



**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

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**TRANSCRIPT OF PHASE TWO HEARING  
HELD ON 12 SEPTEMBER 2011 AT GREYMOUTH**

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**COMMISSION RESUMES ON MONDAY 12 SEPTEMBER 2011 AT  
11.31 AM**

**MS ANDERSON CALLS**

**5 ADRIAN ROBERT COUCHMAN (AFFIRMED)**

Q. Mr Couchman, your full name is Adrian Robert Couchman?

A. Correct.

Q. And you have previously been employed at Pike River Coal as a safety training co-ordinator?

10 A. Correct.

Q. And that was from the period September 2008 to 2010?

A. Correct.

Q. You've prepared a written brief of evidence, do you have this with you?

A. I do.

15 Q. Could you begin reading please from the second sentence of paragraph 2?

A. "Initially my role was to set up training programmes and establish an induction process for the mine. At the time I reported to Neville Rockhouse and carried out underground audits, which were  
20 scheduled to be every two weeks but were actually carried out once a month by myself. I checked safety equipment, fire equipment and the telephones that were working underground."

Q. Can I just get you to pause there Mr Couchman. In terms of that training role that you had, was that exclusively a training role at that  
25 point or –

A. It was a combination of training and safety jobs as well. So it was a sort of 50/50 role.

Q. And what was your background for your training and qualifications for that role, for those combined roles?

30 A. Prior to that my experience I had worked with safety in terms of writing up contracts for Regional Council and for the Department of Conservation. I didn't actually have any formal qualifications as such.

Q. I'm just going to get Ms Basher to bring up on the screen just one of the audit reports that you prepared that you've referred to in paragraph 2. If we could have on the screen DAO.001.03549. Do you recognise that as one of the audit forms that you've completed when you were in your

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A. I do.

Q. Just looking down that, if we can just look at item 7, running down the left-hand side of the page, we've got a reference to, "Fire hydrant and fire hoses," so the columns running down there, is it a column with ticks in different boxes depending on the impression that you've gained when you've been inspecting or auditing these equipment?

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A. Correct.

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Q. I see the notation there, in terms of the fire hydrant and fire hoses, very poor, hoses all tangled, lying, the drift branch is missing, and if we look down the bottom of the page under, "General comments," which begins, "Fire hoses are an ongoing issue in the mine. They are not being rolled back properly, lying in the drift, branches missing and in one case it was attached to the air pipe although tagged out." Are you able to help us to understand what's been referred to in that commentary?

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A. In the drift there is a series of fire hoses every 50 to 100 metres at various intervals throughout the mine. Part of my role was to audit those fire hoses to see that they were serviceable. We found they were hooked up to the permanent water, permanent water pipeline that was running to the main drift. What we found was that the miners were using the fire hoses to fill up the mine machines so they, and they weren't bothering to roll them back up again. And in some cases to make it easier to fill the machines up they would cut the ends of the branches off, they would remove sections of the hose and use it in other parts of the mine. So it was an ongoing issue. Virtually every audit I did I came across fire hoses that hadn't been rolled up.

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Q. And that's a reference to branches that would ordinarily be attached to the fire hoses in the different places in the mine?

A. Correct.

Q. So not – quite separate from the fire branch that we've had reference to –

5 A. No they were a short plastic red fire, standard fire hose branch that was attached to the end of the hoses. So we tried different strategies to try and stop that from happening. We made it so - we made the rule that fire hoses were now red. From now on, anybody caught using a red hose for any other purpose other than fire fighting would be disciplined. We were going to look at putting T junctions into the fire hoses so that  
10 we could run an ordinary fresh water hose off the pipeline as well as running the red hoses off as well.

Q. And did that have some impact?

A. We never, I got, I was removed from the safety department before I was able to finish that project.

15 Q. Just if I could get you to look on the screen. So item 10 is changeover station to standard. We've got a tick there in the middle column, and then moving across to the commentary on the right, "Unbeknown to the safety department the 30 minute rescuers have been moved up toward FAB from stub 4 FAB?"

20 A. Yes.

Q. So that's a notation that you've made when you've carried out this audit?

A. Correct.

25 Q. Do you recall or is there a record of how many of the 30 minute rescuers were originally at the stub 4 FABs?

A. That would be the whole lot of them, the 30 minute of them.

Q. But how many of those would there be?

A. All together?

Q. Yes.

30 A. At that time there was only 30 in addition to the 40 to 60 minute rescuers. There was a combination of rescuers at the –

Q. That's helpful, Mr Couchman. So that's not a reference to the duration of the rescuer. It's –

A. There were two models of self-rescuers at the changeover station. The 40 to 60 minute ones were in, mounted on the wall and the 30 minute ones were mounted in a cardboard box on the floor in the changeover station at that time.

5 Q. And the concern that you've noted in this form is that those rescuers were moved without notifying the safety department?

A. Correct.

Q. If I could get you to continue reading your brief from paragraph 3 please?

10 A. "From about September 2010 my role became purely a training role and I reported to the HR Manager, Dick Knapp. From this time I had no official responsibility for underground audits, drug and alcohol testing, speed camera checks or fire evacuations. I was interviewed by the Department of Labour and police investigators in February 2011. At that  
15 interview I confirmed that I had been in the mine the day before the explosion because I'd had a contractor on site and we were in the process of developing a training video related to shotfiring. I had taken the contractor named Nia Edwards into the mine on the 18<sup>th</sup> of November 2010 to film McConnell Dowell shotfiring and had looked into  
20 the boxes containing the self-rescuers at the Slimline. No videos or footage was taken of the Slimline at the time. The police contacted me by email in early August asking to meet with them again. They had also left messages on my telephone. I was working near Twizel at the time and I was not easily accessible. In the end, I emailed the police on the  
25 28<sup>th</sup> of August and had a second interview on the 30<sup>th</sup> of August 2011. This interview was about the boxes located at the Slimline.

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A. I understand that the Royal Commission has asked for a statement from  
30 me about the boxes at the Slimline and my inspection of them on the 18<sup>th</sup> of November. At about 2.00 pm on the 18<sup>th</sup> of November 2010, I went into the mine with Nia Edwards to watch McConnell Dowell staff prepare and then fire shots into rock where an equipment stub was being currently constructed. This was the first time I had been in the

mine for about three weeks. We were underground that afternoon for about three or four hours and were initially dropped off at the McConnell Dowell crib room where we met with Les Tredinnick who was a shotfirer and we had worked with him in the past filming with him up on the surface. We wanted to actually film him doing a shot in the mine and we had taken under an approved camera. We watched then filmed McConnell Dowell staff, Les Tredinnick, prepare the face for firing. There was a delay with the firing which caused a delay for the shift staff changeover that afternoon. Nia and I mingled with the shift that was coming on duty that afternoon while we waited for the McConnell staff to fire the shot. While waiting, I was talking to some C crew staff namely Danny Herk and Allan Dixon as I knew Allan Dixon quite well from when he had worked in my office for three months due to a re-occurring knee injury. After the shot was fired, we took some further video footage of the results and then proceeded to leave the area and head back to the Slimline fresh air base to catch a ride on one of the departing drift runners. While we waited at the Slimline fresh air base for the drift runner to arrive out of habit, I went into the fresh air base and opened up two of the self-rescuer cache boxes and did a quick count up of the self-rescuers within the two boxes. It was about 4.00 pm in the afternoon. This was a habit that I'd done whenever I went underground from when I conducted safety audits for Neville Rockhouse in the safety department. I opened one of the cache boxes and count, what I remember to be about, I opened up both of the caches boxes and counted what I remembered to be 108 rescuers. Only 100 persons were allowed underground at any one time, so there were sufficient rescuers for every person underground with some left over. More than were actually needed. I recall there were 60 of the 30 minute rescuers and 48 of the 40 to 60 minute rescuers. After counting and assuring the condition of the self-rescuers, I sealed and locked the cache boxes."

Q. Can I just get you to pause there Mr Couchman. That reference to, "Sealed and locked the boxes," can you explain the action?

A. The boxes have a plastic toggle. When I say, "Locked," I meant I re-closed the clasp back on them and they have a plastic toggle which I reinserted. In terms of locking, it was just a matter of reinserting the plastic toggle back into the latch.

5 Q. Thank you. Just continue from paragraph 14?

A. "The boxes have three clamps and a locking toggle on them and will not open by themselves. Each clamp has a plastic toggle. There are two hinges at the back. The rescuers were packed into boxes in two rows, longways across the box. They were in two layer stack but not tightly stacked. They were loosely positioned in each box did not have any separators, foam pads or anything else between the rescuers. The rescuers were packed into two boxes because we couldn't get the required number in one box, so as a result they fitted loosely and comfortably and were not too tight. When stacked the rescuers reached about two-thirds up the height of the box, my best estimate is that the self-rescuers are 200 millimetres in height so that when stacked on top of each other they would leave approximately another 200 millimetres to the top of the box. I have not actually measured the dimension of these boxes, but my best estimate is the boxes were a metre in length, 20 600 mls in height, 600 mls backwards in depth. I would estimate the weight of each box at about 90 kilograms and you would need two men to lift or move the boxes when they were full."

Q. Can I just get you to pause there, Mr Couchman.

25 **WITNESS REFERRED TO HAND-DRAWN IMAGES OF SELF-RESCUER BOXES**

Q. Mr Couchman, when you were interviewed you did some drawings for police to describe the boxes from a birds-eye view and other positions? Do you recognise that as the drawing you prepared for police?

A. I do.

30 1145

Q. So you've got a notation there, 'That's a bird's eye view looking down into the top of the box'?

A. Correct.

- Q. And there's a notation, 'Two layers high'?
- A. Yes.
- Q. There's some measurements around the corners of the box there, at the top right we've got 600?
- 5 A. Yeah, at the time that I drew this, I was trying to do it off memory. The police officer I was discussing this with, I wasn't, I was caught unprepared. I was trying to recall what I'd actually was drawing, so this is basically an estimate, yes.
- Q. This is just a schematic to assist the explanation with of the boxes?
- 10 A. Correct.
- Q. And are we to take it that there's nothing particular about the number of self-rescuers or the shape that you've drawn indicating that they're –
- A. No, they're not to scale. The drawing's definitely not to scale.
- Q. And just to the right of the box, that notation, '108' with a question mark,
- 15 is that your notation?
- A. Yes.
- Q. Can you just look at the next – before we move on to the next paragraphs of your brief, just look at the next diagram? Ms Basher, are we able to highlight just the – it hasn't come out perhaps as clearly in that electronic copy, but do you recognise that as the second drawing that you prepared?
- 20 A. It is.
- Q. So the drawing – Ms Basher are we able to highlight the bottom drawing which has got the word, 'Drift,' and the direction, so it's just looking at the Slimline itself? So that's, you've notate – you've indicated the direction of the drift and the Slimline and the placement of the boxes?
- 25 A. Correct.
- Q. So, do we understand the notation that you've got two caches side by side with the notation, "Fire behind?"
- 30 A. Yes, the firebox was behind the second cache box.
- Q. And again, you've drawn these from memory?
- A. Correct.
- Q. If I could ask you to begin reading at paragraph 18, please?



A. “There was a third box in the Slimline and I recall this box was sitting behind the two cache boxes containing the rescuers. The third box was the fire fighting box, which was a plywood firebox that had been built by a local builder. In side there were three 20 litre drums of foam and a stainless steel foam mixer across the front of the box. There was a wooden plywood divider down the middle of the box with the three 20 litre drums behind and the stainless steel standpipe in front. The box was painted white with green lettering and reflectorised tape on it. It had metal handles on each end and was too big for one person to carry, needing two people to lift it as it weighed between 90 and 100 kilograms. I think that previously there was a first aid kit in the Slimline but it had been moved forward. It was my understanding that the Slimline was to be extended and made bigger, even having an office out the back of it. The condition of the floor in the Slimline fresh air base was rough and sloped backwards to the back of the room. It was a messy and broken and rubbly floor and I think there was some mesh on the wall. There was a roller door that was a big plastic sheet and it was like rolled up tarp across the front of the base. When the drift runner arrived at the Slimline fresh air base, it quickly filled with miners and contractors wanting to leave and there was no room left for Nia and myself to get on board, so we decided to walk the approximately two kilometres out of the mine and as we walked down the drift, I took it upon myself to check the telephones that I came across on the way out. I found two telephones that were not working. One was in the transformer bay at pit bottom and the second one was in the portable changeover base located along the drift. When I went inside the changeover base, I noted the fresh air valve at the back of the refuge base was turned on, but there was no air coming in as there usually is. When I got back to the control room I verbally reported that there was no air going into the changeover station and that the telephone was not working. I can't remember who I reported it to, as there was just a group of people within the control room at the time. I was told not to worry because the changeover station was in the process of being

decommissioned and being prepared to be moved forward, further into the mine. As for the second telephone I'd reported in the transformer bay, I was told that they would get an electrician to check it out. It must've been close to quarter to six by the time we walked out of the mine. At the end of the interview on 30<sup>th</sup> of August I drew a sketch for the Slimline layout and of the boxes and their location within the base on the 18<sup>th</sup> of November 2010. The sketches I drew are attached to this statement.

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10 **CROSS-EXAMINATION: MR DAVIDSON**

Q. Mr Couchman, in your evidence you refer to the 50/50 training of safety roles that you assumed?

A. Correct.

Q. And you undertook a test climb of the ladder up the Alimak raise?

15 A. I did.

Q. Can you recall when that was?

A. I can't recall the exact date, no, but I do remember doing it.

Q. And the context of that was what?

A. I'd been taken underground by Neville Rockhouse to assist with the testing of the possibility of using the vent shaft as a second means of egress into the mine. He'd just invited me along for the trip, we were meant to meet Mr Whittall underground at that time.

Q. And what actually happened?

A. We all arrived at the Slimline, at the base of the vent shaft sorry and waited for Mr Whittall to turn up. It soon became clear that he wasn't going to come so Nick Gribble, the engineering manager who was there, went up the ladder first, once he put on a fall arrest harness on, clipped himself onto the lifeline and proceeded to climb up the shaft. I put on the second harness that was available and clipped it onto the lifeline and followed up behind him.

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Q. How far did you go?

- 5 A. We got up as far as the 50 metres, we climbed the first 50 metres of the shaft until the point where the ladder slopes slightly. You've got to understand, it goes around the concrete plug that we put into the ground and where the ladder changes direction and starts to slope towards the final section of the shaft, we both got as far as there. When we both got there we were just physically exhausted, to the top of that point. We both looked at each other and said, "We're not going any further," and made the decision to climb back down.
- Q. Now the conditions at the time you were doing this, were what?
- 10 A. Extremely wet, was a lot of water coming down the shaft at the time, cold and extremely physically demanding actually, just physically climbing up that ladder.
- Q. So you got, you say, how far up -
- A. About 50 metres up.
- 15 Q. And apart from the exhaustion you were feeling at that stage, what was it about the next stage of the climb had you undertaken that concerned you, was there anything?
- A. Well there was no further, we both, well I realised that we'd actually gotten over the most hardest part. The purpose of our role there was to evaluate whether we could use that entrance as a second means of egress. We both came to the conclusion at that stage that there was no way that you were going to get people up that in an emergency situation.
- 20 Q. Was that the subject of discussion by you with anyone, the result of that climb?
- 25 A. When we both came back down the shaft, and once we caught our breath, we both said to Neville there was absolutely no way that you could use that as a means of egress. So literally as soon as I got back down with Nick Gribble.
- 30 Q. And do you recall the subject being raised again with you after that?
- A. I'm sure that Neville and I discussed it, I don't remember any specifics, I know that my recommendation to Neville at the time was that that was not to be used as a second means of egress.

Q. Now if we come back to the question of the self-rescuers. You, in your paragraph 11, refer to waiting for the drift runner to arrive and out of habit you went into the fresh air base and opened up the two boxes?

A. Yes.

5 Q. So is it something you did on a regular basis?

A. When I was working for Neville at that stage I would go underground once a month when I could and conduct audits of the telephones, safety equipment, whether the miners were wearing PPE, the appropriate PPE, whether the first aid boxes were appropriate, they hadn't expired, the equipment hadn't expired, so I just did a range of general safety  
10 checks throughout the mine. Part of that role was checking and counting on the self-rescuers at that fresh air base.

Q. Would you record that somewhere?

A. They were record, well it was recorded on that sheet that I was shown  
15 earlier.

1155

Q. But usually whenever you made a check you'd record the result of that check, would you?

A. Yes.

20 Q. You then say you counted what you remember to be 108 rescuers?

A. Yes.

Q. Do you have a record of that?

A. No. That audit I did then was not an official audit. I was just out of habit - as I said, I was no longer working for the safety department at that  
25 stage and out of habit I just went and checked the boxes.

Q. And you counted them out on this occasion?

A. I didn't count them out as such. What I did was I counted the top layer and then doubled it by two. It wasn't an exact count.

Q. How were they made up? You refer to 60 of the 30 minute rescuers and  
30 48 of the 40 to 60 minute rescuers. Were they split equally between the two boxes?

A. No they weren't. There was a mixture of the 40 minute rescuers and 30 minute rescuers in one box, and one box was exclusively 30 minute rescuers and the other box was a mixture of the two.

5 Q. Now looking at the two boxes as you saw them, as you came into this section, which was the one that had the 30 minute rescuers only?

A. The second box.

Q. The furthest inside or the –

A. No, no. The cache box was, cache box 1, which is the one the furthest into the stub.

10 Q. Yes.

A. Cache 2 box, which is the one that was open, that's the one that had the 40 minute ones in.

Q. And then you sealed and locked the boxes after you'd made the check?

A. Yep.

15 Q. And you've described the self-rescuers as being about 200 millimetres in height, leaving about 200 mls to the top of the box?

A. Thereabouts, yes like.

Q. Could you bring up please Police Brief 51/12?

**WITNESS REFERRED TO POLICE BRIEF 51/12**

20 Q. If you'd see that on the screen there and this is part of a brief of Mr Moncrieff, and at paragraph 37, drawing on imaging he has examined, he's put the boxes in the configuration you see there box 1, 2 and box 3 in behind. Do you see that?

A. Yes.

25 Q. Does that broadly accord with the way you recall it?

A. Yep, yes.

30 Q. And if you read the text of paragraph 37, he refers to two large boxes clearly visible resting on the ground in the foreground of the scan. A smaller box appears to be behind and only partially visible in the gap between the boxes. He then talks about boxes 1 and 2 appearing to be set forward. Just look at the dimensions in the last two lines please? Boxes 1 and 2, he says, are about 1.8 to 2.4 metres from the rib

respectively, and the front of box 3, the one behind, is about 1.3 metres from the rib. Again, does that broadly accord with your recollection?

A. Yes. I remember looking at the firebox 'cos I'd just finished locking up the second box when I remember looking at the firebox thinking I should look in that, but because it was behind the other box then the drift runner pulled up and everyone got on board, so that's when I left.

Q. Could you bring up please SOE01700001.

**WITNESS REFERRED TO SOE.017.00001**

Q. That, I take it in your evidence, is the open box on the right-hand side?

10 A. Yes.

Q. Nearest the camera. Now, relying for the fact this is a CAL scan, can you make any observation about the lid of the box that's opened. Does it tell you anything about that box as being a self-rescuer or other box?

15 A. It would indicate to me that that, well the box is actually open on that front box. There appears to be moulding within the box.

Q. Are you talking about on the inside of the lid?

A. Yes.

Q. And by moulding, do you mean what appears to be ribbing in the CAL scan?

20 A. Correct.

Q. Does that accord with what you recall of the inside of those boxes?

A. Yes.

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**CROSS-EXAMINATION: MR WILDING**

25 Q. Mr Couchman, you referred in your evidence to a portable changeover base, does that mean the white McConnell Dowell changeover base?

A. Yes.

Q. And the self-rescue cache at the bottom of the Slimline, is that the only cache of self-rescuers that you're aware of underground?

30 A. Those were the only two that were available.

Q. Ms Anderson took you to one of your audit reports, to whom are they sent?

- A. When I completed those reports I would submit them to Neville Rockhouse.
- Q. Would you discuss them with anyone?
- A. I would discuss them with Neville.
- 5 Q. The audit report you were shown was done in July, did you also do reports for August and September?
- A. I did one for August 2010. I didn't do one for September.
- Q. And that's when you stopped your safety training co-ordinator role?
- A. Correct.
- 10 Q. Who took over from you?
- A. Nobody.
- Q. Did anyone take over doing underground audits?
- A. Not that I'm aware.
- Q. You referred to your note in relation to the fire fighting hoses, would it be fair to say the potential consequences of the issues you'd raised in relation to those were that they would be difficult to use in an emergency?
- 15 A. Correct.
- Q. And they might present a tripping hazard?
- 20 A. I wouldn't – no they, main concern was the fact that if they were in a tangled mess on the side of the wall or lying on the ground, they're not so much a tripping hazard, more of a, if you had to run them out quickly to fight a fire, they would not be available to you.
- Q. And in that audit report you also referred to a move of self-rescuers from the portable changeover base without safety having been notified?
- 25 A. Correct.
- Q. Do I take it from that that it was a requirement that such moves only occur with the consent of safety?
- A. Correct.
- 30 Q. And what do you mean by "Safety?"
- A. The safety department, which consisted of Neville and myself.
- Q. Are you aware of whether the fact of that move of the self-rescuers was notified to miners before the explosion on the 19<sup>th</sup>?

A. That occurrence occurred, the miners did that themselves. They took it upon themselves to move those forward, so that one was not notified prior to the explosion. That, we – subsequent to that occasion, we got those two plastic containers and filled them with – we purchased further self-rescuers and filled the two containers with them and moved them forward. And that was communicated to the staff.

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Q. If I could just ask you to look at DAO.001.03549/4?

**WITNESS REFERRED TO DAO.001.03549/4**

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Q. Do these two photos represent the issues that you were talking about in relation to the fire fighting equipment?

A. Yes, they do. I took these photos.

Q. Would you tend to take photographs of the areas of concern when you were underground?

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A. No, not necessarily. I had gotten so frustrated with the fact that the fire hoses weren't being maintained and that a lot of the issues that I was identifying were not being addressed, that I took photographs to sort of emphasise the point.

Q. I take it you could assist in the preparation of a plan with accompanying photos showing the areas of concern to you?

20

A. To me, yes.

Q. If I could just take you to DAO.002.08155/1?

**WITNESS REFERRED TO DAO.002.08155/1**

Q. And I take it this is an email from you to Mr White, Mr Rockhouse and Mr Ellis?

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A. Correct.

Q. And it expresses concerns about some of the safety equipment down the mine. In what capacity were you writing that?

A. I was writing this letter in my capacity as the chairperson on the safety committee.

30

Q. And that was a role you still held up till the date of the explosion?

A. Correct.

Q. If I could take you please to the same commencing DAO number, but ending 55/1? Sorry, 57?



**WITNESS REFERRED TO DAO.002.08157/1**

Q. It's a bit difficult to see, but is this the response also on 9 November at 2.06 pm from Mr White to you with his comments interpolated?

A. Yes I wrote this letter and this is Doug's reply.

5 1205

Q. Just ask Ms Basher to highlight the bottom third from the paragraph commencing, "Availability of warm wet-weather gear." One of the concerns you've raised in the first sentence is the available of warm wet-weather gear and orders for placement of PPE. And "PPE," presumably, stand for personal protection equipment does it?

10

A. Correct.

Q. Was any of the equipment the subject of that sentence, equipment that would be necessary for men to self-rescue themselves?

A. No.

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Q. The next issue raised by you is the one in relation to the fire hoses and Mr White's reply is, "Management of fire hoses will not stop the tardy lazy practices of people who obviously don't care about the proper use of equipment, a fire fighting plan is being formulated which includes the replacing of pipes and fittings in the drift and replacement of fire fighting equipment." Had a fire fighting plan been formulated by the time of the explosion on the 19<sup>th</sup>?

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A. I'm not aware of one. The fittings, the pipes and the fittings and the replacement of fire fighting equipment was what I was tasked with putting into place which was then removed from me once I left the safety department.

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Q. And to your knowledge that hadn't been done by the 19<sup>th</sup>?

A. It hadn't been done, no.

Q. The next concern you've raised is, "Concerns of the fact that there is often no drift runner left at the face during the one hour changeover period. If an excavation was declared at this time, then it would seriously impede excavation." And I take it the issue here is that it would be quicker for men to get out of the mine in a vehicle than on foot?

30

A. Yes it would be.

Q. How long, in your experience, would it take to walk from the Slimline fresh air base to the portal?

A. Up to about half an hour.

5 Q. How long would you expect that to take in a vehicle moving as fast as it could reasonably go?

A. Probably 10 minutes, yeah, 10 or 15 minutes, it'd be out of there.

Q. And do I take it that your view would be that, presumably because of the length of the drive, there should always be a vehicle available for those  
10 working at the face?

A. These concerns I've raised here, in this letter here, are from the safety committee, so even though I've written the letter, this is actually coming from the safety committee itself, so the miners that were present on that day raised the concerns of the drift runner not being available for  
15 evacuation in that one hour shift over changeover period.

Q. If I could just ask Ms Basher to turn to the next page which is ending /2 and just highlight please the centre third of that. And another concern you've raised, just at the top, quote, "Concerns were raised about the availability of the controllers at times on several occasions, they have  
20 tried to raise them on the DAC or the phone and have had no reply." And Mr White's response is, "The control room is manned 24/7. If these events can be documented at the time of happening, they can be investigated." Do you know whether that issue had been investigated by the time of the explosion on the 19<sup>th</sup>?

25 A. I don't know if they'd been investigated no, at that stage, no.

Q. Do you know if it was still an issue as at the time of the 19<sup>th</sup>?

A. I took it upon myself to actually start making a note of occasions but there was no official investigation at that time.

1210

30 **QUESTIONS FROM COMMISSIONER HENRY:**

Q. Mr Couchman, you said, "I was removed from the safety position?"

A. Restructured.

Q. Restructured?

A. Yeah.

Q. What were the circumstances in which that occurred?

5 A. The explanation that was given to me was that my training role was to be moved into the HR flow and that Neville would be focusing exclusively on safety.

**QUESTIONS FROM COMMISSIONER BELL:**

Q. Mr Couchman, in the first part of your statement you say that the audits were reduced from once a fortnight or once a month, why was that?

10 A. They were reduced as such, it was a timeframe, it was just having time available, time to do the work that we had available to do it. We didn't consciously reduce them to once a month. We schedule them once a fortnight but time only allowed us to - we only managed to try to get them in once a month.

15 Q. So it was lack of staff, would that be a reason?

A. Correct.

Q. I'm just interested in these boxes, the self-rescuers, you talk about the toggles that you slipped into the locking devices, do you think that those boxes would be easily blown open by a shockwave or by a pressure wave?

20

A. No I do not.

Q. So they'd be hard to blow open?

A. Correct.

Q. And Mr Stiles last week told us that the boxes are actually lined up in a row, but I think you're saying that they were not in a row, in fact one of the boxes, the box containing the fire fighting equipment was behind the other two, is that correct?

25

A. Correct, yes I do. I actually physically remember thinking at the time, because I was going to reach over and open it and I couldn't, because the clasp, or the hasp was in the - I'd have to move one of the boxes to get at it and the then drift runner pulled up so as it wasn't an official audit I didn't open the third box.

30

Q. And just finally, you mentioned you picked up the two telephones weren't working as you made your way out of the mine, and I know one of them they said they weren't going to fix because the base was moving further inbye?

5 A. Forward – being decommissioned yeah.

Q. Do you know, was the transformer phone fixed?

A. No I do not.

Q. And what was the process to get something fixed? Did you fill out a form or did you have some sort of mechanism where you raised a fault or some sort of system within the mine to get it repaired?

10

A. There wasn't actually a – there may have been a formal reporting process but at that stage and on that particular day I was in a hurry, I was late as it was, and I just stuck my head into the control room and reported it to the controllers in the room at the time.

15 **QUESTIONS ARISING - NIL**

**WITNESS EXCUSED**

**MR LUMMIS CALLS****DANIEL PATRICK DUGGAN (SWORN)**

Q. Please state your full name?

A. Daniel Patrick Duggan.

5 Q. Were you previously employed by Pike River Coal as a control room officer?

A. Yeah, correct.

10 Q. Did part of your duties include communication with miners and contractors underground, monitoring gas levels, air velocity, barometric pressure as well as controlling the water pump that supplied water into the mine?

A. Yes.

15 Q. If Ms Basher can bring up the photograph that we have recently obtained of the control room, will I think will need to be produced as exhibit 25.

**EXHIBIT 25 PRODUCED – PHOTO OF CONTROL ROOM AT PIKE RIVER COAL**

20 Q. Mr Duggan, looking at that photograph on the screen there, can you describe for us whereabouts you would sit and what those eight different computer monitors that we can see, or one screen and seven computer monitors, what they had on them?

A. Yeah, no worries. If you can you see that, that was where I'd sit in the corner seat there normally, or over there where we got the internet computer there.

25 1215

Q. So the corner seat being directly below the emergency management board, or to the – as is shown on the photograph, to the left of that?

30 A. Yeah, probably slightly, probably more around this area here. I mean it depends what's going on, if I'm controlling water pumps and stuff, I'd be using these computers, so I could sit anywhere along here, had wheels so you could just slide round as you need.

Q. So you're saying the water, computers that monitor the water pumps were those we can see on the right-hand side of that photograph?

- 5 A. Yeah, oh, one, two, three, four, of them. That's the computers I use for controlling the water underground water control. Also, you'd have gas readings and stuff on there. You'd have all your alarms that would go off, the power. You could look at your fans, so you could switch between screens. There's lots of different screens, so, not just what you're seeing there. You could switch over and look at different things and power sources and all that. That one there was just the old safe gas system, so it's just the real time gas sensors from underground.
- 10 Q. So that's the screen closest to the corner of the room that you're indicating –
- A. Yeah, that's the corner screen, so that's where we record, every three hours we'd record gas readings, velocities, oxygen, methane underground in certain stations. That there was just our internet computer and also we'd do our reports on there to be emailed to certain managers, senior management in the mornings.
- 15 Q. Did that include the control room offices event log report that monitored what you, who you'd had contact with during the day?
- A. Yes, I'd do mine online or pretty much on a spreadsheet. Some other controllers just done theirs manually, just write it down there as it goes.
- 20 I normally write notes and then every say, time when you get a spare chance, you just go off the notes and fill it in on the spreadsheet in the computer. That one there was our DAC system, so just a touch screen DAC system.
- 25 Q. I'd like you to explain in some more detail how the DAC system worked from the controller's perspective?
- A. Well, it's not on at the moment there. Just basically when it's on, you've got touch screen situation, you could just press one button and that would turn the DACs on, it would highlight green, so you know it's on, just this one button, and then you can press, "Call," and that just makes an alarm noise which calls all DAC systems underground. There's probably, well, probably be up to 20 or so, 15 or 20 DACs spread throughout the mine, and yeah, as I pressed the "Call," button, the noise would go on all the DAC system and if I was after someone, then you'd
- 30

call them. Whether or not they hear or not, someone else might say, "Last I seen him, he was up here or going there," so yeah, you could communicate underground with most of the places.

5 Q. Could you isolate a particular area of the mine that you were interested in, say up by the ABM machine?

A. I wasn't quite sure actually. It'd only probably been introduced a month earlier, so when I called, I just used the whole mine, so it didn't really make a difference, so that's the way I used it.

10 Q. Then on the very left of that photograph, we can see a much larger screen. Can you tell us about that?

A. They were cameras, so we had, you know, probably up to 10 different cameras around the place. We had one for the yard, which is just out the room there. You had some down the wash plant, had some in the bathhouse down the wash plant area, and then you had one at the portal, which was quite new as well and you also had a couple underground in the wash bay areas, where we'd flume coal and stuff, just keeping an eye on crushers and stuff to make sure there's no blockages. Yeah, and it was a split screen so you could either look at one big picture or you could look at, so, you'd have like a big area there and then you'd have all the little ones around it and it will just change. It would just change from one screen to the other.

20 Q. What was the usual formation that you had the screen in?

A. Yeah, that formation I was just talking about. It's not like that actually, it's more, you'd have like, your little screens going round there, then a big area like that would be one main screen and it would just change every 10 seconds, go through the whole lot throughout the day.

25 Q. Could you adjust to focus in on one area if you wanted to?

A. Yeah.

30 Q. Did you ever do that?

A. Yeah, sometimes, if I'm by my computer's here, something wasn't looking right, pressures were different on the pipes with the fluming underground, I might zoom into the fluming stations or crushers and

have a look to see if there's a blockage, 'cos sometimes you could, yeah, see that there's a build up of slurry.

Q. Was there any sound associated with those images?

A. No.

5 1220

Q. Now, if Ms Basher can bring up document DAO.010.00326.

**WITNESS REFERRED TO DOCUMENT DAO.010.00326**

Q. Now, this is – do you recognise that as being the control room officer's event book?

10 A. Yes, yeah.

Q. And that one is one, I think, actually completed by you on the 18<sup>th</sup> of November 2010?

A. Yeah, looks like it, yeah.

15 Q. You've mentioned that you would fill in on the computer, when time allowed, your notations, and then at the end of the day would you print that off and sign at the bottom, as we can see you've done on this particular form?

20 A. Yeah. Normally we'd print it off and I'd normally print a couple of copies and give one to the oncoming controller as we have a changeover. We sort of have five or 10 minutes and I sort of run him through what's been going on, what the problems are, what's coming ahead if there's any breakdowns or, and yeah just he'd have that available for information and also we'd, we could hand it on to the undermanager and they'd normally sign it off as well.

25 Q. And where we see the notation "monitor" there, that's referring to the hydro-monitor?

A. Yeah, hydro-monitor.

Q. And it goes over onto a second page, which refers to some other areas in the mine?

30 A. Yeah, correct.

Q. Mr Duggan, how long had you been a control room operator at Pike River?

A. Probably around 26 months, just over two years.



Q. How did you become the control room operator?

A. I was employed previously as just a miner at Pike River in June 2008 and as I was moving houses I sprained me ankle and the controller at the time, Brian Smith, was leaving, so they had me on light duties in there and he, about two weeks, two or three weeks I was in there with him and it was quite a basic control room then. McConnell Dowell were still in charge of the tunnel, so it was still the stone drive as we probably only had one or two computers, and yeah, and I basically just sat there with him and sort of replaced him, and as time went on my ankle was quite bugged for about three months. Time went on, they offered me a contract, which the salary was more attractive than underground work so I stayed in the control room.

Q. When we had the image of the computers up, we could see that there were also, or the monitors in the control room, we could see that there were also a number of phones. Perhaps if we could have that image back up you can explain what the various phones in the control room related to?

A. Okay. We got the one phone there. We got one there and one there. That one there was the 555 phone number that you would have heard about, so that's, that's –

Q. That's the emergency number?

A. Yeah, normally used for emergencies only. Say, someone wanted to contact me from underground, it would have a different ring tone as well so if you're busy, you know, and you heard that, you'd know that straight away someone might need help so you'd immediately answer it. Also, you know if there's – if I had to ring an ambulance I'd normally use that phone as well, which on a few other occasions I've done so for minor little injuries. That one there, I think the phone number was 410 and yeah that was just one of the other phones, and the spare one there, 411, and both these were – all three of these phones would have the caller display so you'd know which number, who would be – well not who's calling but what number they're calling from and the location underground, and –

Q. Sorry, go on?

A. Also, if somebody else is calling that same number it would line up so it would queue up. You'd see that on the display. So I could be talking to someone and you could see another incoming call.

5 Q. We've also heard about a remote phone. Is that something we can see in the picture at all?

A. Normally the – no that's not it there – it's normally around here somewhere, there's just a handheld, handheld phone that if we needed to go to the toilet or leave for some reason out in the yard, then you could take that with you and, yeah, if any of the phones rang, it would normally transfer straight to that. Yeah, well just on nightshift sometimes there weren't too many people around and you might have to run over and check something in the stores and you take the phone with you, so.

15 1225

Q. How frequently did those phones ring during the day?

A. On dayshift during a weekday you could get up to 350 calls a day, incoming and outgoing. Yeah, sometimes when really busy, normally we're on dayshift so it was quite hard to sort of get a lot of jobs done. Sometimes you'd have two phones going at once and then get a – like I said before you'd have another call coming in on one phone so you'd have three calls going at once. And also people on the DAC sometimes, so it could be quite hectic sometimes.

20 Q. In your role as control room officer, how much contact did you have with mine management?

A. Oh, it used to get, as in people like Peter Whittall used to ring up probably on dayshift once or twice a week while I was in there, just a general see how things are going and update on underground, so he'd ring from Wellington.

25 Q. And what type of update was he wanting?

A. Just normally what sort of meterage, how they were going with cutting, if things still working, there might be a machine broken down that's had a major, so if they'd got it running yet, it might be a two-day breakdown.

30

Yeah just along them lines, sort of thing. See how the hydro-monitor's doing.

Q. Mr Duggan, do you have your brief of evidence in front of you or with you?

5 A. Yep.

Q. You can now start reading that in relation to Friday the 19<sup>th</sup> of November 2010, from paragraph 4?

10 A. Yes, just keep in mind that as this brief here is the odd paragraph that's in the wrong order. Just the way it's been presented to me from the police I've read my main one and yeah, it was correct in there but yeah, I think you might know, so.

Q. I will make sure that we correct those paragraphs particularly 17, 18 and 24 to 28 when we get to those Mr Duggan.

15 A. "On Friday the 19<sup>th</sup> of 2010 of November, I was working a 12 hour shift from 7.00 am till 7.00 pm. I recall that day that the coal processing plant had a planned shut-down for maintenance to be carried out on the water pumps supplying the water to the mine. Just before 3.45, I received a phone call from someone at the coal processing plant saying that they'd finished their maintenance and the water pumps and I could restart  
20 them. The control of the water pumps is done by the control room officer from the control room as required. After restarting the pumps I needed to contact the miners operating the underground mining equipment to notify them that the water was about to come back on and they could commence mining. I used intercom system called Voicecom  
25 which is known as a DAC system. I got a response from someone underground who I believed to be Malcolm Campbell an underground fitter but shortly after that a number of alarms in the control room activated indicating we'd lost all communication with underground."

Q. Just pause there. Why did you think it was Malcolm Campbell?

30 A. Malcolm was on my crew so I knew Malcolm, I talked to him quite often and he was Scottish and he had a distinct accent, yeah, there was another Scottish man Peter Rodger, I'm pretty sure between the two of them I knew it was Malcolm's voice.

Q. You have now had an opportunity to listen to a recording of that DAC communication. We have, Ms Basher has a transcript of it, now this has been procured by counsel listening to an amateur recording prepared on a best-endeavours basis without any expert assistance, Mr Duggan  
5 you've listened to this recording and have been able to confirm that it appears to be accurate, so if we can bring the recording up that will need to be produced as an exhibit. So that will be exhibit 26.

**EXHIBIT 26 PRODUCED – TRANSCRIPT OF DAC RECORDING**

1230

10 Q. Now the first line of that we can see there you're on the intercom and you ask, "Hello, ABM or roadheader," and then you have a reply some eight seconds later, "Hello Dan, who are you looking for?" That's the remark that you believe was Malcolm Campbell.

A. Yes.

15 Q. And in response to that you then say, "Control, you're just after ABM and roadheader?"

A. Yeah, yeah.

Q. And at that point there's a noise on the line but at the stage that you when you were listening at the actual time you didn't notice that particular noise in the –  
20

A. No I don't, I think the DAC, it wouldn't have been a noise there when I was in the control room at the time. It wasn't until I was shown by the police that it was picked up. I don't know how the recording system works, whether it recorded when no one was talking but, yeah, I  
25 definitely didn't notice a noise on the day.

Q. Then the next part of the recording that you can hear is you saying, "Hello sparkies?"

A. Yeah, correct.

Q. And at that you can hear in the background the control room alarm?

30 A. Yeah, yeah.

Q. Which alarms is that that you could hear when we listened to this recording?

A. At the time it would've been the alarms indicating that all communications from underground were gone, as in all the data, gas guards, power, fans, all the information on the SCADA system.

5 Q. How many monitors on the computer does that mean that are flashing at you telling you that these various items are down?

A. Yeah, I think just that one computer did, well outta them four computers I showed you that I do the fluming on, yeah just the one computer, or maybe two of them might've been alarming but, yeah, didn't really matter they're all pretty much the same, but I'd brought up just one, just  
10 use one computer to have a look at the alarms and see what they were.

Q. Then some 44 seconds later, going back to the transcript, you're then asking, "Hello underground, any sparkies?" Was it unusual to have that type of gap without any response?

A. Normally if power went off or the fans went off then it's all in – as soon  
15 as the fans go off there's interlock system where all underground power goes off, so normally within a minute they would contact you, but since I hadn't heard from them I tried to contact them, it was unusual, yes.

Q. Then at 50 seconds later you're asking again for a monitor, "Hello, monitor please," that's referring to a particular area in the mine?

20 A. Yeah, that's the hydro-panel which I knew where three workers were at the time.

Q. And then a minute or 57 seconds later there's further alarm noises that can be heard on the recording. And then a minute or so later you make the comment, we can see there, third from the bottom, and obviously  
25 there's a swear word there?

A. Yeah, just a bit of a worry and frustration.

Q. Why was that? Why was there worry and frustration at that point?

A. It was getting to the point where, yeah, it just seemed out of character to not hear from someone and, yeah, I sorta – at you see later on I've said,  
30 "No, no communication," as in the DACs and the phones not working, but they actually were working but I thought that for some reason maybe they can't hear it or, yeah, but they seemed to be working, the phones as well as the DAC so.

Q. And then the last two lines you're asking again, "Hello, anyone underground. Hello, monitor please, anyone underground, anyone?"

A. Yeah, that was just trying to get hold of any person that could hear the DACs, just to confirm that someone was hearing them or everything was okay.

5

Q. And there was absolutely no response to that?

A. No, no response.

Q. You can continue reading at paragraph 11?

10

A. "This meant we'd lost all intercom and phone communications, but that was basically with communicating with people, so they were actually in working order, they appeared to be so... As well as communication with the main underground fan and the gas monitoring equipment and all power had gone out within the mine."

15

Q. Pause there at the end of paragraph 11. What you're explaining there is that you could still hear a dial tone on the phones but no one was answering them?

A. Yeah, the DAC seemed to be working fine and all the phone numbers I was ringing to my knowledge seemed to be working fine as well.

1235

20

Q. In the recording that we just looked at of the DACs there are some gaps of 50 seconds to 57 seconds, what were you doing in those gaps. Can you recall?

25

A. I had other phones, using the phones, I had like probably three, the whole three phones trying to ring underground as well, just had them on speaker just to try and get someone, then I'd change to try ring another number and just try and get hold of any phone underground, probably the 15 or so phones that were available.

30

Q. You've mentioned that the alarms were coming up showing that gas monitoring equipment and power had gone down. Had you ever seen that many warnings or alarms going at one time before?

A. Not about communications lost anyway. I've seen lots of alarms go off but that was more to do with the control of the slurry system, we used to get alarms saying, "There's going to be an alarm," so just, yeah, that

was more about that and the running of that, but nothing on this scale about communications and power of everything.

Q. What, if anything, were your screens telling you about what the main fan was doing?

5 A. It – well, there’s also a page where you can bring up on the screen that shows you the main fan and normally if it trips, it’s green for go, red for stop pretty much, and there wasn’t even a read there, it was just clear. There wasn’t even like, you can see the outline of the drawing of the fan, but it was just clear, so just no communications. We didn’t know  
10 what was going on.

Q. Had you ever seen that with the fan before?

A. No.

Q. You can continue on at paragraph 12.

A. “I then tried unsuccessfully to make contact with anyone underground.  
15 This was unusual because if there was an underground power outage the phone system had a backup battery that enabled us to communicate with the miners underground. A couple of minutes later I got a call from Mine Manager Doug White, and told him we’d lost communication and power in the mine and that I was going to get in touch with  
20 Danie du Preez, the communication and monitoring engineer. I attempted to phone Danie to advise him but he had left work for the day and I left a message on his cellphone to get in contact with us as soon as possible.”

Q. Pause there. That’s at the end of paragraph 14. Was there a backup  
25 person you were to contact if you couldn't get hold of Danie?

A. Normally if I couldn't get hold of Danie, I’d just try and get hold of a sparky. I’d talked to Katrina, she was a receptionist downstairs, and she said she had a contractor called John Heads and she’d send him up for a look.

30 Q. So if you can continue on there at paragraph 15?

A. “John Head and Rob Ridl had arrived up here and there were some members of McConnell Dowell crew that I made a comment, “I’ve got a real bad feeling about this.” I rang Doug back because

five or 10 minutes had passed by then and I said to him, 'Do you want me to place Mines Rescue on standby?' He said, 'Oh, we won't go there yet, we'll get someone up there.'"

5 Q. Pause there. Why were you thinking Mines Rescue needed to be on standby at that point?

A. Yeah, just was, like I said before, just really unusual. No communications and it was getting to the stage where you'd think somebody would be almost coming out of the mine to let us know that, "Yeah, we're all, all right. We've lost all phones and DACs." Also, the  
10 shift boss of McConnell Dowell's oncoming crew, Peter Dickie had told me that there's a real strange smell in the air.

Q. So, with all of those things, you just felt something wasn't right?

A. Yeah, just a bit of, just, yeah, just didn't sort of add up. I didn't think there'd been an explosion or nothing like that, but I just thought, well  
15 something sort of happened, but I didn't think it would be along that scale.

Q. You can continue reading there at paragraph 17?

A. "After that, Doug White, underground mine manager, Steve Ellis and planning manager Terry Moynihan came to the control room at various  
20 times to establish what had occurred and to assist." That was one –

Q. This was one of the paragraphs that should in fact be much later on in your brief, around paragraph 38. This is something that happened later on in terms of the sequencing.

A. Yep, yep.

25 Q. And that's the same for the next paragraph where you start talking about receiving a lot of external phone calls which Terry Moynihan was assisting you with?

A. Yep, that's right.

Q. So if you can continue reading then at paragraph 19?

30 A. "I recall Rob Ridl asking electrician Thys Strydom to go underground to check the power, if the power was on up there."

1240

Q. Pause there. Do you recall seeing Thys Strydom before he went in?



A. Just briefly. I mean it's sort of getting fading slowly now. It's been a while so...

Q. Mr Strydom told us that it was you that issued him with the gas monitor?

A. Yeah.

5 Q. Can you tell us anything about that?

A. I can't recall but if he said I did, I probably did yeah 'cos if gas monitors were in the control room so...

Q. Do you recall at any stage that day him returning a gas monitor?

A. Yeah, I do recall him returning a gas monitor to me.

10 Q. Tell us about that?

A. This was after he'd come out and told us that he thought there'd been an explosion. He, yeah he was sort of across the other side of the yard. Yeah, he wasn't all right, you could tell. He was a bit disturbed, he was playing with a roller door and he came over and said, oh, apologised to me for not returning the gas detector as soon as he came out of the mine and he was a bit over-apologetic, from which I said, "Hey, you know, don't be, don't be silly, it's – we're not too worried about that at the moment," so he was a bit, bit upset.

15

Q. From then, do you recall what type of gas monitor it was?

20

A. Just would have been a Draeger standard gas monitor for – it would have had taken readings for oxygen, probably carbon dioxide and carbon monoxide and methane.

Q. Continuing on then from paragraph 20?

25

A. "Rob Ridl and John Heads also went up to the portal to assist with checking the situation with the power. I stayed in the control room taking phone calls and trying to make contact with the miners underground. About 15 minutes after Thys Strydom left to go to the portal he called the control room and advised us that it looked like there had been an explosion in the mine."

30

Q. Now again I think you've explained that this paragraph that you're about to read, paragraph 23, is out of order and that this happened after you had called Mines Rescue?

A. Yeah, yeah pretty much jumped one spot down or...

Q. So if you could continue reading paragraph 23 with that caveat?

5 A. "In the control room Doug White initiated the card system, which is an emergency response system whereby cards are handed out to individuals with duties for them to carry out so the emergency response can be managed in a coordinated way. Once Thys Strydom informed us that there looked like there had been an explosion I immediately telephoned Mines Rescue. I spoke briefly with the lady I presume was the receptionist, and she put me through to someone I believed to be Glenville Stiles."

10 Q. Pause there. Are you now aware of who that person was?

A. Yeah. Since then I've found out it was more likely Glen Campbell.

Q. Did you speak to Glen Campbell? Do you recall speaking to Glen Campbell that evening?

15 A. I recall, as I thought that was Glenville but yeah I recall talking to if it was Glen Campbell. Glen Campbell also a phone call back from Glen Campbell later on just saying that rescue were on their way and just sort of get more information and stuff.

Q. Continue on there at paragraph 26?

20 A. "I explained to him that we had a suspected explosion underground, had lost communication with underground and gas readings were off the SCADA system."

Q. That's actually a spelling error. In the brief there it's got "strata system," but you do mean the system, the SCADA system, S-C-A-D-A –

A. Yeah, the SCADA system as in the computers, data from underground.

25 Q. Continue on there at paragraph 27?

A. "Glen told me that they would start to assemble a team and some of the Mines Rescue team were on their way back from training. I cannot recall any other part of the conversation I had with him."

30 Q. So it's after that telephone call that Doug White initiated the card system?

A. Yeah, after that phone call, after ringing rescue I pulled out the, that duty card system sheet, opened it up and then Doug started initiating the card system and then I also showed him where the folders were, that

you get a clip board and paper and a vest to go with every card and then I tried to find a helicopter phone number as he wanted to go up the vent shaft to have a look.

5 Q. Do you recall whether you were actually issued with a particular duty card?

A. I don't actually recall getting a duty card myself.

1245

10 Q. Ms Basher's been provided with a series of photographs and I think one of those actually shows a folder that you're talking about. Is that the, or can you see there the card system book been talking about?

A. Yes, yep.

Q. That's the blue display book folder there shown in the bottom right of the photograph?

A. Yep, that's correct.

15 Q. And was that its position on the 19<sup>th</sup> of November at the bottom of the emergency procedure shelf?

A. Yeah, if it wasn't there it would've been just slightly to the right, possibly behind that corner computer, yep, but it was always around that area.

Q. And if that can actually be produced as exhibit 27.

20 **EXHIBIT 27 PRODUCED – 4 PHOTOS FROM PIKE RIVER COAL**

25 Q. There are actually four photographs there if we can - We can look at the other ones just so that everybody knows what else is available in that series. The first one we've seen, that's the control room picture. Second is a larger photograph of the emergency manager control room procedure book and this shot is of a close-up of the camera monitor. On the left-hand side of it was see a note, "The server has lost connection to the camera." Do you recall ever seeing any notes like that on the computer monitor?

30 A. Yeah, from time to time the server would do that just, yeah, sometimes it'd do it random times and just random cameras, yeah, sometimes a camera would go down, yeah.

Q. Did it do that on the 19<sup>th</sup> at all, can you recall?

A. I don't think it did.

Q. Now, if we can continue on with your brief of evidence then, at paragraph 29?

5 A. "About five to 10 minutes after I phoned Mines Rescue I telephoned St John's ambulance and I spoke with a lady. I told her the location of the mine at 586 Logburn Road, Atarau, Greymouth and gave her my contact telephone numbers. I told her we suspected a major incident underground possibly an explosion and needed as much emergency care as possible such as ambulance and probably a helicopter on standby."

10 Q. Pause there, Mr Duggan, perhaps to save you reading through exactly what you told the emergency operator, we can in fact play the call.

**RECORDED 111 EMERGENCY CALL PLAYED**

**OPERATOR:**

15 Ambulance what's the exact address of your emergency?

**MR DUGGAN:**

Pike, Pike River Coal, 586 Logburn Road, Atarau, Greymouth.

**OPERATOR:**

Okay, what was, sorry, 586?

20 **MR DUGGAN:**

Logburn Road, Atarau Greymouth.

**OPERATOR:**

No problem, let me locate - look you up on the maps, we've got 586, Logburn Road, Atarau and it's the Pike River Coal is that right?

25 **MR DUGGAN:**

Pike River Coal Mi - Pike River Coal Mine site, yep, that's correct.

**OPERATOR:**

Okay and what's the phone number that you're calling from please?

**MR DUGGAN:**

The phone number is 7698 –

5 **OPERATOR:**

Yeah.

**MR DUGGAN:**

- 555.

**OPERATOR:**

10 7698555?

**MR DUGGAN:**

Yep, and I'll give you a second number just in case that doesn't work.

**OPERATOR:**

Sure, yep please.

15 **MR DUGGAN:**

Second number 7698 –

**OPERATOR:**

Yeah.

**MR DUGGAN:**

20 - 410.

**OPERATOR:**

7698410. Okay, tell me exactly what's happened?

**MR DUGGAN:**

Okay, we suspect a major incident underground, possible explosion. We may need as much emergency care as possible, ambulance and probably helicopter on standby 'cos there are a lot of people underground at the moment and we're aren't su –

**OPERATOR:**

How many people roughly are underground?

**MR DUGGAN:**

Roughly, you're probably looking at at least, 25 to 30 people and no one's accounted for at this stage.

**OPERATOR:**

Twenty-five to 30 people. So what makes you think there's been an explosion?

**MR DUGGAN:**

Well we lost power underground.

**OPERATOR:**

Oh, okay.

**MR DUGGAN:**

Communications and normally underground all the fans will go out and you'll get a call from underground, or people saying that, you know, people say look –

**OPERATOR:**

But you haven't heard from anybody?

**MR DUGGAN:**

We haven't heard from no one for about, for about almost an hour now. We sent up, we sent someone up in a vehicle. They got up so far up and then

they rang us back on a phone and told us they suspect an explosion. So he's come back out. We've heard from nobody so, it's possibly a very major incident.

1250

5 **OPERATOR:**

Okay, so we've got a major incident on your hands there.

**MR DUGGAN:**

Yeah.

10

**OPERATOR:**

So what's your name?

**MR DUGGAN:**

15 Daniel Duggan.

**OPERATOR:**

Okay.

20 **MR DUGGAN:**

Surface controller.

**OPERATOR:**

All right. Now I just want to get as much information as possible?

25

**MR DUGGAN:**

Yeah, no I understand, yeah.

**OPERATOR:**

30 From what's going on. So you want the heli on standby and as much -

**MR DUGGAN:**

I think so yeah, like I'm talking to the manager here, he said, "Yeah, have it on standby anyway," look we just don't know how bad this is, it could be the worst you know.

5 **OPERATOR:**

So it could really really bad, or it could be –

**MR DUGGAN:**

It could, it, yeah.

10

**OPERATOR:**

- it could be anything?

**MR DUGGAN:**

15 Yeah it, it's not gonna be good I'll tell you that.

**OPERATOR:**

Okay, that's understandable.

20 **MR DUGGAN:**

We've heard from no one, it's been an hour.

**OPERATOR:**

Okay, what's the weather like over there?

25

**MR DUGGAN:**

Yeah, it's a bit cloudy on the hills but it's definitely helicopter, it's definitely fine for a helicopter.

30 **OPERATOR:**

Yeah, and what about a landing zone?



**MR DUGGAN:**

Landing zone? The amenities area.

**OPERATOR:**

5 Sorry?

**MR DUGGAN:**

We've got an amenities area.

10 **OPERATOR:**

Oh okay, yeah.

**MR DUGGAN:**

Which is right here by the actual control room.

15

**OPERATOR:**

Okay.

**MR DUGGAN:**

20 Okay, I've got co-ordinates.

**OPERATOR:**

Yeah, what are your co-ordinates?

25 **MR DUGGAN:**

There were co-ordinates here, I bloody can't find them.

**OPERATOR:**

It's all right Daniel.

30

**MR DUGGAN:**

Well actually, the helicopter's got our co-ordinates for the amenities area anyway.

**OPERATOR:**

Okay. This is definitely 586 Logburn Road –

5 **MR DUGGAN:**

Yeah.

**OPERATOR:**

- that you want us to come to?

10

**MR DUGGAN:**

586 Logburn Road, Atatarua.

**OPERATOR:**

15 Yeah, okay Daniel I'm just going to keep you on the line a little bit longer, I just want to make sure –

**MR DUGGAN:**

Yeah.

20

**OPERATOR:**

- I've got all the information we need, okay?

**MR DUGGAN:**

25 Yeah, no problem.

**OPERATOR:**

Hold on a second.

30 **MR DUGGAN:**

Hey Shane, you don't mind asking some of these guys if they wanna start clearing the yard and making sure there's no debris in case they need a helicopter, it may have to land here, we need everything out the way, like -

**OPERATOR:**

All right Daniel,

5 **MR DUGGAN:**

Do you know what I mean.

**OPERATOR:**

I've got these two contact numbers for you.

10

**MR DUGGAN:**

Yeah.

**OPERATOR:**

15 Okay, so if we need anything else we'll phone either one and hopefully you'll be able to pick up and talk to us?

**MR DUGGAN:**

Yeah, I'll stay manned in this control room the whole time.

20

**OPERATOR:**

Brilliant, okay. So what's everyone else doing there at the moment.

**MR DUGGAN:**

25 I'm sorry?

**OPERATOR:**

So have you got people trying to make contact underground, heading underground, what's actually happening there?

30

**MR DUGGAN:**

No, no one will enter, Mines Rescue's been notified.

**OPERATOR:**

Okay.

**MR DUGGAN:**

5 So Mines Rescue deal with that. Any of your services won't be going underground, they'll just be outside for emergency care.

**OPERATOR:**

That's brilliant, okay thank you Daniel.

10

**MR DUGGAN:**

Okay, thank you very much, bye.

**OPERATOR:**

15 All right, no worries, bye.

**MR DUGGAN:**

I'll stand -

**EXAMINATION CONTINUES: MS LUMMIS**

20 Q. Mr Duggan, if we can continue reading, we actually have a summation of that for the record, there is a transcript SOE.019.00001. Mr Duggan, if you can continue reading from paragraph 38 in your brief.

A. "Within half an hour of the incident occurring we began receiving a large number of phone calls, including phone calls from SKY News London, 25 CNN in the US. It was actually frustrating because it was clogging up our phone system. I also answered a phone call in the control room from one of the miner's Daniel Rockhouse and put him on speaker phone."

Q. Pause there Mr Duggan. By the time you heard from Daniel Rockhouse 30 had you started receiving those calls from CNN and overseas media and the like?

- A. Yeah, pretty much after I rang emergency systems, yeah, within – probably while I was on the phone to that lady, phone calls started coming in by the hundreds.
- 5 Q. Can you recall which phone it was that you took the call from Daniel Rockhouse on?
- A. No I can't actually.
- Q. We've heard from Daniel Rockhouse that he called 555 and it went through to an answer-phone, do you have any explanation for that?
- A. I didn't think that would be possible actually but, yeah, I think they need  
10 to look into that with probably the person that set up the phones.
- Q. You have told us previously that there's a display on the phones showing whereabouts in the mine the call is made from, do you recall taking note of where Mr Rockhouse was?
- A. Yeah, as soon as he rang I knew he'd called from pit bottom, I could see  
15 it on the phone.
- Q. So could you see a number or could you actually see the description, "Pit bottom?"
- A. It said, "353 B1 substation."
- Q. Continue on there from paragraph 40.
- 20 A. "He was asking for help but his voice sounded calm and he wasn't over-panicked. I asked him if he was injured or whether or not he could see. He replied he wasn't injured but he could hardly see anything and could hardly breathe. Daniel said to me he thought his loader had exploded."
- 25 1255
- Q. Pause there. Can you recall anything else that you asked him before Mr White came along?
- A. Yes, I asked him if he had his self-rescuer with him and he told me he'd lost it or thrown it away.
- 30 Q. Continue on there at paragraph 43?
- A. "Doug White then arrived back at the surface control room after being up the ventilation shaft. I told him that Daniel Rockhouse was on the telephone and I had been talking to Daniel for approximately

30 seconds before Doug arrived. Doug took over the conversation. I cannot recall when he said it, but Daniel said it looked like the air was clearing. Doug told him to stay low and start making his way towards the fresh air base. That was the last we heard from Daniel until he  
5 walked out of the mine with Russell Smith.”

Q. Pause there. Was that a conversation that took place on the speaker phone?

A. Yeah, I'm pretty sure it was on speaker.

Q. You've mentioned that Mr White told Mr Rockhouse to make his way  
10 towards the fresh air base and we've heard about the area, the Macdow changeover station?

A. Yeah.

Q. Which was, appears decommissioned at the time, was that something that you knew about?

15 A. No. I knew nothing about that.

Q. Continue on reading from paragraph 49?

A. “During the emergency response I also recall making the SMV, people mover, was ready to take rescue teams into the mine. I also ensured gas detectors were ready in the event that they were needed  
20 underground. I stayed in the control room until finally leaving the mine site at around 9.20 pm that evening.”

Q. During the time before you left, did you take any calls from any family members?

A. Yes, plenty.

25 Q. How did you deal with those?

A. Yeah, we were told by senior management that we weren't allowed to lead on what had happened because, and who was confirmed who was underground, as they were still going through the elimination process from the tag board of who was underground and who wasn't.

30 Q. When you say it was “Management,” can you recall who told you that?

A. I believe it came from Doug White and Steve Ellis.

Q. The SMV people mover that you got ready to take rescue teams into the mine, whereabouts were you readying that, or whereabouts was that happening?

5 A. It just basically a pre-start sort of making sure it's topped up with oils and stuff and fuel, and just facing the right way, and that was just outside the control room there. There's a diesel sort of bay there where all the diesel vehicles park, so probably 15 metres from the control room.

10 Q. In the time that you were in the control room that evening before you left, did it move at all up to the portal, are you aware?

A. I can't recall. It may have.

Q. During last week we've heard some evidence about the tag board system at Pike River Coal, which was, I think just outside of the control room, is that right?

15 A. Yep.

Q. Obviously on the 19<sup>th</sup> of November it wasn't an accurate reflection of who was in the mine. Are you aware of any occasions that people had forgotten to remove tags from the board?

A. Yes, I am, yep.

20 Q. Can you tell us about those occasions?

A. Just from time to time, maybe on nightshift, I would notice a name or a name or so on the tag board that I knew that person had just left on the previous shift, so yeah, as that process, before we remove that tag we had to eliminate it and give him a phone call and make sure he was at home before removing his tag.

25 Q. Were there ever any occasions when someone rang you from off the mine site saying they'd left their tag on?

A. Yes, that was another thing that happened and also occasionally someone would ring from underground saying they haven't put their tag on.

30

1300

Q. How would you deal with those situations when they arose?

- A. If it was somebody from underground, then I'd go find their tags which is sometimes just where their cap lamps are, or there was tag in, tag out board, I'd find it on there and then put it on for them and with the people from home ringing, yeah, same thing, I'd remove their tag if they'd rang me and confirmed that they weren't underground.
- 5
- Q. When that happened, that's the example of somebody having got home and suddenly realised that they'd left their tag on the board, did you complete an incident report about that happening?
- A. No not normally. Normally I'd leave it up to them.

10 **THE COMMISSION ADDRESSES MS LUMMIS - DISCUSSION**

**THE COMMISSION:**

- Q. Mr Duggan, we're going to take the lunch break until 2 o'clock. I'm sure there are going to be questions for you from others as well.
- A. Yep, no problem.

15 **COMMISSION ADJOURNS: 1.00 PM**



**COMMISSION RESUMES: 1.59 PM****EXAMINATION CONTINUES: MS LUMMIS**

- 5 Q. Mr Duggan, I just have a couple of questions relating to the CCTV footage. On 19 November, after you'd lost all communications, did you look at any of the footage?
- A. Not straight away. After the communications engineer, Danie du Preez came back, probably would've been an hour and a half later after I rang him, he'd re-winded some of the footage from some of the Hamilton Gardens cameras in the slurry station and that. And he rewound it prior to 3.45 and watched it as it got to that point, 3.45, when all comms were lost and, yeah, the camera just pretty much stopped but there was just a clear picture, it's like time stood still.
- 10 Q. So you had a picture of the slurry, for example, but that picture just froze and nothing more happened?
- 15 A. Yeah, just froze and the water that might've been running down was still, just yeah, everything just froze, it didn't – it went offline but there's still a still picture there.
- Q. Did you look at the image of the portal at all?
- A. No, no we didn't.
- 20 Q. Do you recall completing a log on the 19<sup>th</sup> of November?
- A. I did have a, well a couple of logs actually, there was a main log I had for people, incoming calls and stuff, and then after that it just went to just normal paper and just writing already cut two to three pages full of phone calls and, yeah.
- 25 Q. When you left the mine site at 9.20 what did you do with those items?
- A. They were just left in the position that I'd left them at, just on the desk.
- Q. The report that we had up on the screen earlier, the control room officers event book report, did you complete one of those on the 19<sup>th</sup> of November, do you recall?
- 30 A. I'd only filled it in probably up to the actual event and then after that that was the last time I filled in any more information on that and, yeah.
- Q. And at that stage you're doing that on the actual computer?

A. Yeah.

Q. If the Commission's been unable to find that log can you offer any explanation as to why that might be?

5 A. Probably because it was never printed out or the next controller that came on to relieve me probably logged out of my username and logged into his or as a control room temp and, yeah, that data, if that was the case, would probably be lost.

Q. And was it Mike Goudy that took over from you that evening?

A. Yeah, correct.

10 Q. And did you give him a run-down of what had happened up to that point when you changed over?

A. Yeah, yeah, where we had a changeover, yeah.

1403

15 **THE COMMISSION ADDRESSES COUNSEL – APPLICATIONS FOR LEAVE TO QUESTION – ALL GRANTED**

**CROSS-EXAMINATION: MR DAVIDSON**

20 Q. Daniel, just in response to your evidence that all communications were out, phones and so forth were out, what we do know is that a call came in from Daniel Rockhouse from the phone which you've been able to identify, 353 was it?

A. Yes, yep.

Q. And that told you on your phone screen where that call came from?

A. Yep, sure did.

25 Q. And did that also, at the time, record, at the time record the time of the call coming in?

A. Yeah, normally, yep it does normally record the time, yes.

Q. Yes. And does that stay logged into the phone so you can refer to it later?

30 A. Yep, I think it stores up to over 300 phone calls, incoming and outgoing, so as long as when you get to that 300 stage, it probably automatically overwrites the furthest calls.

Q. And do you know if the system can still be retrieved after it's overwritten?

A. I'm not quite sure about that.

5 Q. The reason I ask is that the sequence of events provided by the police has come under consideration already in this inquiry and there is an estimated time of the call from Daniel, estimated at 5.15 and he's recorded as coming out at 5.26, so 11 minutes later over 1900 metres of the drift. So, have you got any idea when the call was made, thinking back to the sequence of events?

10 A. No I can't remember exactly when it was taken, it just, it's possible it was noted somewhere, possibly by myself, or possibly Terry Moynihan who was also helping with recording, so it possibly could be noted.

Q. The phone call came in on which of the phones that you've shown us today?

15 A. I think it was the middle one, it wasn't the 555 and I think it was the 410 phone which had the 555 which is on this corner you had the 410 and then the 411, so 410 in the middle.

Q. And would that phone have been used repeatedly after that time 410?

A. Yes.

20 Q. What was the general state of the phone system as you knew it? How reliable was it?

A. To get hold of people underground on the phones, well it was actually, yeah, very unreliable sometimes. They'd normally advance them with the machines and it really hard to get hold of someone due to cutting  
25 machines being loud, sometimes they may not have got advanced as they should of and also I think reliability of the phones were crap underground, the underground phones, so quite often they'd break down.

1408

30 Q. Well, your evidence today has been that you tried ringing, I think you mentioned up to 15 phones that were underground using a number of phones in the control room?

A. Yeah. Basically, I went through and tried all the underground numbers.

Q. And did you hear a dial tone? What sort of tone did you hear?

A. Yeah, it was just a, just a average dial tone just like you would on your home phone.

5 Q. Do you know enough about the phone system to know that if the phone's not functioning at the other end of the line, what tone you'll hear?

A. No, it just sounded quite standard like everyday phone call really.

10 Q. Now, on the time record that we have available to us we see that at 4.25 there was a call made to – 4.26 call to Mines Rescue, 4.35 to St John's and at 4.40 the helicopter request made by you?

A. Yeah.

Q. The sequence of events. Whose direction were you taking when you made these calls? Anyone's direction?

15 A. As soon as Thys Strydom had rang and said it looks like there'd been an explosion, I rang Mines Rescue just on me own terms. I just knew that in training that's what you do so I didn't need permission or anything, it was just what I'd done, and yeah same with the 111 call, it's just part of what I do and with the helicopter I think Doug had said just have it on standby, but I was also been trained that the emergency services under the circumstances would have sent a helicopter anyway so...

20 Q. Now you referred in your evidence in paragraph 47 to Doug White telling Daniel to stay low and start making his way towards the fresh air base?

A. Yeah.

25 Q. You remember those words being used, "fresh air base?"

A. Yeah.

Q. What did you understand that to mean in terms of a fresh air base?

30 A. Well, I pretty much thought he meant make his way down towards the, is it stub 3 fresh air base on the way out, and I'm pretty sure he said to Dan, "Try and establish contact again," so...

Q. Did you know anything about that fresh air base?

A. Not off memory. If I was informed about it, I can't recall so...

Q. Just to clarify one last point. You refer to the gas readings communications underground. The gas readings were off the strata system, it's the SCADA system isn't it?

A. Yeah, SCADA system.

5 Q. So just what is on the SCADA system so far as you're concerned in the control room, what information?

A. Basically all the, all the computer side of things underground. All the monitoring as in the gas, all the gas guards, all the power substations. So if power goes out you get alarms. You also got all the pumps, slurry system. It's quite a big system. It rotates all the way to the wash plant, so you got multiple screens about that. Yeah, and basically yeah, and also the computer, in computers if any alarms – they'll show you the alarm and sort of tell you what it is and stuff for us to acknowledge. So if anything goes down, anything online with the SCADA system it alerts us with an alarm noise and flashing red signage, and also the underground fans, monitor them and also the spare one on top of the shaft which should kick in after your underground fan trips.

10

15

Q. But all this information is lost, is that what you're saying?

A. Oh, at the time when, I mean communication's lost, yeah. All the alarms were saying all communication - all the information that we'd normally see on that system, there was no information on any of it. So it just said communications lost. So we didn't know what was happening, if, if there was actual power underground or what was running, what wasn't. It was just – the computer just was not recording anything. All communications were down.

20

25

Q. So is it the case then that the only communication that comes back out of the mine to you is the phone call from Daniel Rockhouse?

A. Yes.

Q. And your uncertainty as to whether when you hear phones ringing they are in fact ringing at the end, you don't know that do you I think?

30

A. Repeat that, sorry?

Q. When the phone sounds as though it's ringing to you, you don't know what's happening at the other end of the line, whether it's ringing or not in the mine?

5 A. Yeah. Well, no. Yeah, it sound – well to me it sounds like it's ringing, but whether or not it was ringing underground I'm not sure how it works if...

1413

**CROSS-EXAMINATION: MR HAMPTON**

10 Q. Daniel, I'm just following up a couple of things that Mr Davidson asked. Are you saying that you did not know that the fresh air base at stub 3 had been decommissioned?

A. Not to my recollection, no.

15 Q. What about your state of knowledge of the phone, we've seen a yellow phone that was in that fresh air base, did you know whether that was still working or not?

A. No, I didn't, but like I said, it wasn't uncommon for a phone to not work, someone go to use it and it not be working, it was – yeah, the phone systems were just not very good in my opinion.

20 Q. Had you ever made any comment to anyone in management about the phone system? You described I think in your evidence, just a wee while ago, as "crap"?

A. Yep.

Q. Did you ever tell anybody about that?

A. We had voiced it, probably been voiced several times over two years.

25 Q. To whom?

30 A. I'm pretty sure I've voiced it to, at the time, a, the electrical management team, so is Mike Scott. Maybe Danie du Preeze, he's a communications IT man, and also we'd had meetings with Peter Whittall and senior management about the control room before, it'd been voiced to them and also probably a month or two before the explosion, we'd had a meeting about improving the control room and our points of views with Doug White and Steve Ellis and the other controllers.

Q. So that was a meeting with management by the controllers, is it?

A. Yeah, we actually, well, I called the meeting actually. I asked Doug if we could have this meeting, discuss some matters and he agreed and we sat down and discussed a few worries and stuff from each.

5 Q. Right, can you remember what the concerns were you raised at that meeting please Mr Duggan?

A. It may've been about the phones some of it, but around that time, to be fair, they were introducing the DAC system so that was the solution to that, 'cos the DAC system was a lot more reliable. Yeah, just a few  
10 other things, just you know, I think, I think we, us controllers always got looked at as not doing our job properly and there was no real structure to be honest, as we, since I was in the control room, we basically didn't get really any training. We figured out most of the SCADA system when it comes to the controlling of the pumps ourselves, a lot of it. Yeah, just,  
15 yeah, I've sort of gone a bit blank actually, but yeah, there was a few concerns.

Q. How many controllers were there?

A. We had four of us and also with me I had a trainee controller, so he was probably with me for three or so months.

20 Q. And when you first started in the controller's role, did you have – what sort of training did you have then?

A. Oh, basically it was just from watching Brian Smith and that was just watching him, and then I started taking some phone calls and doing gas readings and it was, like I said before, it was quite a smaller operation  
25 then, it was more of a stone drive, not a coal mine, so we had less computers to monitor. There was no fluming. It was just, just a couple of gas readings to record every three hours, just taking phone calls, passing messages on and maybe getting sparkies and fitters and stuff up to broken down equipment.

30 Q. And over what period were you alongside Mr Smith then?

A. Oh, probably about two to three weeks.

Q. And once you were through into the coal, did you get any training then or re-training then as to what was required of you now you were into coal, now the mine was into coal rather than driving through the stone?

5 A. Most things stayed the same, except for we started getting more computers with more gas guards, so they probably introduced more gas guards, so it's a safe gas, real time gas sensors, so we got more of them as the mine advanced so we could have that at real time.

Q. Yes. And the training you had on those, once you got those real time gas systems?

10 A. Well there wasn't really too much training. It was just – you know, we'd all done our gas ticket. We had to have a gas ticket to be controllers, which is a eight week course, and then a three to four hour exam on gases, and you pretty much have to have 100% and then you have to also go back and to be there and sorta get interrogated by a couple of  
15 Mines Rescue guys about certain things and questions around the gases involved.

1418

Q. In your time at Pike did you, and particularly when you're in the control room, did you ever have any involvement or training in emergency  
20 response, if an emergency happened underground what the response would be, your part in that?

A. Not really training, there was a few times certain Mines Rescue people came in the room and just sort of opened up the book and went through a few things with me, you know, like if there was a fire, you know, like  
25 just little scenarios just in general conversation.

Q. Were you trained at all in what the response would have to be if you're in the control room if there was an explosion underground?

A. No, but yet I mean, we know, we basically know that we're basically in control of that control room till any senior management or someone  
30 hierarchy, undermanager, manager turns up to take over.

Q. On the day of this explosion do you recall at any stage anyone declaring or imposing an exclusion or a no-go zone around the portal of the mine?



- A. No, I don't recall, I can't remember that. Are you saying after the explosion or?
- Q. After the explosion?
- A. No, I can't recall.
- 5 Q. Sorry I wasn't here this morning and I apologise for that?
- A. Yeah.
- Q. But what period of time did you continue on in the control room for after the explosion?
- A. I left around 9.20 pm, it was after nine, roughly 9.20.
- 10 Q. After the explosion and various people went down to the portal from time to time, were you aware of the number of people and the identity of the people going down to the portal?
- A. No, I remember Neville Rockhouse going there, that was probably when Daniel and that came out.
- 15 Q. Did you have any means of communication with the people going down to the portal?
- A. I can't recall if they had, they may have had a hand-held radio system but I can't recall if I was talking to them. There was like three of us in the control room doing all the communications with internal phone calls and Terry Moynihan talked to people on the hand-held radio system and I wasn't sure if he was talking to people at the portal or not.
- 20 Q. Just touching on something different, the Northern Lights system, had you had any involvement with that as a means of checking in and checking out the miners underground?
- 25 A. Yeah, when it was first introduced we were shown how to use it, it was quite basic, just sign in, just use a password, sign in and you could look at who was presently underground and, yeah, I just, I found it – after having a few looks at it, it was just unreliable and, yeah, I think it was never really used again as I think management realised that there was people on the computer saying they were underground when their gear was actually inside the sensor, so it was very unreliable, it didn't really work.
- 30 Q. Was it still operating, in theory anyhow, as at the 19<sup>th</sup> of November?

A. I hadn't been on it for a long time but it probably was on the computer but I wouldn't have used it in that case, I wouldn't even have thought about it and it would've been unreliable.

5 Q. Was there one notorious occasion when you sitting in the control room found that you were supposed to be underground?

A. Sorry?

Q. Was there an occasion –

A. There may have been, yeah, I actually think my name was underground one day when I was sitting in the chair outside in the control room.

10 Q. Was there some company policy or arrangement that deputies underground were supposed to ring into the control room every two hours?

A. Yeah, yeah, I recall that, yeah.

Q. Did that occur?

15 A. It did, sometimes sooner and sometimes it was after, after the two hours. So it wasn't always on the two-hour dot.

1423

Q. Was it ever a problem from your point of view as a controller?

20 A. In a frustrating way it could be sometimes, you know, sometimes we'd have to chase them up, if we hadn't heard from them for two hours we'd normally give them a ring for an update, or, if management had rang me, even before the two hour mark and wanted to know what was going on then I'd be chasing them up, but, yeah you did get quite often when the wouldn't call in from time to time.

25 Q. Was that system, at least in part so you as a controller, could know where men were underground?

30 A. Yeah well, not only that, just to know people were okay. Before each shift goes underground the undermanager's meant to provide us with a sheet, a manning sheet, to show who's working on what machine and what heading they're at.

Q. Was that always done?

A. Sometimes you'd have to chase it up. A lot of the times it was done but on the 19<sup>th</sup> it wasn't done.

- Q. The shifts that were underground the undermanager had not submitted a report showing where the men were going to be?
- A. Not the undermanager, no, not on the oncoming shifts.
- Q. So did you, in the control room, have any knowledge of where these men were actually going to go and what they were going to be doing?
- 5 A. I had a basic idea but not, there would've been a few people I didn't know where they were because of not receiving that sheet, but with contractors, contractors at the start of the day, they sign in and they also write where they are, where they're going to be working so that's, they
- 10 take care of themselves in that way, there's always a reference about them and McConnell Dowell, yeah, you pretty much know where they are too, so.
- Q. If this sheet wasn't submitted to you as a controller, did you see that as a problem from your point of view?
- 15 A. Yeah, I did talk to some undermanagers and voice my concern and, yeah, always saying to them, "What if," and yeah.
- Q. Did you ever raise it with higher management?
- A. No, I just sometimes would have a go at them personally.
- Q. The undermanagers?
- 20 A. Yep.
- Q. Different subject. In your two years, before I go to that subject, the emergency response plan, was there a duty card for the control room operator?
- A. Yeah, I think there was, yep.
- 25 Q. Were you issued with one on the night?
- A. I may have been but I actually can't recall at the moment.
- Q. You've been at Pike about two years or thereabouts?
- A. Yeah, probably getting close to two and a half.
- Q. Were you ever aware of any election of miners or of the employees to a health and safety committee?
- 30 A. Who employees sorry, of any?
- Q. Of employees of Pike, just generally?

A. Oh, as in to represent health and safety, yeah, I'm pretty sure there was a representative from every crew and I'm not sure if it was fortnightly or monthly meetings they'd have and that they'd take, the representative from the crew would take concerns to the meeting and, yep, bring up the concerns from his crew.

5

Q. Do you know whether those people were elected through the union or was it through union involvement or was it just, as it were, self-appointed within the crew?

A. I think it just may have been self-appointed. I actually did not think the union have anything to do with the health and safety meetings, as far as I knew.

10

**CROSS-EXAMINATION: MS BEATON**

Q. Mr Duggan, we've heard evidence already in this Phase, that there was a drill, an underground evacuation drill that happened at Pike on the 13<sup>th</sup> of October 2009, and that involved the surface controller on that occasion. That wasn't you I take it?

15

A. No it was - I believe it was a Wayne Ballentyne it was one of the other controllers at the time.

Q. Had you ever been involved yourself in any kind of drill like that, but an emergency situation?

20

A. No I know that it was in the planning that all us controllers were going to get a drill like that but it hadn't happened yet.

Q. You mentioned, I think, before to Mr Davidson that there had been a couple of occasions where some Mines Rescue staff had come in and spoken to you about your role?

25

A. Yep.

Q. Was that you individually or you and the other controllers?

A. Yeah, individually just maybe, I can't remember if it was Trevor Watts sorry or Glen Campbell, they may have both come in at separate times and just briefly went over a few little things and yep.

30

Q. And I think you mentioned that they ran scenarios passed you were you required to explain how you'd cope with them?

A. That may have been it, I sort of can't remember exactly know, it was a wee while ago, so that probably was how it was.

Q. I think you said in your evidence this morning that on some days there would've been up to 350 calls?

5 A. On, yeah, on a really busy day, one day, 'cos we were, sort of had expectations to have certain reports through to managers, senior management at certain times and I was.

Q. This is during dayshift I take it?

10 A. Yes, during dayshift, so I went over the phone calls and got an accurate number of how many calls had come in that day just to sort of let them know, "Hey, get off our backs," we can be quite busy in there, so.

Q. In terms of timing, how close was that to the time of the explosion that you raised that issue?

15 A. I'm not quite sure, probably a few months before. It sort of got a bit easier with me 'cos I ended up getting, like I said before, a trainee controller, so actually had two in there. On a busy day we had two of us so, that made things a bit easier, but to be fair it wasn't like that either. There was times where it was quiet.

1430

20 Q. From your evidence this morning it seems that from the time you started in the control room your job became progressively more demanding. Would that be accurate?

A. Yeah.

25 Q. Do I take it that having a second person in the control room in your view would have been something that was useful at Pike River?

A. Yeah it was useful, but that was just during the busy times. On, when it was busy it was useful, but, say, nightshift there wasn't as many people there. You didn't need really need a second man. Just sort of peak hour sort of thing. But that could happen at any time during the day.

30 Q. Having a second person during a dayshift, was that something that you'd raised with management or not?

A. No. I don't think they would have gave us one anyway.

Q. Why do you say that?

A. Well, I, I just – oh, I dunno. I dunno if they realised how busy it was in there.

Q. What kind of support do you think you had from management as a control room officer?

5 A. Yeah, to be fair Doug White was really good. He was - he's quite a people's person so he's quite approachable. When he became manager I felt more comfortable talking to him than I have with any other management prior to him so he was approachable. So just about issues about getting the reports out late, I'd approach Doug and tell him  
10 about the phone calls and he was quite understanding and stuff, so he was really good to deal with.

Q. I think you told us before about a meeting that you and some of the other controllers had had with Doug White a month or so before the explosion?

15 A. Yeah. Yeah it may have been a bit earlier than that. It may have been a month or two months before.

Q. Okay. In that meeting were issues over training discussed? Training for you as a group?

A. Yeah, I, I can't actually recall a lot of it to be honest. It's sort of...

20 Q. Was one of the issues discussed changing the reporting sheets that you had to complete?

A. Yeah, I, I think Doug may have been – Doug White had said he was gonna take it upon himself to have a look at the control room and sort of get a better system going so it makes it more user friendly for us and  
25 'cos it had been on the cards for a couple of years and no one had sort of taken the responsibility, and he said he was gonna start stepping up and helping us out a bit and getting a better system going as in making the reporting easier, maybe not so much of a paper trail. Re-reporting and all this sort of stuff.

30 Q. Had that happened or begun to happen before the 19<sup>th</sup> of November?

A. Maybe not, not really just that, but there was a few things changed. We got a lot more information from undermanagers. We requested that we don't get enough information about what their jobs are for the day.

Okay they might be cutting, but then other crews might be extending pipeline services, ventilation, and so we'd ask Doug and Steve Ellis was there as well. We'd said we wanted this sort of information. We wanted to know, we wanted a sheet to know exactly what the plan was for the day, the daily plans. So basically this – the meeting may have been on a Friday or Thursday and after my next shift, after I'd had my days off I came back and that was already in place. We were getting this information from the undermanagers because a hell of a lot easier on us.

5

Q. And was the information to be received at the beginning of a shift?

A. Yeah.

Q. Like on a dayshift for example, you'd get that from the –

A. Yeah. And the same, leaving on nightshift we'd get that information, or yeah.

15

Q. I'm just going to show you a series of documents and ask you to comment on them for me if you can. The first please is DAO.001.09815? It should come up on the screen in front of you in a moment Mr Duggan.

**WITNESS REFERRED TO DAO.001.09815**

20

Q. Now we can see there a document. It doesn't appear to be a signed-off version of it though, but it has a – down the bottom you see what's an issue date of 11 July 2010. We're just not entirely sure of the accuracy of that in terms of its creation or printing, but have you seen that document before?

25

A. I don't ever recall ever seeing that in – if it was in the control room I'd never seen it. It must have been hidden somewhere so...

Q. You've seen it since though I think have you in the process of preparing to give evidence today?

A. No. I've only seen it maybe today.

30

Q. Okay. That sets out what is, effectively, a description of the role of surface controller, the purpose of it, and some rules, and it also sets out three documents which surface controllers are required, as I understand it, to produce per shift or per day perhaps and one of those is what my

learned friend Ms Lummis showed you this morning, which I'll just get you to confirm that again please, it's DAO.010.00326? That's what's called the control room officer's event book. Is that what – can you see that in front of you?

5 1435

**WITNESS REFERRED TO DAO.010.00326**

A. Yes.

Q. And that's the one I think that you've completed for your shift on the 18<sup>th</sup> of November, so the day before the explosion?

10 A. Yep.

Q. And it records you working a dayshift on that day?

A. Yep.

Q. And that records some measurements of methane, carbon monoxide, oxygen and V-O – I can't read that. Volume –

15 A. Velocity is it?

Q. Velocity, yes, for two different locations, is that right?

A. Yep.

Q. And you said before that you, on the day of the 19<sup>th</sup> of November up until the time 3.44, you were completing logs as you sent, is this one of the logs, or the forms, that you were completing during that shift?

20

A. Yep, that's the one I would've had completing on, the spreadsheet on the computer, yep.

Q. Right. If we could have a look please at DAO.011.23213?

**WITNESS REFERRED TO DAO.011.23213**

25 Q. Can you explain to us what that is?

A. Yep, that's a production report that was completed – it goes over a 24 hour period, so dated on the 18<sup>th</sup>. I'd get there on, say, the 19<sup>th</sup>, and I would do the previous 24 hours, from the 7 o'clock the morning before to the 7 o'clock in the morning when I arrived on the 19<sup>th</sup>.

30

Q. Yes.

A. And it would just be recording what sort of meterage the machines had done and you can see all the different machines there as well as the



headings and also what the main delays were, downtime, and that would be emailed to senior management.

Q. And the sources of information for this document would be what?

5 A. An undermanager's report, then they would get their information through the deputies, so it would sort of get transferred to undermanager, then I'd transfer it onto this, so it would be three times it would probably be recorded.

Q. Is this an example of the paper trail that you mentioned before –

A. Yeah, that's just part of the paper trail, yeah.

10 Q. So just so we're clear, this particular document was for the 18<sup>th</sup> of November, the 24 hours ending at the time you started, 7.00 am on the 19<sup>th</sup>, is that correct?

A. Yeah, correct, yep.

15 Q. Were you also required to complete what's called a control room operator's report which recorded the location of diesel vehicles and equipment like that, do you recall?

A. Yep, we had that, but, yeah, that was another one that was hard to chase up, 'cos people were meant to tell us when they go in, what vehicle they're on, and, yeah, sometimes we source the information through the undermanager.

20

Q. While they're underground or above ground?

A. No, normally when they're above ground, I'd go ask or whatever and they could normally tell you what machine they're on. It was, the information was meant to come to us. We're not meant to chase it, but quite often we had to chase the information.

25

Q. Can I show you another couple of documents please and you just confirm for me what they are and what purpose they had for you in your role? The first is DAO.001.02944?

**WITNESS REFERRED TO DAO.001.02944**

30 Q. See that on the screen in front of you and it's got a title of 'Deputy statutory report', do you see that?

A. Yep.

Q. And that's been completed by a deputy called, Craig Visven on the 19<sup>th</sup> of November dayshift?

A. Yep.

5 Q. So that's a report that the statutory checks would have to be carried out, as I understand it, underground?

A. Yep, yep.

Q. And is that one of the sources of information that you see as the control room officer, or not?

10 A. No, not normally. Normally that would go to the undermanager and they would, yeah, take notes off that and what sort of advances they'd done with the machines, and then that would come to me for that sheet that we just saw before.

1440

15 Q. We move please to the next document, DAO.001.02567. That's titled, "Deputy's production report," again it's for Friday 19 November dayshift B crew, is that a document that you would see in your role as control room operator?

20 A. No, normally that would be the – any information the undermanager would take off, like I said before, into his form and I would see the undermanager's form.

Q. So deputies would fill this in during the course of the shift?

A. Yeah, they'd take that underground and sometimes complete maybe the end of it outside or...

Q. Provide that to the undermanager?

25 A. Yeah.

Q. Who would then create another document, which if we can refer please to DAO.001.03517. Do you recognise that form?

A. Yeah, that's the undermanager's report that we would get.

30 Q. It's titled, "Shift operations report," but you refer to it as undermanager's report?

A. Yeah, yeah.

Q. And it's, I think, been completed by a Mr M Palmer on the 19<sup>th</sup> of November on the dayshift?

A. Yeah.

Q. And so the undermanager, as I understand it, would complete this report from the information provided to him by the deputies?

A. Yeah, correct.

5 Q. And then you'd receive this report in the control room?

A. Yeah.

Q. And it's from that report that you would create your own and forward that on to management?

10 A. Yeah, but like I said, yeah, we'd normally get three reports, I'm just trying to think actually, yeah I think we get one for, yeah, dayshift, backshift and nightshift, depending on who the undermanager is, so yeah we'd get the three and use them three to create that one.

Q. For that 24-hour report?

A. Yeah.

15 Q. Your own practices you said were to enter information into your spreadsheets online in the computer rather than handwriting?

A. Yeah.

Q. Other control room officers were a bit more old school, to put it colloquially, and completed these logs in handwriting?

20 A. Yeah. I think, yeah, I think there may have been one controller that done that.

Q. Would that be Peter Derrick, is that right?

A. Yeah, Peter used to do it manually.

25 Q. From the 19<sup>th</sup> of November can you recall whether there were any logs at all, or documents that you were creating in handwriting rather than on the computer?

A. Yeah there probably would've been. There probably would've been some information I've written down that should've been there somewhere.

30 Q. I take it when you left the site 9.20 on the 19<sup>th</sup> did you take any documentation with you?

A. No, everything I'd written down I think was left there.

Q. The photo of the control room that Ms Lummis showed you this morning, which is exhibit 25 I think, could we have that up please. Do you know when that was taken Mr Duggan?

5 A. It would've been probably not too, before the explosion sometime, probably not too far before it either because we got the big screen there that had the cameras and also the old DAC system, the Voicecom, intercom system.

Q. So that dates it because the DAC system had only been, I think you said, for a month or so. Is that right?

10 A. Yeah, a month, maybe a bit longer.

Q. How does that scene that we see in that photograph compare to what the setup of the control room on the 19<sup>th</sup> of November?

A. Pretty similar.

Q. What's different, if anything?

15 A. Probably that one chair sitting by the big TV without a back.

Q. I see, okay. So in terms of the locations of screens and the things on the wall, they were in the same place?

A. Yeah.

20 Q. With the DAC system Mr Duggan, within the mine was it a portable system, could the miners move it?

A. Yeah, I believe you could just basically – if you wanted to move a DAC I think you could just grab an extension cable, just a normal power point extension cord and plug it in, move the DAC along and then re-plug it in, sort of, you could advance it with the machines, operating machines.

25 1445

Q. Had you ever been inside Pike Mine when the DAC had been operating?

A. Yep.

Q. So how loud was it?

30 A. Yeah, it was definitely loud enough. You could hear it over a machine, but to hear clearly you'd probably want to stop the machine, but I think they used to manage to talk over the machine.

- Q. Now, Ms Lummis referred you to, and we saw on the screen a copy of the transcript that counsel had prepared of your communications on the DAC system from about 3.44 pm on the 19<sup>th</sup>?
- A. Yes.
- 5 Q. Do you recall whether there was anyone else in the control room over the period of time that's shown in that transcript?
- A. Yep, I'm pretty sure it was myself and the pond operator who's also, his station was pretty much in the control room as well and his name's Gareth Newcome.
- 10 Q. Gareth Newcome?
- A. Yep.
- Q. You said, I think, in your witness statement that you read, that was prepared for you by the police that you got a phone call and as a result of that switch the pump or the water pumps back on?
- 15 A. Yep.
- Q. The timing of switching the pumps back on, how close was that to the time when you were speaking on the DAC to the person you recognised as, I'm sorry, you did give me his name.
- A. Malcolm Campbell.
- 20 Q. Malcolm Campbell, sorry, yes, Mr Campbell, what was the difference in time between those two things happening, do you remember?
- A. It would've been a minute to three minutes. Three minutes at the most it was really close, that's why I was actually ringing underground.
- Q. Which was why?
- 25 A. I was ringing underground to get a hold of the ABM or the roadheader place to let them know that the water system, I'd turned it back on so they could commence mining.
- Q. So you'd already turned it back on?
- A. Yep.
- 30 Q. Before you rang through?
- A. Yep.

Q. In that photograph, I'm sorry, exhibit 25, in that large monitor which is on the left-hand side of the room as we see it, that shows, as I understand it, the is it CCTV footage from around various locations in the mine?

**WITNESS REFERRED TO EXHIBIT 25 – PHOTOGRAPH OF LARGE  
5 MONITOR**

A. Yep, also outside.

Q. Right, inside and above ground obviously?

A. Yes.

Q. And down at the coal processing plant as well?

10 A. Yep, there's a camera down there.

Q. How many cameras were there, do you know?

A. I know there was, I think there was two in the bathhouse, one at the coal processing, well, it was just a tall one on the pole that we could rotate and zoom in, you could actually control it. So that was in the yard down  
15 by the coal processing plant. There was one at the portal, there was one outside in the yard, there may've been two actually, one in the stores as well which is just across there in the control room and yeah, and there's maybe three or four underground around the pump stations.

Q. I think you said in your evidence this morning that you had set up that  
20 monitor to show one large screen in the middle, is that right?

A. Yeah, normally it would have one large screen that would keep rotating through them.

Q. And how often, was it every 10 seconds, I think you suggested?

A. Yeah, may have been something like that, yeah.

25 Q. Were you able to override it and go back and look at something whenever you wanted to or did you have to let the series play out?

A. No, if we wanted to go back and look in something in history, you could probably go back, maybe even five or six days if you wanted to rewind it that far.

30 Q. As part of your role, were you aware of how many sensors within the mine underground were connected to the safe gas system?

A. Yeah, I would've been aware at the time but yeah, a lot of it's faded now.

Q. Do I understand it that there would've been separate sensors that were connected to the SCADA system?

A. I think most of the sensors that were down there would've been all connected to the SCADA, or all the safe gas ones as well, so.

5 Q. Were they same sensors for both systems, is that what you mean?

A. Yep. Yeah you could actually, with the safe gas computer, that's the one in the middle of the room yeah, that was sort of the older one and then we could use that and also the SCADA system had the new ones that were introduced , new gas guards as the mine advanced.

10 1450

Q. As well as gas levels, what else did the SCADA system monitor?

A. Just all the pumping operations, like I said, the slurry. Told you about all the alarms, trending from gas sensors and stuff. You could look at the pond. You could tell if the pond was out of compliance. Also an  
15 underground stub pond, you could tell if that was overfull. The fans. All underground power substations, so you could see if circuit breakers were opened or closed and you just – if anything sort of out of the ordinary happened you'd get the alarms.

20 Q. Was it part of your role to know whether or not the sensors underground were properly configured?

A. Nah, I wouldn't say it's part of my role, but I believe that there were statutory checks that the electricians would go down and make sure that they were all calibrated and I, I know quite often they took down gas calibration kits and we'd recalibrate them, the gas sensors.

25 Q. Just moving to a different point for a moment. There's been a suggestion at some point that there might be some sort of mining convention that you wait an hour before calling emergency services in situations such as what presented to you on the 19<sup>th</sup> of November. Can you comment on that or not?

30 A. No, well basically as soon as we heard there might be an explosion, that's when we called straight away and that's how I think that anyone would do it, and yeah, just from management's point of view I think they

sort of don't, wouldn't ring unless they know for sure that there's been a major incident.

Q. You said from whose point of view, sorry?

5 A. From managers, I don't think, like when I asked Doug about should I point them on standby, I just don't think – I think they had this thing where they wouldn't call the services unless they got confirmation that there had been an incident.

Q. If we could have the mine map, exhibit 14 up before you just to clarify some things with you please, Mr Duggan?

10 A. Yep.

**WITNESS REFERRED TO EXHIBIT 14 - PIKE RIVER MINE MAP**

Q. Can you see that in front of you there?

A. Yeah.

15 Q. If we could just zoom in please perhaps on the portion between pit bottom in stone up to about stub 1? Or am I right, Mr Duggan, that the cameras that you were talking about that were underground were in the location of pit bottom in stone?

A. Yeah.

20 Q. And the call that Daniel Rockhouse made from within the mine, you said that you remember seeing it come up on the phone and I think you referred to it as being a B1?

A. Yes, I remember that clearly.

25 Q. Can you see that on that map in front of you? You might have to actually expand it even further just in the pit bottom in stone area perhaps.

A. Yes, that's B1 there. It's the main drive.

Q. Do you know from your personal knowledge where the phone was in that area or not?

30 A. I don't personally know, but last I recall I'm pretty sure it was around the corner, probably inbye the stub maybe a few metres.

Q. Is it correct that the recordings that occurred of calls at Pike River on the 19<sup>th</sup> of November were only for the DAC communications and any 555 calls?



A. As far as I knew, there was. There may have been a record button on each phone but I didn't, I don't think they ever worked.

Q. Had you ever tried the record buttons?

5 A. No. As far as I was aware, they didn't exist, but I did get told that the DAC system is recorded.

Q. Just to finish off, Mr Duggan, I think you said earlier that you had started a phone log. Was that from the time of these events from about 3.44 onwards?

A. Yeah.

10 Q. And was –

A. Yeah, I mean –

Q. Sorry?

A. There may have been a few calls that were missed, but it's just due to the fact that it was just utter chaos, just, just crazy in there. Even with  
15 two or three of us in there, it was just too much happening with the phones and...

1455

Q. Were all of the people in there, answering the phones, or people coming and going?

20 A. People were coming and going, but there was myself, Terry Moynihan and Steve Ellis were pretty much doing the phones and also, yeah, Terry was sort of doing the handheld radio as well.

Q. Were all three of you recording on this phone log, or just you?

A. I'm not sure if Steve Ellis was, but I know Terry Moynihan had a bit of a  
25 book and making recordings too.

Q. Were you keeping separate logs –

A. Yeah.

Q. – or a joint one? And in your case was yours entered on the computer or were you handwriting it?

30 A. No, I was just handwriting it.

Q. Mr Duggan, do you know whether you can call an external phone from within the mine?

- A. Yes, and you can't, unless, well, there's only one way and that's if, if somebody wanted to contact home, say their wife for something, they could ring the control room and give me their number and then I would hang up and then I could ring their house and say, "Your husband would like to talk to you underground", and I could transfer from their house say in Greymouth back to that phone number from underground, that was the only way you could connect.

**RE-EXAMINATION: MS LUMMIS – NIL**

**10 COMMISSIONER BELL:**

Q. Did you know that the emergency response plan had been activated?

A. As in the duty card system, that part of it, yeah, just after I'd talked to rescue, I'd got it out and I was gonna get hold of the helicopter co-ordinates and that's when Doug started handing out duty cards to certain people.

Q. So have you been trained in using those duty cards?

A. No, not really, maybe just briefly looking at it, but I did quite often, when we did have quiet moments go through it. We were always told to sort of, when you get spare moments to sort of go through that sort of stuff and familiarise ourselves with it.

Q. Evidence given last week by Mr Strydom indicated that the analyser that he received was just a methane analyser, just a blinky, but I think in your evidence you said he got an analyser that analysed more than gas, can you explain that?

25 A. Oh, it may've been just methane. Like I said, I can't actually recall giving it to him, but I probably did and some of them did have methane and some of them had the lot.

Q. And did you receive any training in operating that sort of equipment, in the gas monitors in use at Pike?

30 A. With my gas ticket, with your gas ticket you learn how to use them, they're pretty basic.

Q. So you actually knew – you actually had been trained in the actual gas monitors you had at Pike?

A. Not really specifically them ones, but, yeah, pretty much similar, probably similar ones at the Mines Rescue station, just basic operations.

5 Q. Ms Beaton mentioned the evacuation exercise, were you briefed by your other colleague controller on the results of that exercise? Did you get any feedback from him?

A. No. I was just sorta told that everything went pretty well, yeah.

10 Q. Was it controlled and everyone attended, I mean, I know you mentioned before you had a portable phone you could use, was that out of the case, or?

15 A. Before there was a portable phone, sometimes you did leave and like, I say, you know, there's not always someone there to be in there while you were gone, you may have to go to the toilet on nightshift, you know, yeah, there might be no one else you can grab to be in the control room while you go, so, until we got that portable phone, that sort of fixed that problem.

20 Q. And just finally, Ms Beaton asked you this question, how many actual, what was the total number of screens you were looking at on the television thing, was it about eight screens all together, or?

A. Yea, it was around that, maybe seven, eight, maybe slightly less.

Q. Because what I was trying to understand was the explosion ran for some 50-odd seconds –

A. Yeah.

25 Q. – but if you've got eight screens cycling through 10 seconds each –

A. Yeah.

Q. – it's possible that the screen, it never came up on the explosion because it was running through the first five before it got to the explosion. Would that be the case?

30 A. Yeah, but – yeah correct, but even if it was on the big screen, you know, my attention probably would've been on the alarming SCADA system.

Q. Because the way the control room is set up, that screen was on your left-hand side wasn't it –

A. Yeah, it was –

Q. – and you were looking straight ahead?

A. Yeah, it wasn't very often, you know, you weren't always looking at that screen.

5 Q. No?

A. Yeah.

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**

1500

**MR MOORE OPENS**

First, I do acknowledge the courtesy extended to me by the Commission in making this brief opening statement on behalf of the New Zealand Police. Unlike other witnesses it is not the police's intention to have  
5 Deputy Commissioner Nicholls or Superintendent Knowles read their briefs. They are very lengthy, running to 80 pages and 105 pages respectively, they're very detailed and they amount to a large extent to a diary of the police's involvement. It starts at 4.38 pm on Friday the 30<sup>th</sup> of November 2010 when the ambulance service alerted the police that it was believed that  
10 between 25 and 30 men were trapped underground at the Pike River Mine. And it ends when the police's direct responsibility for stabilisation of the mine ceased in March of this year with the handover to the company's receivers. Despite that the police's involvement has continued through their dialogue with the families, and believe facilitated through their counsel, and through  
15 their commitment to assist with the DVI phase and the ultimate recovery of the men and, of course, the police's assistance to the processes involved in this Royal Commission. The evidence that the Commission will hear from the police is truly supplementary. It's not intended to traverse the filed evidence except to the extent that it provides a context of commentary which will be  
20 given by both senior officers. Purpose of this opening is to give an overview of the evidence in chief which the police propose to lead. Assistant Commissioner Nicholls was appointed the response co-ordinator. And his role was to provide overall strategic advice and support to the front line. He is something of an expert in emergency response systems,  
25 especially New Zealand's co-ordinated incident management system known as CIMS. He also finished an intensive five-day course on incident management in London just six weeks before the 19<sup>th</sup> of November. And he'll explain how the Pike River operation unfolded and the challenges which everyone concerned faced. He'll explain the lead agency concept and why in  
30 his view it was appropriate that the police took that role. He will discuss the competing options of sealing versus not sealing. And his position and that of the police is plain. There would be no question of sealing or inertising the mine while there remained any reasonable possibility that anyone could still

be alive inside. And that is, as the Commission knows, a view shared by others who before this Commission have filed evidence and given oral evidence consistent with that stand. And the police's position on entry to carry out a rescue is similarly unequivocal, that no one should enter the mine until the experts deemed it was safe to do so. It was never going to be an exercise which was risk-free, it was all about understanding the risk and making an informed and objective judgment about entry. As we all know, the sad history of Mines Rescue around the world is littered with examples of courageous rescuers who die doing their job. Almost certainly, the rigorous risk assessment and validative process of the incident management team, which obviously included Mines Rescue, is a central component, as well as the remote superintendant from Wellington avoided a similar catastrophe on Wednesday the 24<sup>th</sup> of November when the mine exploded a second time, this time even more powerfully than the first.

15 1505

Assistant Commissioner Nicholls' evidence will be, for the most part, evaluative. He will talk about what went well and what, with the wonderful convenience of hindsight, might be some lessons to improve and what the assistant commissioner will say is that overwhelmingly, the operation went well. There were no further deaths because the incident management team in the CIMS model worked well. Every agency, whether it was Pike River, Mines Rescue, fire, ambulance, defence, worked well together. Collaboratively, contentiously and co-operatively and all driven by a common goal which was to get those 29 men out. And they worked 24 hours a day to try to achieve that purpose. He will tell you the logistics worked well, that whatever the frontline demands were, whatever the frontline said that they needed, they got and whether it was tube-bundling from Australia or robots from Queensland, and in fact one was being negotiated from the United States, or whether from the defence force, communication systems, GAGs, Floxals, whatever they wanted were sourced, but like any operation of this magnitude there are always aspects which could be approved, improved and refined and Assistant Commissioner Nicholls will frankly accept that in the future, heaven forbid should this ever happen again, some things might be done a little

differently and he'll talk about the need for a multi-agency exercise or drill at mine sites to refine the emergency response processes. To develop and improve inter-agency relationships and strategies. He'll talk about how some aspects of Queensland's MEMS system might be incorporated, especially the allocation of experts to specialised roles on the IMT. He will talk about more operational decisions which could be made by the incident controller rather than the response co-ordinator in Wellington, but that there is certainly a role for a remote oversight and support. He'll talk about smaller IMT meetings and perhaps with less frequency although that will necessarily be a decision which varies according to the circumstances. He will talk about designated family liaison and the appointment of an officer rather than placing this task fully on the shoulders of the incident controller, although the incident controller still, in the assistant commissioner's view, has a role in this regard, the question is how big should that role be. He'll make a similar observation about media and he'll talk about the importance of parallel contingency planning. Superintendent Knowles' evidence will follow a similar format and he'll emphasise how the operation, at least from his perspective, pulled the disparate and independent groups together. He'll emphasise, again, that all worked well, all worked co-operatively, all were bound and driven by a common goal. But he too will point to areas where lessons for the future might be available. The possibility of more front-end decision making being made by the incident controller. More effective use of the incident controller's expertise and time. More efficient family liaison and meetings and Superintendent Knowles has read every one of the briefs filed on behalf of the families, and while some are highly complimentary of the superintendent's role, others are far less positive and the superintendent has reflected on those comments and has some ideas on how the processes and challenges of that very difficult job might have operated better. He also has views about the pressures on the incident controller and how, on reflection, a dedicated officer might have filled that function and carried the weight of that very important responsibility. But the incident controller would not dictate all responsibility in relation to communications with families because it is such an important strategic role. He also has views about media liaison which in this case

assumed massive proportions. But again, the overwhelming picture that he will paint is of a group of contentious men and women from multiple organisations working together in the context of a massive search and rescue operation, the likes of which, until the devastation of Christchurch with the earthquake on the 22<sup>nd</sup> of February, New Zealand has not in recent times had to endure. And some of these initiatives which he will speak about have already been partially implemented.

1510

For example, the revised media strategy was implemented in Christchurch and proved to be very successful, and already there is planning and training between the police and Solid Energy for joint inter-agency emergency exercises and drills for mining operations. So with the Commission's leave I will call Grant Alexander Nicholls.



**MR MOORE CALLS****GRANT ALEXANDER NICHOLLS (SWORN)**

Q. Assistant commissioner, would you tell the Commission please your full name?

5 A. My full name is Grant Alexander Nicholls.

Q. You hold the rank of assistant commissioner of police and you are based at Police National Headquarters in Wellington, is that correct?

A. That's correct.

10 Q. You've prepared a brief of evidence which runs to 80 pages for the Royal Commission, is that correct?

A. That's correct.

15 Q. And is it correct that your present evidence is designed to summarise most important aspects of that, but also to deal with how with the benefit of hindsight, some matters might have been done differently and perhaps to educate us on those aspects which went well as far as this operation was concerned. Is that your understanding?

A. That's correct.

20 Q. Just by way of summary, just so that we understand where it is that you're going, is it correct that there are 12 topic headings that you'll be dealing with, and I'll just go through them one after the other. You'll start by describing how it was that you became involved. Secondly, deal with a summary of your experience. Thirdly, the operation in practice. Fourth, some comments on lead agency. Fifth, the situation which confronted you on the 19<sup>th</sup> of November last year. Sixth, the  
25 situation which the police inherited in terms of what confronted you. Seventh, sealing, survivability and the issue of raising false hopes. Eighth, decision-making process. Ninth, the engagement of experts. Ten, communication with families. Eleven and 12 are summaries. First, 11, what went well, and 12, some comments you have to make about  
30 opportunities for the future. Is that correct?

A. Yes, that's correct Mr Moore.

Q. So dealing with the first, how you became involved. On the 19<sup>th</sup> of November, how was it that you first learned about what had happened at Pike River?

5 A. I was actually on the West Coast of the South Island at a conference and flew in from the South Island, landing in Wellington, and received a call or a message actually on my cellphone from Deputy Commissioner Pope. I'd say Mr Moore, it may assist me if I had my brief.

Q. Yes. You made some notes for the purpose of giving evidence?

10 A. Yes sir I have and it's in the form of a –

Q. You don't have those with you?

A. No. I think Ms Anderson may have them.

**MR MOORE:**

15 Is that all right Your Honour?

**THE COMMISSION:**

Yes. He may have both the notes and his brief for reference purposes.

**EXAMINATION CONTINUES: MR MOORE**

20 Q. Right. You were telling us how you got involved. You received a call from Deputy Commissioner Pope to give him a call, is that right?

A. Yes that's correct. That was about 7.00 am on the 20<sup>th</sup> of November.

Q. So that was the Saturday morning?

25 A. Sorry, well I started the role at 7.00 am on the 20<sup>th</sup> of November but the call was received on the evening of Friday and in discussion with Deputy Commissioner Pope he said that matters were being attended to by Acting Assistant Commissioner Steve Christian and that I was to make myself available the next morning. Steve Christian was relieving for me while I was out of town.

30 1515

Q. And did he ask you to assume the role of response co-ordinator?

A. Yes, he did.

- Q. Right, thank you, we'll talk a little bit about what that involves in a moment, but I want to deal now with a summary of your experience, if I might just lead you on that. The detail of your experience in the area of emergency response and incident management is actually set out in your brief of evidence, isn't it?
- 5 A. Yes, that's correct, it is.
- Q. But perhaps, is the most, really probably the most relevant in terms of courses and other qualifications that you've had, a Strategic Gold Command Course which you completed through the National Policing Improvement Agency at the International Academy at Bramshill in London in September and October last year?
- 10 A. Yes, that's correct. I attended that over the period 27 September to the 1<sup>st</sup> of October. It's a residential course lasting five days and it focussed on what's known as the gold command, which is effectively the strategic commander in terms of an event, a crisis or an operation, something of that nature.
- 15 Q. And that is directly relevant to the sort of task you found yourself undertaking only six or so weeks later, is that right?
- A. Yes, that's correct, it is directly relevant. It's an intensive course, had three days of theoretical learning and then the remainder of the period – sorry, it was actually two days of theoretical learning from memory, three days of practical, which was evaluative.
- 20 Q. And you're also obviously very familiar with New Zealand's co-ordinated incident management system, or CIMS, is that right?
- 25 A. Yes, that's correct. I am familiar with it, having completed the training to level 4, and also having served in Thailand during the Boxing Day tsunami as a New Zealand Police contingent commander in terms of the response there.
- Q. So you have both practical and theoretical experience backing up that role, is that correct?
- 30 A. Yes, sir, I do.
- Q. As far as CIMS is concerned, are there four points you wish to make to the Royal Commission in terms of how that model operates?

- 5 A. Well, it's deliberately designed to be flexible. The model, I think I'd describe it as a framework, not a straight-jacket. It's capable of operating at fundamentally three levels and it is not dissimilar from the gold, silver, bronze model operating in the United Kingdom, or the MEMS model operating in Queensland, there are high degrees of similarity. The response co-ordinator determines the strategy so that everyone working on the operation is very clear about the objectives that have to be achieved and the taskings and matters of that nature and the response co-ordinator works closely with the incident controller and in this case it was Superintendent Gary Knowles.
- 10 Q. And Superintendent Gary Knowles is the district commander of the Tasman Police District, and that would be normally the person who would undertake that role, is it?
- A. Yes, sir, that's correct.
- 15 Q. So we turn to the third point, which is the operation in practise. Do you have some comments to make in terms of the scale of this operation as it confronted you?
- A. It was complex. It was large. It was particularly challenging. It had the potential to be one that had multiple fatalities. It needed co-ordination on a broad spectrum of agencies. It was very, very difficult.
- 20 Q. How many police staff were involved in this to your knowledge?
- A. Over 300 police staff from all around the country.
- Q. Where did you locate yourself?
- A. Police National Headquarters in Wellington.
- 25 Q. Right.
- A. And the incident controller was generally based in Greymouth and at the forward command at the mine.
- Q. So in your particular role, what were your functions?
- A. So as the response co-ordinator, fundamentally I set the strategic framework and that's been documented and is available to the Royal Commission. I set it out determining the decision-making process and invest the decision-making with a degree of physical and emotional separation.
- 30

1520

Q. Why was that important?

5 A. I liken the aspects of an emergency response to a three-legged stool. You can have emotion, you can have fatigue, and you've got to have good process. If emotion and fatigue start to overwhelm the response then the decision-making can become fundamentally flawed.

Q. And did you recognise that as a problem in this particular operation as it evolved?

10 A. This was always going to be a challenge in this type of operation when people were involved in the rescue of those whom they worked with and knew. Fatigue was always going to be an issue, to be able to sustain the operation over a long period of time. So when you put emotion and fatigue into one context you've got a real cocktail of challenges. So you try and manage that by either sound structure or process, a combination of both actually.

Q. Did you have a role in resourcing?

15 A. Absolutely. The bottom line was whatever was needed would be delivered. The resourcing requirements would come up from the front end of the operation and I had a team in Wellington who on occasions would scour the globe to find what was required. We co-ordinated a number of items from offshore.

Q. Can you give the Commission a couple of examples of the sort of thing you're talking about?

25 A. Well we were instrumental in getting the GAG in from Australia. And I just acknowledge the contribution that the people in Queensland made, it was at a time when they were clearly challenged with the floods but nevertheless they came to the fore, sent men, expertise and equipment. We facilitated the border movements.

30 Q. What do you mean by that?

A. Well they had to come across immigration. I think in one case there was someone without a passport and we tidied all that up. This was about urgency, this was about getting people on the ground.

Q. In fact I think that was the first international flight into Hokitika that occurred as a result of this. Is that right?

A. That's correct, it was. I mean, we were negotiating with all sorts of embassy's around the world, the US Embassy. We were looking at diverting a Starlifter from Antarctica to pick up equipment. We were negotiating with the Dutch in relation to additional GAGs. And all this took time. Some of the arrangements, I don't recall it being with Queensland but with some of the other suppliers were subject to some pretty challenging contractual arrangements which had to be worked through with our legal team. So there was all manner of negotiations and discussions going on behind the scenes.

Q. What about engagement with other agencies?

A. Back in Wellington in particular there was an inter-agency approach. This had both national and international significance. It had significant political interest, local Government politics, national politics, we were negotiating and discussing various aspects across Government agencies. There was Ministry of Economic Development, Ministry of Social Development...

Q. What about foreign interests, I'm really talking about inter-Governmental relationships?

A. They were an aspect of this too because we had to negotiate equipment coming in from offshore, we had to facilitate the movement of people, we had to deal with foreign embassies in terms of missing people from within the mine, the embassies clearly had an interest in their own nationals, as did the Ministry of Foreign Affairs and Trade. So there was a significant amount of work put into managing that phase at a national level.

1525

Q. So while all those sorts of things were happening, did you also have a role in terms of assessing risk and safety and authorising decisions?

A. Yes I did, and I had discussions with some key advisers in the - one in the New Zealand Fire or two in the New Zealand Fire Service, and that was Mr Jim Stuart-Black and Dr Paula Beever. I had discussions with

the deputy secretary or deputy chief executive of the Department of Labour, Lesley Haines, and Dr Geraint Emrys from the Department of Labour.

Q. How did those relationships work from your perspective?

5 A. I thought they were very good. I think the New Zealand Fire Service provided significant input. In my view, their expertise was second to none and their contribution at the front line couldn't be questioned. Their commitment was just splendid.

Q. What about the Department of Labour?

10 A. The Department of Labour made staff available. Lesley Haines gave me her cellphone number. I recall writing it on the whiteboard, "Lesley 24/7" and –

Q. Was that the indication given to you as to availability?

A. Yes, yeah she, and in the main she was.

15 Q. Now that deals with, say, the Department of Labour up in Wellington. As far as the site itself was concerned, were you aware whether there was a Department of Labour presence there as well?

A. Yes I was. I don't recall ever meeting anyone from the Department of Labour at the site but that's not unusual because that was not my role, but I recall seeing briefings, incident action plans. Oh, the numerous discussions I had with Superintendent Knowles advising me that the Department of Labour were present. I think, I think from memory it was two or three staff. There was a regional manager who was made available and I think from memory her name was Sheila McBreen-Kerr.

25 Q. Thank you. I think we can probably get the detail of that from Superintendent Knowles. But certainly your sense was that the agencies that you were working with were working well and cooperatively and cohesively?

A. Yes.

30 Q. Turn now to the fourth heading which is "Lead agency," and the CIMS model provides for a lead agency to assist with the coordination with the emergency services and emergency service response. Is that right?

A. Yes that's correct it does.

Q. Is this at all unique or is this something much more generic associated with most rare search and rescue incidents?

5 A. No, police are generally the lead agency on a search – well, are the lead agency on a search and rescue operation by convention. We also have a statutory basis for the lead agency function. If you have a look in the CIMS manual it's, I think it refers to words to the effect, "by agreement" or "by statute" or words to that effect. I just haven't got the manual in front of me at the moment.

10 Q. Well we'll discuss that perhaps in a little more detail further on in your brief, but in terms of the choice of a lead agency what are the sorts of considerations which are in your view relevant in that determination?

A. You would consider the legislative basis, so what does the legislation say in terms of a event that you're faced with. You consider the expertise available.

15 Q. And when you're talking about expertise available, you're talking about a broad spectrum of expertise, you're talking about specific expertise, and you mentioned search and rescue then a moment ago and the role that the police at least in this country perform in search and rescue operations. Is that a relevant consideration?

20 A. Yes it is. Another example perhaps is a fire. It's quite straight forward that the New Zealand Fire Service would be in charge of a fire in an urban area where a structure's on fire, so in an aboveground situation is my understanding, and clearly the New Zealand Fire Service has that expertise. The police would fall in behind the New Zealand Fire Service and provide cordon and containment so that the fire service personnel can get on with their area of specialisation. You consider the available  
25 resources.

1530

30 Q. When you say, "Available resources," are you talking about the ability of the agency to source, to procure resources whether those resources are measured in terms of people or product or services?

A. Absolutely. There's a myriad of issues there.

Q. Right, any other considerations?



A. Sorry?

Q. Any other considerations?

A. Oh, the nature of the incident generally.

5 Q. Thank you. Turn now to the fifth point, which is the situation which  
confronted the police on the afternoon of Friday the 19<sup>th</sup> of November  
last year.

**MR MOORE ADDRESSES THE COMMISSION**

**COMMISSION ADJOURNS: 3.31 PM**

**COMMISSION RESUMES: 3.51 PM****EXAMINATION CONTINUES: MR MOORE**

5 Q. Assistant commissioner, we were just embarking on you describing to the Royal Commission what the situation which confronted the police from the moment of the explosion or at least from the moment that the police were aware that they were likely to be involved?

10 A. I think the situation, I would describe it as fraught. It was challenging. It was always going to be difficult and there were many layers of complexity. I reflected at one stage, we were dealing with a predictably unpredictable, unstable, unsafe operating environment. The mine would obviously breathe in and out, as they do, and it was fundamentally very difficult. One of the key maxims when you're dealing with a situation is to understand your operating environment and that in itself was a challenge.

15 Q. Right, well I think you'll be talking a bit more about that later in your evidence, but in terms of that initial phase, what was your impression of the state of cohesion or otherwise of the response?

20 A. As the evidence before the Commission shows the initial response, it was known that there had been an explosion. It was underground. I think Daniel Duggan who I've not met before, described in his evidence, chaos. The impression I got was that there was a – it was probably an accurate descriptor, chaotic, and that's understandable.

Q. Is that at all unusual in your experience in major search and rescue emergency situations?

25 A. No, it's not, because, you know, all of a sudden normality is thrown into abnormality. Everything that one holds dear as stable, has become fluid and unstable and that has to be dealt with, so chaos – no, I'm not surprised.

30 Q. Is that a situation which is at all novel to the police, particularly in the context of search and rescue?

A. Oh, it's not novel, I mean we deal with chaotic situations every hour of every day, so this is, this was not unusual and I didn't expect this one to be any different. I guess it was the degree of complexity and confusion.

5 Q. My next question probably rolls into the question of lead agency again, but if you were to compare the capability of the police in a large scale search and rescue or emergency response situation, are there any other agencies that you're aware of who have the ability and the capacity to be able to deal with these sorts of things?

10 A. I think the New Zealand Fire Service does. It's well trained, highly skilled people who are very familiar with CIMS, the New Zealand Defence Force. They are the only two that spring to mind. And the New Zealand Police, of course, given the size and the complexities that were dealt with.

1555

15 Q. And is that, at least in part, to your knowledge, the reasoning behind Deputy Commissioner Rickard's decision that the police should be the lead agency?

A. Yes.

20 Q. This was also a case, wasn't it, where there was a real potential which sadly has been realised, of multiple fatalities, is that correct?

A. Yes that's correct. I think the initial information was that in the vicinity of 30 people were trapped underground, and they are my words, and the possibility of multiple fatalities. So clearly the police have a significant role as the investigating arm of the Coroner's office.

25 Q. To your knowledge, was it ever suggested to you or to anyone else, whether on site or off site, that the police was an inappropriate agency to be assuming the lead agency role?

A. Sorry, Mr Moore, was the question inappropriate?

Q. Yes.

30 A. No.

Q. So it was never suggested to you or, to your knowledge, to anyone else at least within the police, that some other agency should be engaged in this lead role?

A. No.

Q. So if you were to summarise as to why it was appropriate for the police to be involved in this role, are there five points that you would make in relation to that?

5 A. Well the sheer size of the operation and coupled with that is the complexity. There's the personal.

Q. So, the first is the sheer size and the complexity of the operation, is that right?

A. Yes sir that's correct.

10 Q. Second?

A. The personal and emotional connection, which the management had with the missing men, and that's absolutely understandable. They are the employers of these men.

15 Q. Right. And what was the problem then? Are you able to expand on that?

A. Well, it goes back to an earlier point that I made. When emotion starts to find its way into the decision-making process that can be rather challenging for all parties.

20 Q. So what you're saying is there is a need to invest the decision-making process with a level of objectivity

A. Objectivity.

Q. - and distance?

A. Yes.

Q. Is that right?

25 A. Yes.

Q. The third point?

A. The commercial interests which may have the potential of creating a conflict of interest.

30 Q. Now these three points that you mentioned are all reasons why the company should not be lead agency. Is that correct?

A. Correct.

Q. And is that a point that you confront because certainly it's suggested in some of the evidence, and I believe Mines Rescue Service has

suggested that the statutory mine manager should have assumed the role of lead agency and that's why you're responding in this way, is that correct?

5 A. Yeah, that's correct. I mean in my view there are potential difficulties with that approach.

Q. So you've dealt with the question of commercial interests and the potential for the creation of a conflict of interest presumably between sealing the mine, for example, and to preserve an asset. Not suggesting it happened in this case.

10 A. No.

Q. But that's the potential isn't it?

A. Correct. And if not a reality, a perception.

Q. Yes. Fourth point?

15 A. Well there has to be a high degree of experience in managing and coordinating the emergency response, and I think in terms of this particular operation it got as difficult and as challenging as it could ever get.

Q. So you need to have an agency which has got that background and depth of expertise, is that your evidence?

20 A. Yes sir, that's my evidence.

1600

Q. And the fifth point as to why the statutory mine manager, at least in this situation, may not have been appropriate?

25 A. There's also the potential of criminal culpability for acts or omissions and I think there's a protection there for the mines manager that there is an independent approach to the operation in the investigation that follows and there's also an expectation that will occur.

30 Q. Now in terms of the list of the 12 headings, the next point I want you to talk about is what it was that the police inherited at Pike River Coal Mine. Can you take us through that please?

A. Yes, sir I've described it as a predictably unpredictable, unsafe operating environment, and that's the way I saw it. As I said, the first step in the process is to get an understanding of your operating

environment, no matter what that might be, and in this case that had to be achieved by gathering samples, having them analysed, and relying on expert advice.

Q. Any other difficulties peculiar to the site?

5 A. I think there was no viable emergency exit. That made it difficult and I think I recall the analogy that Trevor Watts used, and I think it was very appropriate, Trevor talked about walking down the barrel of a gun.

Q. And that was a reference, was it, to the drift and stone was it?

A. Correct. The 2.4 kilometre drift.

10 Q. Carry on with the complications and the difficulties which confronted the police?

A. My understanding was that when the first staff arrived there was no effective monitoring in place of the gases, and that goes back to the earlier points that I've made.

15 Q. Yes.

A. And of course understanding your environment was critical.

Q. Carry on.

A. Again, and understandably emotionally confused and frustrating environment. And I've read some of the evidence of those who felt  
20 degrees of frustration, I can completely understand that.

Q. Yes?

A. There was no effective emergency response plan or a standard operating procedure for an explosion.

Q. Yes.

25 A. The terrain, it was mountainous, it was often only assessable for a helicopter and you also had weather complications.

Q. What about communication?

A. Limited communication. My understanding is there was no cellphone coverage and limited phone lines into the site. And again,  
30 Daniel Duggan was talking about the phones becoming overloaded. I'm not actually surprised to hear that. I'm not sure any phone system could've coped.

Q. Other problems?

A. There was the initial uncertainty regarding the number of men underground and who they were. There was the uphill climb, I think it was a five degree incline of the drift.

Q. Running 2.4 kilometres, yes.?

5 A. Kilometres, yeah. There was the very high level of political interest, both at local and national level and there were international components that had to be managed. And the very intense national and international media interest which Superintendent Knowles had to deal with. There was the need to sustain a 24/7, seven day a week operation indefinitely.  
10 That's very challenging. And as it turned out the company had limited funds.

1605

Q. What was the final bill payable by the police, to your knowledge?

15 A. I think it was in the vicinity of \$11 million. I know in February we were negotiating, or working through some contractual arrangements that was going to see about another \$3 million, January it might've been. There was high expectations and I think it's really important to understand the context in which this occurred and this occurred in the context of a successful rescue operation in Chile and what you had  
20 there was a gold mine and gold mines don't contain methane. So there was a significant, but very fundamental difference.

Q. But certainly high expectations off the back of that extraordinary rescue?

A. Yes, absolutely.

Q. Yes.

25 A. There was the complexity of legal issues. I think this was with the police don't normally conduct search and rescue operations in private property in terms of private companies. Normally, search and rescue operations are conducted in public space so there were issues there and there was the issue of a prohibition order.

30 Q. Was that ever, you're talking about the Department of Labour on its part issuing a prohibition order aren't you?

A. Yes.

Q. Was that ever dangled over your head like a sword?

A. No. It wasn't. I was aware of it but the systems that were put in place managed through it.

5 Q. And I think you also mentioned some of the contractual complexities which your legal advisors had to assist you with in terms of leasing equipment and plant and that sort of thing, is that right?

A. Yes, that's correct. There was a number of contracts that had to be worked through, in fact I had one lawyer almost working full-time on some of the contracts and that was suppliers wanting contracts under terms and conditions that had to be worked through, particularly some of 10 the off-shore requirements that had to be met and of course, it came with insurance issues as well which had to be worked through. There was also the need to understand the role in contribution of experts and international experts we dialled into, expertise in Western Virginia. The reason for that was because they had had the experience of 15 Upper Big Branch which was a mine that exploded in not dissimilar circumstances in April of 2010.

Q. So you saw some expertise from that quarter did you?

A. Yes we did. We also had the expertise from Australia, from Queensland, New South Wales, from Western Australia which was the 20 robot, defence course. So there was a myriad of expertise.

Q. What else?

A. Well, again, I just reiterate the understanding of the operating environment and the ability of sampling points to determine the internal mine conditions which necessitated the need to drill boreholes, so that 25 was a significant process.

Q. What about the issue of survivability, was that a straight forward issue?

A. No it wasn't. We started dealing with that around the 24<sup>th</sup>, from memory, but there was high expectations regarding survivability. And the contingency planning for an explosive event, there didn't appear to be any contingency planning for such an event. I reflected there was no 30 viable exit, other than the single-entry drift. There was no nitrogen generator onsite. There was no GAG. There was no docking points. So all this had to be sourced and created. Other than the viable exit just



couldn't do that. I wasn't aware of any joint multi-agency exercise that preceded the event, and I think that would've been very helpful because it would've –

1610

5 Q. Why?

A. Sorry?

Q. Why?

A. Oh, well, it would've facilitated a fundamental understanding of the various roles, functions, expectations and it's, in my view, difficult to try  
10 and create that relationship during the course of an event and I can speak about that in more detail.

Q. Yes, anything else?

A. It was approximately one hour before the emergency services were advised. I often thought there was a collision of many worlds here.  
15 There was a technical world of mining. There was the operational world of emergency management and the operational world of the emergency services. There was political worlds' colliding. There was international interest. There was emotion. There was a commercial world. There were conservation interests and there was collision of media and there  
20 was a legal issue, significant issues on some occasions to deal with, and of course –

Q. I think there was a very important family world as well, wasn't there, with families of 29 missing men.

A. It, in my view, was the most important aspect are the families.

25 Q. Thank you for that. I want to turn now to item number 7 on the list, which is sealing, survivability and the raising of false hopes. Up until Wednesday the 24<sup>th</sup> of November last year and the second explosion, what was your view on survivability?

A. I sincerely believed up until the 24<sup>th</sup>, that some of the men underground  
30 may have survived. I thought some of them could've been trapped.

Q. And what was the basis, the grounds for that belief?

A. I looked at an amalgam of information. Firstly, Daniel Rockhouse and Russell Smith had self-rescue. I'd just like to say that I think Daniel Rockhouse is an absolute hero. I think he did a tremendous job.

5 Q. So, how did that fact link into your belief about survivability, given that that was relatively early in the sequence we're talking about?

A. Well, I had no reason to believe that no one else mightn't have survived the blast and weren't waiting to be rescued. There was, the mine management were very positive about this and I thought they had the best knowledge of the mine, and in my view, were amongst the best  
10 placed to give us an opinion about survivability.

Q. Can you think of any particular incidents, observations made by those connected to the company which fed that belief?

A. Yes, Mr Whittall. At 8.30 pm on the 20<sup>th</sup> of November he stated that the fresh air was being pumped into the mine and that it was quite  
15 conceivable that there was a large number of men sitting around the end of an open pipe, waiting and wondering why we're not taking our time to get to them.

Q. And just for the record, that's recorded in the police timeline at page 16, is that right?

20 A. Yes, that's correct. I'm almost certain that it was the chairman of the board, John Dow, who said on the 20<sup>th</sup> of November that there was enough rescuers or self-rescuers in the mine for people to have survived for several days.

1615

25 Q. Any other evidence?

A. I distinctly remember my colleague, Assistant Commissioner or Acting Assistant Commissioner Steve Christian and I'm almost certain it was on the evening of the 20<sup>th</sup>, possibly the 21<sup>st</sup>, and he spoke to me at the handover about a fresh air base or a clean room, and said there was an  
30 oxygen line going in there, and he got that information from the mine site, the front end of this operation. So -

Q. So that's something that actually came from the operational end?

- 5 A. Yes sir, it is. I think Peter Whittall in his brief of evidence at paragraph 139 says, "Up until the second explosion occurred I genuinely believed that initially most men and with the passage of time some men could have survived the first explosion. This was based on my understanding that compressed air was running into the mine and that the men would have been wearing self-rescuers. Up until the second explosion I tried to convey this information to the families while at the same time making them aware that the situation remained grave and the hope of finding men alive was diminishing as the length of time after the explosion increased. My message had been consistent with that of the police to continue to plan for any possible survivors until there could be no hope of survival." And a similar view was expressed by Doug White in his evidence on the 7<sup>th</sup> of September 2011.
- 10 Q. That's to this Commission, is that right?
- 15 A. Yes sir.
- Q. And anyone else?
- A. Professor Dave Cliff. He's a mining expert and he was engaged by police on the recommendation of Mr Whittall, was reported in the media on the 24<sup>th</sup> of November saying that pockets of air trapped in dead-end corners of the Pike River. So if Pike River could be providing safe havens for the trapped men - trapped miners sorry. I'm not saying that it's true and I'm not guaranteeing it but it is possible." And I met personally with Professor Dave Cliff and I have an immense amount of respect for him. I think he's truly an expert.
- 20 Q. So those are samples anyway of a variety of comments from different sources, all tending to express a degree of optimism about the degree of survivability after the first explosion on the 19th of November, is that correct?
- 25 A. Yes sir. That's some of the information that we were relying on.
- 30 Q. What did those comments and your expressed belief that survivability was possible have in terms of any decision to seal the mine or inertise the mine?

A. I'm not sure how you could do that with good conscience. Any inertion of the mine at that point may well have led to the death of other men, particularly when we now know that there was not a functioning fresh air base in there.

5 Q. And I think you're fortified to some extent in that view by comments made by Kenneth Singer in his brief of evidence of the 25<sup>th</sup> of August -

A. Yes I've -

Q. - at paragraph 152, where he expresses a similar sort of view?

A. Correct, and I think it's important to say I've never met Ken Singer but I  
10 think his comments are particularly accurate, or I'm not aware that I've ever met him.

Q. It has been suggested by some that by not sealing the mine earlier the police were responsible for creating an unrealistic and false hope of survival. What do you say to that?

15 A. I'm aware there's been some criticism of the police through not sealing the mine earlier, and that a degree of false hope was raised, but from my perspective this wasn't false hope. I sincerely held the hope based on the past information and evidence available to us at the time.

1620

20 Q. So what degree of satisfaction, at least as far you were concerned, was required before you would contemplate sealing a mine, this mine?

A. A high degree of confidence that nobody was alive in that mine.

Q. To turn now to the eighth heading, which is the decision making process. And perhaps if you could start by just describing what your  
25 role as response co-ordinator actually meant?

A. Yes sir. As the response co-ordinator I established the structure which I considered was best in terms of co-ordinating and reviewing important decisions which needed to be made by the IMT, all these decisions were made in collaboration and consultation with other relevant  
30 agencies, as well as the advice of experts. It was critical that all decision were made on the basis of the best available evidence at that time, what we understood to be the circumstances at that time. And the environment in which those decisions were made was extremely

complex. There was often a lack of information available to inform the decisions. For example, it was difficult to obtain information about the state of the interior of the mine following the explosion, gas damage, was there a fire, was the combustion that was later – I remember I used

5 the word, “Fire,” and I was corrected and told , “There was a heating.”

Q. Who told you that?

A. Peter Whittall.

Q. Yes. So you spoke about a fire in the mine because there was, certainly at one stage, a suggestion, and it may have been more than a

10 suggestion, that there was a fire in the mine?

A. Yes.

Q. Is that what you’re talking about?

A. Yes.

Q. And I think you said that Mr Whittall corrected you on that?

15 A. Corrected me, yes he did. He referred to it as, “A heating.”

Q. Right.

A. There were a number of complexities and I regard it a priority to put structure around the efforts of those working at the mine as well as we go round the decision-making processes. I think it’s important to just

20 unpick two aspects of the decision-making process. One is the process in terms of making the decision and the other is approval process, and I think it’s the approval process that’s fundamentally come in for some challenge, not necessarily the decision-making process. And it’s important to make –

25 Q. When you say, “Challenge,” I think you mean some criticism, is that right?

A. Yes, that’s probably a better way of putting it.

Q. And that criticism is around the claim that at least some decisions took too long to turn around?

30 A. Correct.

Q. Yes. What do you say to that?

A. I mean I’d like to see some examples of those decisions so we can just work through them. I’m not sure that there’s any decision that took, or

the approval that took any length of time that resulted in anything detrimental.

Q. Can you think of any examples, while you're just sitting there, of occasions when there was an urgency around a particular decision and what was done to turn that decision around?

A. I remember I got a call in relation to sealing the Slimline and that was – I remember the –

Q. Who was that call from?

A. Superintendent David Cliff. He's the district commander, of course not to be confused with Dave Cliff the Professor, and he needed an urgent decision on sealing the Slimline. It was 2040 hours and he got in say a minute. He said that the window of opportunity had opened, that he'd been advised that the time was now right, that the flying conditions for the helicopter was appropriate, and it had to be done with a degree of urgency, so I authorised it.

1625

Q. Were there other examples that you're aware of, and perhaps the example you've just given is probably not very far away from one, where the decision was in fact very much more protracted because of concerns that other agencies involved had. Can you give us example of that? What about the sealing of the main shaft? Do you remember that?

A. Yeah, I do. That took some time, there was some issues in terms of just working through the safety issues. You're referring to when the GAG went in?

Q. No, I'm talking about the deployment of helicopters in lowering heavy equipment to seal parts of the mine? Do you remember anything along those lines?

A. Yeah, that's right, there was an issue. That was around sealing the vent, from memory. There was a number of issues with that, actually. There was the weight of the plate, and from memory the helicopter had to lift something that it was not capable of doing. There was also issues in terms of CAA regulations regarding flying in that type of area and that was a safety issue. We're asking a helicopter to fly over a flaming vent

and understandably the helicopter pilot had some concerns about that. So, we engaged with Professor Cliff about how best that might be achieved. I think there was an engineering solution where the plate was cut in half. So there was a myriad of issues that had to be worked  
5 through and I think the risk assessment, although it took time, was very effective in ensuring the safety of all parties involved. I mean, it would've been absolutely irresponsible to allow that to occur without a significant amount of due diligence.

10 Q. In fact as far as that particular example is concerned I've had helpfully referred to me a photograph of this particular part of the operation. It's to be found at page 70 of the police flow chart. It's dated the 30 November 2010.

**WITNESS REFERRED TO POLICE SEQUENCE OF EVENTS DATED  
30 NOVEMBER 2010**

15 Q. Now, assistant commissioner, is that the operation that you're talking about?

A. Yes, that's correct. Yep, that's it. You can see there the vent shaft, the plate that was cut in half. The final position of the structure and of course the helicopter flying in the mountainous terrain.

20 Q. And that's an example of a decision which actually took some considerable time to turn around because of the understandable resistance of some of the operators who were to be engaged, is that right?

25 A. Absolutely, and it was absolutely understandable and that's why we work through a pretty rigorous due diligence on that and sought some significant advice and input.

Q. What was happening as far as the site itself was concerned and the incident controller and the relationship with the incident controller verses you?

30 A. Well, my role, as co-ordinator, was to assess the various options with the significant contribution of a team of advisors. So, what would happen is the concept would come up from the IMT, the incident controller would go through it and then pass it up.

1630

Q. Right. Now there has been, and you're aware that, the involvement of Wellington and this hierarchical structure of a response co-ordinator invested an unnecessary degree of complication into this whole decision making process. Do you have any comment to make about that?

5

A. Well I was in close contact with the incident controller, Superintendent Gary Knowles. Ours wasn't a, I guess, a truly hierarchical relationship in the sense that when he needed advice or a forum to throw ideas around, I was available. I used him as a source of information as well and I valued his opinion and input on the decisions which I was obliged to make in Wellington.

10

Q. Do you, notwithstanding that, have some observations about how, with the benefit of hindsight in a similar operation of this magnitude, you might change some of that structure?

15

A. Yes, I do.

Q. Tell us about that.

A. In reflecting on a similar incident of this magnitude, heaven forbid, I'd consider delegating a good deal of the more routine decision making to the incident controller. For example, relatively uncontroversial decisions such as the deployment of a robot, authorising boreholes, other ground level operational decisions should be made by the incident controller.

20

Q. And the reason for that? Might be absolutely obvious, but perhaps for the record you can tell us?

A. Well, they're at or near the site and have personal knowledge. The decisions are not critical in terms of potential loss of life or other high level considerations and to avoid any perception of delay –

25

Q. Or actual delay?

A. Or actual delay.

Q. Right.

30

A. I think the incident controller would be ably advised through a technical group or something of that nature, that could work.



Q. There are, however though, some decisions which you firmly believe need to be carried by you or even more senior officers within the police department, is that correct?

A. That's correct, sir.

5 Q. What sorts of decisions are they?

A. Those decisions that have a national significance and that they have the potential to result in multiple fatalities.

Q. And in the context of this case, are there any particular decisions which you believe should be elevated to that level of authority?

10 A. The decision to seal the mine.

Q. Why?

A. It has the potential cause of death of anyone who might've survived the initial explosion. I think Ken Singer deals with it in his evidence when he talks about, especially the uncertainty of a second explosion, it may or may not occur and he also talks about the challenges, the safety challenges around that, in terms of people working at the portal and matters of that nature, that, I mean that's significantly high risk.

15 Q. So, a decision like sealing the mine which has certainly the potential to result, well, it would result wouldn't it, in the death of anyone who'd managed to survive, is a decision which you believe needs to be elevated to higher levels within the police, is that right?

20 A. Yes sir, that's correct.

Q. And that's because of the national significance, I think you said, is that right?

25 A. Yes, well, it's even wider than that. There's international significance on that decision as well.

Q. And what about the weight or the burden of that kind of decision on the incident controller, does that have an influence in terms of your opinion?

A. Well it does, I think it's a significant burden to place on one person's shoulders.

30 Q. Is there another decision, and again in the context of this particular case, that in your view deserved elevation to these higher levels?

A. The decision to enter the mine.

Q. Right, as part of a mines rescue, is that right?

A. Yes, absolutely.

Q. Sorry, yes, a rescue operation?

5 A. That has the potential to lead to further death, significant injury of some or all of the crew deployed in. I think you only have to look at the history of Mines Rescue throughout the world to see that a number of people have lost their lives entering a mine to save the lives of others.

1635

10 Q. Had you and have you read up quite a lot of literature on that particular topic?

A. Yes sir, I have.

Q. Turn now to the ninth heading, which is the engagement of experts. Can you tell us about what you did in terms of engaging experts available to provide advice to you?

15 A. Yes I engaged a group of advisers as well as agency representatives to ensure that any of the proposals sent to me for a decision were both appropriate and authorised. For example, if it was important to ensure that the Department of Labour was fully appraised and engaged in the decision-making at my level given their statutory function in terms of  
20 their workplace obligations. I also worked closely with the New Zealand Fire Service and I've mentioned the expertise of Jim Stuart-Black and Dr Paula Beever. Dr Beever, she has expertise in combustion, fires, matters of that nature.

Q. Explosive fires?

25 A. Yes sir, she does.

Q. In fact I think she's very recently been doing work in relation to the explosive fire at the store in Tamahere?

A. Yes she is.

30 Q. Now, would you contrast the group of experts that you had available to you around your table with those experts which Superintendent Knowles assembled around him as part of the IMT?

A. Yes, these experts were largely, if not exclusively, nominated by the agencies who were already involved, such as Pike River Coal, New

Zealand Mines Rescue, SIMTARS. They were practical experts who had local knowledge and were able to respond to the changing circumstances as they developed at the mine.

5 Q. I want to turn now to heading number 10, which is "Communication with the families," which is obviously the point that you regard very strongly?

A. Yes it is.

Q. What was the police's strategy in terms of its dealings with the families?

10 A. From the outset I considered the families as an absolute priority, and the communication with those families. Indeed, I coined the phrase, "families first". This meant that before any communication or announcement was made publicly, I wanted the families to know first. It was a central plank in my strategy on behalf of the New Zealand Police that the families needed to be appraised in a practical way of all relevant developments in relation to what was happening, going on, what was  
15 being done.

Q. There was some complication in the sense that this was both a police investigation and a police operation wasn't it?

20 A. Yes, and that definitely is a sergeant issue. I mean at one end of the continuum you have the absolute desire to share all information, and at the other you have a investigation to determine culpability, indeed, if indeed there is any culpability.

Q. Now, in all of these sorts of operations, you know, rumour and speculation is rife isn't it?

A. Yes, that's right.

25 Q. Was this any exception?

A. No, this wasn't. There was all sorts of information and bits and pieces floating around. I mean we had to deal with all sorts of issues.

Q. So what was your approach to that?

30 A. That the families are provided with facts not speculation. Facts about the number and the identity and the nationalities of the men are an example. The police only released that information when the facts were certain, but there had been a great deal of speculation before that information was released.

Q. Now in relation to the families, the police had something of a dual role didn't they? On the one hand they provided a degree of welfare assistance, is that correct?

A. Yes that's correct.

5 Q. And I'll get you to talk about that in a moment. And on the other hand, there was the need to keep the families fully apprised of what was going on. Is that correct?

A. Yes.

1640

10 Q. What were some of the welfare support that the police provided?

A. I think Gary Knowles was involved in family briefings.

Q. I'm thinking more about the welfare aspects rather than the briefings now. What are some of the strategies that the police put in place, some of the services which they provided in terms of welfare and support?

15 A. This was regarded as a priority. The police obligation, or police's obligation was to ensure they were actively involved in the regular briefing, updating of families, in relation to the progress of the operation, given the company's relationship with the families, particularly as the employer of the missing men, regarding Pike River Coal's involvement  
20 in this process as central, and I'd just like to say I was grateful to Mr Whittall for his involvement in this process.

Q. Do you have a comment about the twice-daily briefings that Superintendent Knowles was involved in?

25 A. I think on reflection twice daily briefings placed an unreasonable burden on Gary Knowles. As incident controller he was extremely busy and the demands of the time, they were substantial indeed.

Q. So lessons for the future, how would you change things?

30 A. I think he should've been involved in at least one of the daily briefings but on a more restricted basis. In my view it would've been appropriate to have appointed a police liaison member, at a senior rank, who would have supplemented the efforts of Superintendent Knowles and his obligation to the family. That person would've provided detail of the material, which was necessary for the family briefings. Such a person

would be involved in giving the regular media interviews and updates. Superintendant Knowles was involved in dealing with the media, updating the families as incident controller and I think it was a big ask.

5 Q. And lessons learned. I mean have those strategies been put in place in a different context to good effect?

A. Yes, in Christchurch following the 22 February earthquake we reflected and took a different approach.

Q. And that worked better?

A. Yes it did.

10 Q. Now the eleventh point I want to ask you about is, first of all what went well then we'll move to opportunities for the future. So perhaps can you just move us through as quickly and as economically as you can?

A. Yes.

Q. What in your view in retrospect worked well?

15 A. I just preface my comments by saying it saddens me to say that 29 men lost their lives in this mine but following the 19<sup>th</sup> of November there were no additional deaths or serious injury. The rescue teams and those involved in some very high risk activities were deployed safely. There were multiple phases that were co-ordinated, international requests and  
20 operational deployment. What those at the site determined they needed to give effect to their action plans were supplied. Often this required the police to co-ordinate with other agencies. The New Zealand Defence Force were outstanding. The Australian High Commissioner extremely supportive. The private sector suppliers assisted, essentially what was  
25 required was delivered. Most parallel planning worked well. All sorts of requirements needed to be juggled at the same time, that was obtaining additional staff from throughout the country. Equipment, informing the public through the media, liaising with the families, there were many things that had to be done. Government agencies at a local and  
30 international level worked well and co-operatively. Department of Labour, Ministry of Social Development, Department of Conservation, Ministry of Foreign Affairs and Trade, New Zealand Fire Service, was

effectively liaising with foreign embassies and the local community that was established and maintained.

1645

5 A. Effective collaboration and contributions were made by technical experts, both nationally and internationally. Priorities were established and work completed efficiently, boreholes were drilled. These were done in a few days and not weeks. A nitrogen generator was sourced from offshore and that was operational within days rather than weeks or months. There were new professional relationships established where they hadn't previously existed. I think these worked well in the main. Risks were identified and they were safely managed. There was absolutely intense national and international media, that was challenging but it was managed. Emergency response was effectively managed and it was over a very long, sustained period. Welfare supports were put in place. Certain aspects of the family support liaison were effective and the text notification, the website, the 0800 phone line, we set up for the regular briefings and I understand that they continue to the day. Local police staff from Greymouth, they performed extremely well. They established co-ordination through the operation, particularly in that initial action phase and senior police staff were available.

15 Q. And then finally, if we turn to heading number 12, which is your comments on opportunities for the future. I think you list some five, perhaps you could take us through those?

25 A. Yes sir. The first one is emergency exercises. I believe that emergency exercises involving all agencies involved at the mine would be of great assistance. This would ensure that all agencies understand their roles. They grow to know each other, both operationally and socially and would identify short comings which could be identified in the future. And as I say, the planning for this is already commenced, it's in its pre-preliminary stages with Solid Energy.

30 Q. Second point?

A. CIMS. The CIMS model provides an effective operating framework and it did during this operation. It was flexible and operated well in the

context of the mining disaster. It's not inconsistent with other more specialised models, such as the Queensland MEMS model, however, in the context of a mine disaster in New Zealand, there's an opportunity to draw on some aspects of the Queensland MEMS, in particular there's room to allocate certain skilled personnel to critical roles within the CIMS structure to ensure that their experience and capability assists in that role. Now, you could look at examples of the operations manager, the logistics and the planning which are roles under the CIMS. Could these be filled by specialised people within the mining industry but within a CIMS framework? Furthermore, on reflection I believe the majority of operational decisions could be left as the responsibility of the incident controller.

Q. This is actually a third point is it?

A. Yes I think it is, I think. As response co-ordinator, if one is indeed appointed, could provide overarching strategic assistance and also be available in making certain critical decisions which would be unfair and inappropriate to leave on the shoulders of the single incident controller.

Q. So this is the point that you were making that there were a number of operational decisions which could be dealt with by the incident controller but there were core decisions which particularly related to the potential to cause death or result in fatalities?

A. Yes, that's correct.

Q. Which need to be placed in the domain of more senior officers right up to commissioner level, is that correct?

A. Yes, that's correct.

1650

Q. Thank you, all right, the fourth point I think is a question of delegation of functions, particularly in relation to families and family interaction liaison, but also to a lesser extent, media, is that correct?

A. Yes, that's correct.

Q. Tell us about that?

A. Superintendent Knowles, in addition to the role that he was performing as incident controller was also responsible for family and media

briefings. I know he committed himself to two family briefings and two media briefings a day. This was emotionally demanding work and it took him away from his core responsibilities as the incident controller, and I know he'll give more evidence about this aspect himself, but he and I share the view that in the future, these functions should be delegated to a specific senior police officer who would be dedicated to the family and the media.

5

Q. And the role of incident controller, would you take the incident controller right out of that?

10

A. No, no, I wouldn't. There remains a role for the incident controller, who needs to be able to provide a visible presence, but this must not be allowed to compromise his core operational functions.

Q. And then there's a fifth point, which is parallel contingency planning. What does that mean?

15

A. Yes, sir, parallel contingency planning occurs where you've got a number of contingencies or results that need to be catered and planned for, even though they may not eventuate. Parallel planning is another way of describing it, so for example, Superintendent Knowles, after leaving Nelson on route to Greymouth was called back to pick up body bags. This was necessary because of the need to plan the parallel way for the possibility of multiple fatalities.

20

Q. So what you're saying is that you need to be factoring in, in parallel decision making, the worst case scenario –

A. Yes, sir.

25

Q. – although hoping to be able to operate on a better case scenario, is that correct?

A. That's correct. Throughout the operation there was extensive parallel contingency planning, in my view, this worked in most cases well. However, there were some examples where parallel contingency planning might've resulted in the deployment of equipment earlier, for example, the question of inertisation of the mine, was something which needed to be considered and it was considered from an early stage, even though it was not an option which police were prepared to

30



contemplate until there was no reasonable possibility that anyone had survived inside the mine. I heard of the GAG – I wasn't at the meeting, but on the afternoon of Tuesday the 23<sup>rd</sup> of November, attending that meeting was the commissioner of police at the time, Mr Howard Broad, Peter Whittall, Doug White, Darren Brady from SIMTARS, and Superintendent Gary Knowles. It was at that meeting that a discussion about a GAG engine took place. I think they spoke about a Floxal generator as well.

1653

10 Q. A Floxal?

A. Yeah, it's a nitrogen generator. The notes of that meeting record that the police would have arranged for the GAG to be delivered and it was attended to, as I understand, fairly smartly.

Q. So your understanding is the first time it was mentioned at least to your knowledge was in the afternoon of Tuesday the 23<sup>rd</sup> November, the day before the second explosion, is that right?

A. Yeah, that's to my knowledge.

Q. But I think the point you're making is that parallel contingency planning might well have had in a much earlier stage, some kind of facility for having the GAG over here at an earlier stage or at least getting it ready to be deployed in the event that it needed to be done. Is that right?

A. Yes. And it would have been helpful if there had have been perhaps one on site.

Q. Yes.

25 A. Or gagging points, so it could be plugged in.

Q. And then finally, and I think this is your sixth point, IMT meetings?

A. Yeah.

Q. The number of people attending them, their frequency, those sorts of things.

30 A. Yes.

Q. Do you have an observation about that?

A. Yeah, look I do. I think, I'm aware of some of the criticism of the IMT meetings being too large, too many attendees. In my view, for effective

meetings of this kind, the number's in the order of six to eight. I know that from memory the New South Wales Mines Rescue handbook I think refers to about eight positions. If you look at a pure CIMS, it's four. So I think that gives you an idea of where the numbers should be pitched.

5 And it depends on the expertise required. Larger numbers, it can add – they can add an unnecessary layer of complication. I don't know that they have to be every hour. The meeting should be held when it's considered necessarily, but in my view generally about three to four hourly. It's highly dependent, though, on what's actually happening.

10 events are unfolding extremely quickly, there may be a need for more frequent IMT meetings. So I think that needs to be looked at.

Q. So to summarise your position, this was an operation which went well, went collaboratively with support from a number of agencies including the owners of the mine and there are some ideas which you have at least floated with this Commission as to how things might be improved in the future. Is that correct?

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A. Mmm.

#### **MR GALLOWAY ADDRESSES THE COMMISSION**

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#### **THE COMMISSION ADDRESSES COUNSEL – TIMING OF CROSS-EXAMINATION**

**COMMISSION ADJOURNS: 5.01 PM**

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