few days that people have some degree of reluctance to put on a self-rescuer. Mr Strydom was an example of that. He didn't put one on either. I'm just interested to see what your thoughts on that are, in terms of when you should actually put a self-rescuer on?
 - A. Oh, if you're asking for my thoughts?
 - Q. Mmm.
 - A. My thoughts are the first sign of any smoke or suspicion of any fire.
- 20 Q. You mentioned the Incident Management System where matters are reported from time to time, I think in section 28 of your statement, what sort of numbers of incidents were reported? Was incident reporting healthy aspect of —
- A. Oh, certainly. It was a there was quite a number of incidents reported.

 Everyone was encouraged if incidents occurred to report them through the process. It was a fairly well documented process, a fairly well managed process, managed I suppose on my behalf, by the safety manager, Mr Neville Rockhouse.
- Q. And what actions were taken in terms of these incidents when they reported? Was there a process that was followed in terms of actions or outcomes that had to happen because of them?
 - A. It would depend on what the actual incident was and if it required followup.

- Q. I'm just a little bit puzzled on the blast. The first blast lasted over 50 seconds, I understand from looking at the videos. I'm just a bit puzzled that it wasn't noticed on the monitor. There was no air velocity sensors in the mine?
- 5 A. From memory there's an air velocity sensor in the actual, well not from memory, there was an air velocity sensor in the fan housing that measured the velocity of the air.
 - Q. And that was operating to the best of your knowledge on that day?
- A. To the best of my knowledge it was, yeah. I think it's fair to say the person in the control room would've been focussed on the other monitors and not on the one that shows the signs of the blast, but that's a question you'd have to have for Mr Duggan.
 - Q. Yes, well, we'll probably ask Mr Duggan. I'm just interested that there was a fair gap of time between when the explosion occurred and when the alarm was raised, if you like, to yourself about the power being off or the communications lost. There was a period of time there —

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- A. No, I think it's fair to say that Dan got onto the power issue pretty much right away, but at that time no one had seen, to my knowledge, obviously no one had seen the video footage that the people have seen today.
- Q. And just a couple more. The toolbox talks that you had from time to time depending on what was happening to do with the relocation of the fresh air base and other matters, was there any other way the information was disseminated, did you issue, was there alerts posted around the mine, was there further, was there emails, how, or all sorts of, what was your process to make sure?
- A. There were, again depending on the magnitude of what had to be passed on, there were the toolbox talks were generated as I said the other day, they were generated and read at the change of shift. Depending on the magnitude they were issued to the deputies. There were occasions where information was posted on the notice board depending on, again, what the occasions were. So it was fairly, it's a

- system not uncommon to systems of being familiar working in most of the mines I've worked in Australia.
- Q. Just finally, with regards to the mines inspector, I mean as a former deputy chief inspector and acting chief inspector, do you find it unusual that over the life of the Pike Mine there was no improvement notices issued, there was no prohibition notices issued? Have you ever worked at a mine where that's happened before?
 - A. I don't find that unusual. It would I've never worked in the system where prohibition notices are –
- 10 Q. Well, I mean, any sort of compliance notice from an inspector whether it's a substandard condition in practise, a directive, or in the case of New Zealand an improvement notice, or a prohibition notice I'm just saying to you, I'm just looking at six or seven years and we can't find any record of anything ever having been applied to the mine.
- 15 A. That would be unusual, I'd have to say that, I mean, only my own mines I've operated, I can say that it's unusual that I was issued with any prohibition notices. In the position that I held in Queensland I actually issued a number of, they're not prohibition notices but are directives.

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- 20 Q. Directives.
 - A. Yes, it would be unusual that over a period of six or seven years for a mine to go without any form of either directive or corrective action notice put on it.

QUESTIONS ARISING: MR HAIGH

25 Q. Mr White, could you look at paragraph 150, subparagraph (2) of your brief of evidence please?

WITNESS REFERRED TO OWN BRIEF OF EVIDENCE PARAGRAPH 150 SUBPARAGRAPH (2)

- A. One hundred and fifty?
- 30 Q. One hundred and fifty, subparagraph (2) describes the events on Wednesday the 15th of December?
 - A. Yes sir.

- Q. And I particularly refer to the fact that there was the meeting held at Greymouth Police Station, and you say the police made some sweeping statements about the likelihood of any bodies being recovered due to the intensity of the fire and Dr David Cliff commented that it would be unlikely after four explosions and so forth, and that you challenged that, you Steve Ellis and Peter Whittall challenged that statement as to the unlikelihood of recovery, do you remember that?
- A. That's correct, yes.
- Q. Mr Moore referred you to correspondence in a particular, and I'm not going to read them out, there was a letter from the police to the receiver, Mr Fisk, dated the 31st of December 2010, which set out a number of problems that the police had identified following on from a recovery plan that was delivered to the police which you had participated in drawing up. Do you remember that?
- 15 A. Yes I do.

- Q. So, the sequence of events is, you participate in the preparation of a recovery plan, recovery of the bodies, correct?
- A. Correct.
- Q. That's given to the police on the 22nd of December?
- 20 A. Correct.
 - Q. And on the 31st of December, the Commissioner writes back to you as per exhibit 17, outlining perceived problems as to that plan for recovery, correct?
 - A. Correct.
- Q. And the next document is a letter from the receiver which seems to be prepared by you and Steve Ellis, essentially as to the essence of it, and this is a letter from the receiver, Mr Fisk, dated the 5th of January to the Commissioner of Police providing answers to the concerns that had been raised by the police, is that correct?
- 30 A. That's correct, yes.
 - Q. And were you proposing, at that point in time, that there was still an opportunity then for a recovery plan to be properly implemented?
 - A. Absolutely.

- Q. Was there anything in the letter from the police or a subsequent report from Mr Reece, which we heard about as well? What was his firm's name?
- A. Safety Managers.
- 5 Q. Anything in there which changed your mind about how it was still open to pursue a recovery plan then at that point in time?
 - A. Absolutely not.
 - Q. Did you view ever change as a result of that exchange or anything else?
 - A. No it did not.
- 10 Q. The second point I want to refer you to is Mr Moore's reference to the two different boxes. The fire box and the self-rescue box, or the box that contained self-rescue, do you remember his, well you could hardly forget it, carting and having these brought in, and you would've heard his evidence, although we don't, well, on my part I don't know what it is that the photograph has been blown up and shown to experts, do you remember him saying that to you?
 - A. Yes I do, yes.
 - Q. And that you hadn't seen the subsequent photographs. Is anything you heard by reference to the boxes, or what Mr Moore put to you, that changes your view that what you saw in the Slimline shaft CAL image, was in fact the rescue box?
 - A. No it did not, no.

- Q. And the box that was produced as similar to the firebox or fire equipment box, are you able to say how identical that is to the one which was in the Slimline shaft? If you can't, don't
 - A. The actual box or?
 - Q. Yes.
- A. Are we making reference to the box that was shown as being open or the box that was in the actual the firebox that was in the stub?
 - Q. Well, the firebox that was in the stub, the Slimline shaft?
 - A. Is, I would say, identical to the one that was placed on top of this one.
 - Q. The wooden one?

- A. Yes.
- Q. And that one, the rescue service –
- A. This one is similar to the type of rescue containers that we had with the self-rescuers in them. I say it's similar it may not be exact.
- 5 Q. And you heard Mr Moore refer in particular to the levels that the lids went back to, 180 and 105 degrees?
 - A. Correct.
 - Q. Does that affect your view as to what you observed in that CAL scan?
 - A. No it doesn't.
- 10 Q. And the final point is can you please turn to paragraph 48 in your brief, and this follows a question that was put to you by Mr Mount. I'll just briefly read out 48. This is explaining your going down to the portal and the we've seen the video of that. "While I was at the portal Rob Ridl and John Heads arrived. Rob and John had travelled to the portal to check the condition of the electrical power at that point at the substation. I was unaware that the power was out and was only made aware of that when I spoke to Rob and John at the portal." Do you remember saying that in your evidence?
 - A. I do remember saying that, yes.
- Q. Now it was put to you that Mr Duggan's going to say that his recollection is that he actually told you when he rang you about the communications that the power was out. How do you reconcile and you acknowledge that that was possible. What is your recollection now, has it altered at all?
- 25 A. No it hasn't altered at all and I'm not going to dispute if Dan said that then in fact he did say that.
 - Q. So what do you say then about your brief that you weren't aware that the power was out until you went to the portal and spoke to Rob and John?
- 30 A. I'm saying at the time that I did this brief I believed that to be true.
 - Q. And your position now is?
 - A. It may well not have been correct.

WITNESS EXCUSED

COMMISSION ADJOURNS: 3.43 PM

COMMISSION RESUMES: 4.01 PM

MR RAPLEY CALLS

5 **NEVILLE JOHN ROCKHOUSE (SWORN)**

- Q. Now Mr Rockhouse, can you please tell the Commissioners your full name?
- A. Neville John Rockhouse.
- Q. And do you have in front of you two briefs of evidence, one prepared by the police?
 - A. That's correct yes.
 - Q. That has a reference number on it of POLICE.BRF.47/1?
 - A. Correct, yes.
- Q. And does that deal specifically with the 19th of November and what you did?
 - A. It does, yep.
 - Q. Then is there a second brief of evidence with the notation, ROCK0001/1?
 - A. Yes.
- 20 Q. And did you prepare that with your counsel?
 - A. I did.
 - Q. And does that go into more detail focusing on the issues that the Royal Commission wanted to discuss for this phase?
 - A. It did.
- Q. Just before I get you to read those briefs and I'd like you to start with the ROCK0001 brief which deals with the issues of Phase Two. Can you just tell us a little bit about yourself and who you are and your qualifications and your work history please?
- A. Yes, I've spent most of my working life in Australia. My qualifications are Australian working in the mining industry over there where I had about four years underground experience and probably about 11, 12 years open-cut mining. Came back to New Zealand with a master's degree in occupational health and safety and opened my own

consultancy. I became affiliated with the New Zealand Tutor Safety Management, NZISM and acted in the capacity of operations manager with that. At that time I was elected to represent New Zealand on the world body INCHPO where I'm – although I've stepped back from those two roles, I'm currently the president elect of INCHPO which is the international body for safety practitioner organisations globally. I had a consultancy business in Christchurch New Zealand where I operated that for about 10 years. I sold that and returned to the industry that I originally came from.

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- Q. So just dealing with that, moving to Pike River, because your brief doesn't go into that sort of detail. When did you join Pike River Coal Limited?
- A. I believe it was November 2006.
- 15 Q. And just briefly, tell us a little bit about that and what was your role and how did you come to get that?
 - A. I'd been tapped on the shoulder, I guess. I became aware that there was a role going on a Greenfield site and it was a wonderful opportunity. Not often do you get an opportunity in New Zealand, at least, to create a new business, a new coal mine, and I shared the vision that it could be, you know, the best mining operation in New Zealand and then secured the employment, secured the job, came over here and worked very very hard to create the best coal mine we could in New Zealand.
- Q. How long had Pike River Coal Limited been operating when you joined the company?
 - A. It was my understanding that it had been running for a few years, or a couple of years, with resource consents and that sort of stuff. In 2005 I believe the now CEO came on in 2005. Initially we worked out of a project office in town. There was only about five people here working out of the office and we'd go up to the site once a week. In the early days it was via helicopter.
 - Q. So you're employed to be what in the company?

- A. I was employed to be the safety and training manager. But that role changed about six months prior, five or six months prior to the explosion on the 19th of November 2010.
- Q. And changed in what way?
- 5 A. The training component of it was dropped out of it and it was more high levels of concentration on the safety aspects.
 - Q. So was there a safety person, safety manager at the mine or the company prior to you joining?
- A. No, apparently the role had been vacant for about 15 or 16 months.
 They had gone through lots of candidates and they hadn't found anyone that was suitable until I came along.
 - Q. When you came along were there systems there for health and safety already?
- A. No, it was a white paper at the beginning. There was a safety manual but it was a generic document and I read it binned it really and started afresh.
 - Q. So you started from scratch and developed the systems for the company?
 - A. That's correct.
- 20 Q. Well let's now perhaps turn to your brief?
 - A. Yes.
 - Q. The one headed, "ROCK0001/1," and please if you could read that brief to us, perhaps starting with the third paragraph, read the heading. Just take your time and we may pause to add bits as we go along.
- A. Okay. Systems for keeping track of those working in the mine. There are two main systems for tracking movement of miners underground. One is the tag board system and the other is the Northern Lights system where a microchip is contained within the intrinsically safe battery pack on each miner's belt. The tag board is a universally used system in underground mining. It is a legal requirement under regulation 15 of the Health and Safety in Employment Underground Mining Regulations 1999 entitled, "Records of employees underground." This regulation requires that a record be maintained for every employees entry into or

exit from the mine. This includes contractors and visitors coming on site and entering the underground operational areas of the mine. The tag board is regards as the required form of record to meet the obligation at law. When an employee or contractor commences work with PRCL and will be working underground they are first required to complete and pass a general medical examination. Apart from general fitness and medical history this examination covers benchmark levels for breathing, sight, hearing and so-on.

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10 Α. From there the employee or contractor would complete up to three levels of induction training depending on where that person is going to work at the mine. There are five levels in total, covering different operational areas. These are: A, induction level 1, CPP, which is the coal handling preparation plant and bathhouse; B, induction level 2, 15 general surface operations; C, induction level 3, underground induction; D, induction level 4, Ikamatua Road to rail facility; E, induction level 5, which is the hydro escorted visitor. In addition to the above and prior to commencing work at the site, all underground employees and/or contractors are required to complete an NZQA level 2 course with 20 NZMRS, or the New Zealand Mines Rescue Service. This is called unit standard 7146, or just US7146, and titled, Demonstrate Basic Knowledge and Ability Required to Work in an Underground Mine. After successful completion of this learning, including a formal assessment of understanding, the employer or contractor would then come up to the 25 mine where they would next receive levels 1, 2 and 3 site-based induction. This could take most a morning or an afternoon session to complete. This was the minimum standard for all underground workers. Once completed, and after they're passed their assessment of understanding, or test, they were then issued with the photo ID tag for 30 the tag board. Verification of each of these steps was maintained both manually and electronically in the safety and training co-ordinator's office on the electronic Vault systems maintained at PRC. At the

commencement of each shift and after the SOS, or the start of shift,

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meeting and toolbox talk, and immediately prior to boarding a drift runner, each person is required to place his or her tag on the tag board. This is also the time at which any person could be randomly searched for contraband prior to entering the mine. The underground tag board is situation under the covered walkway on the external wall of the Lamphouse and adjacent to the control room door. Contractors usually attended the same toolbox talks as PRCL employees except where shift patterns were different. In these situations the information contained on the toolbox talk, or Newsflash, which is a safety advisory, would be passed onto, usually in electronic format, to the people who controlled those employees or contractor groups. It was expected that they would be delivered prior to the start of their shift. For example, McConnell Dowell Constructors Limited had different start times and conducted their own toolbox talks. These were also sent through to the safety and training department as signed off verification that the talk had been conducted. We also sent them specific topics to be covered with After this process had been completed, the tags were individually placed on the tag board before going underground. Deputies and under managers as the mine's statutory officials, were responsible for ensuring that this procedure was followed on every shift. To the best of my knowledge this occurred on every shift. If ever the situation occurred where individuals were running late, they may have missed the SOS meeting because it usually got underway at 7.00 am sharp. If a person lost their tag or had suffered wear and tear, such as water damage, then they required to report that immediately, then there was a process where a person could get a temporary or visitor's tag from the control room whilst a replacement tag was made. This could usually be done on the same shift, and if not within 24 hours. When people exit the mine the opposite process applied. As they leave the drift runner the first thing they had to do was remove their tag from the tag board and then take that tag into the Lamp-house. Many of the employees and contractors kept their tags with their lamps on a hook provided, while others left it attached to their self-rescue units ready for

the next shift. This system relied on everyone following a set procedure. It could have been abused if people simply forgot to remove their tag or were leaving early and the person was relying on a mate to clock them out by removing their tags for them.

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I've since heard that McConnell Dowell employees left the mine earlier than they should've on the 19th of November 2010 and may have left their tags on the board to be removed later. I have no firsthand knowledge of this, but I am now aware that on 19 November 2010 there were more tags on the board than there should've been and an explanation such as the above would account for this. The Northern Lights System is a high tech system that had been planned to eventually replace the older tag board in the future. This was the situation until we began to experience problems with the system. The Northern Lights were purchased from the Australia manufacturer well before the mine breaking through into coal in 2008. The microchip on the miner's lamp was designed to record the lamp number as the miner wearing it passed through portal where there was a scanner. I understand that eventually we would get additional scanners. These were going to be located in different areas to provide more precise information of an individual's whereabouts. Each lamp number was allocated to an individual miner so that the name of the miner came up in real time on the computer screen in the control room. Other spare lamps were available for contractors or visitors and the control room managed the issue of these. Unfortunately, PRCL began experiencing problems Northern Lights System. One problem was that if a person was sitting inside a steel cage, such as the underground transport drift runners then sometimes the scanner may not acquire the person's signal as they went passed the scanner. This meant it would not register in the control room with the Northern Lights software. I am aware on at least one occasion a drift runner with a team arrived at the control room and the Northern Lights System was still showing them as being underground. This problem was identified in 2009 after Glen Campbell, the training

safety officer for Mines Rescue Service, conducted an independent audit. He discovered that two lamps were on the chargers in the lamp room, yet the system indicated that both were underground. On this occasion it was further established that neither lamp had actually been underground that day. Engineers were made aware of the problems and it was my understanding that they were working with the manufacturers to rectify these problems. The tag board in the Northern Lights Systems I have described were in place and operating on 19th November 2010. I arrived at the control room at the mine at about 5.00 pm on the 19th of November. I immediately became involved in the incident management aspects of the emergency and am not aware of any issues in relation to the number of persons underground being verified as that came later. I am not in a position to comment because I don't know about gas levels, ventilation, electrical, mechanical faults or power supply interruptions that may or may not have occurred on the 19th of November 2010. Facilities, rescue facilities in and at the mine, that's a heading. There was one changeover station (COS) and one fresh air base (FAB) underground as of 19 November 2010. The COS was situated at stub 3 at 1500 metres up the main drift from the portal entrance. This was in the form of a modified portacom structure made of fibrous material, roughly three times, four times three metres in size. The cost, the COS was built by McConnell Dowell who will have the precise specifications of this structure. It consisted of an external entrance door that could be closed. followed by another door that then entered into a room under positive air pressure. This would allow up to six or eight people to enter and changeover their self-rescue unit for a fresh one. The compressed air supply in the room was fed into that room via a pipe from the surface further down the drift. Prior to the 19th of November 2010, the COS contained about 30 to 40 Dragar Oxy K rescue units.

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A. Some of these were the 30 minute duration and some were the longer duration type. These are a chemical oxygen self-rescuer unit that have

a starter unit and contained potassium superoxide, KO2. They operate via a chemical reaction with exhaled air and transformed the KO2 into oxygen and potassium hydroxide, KOH. The potassium hydroxide in turn binds to carbon dioxide, CO2 and exhaled air. Any excess oxygen then escapes through a relief valve into the ambient air. The COS structure was in the process of being moved further up the drift to an area in or around Spaghetti Junction. My understanding is that at 19th November the air had been disconnected and the additional self-rescuers in the shed had already been relocated up to the FAB. This structure was still in the same location —

- Q. So just pause there. We've had a bit of evidence about that from your son Daniel?
- A. Mhm.

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- Q. Whose decision was it to move the structure?
- 15 A. That would be a production decision with in combination with technical services. I wouldn't in mine planning; I wouldn't necessarily be involved in that.
 - Q. And we've also heard from Daniel that the phone didn't work?
- A. Yeah, and that's unusual because one would suspect it should've worked and it should've been hooked left hooked up, so I don't know why it wasn't working.
 - Q. All right. Were people told about that COS structure moving?
 - A. Yes, we had mechanisms in place, toolbox talks and Newsflashes or safety advisories and they would've gone out.
- 25 Q. So just tell us about the toolbox talk, how is it disseminated to the staff?
- A. Okay, at the start of each shift, once the bus arrives from the bathhouse, the guys come in, they start getting their gear on, their lamps, their self-rescuers et cetera, the toolbox talk would be delivered in the lamphouse and usually by the undermanagers. I often went to a start of shift one on dayshift because that was my permanent shift. The other shifts would be covered, they would sent via email the same toolbox talks to be delivered and they would be expected to deliver them at the start of their shifts and also we had the Newsflash advisories which

would go around electronically and a copy of that would go up on the site notice boards and those that controlled contractors were asked to communicate with the groups that they managed.

- Q. Was there any sort of signing mechanism for the undermanagers that they'd delivered these toolbox talks or anything like that?
- A. Yeah, I introduced a system because I challenged several employees on practices that they had adopted and so introduced an acknowledgement form that they had to sign off to acknowledge receiving that information.
- 10 Q. So who signs that off?

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- A. The individual employees attending the toolbox talk, and I am aware that some did and some didn't, some had the view that they didn't want to sign things with, despite the fact that it was just an acknowledgement, but they were compelled to and they were requested to.
- 15 Q. And so just briefly coming back to that telephone, did you know it wasn't connected?
 - A. No I didn't.
 - Q. So I interrupted you, perhaps just continue reading paragraph 29.
- A. "The FAB is situated at the end of the 2.4 kilometre drift in coal measures and was roughly seven to 10 metres further inbye to the heading that housed the main underground fan but on the opposite side of the main drift. So it would be on the left-hand side as you're going up. The FAB is also known as the slimline shaft and is fed fresh air directly by an old exploration hole, borehole, that was reamed out and expanded in size to 600 millimetres. This occurred after the collapse of the lower portion of the lower portion of the 4.2 diameter vent shaft.

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A. The 600 millimetre borehole was not effectively 600 millimetres after it had been drilled at that dimension there had been a problem with the hole when the drillers attempted to case it. I do not recall the exact problem but I do know that the end result was the effective diameter of the hole to be used for ventilation purposes was reduced to around 450 millimetres. The FAB is approximately 10 metres by 5.3, that's a

stub, cut into coal leading directly off the main drift. It had a brattice roller door opening the FAB out onto the main drift. The roller door is made of brattice fabric that has high tear strength. This is also an antistatic fabric material that is highly flame resistant. It is not rigid but is waterproof. It is a flexible material and is often used to direct air, brattice flys, or as a temporary stopping. When developed it can also be cleated to the ribs of the FAB creating an area of fresh air.

- Q. Can I just pause you there Mr Rockhouse. So this FAB, and you've set out the dimensions, how many men would be able to fit in that?
- 10 A. I'd roughly estimate about 20 to 30 men, yeah.

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- Q. And what's your comments, if any, on that number and whether that's adequate?
- A. Yeah well if we had a hot seat changeover, which is what we operated, one shift coming on, another shift coming off, then that size would not be big enough sufficient, so it was hoped to get another fresh air base or a refuge chamber and that would've increased our capacity and we were in the process of working toward that I believe.
- Q. Just back to paragraph 32 I think you're at.
- Α. This area would be airtight only to the extent that it prevents air or 20 noxious gases entering into the space from the drift. This structure was built by Matt Coll and his team who were contracted members to the department we've referred to as the project team. Its construction was triggered as a consequence of an action plan contained in an on-going risk assessment report being prepared after completion of 25 approximately three or four months prior to the explosion. effectiveness was demonstrated and proven after a juggernaut, LHD, blew a turbo and then filled the immediate area with carbon monoxide, CO. The men working in that immediate vicinity went into the FAB and deployed the roller door. They later reported that it worked really well 30 for about the 40 minutes or so that they stayed in there whilst the CO was being dispersed by the main fans. This incident happened with the main fan in operation and sucking fresh air down the Slimline shaft. This works on a pressure differential. If the air is of equal pressure on

both sides of the brattice door then there would be no movement of air through the door. The FAB housed the following equipment: (a) Two self-rescue cache boxes. These were of hard plastic construction similar to what is on the back of a Holden ute.

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A. I believe each box contained 20 long duration Dragar self-rescue units. (b) Two nine kilo fire extinguishers attached to a fire board that could be moved by hand. (c) A fire fighting box or firebox that sat hard up against the rib and contained 3 x 20 litre drums of fire fighting foam, a stainless steel fire branch and a waterline attachment. (d) An emergency cabinet containing tools, including a shovel, hacksaw, hammer and an axe as well as a pick axe. (e) A trauma kit containing a full range of advanced first aid medical equipment, including heavy bleeding supplier. (f) An O2 kit should have been there, but there is some suggestion that it may have been moved up closer to the face. It contained oxygen and different sized breathing masks, there was also a canister of Entonox, it's sort of like laughing gas for pain relief, we're in the process of changing these out to the new hand-held pain relief tubes that a person could suck on for pain relief known as penthrox inhalers. There may or may not have been one in this location. I don't have access to my records to verify this. Mines Rescue, MRS, will also have complete records as I contracted them in to conduct monthly audits and replace any depleted first aid supplies. (g) A normal smaller standard workplace first aid kit. (h) A large orange waterproof pod that contained a large, full-size rescue stretcher, backboards, pillow, blankets, neck-brace et cetera. (i) A piece of mesh about two square metres that was used as a notice board. Attached to this were mine plans, procedures, toolbox talk or newsletter topics. (j) A telephone linked directly to the control room and other internal telephone lines. Above the phone was a sign with the relevant phone numbers, with 555 being the emergency number conspicuously displayed. A DAC internal communications system that operates in a similar way to the old party line telephone network. A person operated this by pressing a button as he or she spoke. One had

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to release pressure on the button to receive a response. In addition to the above, the more basic sets of the standard first aid and trauma kits were located with each working group in the mine including the contractors. There may have been about five different locations that would've had the first aid sets of equipment. There is a comprehensive spreadsheet recording the equipment and its location. As mentioned, I no longer have access to that spreadsheet. There would be in total around 150 times nine kilo fire extinguishers spread throughout the underground and the surface areas of the mine. About 60% of them would've been underground. Additionally, all underground vehicles, including the Toyota Man-haul had automatic fire suppression units fitted to them. Along the drift, there were fire-fighting hoses that were located at various intervals, approximately 70 to 80 metres, with hoses that were approximately 35 to 40 metres in length. This was to allow two hoses to be used on one fire in the drift if that became necessary. Next heading is "Emergency Response Procedures." PRCL had a fully developed emergency response plan, ERMP, dated 18 February 2009, it's DOL7770030012. The plan was signed off by Peter Whittall and me. This was developed by me in consultation with New Zealand Mines Rescue Service and other managers such as the environmental manager for spills and then delivered to the mine manager. The mine manager then owned that document and was responsible for its full implementation. The plan essentially describes three levels of emergencies. A, level 3, these are minor incidents that can easily be resolved using on site resources. B, level 2, events which pose a threat to life or to mining operations where external support will be placed on standby and/or immobilised at the discretion of the mine manager. And C, level 1, external assistance is fully mobilised. Encompassed within the plan is what is known as a duty card system. This was partially activated on the 19th of November. The duty card system currently has 11 cards covering 11 different roles and tasks to be undertaken during an emergency event." If I could intervene there, there's actually 12. The last one, which is the portal controller, was in the process of being

implemented. I'd done the cards and I was just waiting for a sign to come to the clipboard.

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- Q. All right, so on the 19th of November, was there a 12th card in the control –
- A. Yeah, there's a twelfth card in there but there wasn't a twelfth number to hook up on the actual board.
- Q. And did that card have the instructions and the details that we've seen?
- A. Yes, still had the instructions, and that was a recommendation from a Mines Rescue evacuation drill.
- Q. Okay, so you had it audited by Mines Rescue and they recommended a twelfth card be developed?
- A. Yeah, I had a lot of interaction with Mines Rescue because to get their input and I cover that.
- 15 Q. All right.
- Α. Okay. "This system is typically used throughout the mining industry and our system was a hybrid development from another mine in Australia. While the duty card system forms an integral part of the Mines Emergency Plan, the intent is for each card to act as a critical 20 memory prompt. An additional benefit that following the system can also provide a valuable recording and reporting function due to the nature of the duty cards being task orientated. The system is an important tool for ensuring that essential activities are not overlooked by establishing a baseline of different roles, responsibilities and authorities. 25 The duty cards are intended to offer guidance opposed to absolute control over an event, as each and every emergency situation could have a host of different circumstances. This is why it is so important to have effective, competency based training in emergency management. It was my aim to have all the systems I had created ready to be 30 externally auditable by the time that the mine reached steady state coal production. This was expected to be late February or early March 2011. That said, I'd already arranged for external emergency response audits and training to be carried out by Mines Rescue Service as this is an

imperative in any high risk business. This also provided me with the opportunity for further external guidance and continuous improvement in the development of these types of tools. I believe that over the last few years that there were two or three of these types of audits that were carried out by MRS with positive results and appropriate recommendations for improvement. I was continuing to work through these recommendations up to the time of the first explosion. In addition to the above, I had provided one-on-one training to each of the control room supervisors, plus the backup control was nominated by that shift under-manager. This meant eight to 10 people were trained in the duty card system as well as all the emergency response procedures associated with the control room. I also conducted additional training sessions with some staff on the Friday training days. I hadn't completed this training with all staff at the time of the explosion on the 19th of November 2010. This was, however, further reinforced by MRS specific training."

- Q. Just pause there. What do you mean, "Further reinforced by MRS"?
- A. Because I had several roles doing safety and training and procedure development and that, so I actually contacted Trevor Watts from Mines Rescue and got some of his guys to come out and do the same type of training with the duty cards and the emergency procedures just to reinforce it as an external aid and they did that.
- Q. To the same people that you'd already taken through the cards?
- A. Yeah, yeah, and probably a few more because the alternates could sometimes change based on sick leave or holidays, so, yeah so if anything, and again there'd be training records and sign off in the training co-ordinators systems of the guys, so it's probably more than 10.
 - Q. All right, thank you, sorry, so para 49, you're at.
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A. Okay. "In late 2009 I asked Mr Peter Whittall through a managers meeting if I could deliver training to the management team for the duty cards and emergency management system. This request was refused.

He said that the managers were professionals and would have been exposed to the duty card or similar throughout their professional careers. Mr Whittall said that he was quite comfortable with their overall ability to respond appropriately to any sort of emergency situation. I disagreed with that decision. I tried to explain that each mine was different with its own characteristics. I went ahead and arranged exercises testing the response plans with those on the frontline. In 2009 PRC carried out a full emergency exercise. This exercise was carried out with mines rescue acting as observers; MRS provided a formal written report with feedback and recommendations for continuous improvement. I have a copy of the mines rescue report of an exercise carried out in October 2009. The exercise was observed by Trevor Watts in the control room, Troy Stuart at the portal and Matt Coll underground representing MRS. The report was dated 13 October 2009 and the exercise objectives as stated in the MRS report are (a) to test the Pike River emergency procedures and duty card system; (b) to subject the shift surface controller to an emergency scenario; (c) to subject underground officials to an evacuation scenario. The exercise was carried out while the mine was in full operation and with no prior warning. I noted that the observers in the summary section of their report recall that PRC are to be congratulated for keeping the exercise as secretive as possible to give it a more realistic feel. They also recorded that the systems in place at that time required only some minor fine tuning to be robust and effective emergency procedures. They subsequently assisted me with that fine tuning."

Q. So just pause there please Mr Rockhouse. Your son Daniel said, I think in evidence, that he wasn't a participant in any full sort of emergency drill or exercise.

A. Yep.

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- 30 Q. What do you say about that or what can you say about that?
 - A. Well it occurred with the shift that was on day work, so a date was selected, there was only a certain number of people that were aware of it for secrecy and on that particular day his shift was not at work or he

could've been away and if it was I can't remember which shift it was, he could've been away on sick leave or holidays or, or something like that.

- Q. All right.
- A. But it definitely occurred.
- 5 Q. Thank you. So you're at paragraph 53, page 12 of your brief.
- Α. "An emergency exercise was planned for 2010. This was arranged by me with Troy Stuart from MRS via telephone a few weeks prior to the explosion. It had not happened by the time of the explosion. The intention was for a similar scenario based exercise to be used as we did 10 in 2009." And I believe from memory that that was due to occur around December the 10th. "In early 2009 Allan Dixon, now deceased, and I tested the duration of the Drager 30 minute self-rescue unit. demonstrated that it took 19 minutes downhill to walk from the McConnell Dowell stone drive and B heading as they were going 15 through the stone graben at that time to the COS which at that time was situated at 1500 metres inbye from the portal entrance. After spending about five minutes at the COS we continued to walk out toward the portal. I recall that my seal broke at about 42 minutes on the 30 minute unit after I coughed. Allan was walking with me as an observer and 20 without wearing a self-rescue unit. The second means of egress from this mine was a very contentious issue during Phase One of the Royal Commission. After Phase One was completed on Friday the 22nd of July, Mr Peter Whittall was interviewed by John Campbell on the TV programme Campbell Live. When asked about the so-called escape 25 way being used as a means of exit from the mine and talking about fire drills, building evacuations, why did PRC not do any emergency drills using this way out? At nine minutes and 24 seconds into that programme Mr Whittall said that one of the three escape scenarios from the mine was to be by the use of his shaft and that was deemed 30 satisfactory by the statutory mine manager, safety management on site, as well as the Mines Rescue Service and Department of Labour Mines Inspectors. I totally refute that statement. At no time did I ever accept this as being satisfactory means of exit from this mine in any type of

emergency situation. As the site safety manager I was always concerned with the intent to nominate the shaft as a second means of egress. Furthermore, once I found out about the plan to do that I did everything that I could do within the constraints of my role to actually prevent that shaft from being declared as a viable or the official means of second egress from the Pike River Mine. I can only assume this is why the risk assessment was never signed off and its actions fully implemented.

- Q. Can you just pause there Mr Rockhouse. What do you mean by, "Within your constraints of your role?"
- A. Well to put it into context. I was there four years up until the explosion, four and a half years in total. For the first two years it was just me. So I was managing contractors, I was doing a lot of health and safety development, developing procedures, paperwork, lots and lots of big hours, long hours, weekend work, night work and so-on, so I was developing the systems for the mine as it grew. I was not involved in any way, shape or form in the design of the mine or the planning of the mine, you know, that was not my area of expertise. I wasn't involved in the production decisions of where we went and what we did and that sort of stuff. And added to that I didn't have any statutory authority to be involved in those processes. So, you know, that was the reality of the situation I guess.
- Q. So it brings us to paragraph 57, page 13.

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A. My clear understanding during the construction phase of the 4.2 diameter vent shaft, that it was only ever intended to be used as a maintenance access way for the auxiliary fan. The plan at that time was to install a ladder way with rest platforms installed as described in the OSH Service, Prevention of Falls Guidelines 1997. So after installation of the main fan underground engineers could access the auxiliary fan on the surface, in bad weather, or other conditions such as nigh-time when helicopters could not fly into the back country. I recall at that time Mr Koubus Louw was both the production and statutory mine manager. My understanding at that time was that we established pit bottom in

coal, to the south, while we simultaneously were beginning to drive out to the west along the A heading. In doing this we would have then established the second means of egress out through the western escarpment. Then things began to go wrong after the bottom portion of the 4.2 metre diameter vent shaft collapsed. Mr Kobus Louw immediately stopped all work on the project and we conducted a risk assessment that was conducted. We began to have ventilation issues as we were nearing the limit of the forced ventilation system, the external fans at the portal entrance forcing fresh air into the mine. An interim remedial measure was to see work commence on a nearby exploration bore hole being reamed out and expanded in size to 600 millimetres in width, later to become known as the Slimline shaft.

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Unfortunately the drillers encountered difficulty encasing this hole so it was finally reduced in size to around 450 millimetres. Another remedial step was reducing the total number of people allowed underground at any given time. It was also decided to abandon the bottom portion of the 4.2 diameter vent shaft, block it off and then fly in around 1000 cubic metres of concrete to be pumped into the top of that shaft to plug up the bottom. This then served to stabilise the surrounding strata and also created a solid concrete plug. Next a specialist contractor from Australia was commissioned to build a smaller shaft back up to access the 4.2 metre diameter vent shaft and this was to become known as the Alimak raise. This measured some 2.5 by 2.5 metres. I think it was completed around the time that Mr Kobus Louw resigned as both production and mine manager. He informed me that this was due to continued conflict between the then engineering Mr Tony Goodwin and the general manager mines, Mr Peter Whittall. Sometime after this, Mr Michael Bevan, an Australian qualified mine manager was contracted in while the vacant production mine manger's role was advertised. The next obstacle that was encountered was when we hit the stone graben and the mine plans were altered once more to accommodate this event. Our direction changed and we headed to the

north. At around this time someone made a decision to make the Alimak raise the second means of egress from the mine. This would've been during the time Mr Nigel Slonker was operations and mine manager, refer PW22. I do not know who came up with the idea because I was excluded from the morning production meetings during most of Mr Slonker's tenure at the mine."

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- Q. Just pause there Mr Rockhouse. This means of egress or this vent shaft, Mr Whittall when he gave evidence in Phase One at page 988, says that men went up and down it frequently I think, he's talking about that. How common was it that people used this vent shaft and ladder to go anywhere?
- A. It wasn't a common thing, granted that when the infrastructure was going in the cable the cables and that sort of stuff, there were people up and down it, but it's a very strenuous climb and it wasn't something that you would commonly do, you know, for maintenance purposes, that's what it was intended originally for.
- Q. All right, and that was what it was intended for, was that what it was generally used for, maintenance?
- 20 A. Yeah, and installation of well, after installation of cables, I don't think they had an issue where anyone had to actually go up there to do work on the fan because they'd fly up in a helicopter.
 - Q. All right. Thank you, so paragraph 63, please, just continue reading there.
- 25 A. "However, once I found out about this plan, I proactively began to fight against it. I did not want to see a stop-gap measure becoming a long term solution to the issue of second egress from the mine. I also base my argument on some very basic facts such as that this shaft had no winding engine, or any sort of mechanical or electrical hoists to lift anyone who might've been injured such as a case for extracting a person on a stretcher up and out of the mine safely. Therefore, how could it be used in an emergency situation? Additionally there was a 50 metre vertical ladder with no platforms due to a lack of room to build

these into the design. Instead a static wire rope was installed that used a type fall arrest device or an inertia break, a full arrest harness and lanyard would also be required to climb this ladder. We only purchased eight sets, four in engineering and four in the safety department for emergencies, because of its intended use for fan maintenance only." I could add that there's another reason that when you climb this thing, because we did a test run on it, it had an acute angle where at one point it actually sort of, it bent back, so you're sort of looking down like that and not ideal for an emergency.

- 10 Q. So for a period of the ladder, it was leaning out?
 - A. Yeah, it did, it sort of, yeah, just for a period, and I don't exactly know why it wasn't perfectly straight. It must've been a construction issue.

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- Q. All right, continue on please.
- 15 Α. "It was also clear to me that in an emergency event that resulted in an irrespirable atmosphere, e.g. fire or explosion, our miners would be unable to climb 50 metres vertically or would not be able to climb 50 metres vertically followed by approximately 10 metres on a slight incline and then up a ladder in the 4.2 diameter shaft in excess of 20 another 50 metres in height. Through managers meetings I informed all department heads that sending miners to this point at the base of the Alimak could potentially cause a dangerous condition. I explained that the basic rule in any emergency event is that you do not send people into any sort of bottleneck situation." I again also was doing some 25 background work for the risk assessment during a portion of that assessment I was assisted by Mr Mick Bevan who had been the acting mine manager for a period of time until Mr Slonker arrived. He then became a production co-ordinator and assisted me with the control room procedures development. We found out from the technical 30 services department, that was headed up by Terry Moynihan at the time, what the safe working load of the ladder was and then did some basic calculations based on a worst case scenario. That was, if an emergency event occurred at the change of a shift where you could

have an irrespirable atmosphere and one crew was going into the mine to start work and another crew was coming out, such as hot seat changeovers, there could be up to 40 to 60 people underground. I also arranged for an external audit by mines rescue to complete a written report to support my recommendation that the Alimak could not be used as a second means of egress. I was having difficulty getting the risk assessment completed due to senior management disagreement about its official standing, maintenance shaft v second means of egress. I attempted to complete the risk assessment several times which is why the unsigned assessment was at version 4. This was becoming very frustrating to me by this stage. I had made four separate attempts to get the risk assessment completed. Finally to reinforce my view on the unsuitability of the shaft I arranged for an external mines rescue personnel to attend the risk assessment. I have an email dated 1 October 2009 from Russell Howarth suggesting a test escape. This idea was accepted and I was able to arrange for a test to be carried out with two people climbing up the Alimak raise. Mr Peter Whittall was invited to join us for the test run in the attempt to provide to him at a practical level how difficult the assent would be under perfect conditions.

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- Q. So just pause there. You said, "An attempt to provide," just re-read that again. Just take your time.
- A. Read what sorry?
- Q. Mr Whittall was invited to join us for a test run, you said an attempt to provide?"
 - A. "Mr Peter Whittall was invited to join us for the test run in the attempt to prove to him at a practical level how difficult the assent would be under perfect conditions. In late October or early November 2009 four people went underground to participate in this test run at exiting the mine via the Alimak raise. They were Adrian Couchman, training and safety co-ordinator, Nick Gribble, engineering manager, Matt Coll, representing Mines Rescue Service and myself. Adrian Couchman and Nick Gribble were the first two of this group to climb the ladder. When they got back

they informed us that they had decided not to go all the way to the surface of the mine. Nick said to me that after going the first 50 metres vertically that he was convinced this should not be declared as a second means of egress from the mine. Both men were so exhausted when they returned no one else even wanted to go up the ladder. In my view this test proved beyond all doubt that these men were barely able to use the ladder and escape in what were perfect but very wet conditions. They acknowledged that if the atmosphere was irrespirable it would've been impossible to take injured people up that ladder. Added to this was the fact that only eight people at a time could climb that ladder according to the manufacturers safe working load. This would mean that the remainder had to wait in a highly dangerous bottleneck under the ladder while their self-rescue units were being depleted."

- Q. Just pause there. You mentioned this Mines Rescue report. So was there a report done by Mines Rescue on this second means of egress?
- A. For the suitability of it, I believe there was and I believe it was actually tabled in phase one that it wasn't a good idea to use the Alimak raise. I don't know what the number of that would be.
- Q. And just looking at the fact that only eight people can be on the ladder at any one time, so the working load of the ladder, was that information provided to other senior managers?
 - A. Yes, Mick Bevan and myself went and had a meeting with Peter Whittall and told him and explained what we had done. That ladder only had a safe working load of eight at a time and Mick said to Peter, you know, and I let Mick do the talking because he's on a equal par with qualifications and that, mine manager and that, with Peter that's not a good idea to have this thing as your second means of egress.

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MR RAPLEY ADDRESSES THE COMMISSION - TIMING

CROSS-EXAMINATION CONTINUES: MR RAPLEY

Q. Just keep reading from paragraph 70 please.

Α. "I discussed my concerns with Mr Whittall and even arranged with him to attend this particular test run and what we said would be ideal conditions. Mr Whittall agreed that he would participate and even joked with me about whether we could both make it all the way up. On the 5 day of the planned drill, despite the fact that he was on site, he failed to attend even after being reminded. As mentioned overall this exercise had been arranged as a consequence of trying to complete a risk assessment on emergency evacuation from the mine using the Alimak rise as the second means of egress. Several of us thought that it was a 10 very bad idea to use this and wanted to justify this decision and convince Mr Whittall to free up some unbudgeted funds to purchase a refuge chamber for the underground workings. People I had discussed with included Pieter van this issue Rooyen, Nick Terry Moynihan and Adrian Couchman." I now recognise with hindsight 15 that another way that I could've managed that perhaps was to try and arrange a drill an official mines rescue like mine evacuation using that ladder and because it would have been a complete and absolute disaster and it would've failed and I regret that every day. Every day I regret that, that I didn't do that. But, I've had mines rescue involved and 20 I had senior managers and technical services people involved in it and I thought I was doing the right thing at the right time within the constraints that I was allowed to operate. Anyway, "Indeed the delays in completing this risk assessment had some negative flow on effects in relation to other emergency equipment placement requirements. I refer to 25 DOL7770030057/1 which is an email.

- Q. So perhaps if we can get that document bought up, it's DOL7770030057/1 and then just continue reading, thank you.
- A. "Which is an email communication from Mr Adrian Couchman to me dated 3 March. The email demonstrates how the lack of making an executive decision on the official second means of egress from the mine also affected other aspects of safety such as smoke lines and their installation. This particular issue dates back to before November of

2009 where I have an email and diary notes to support what steps have been taken. I will be happy to provide these to the Commission should they be required. Additionally, I formally responded to Adrian and the safety committee in a letter dated 17 March 2010, DOL7770030058/1."

- 5 Q. And perhaps if we can just have that document brought up too please, 7770030058/1? Can you see that Mr Rockhouse, clearly on your screen?
 - A. I can now, yeah.
 - Q. And so that's your response to Mr Couchman's email?
- 10 A. Yes, and at that stage, based on the risk assessment that we'd done or one of the attempts at that risk assessment, everyone at that risk assessment had concluded that, I'm going to take you to bullet point one, that 'The Alimak section of the ventilation shaft will not be used as a second means of egress from the mine in the event of emergency situation where the primary means of egress is blocked or impassable.'
 - Q. So that was the view you held and others as a result of these tests –
 - A. Yeah, it wasn't just me, it was there were many others involved in this process over a period of time.

COMMISSION ADJOURNS: 5.08 PM

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