



MEDIA KIT

Phase Two: Search and Rescue

Hearings

5 September - 23 September 2011

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The Royal Commission on the Pike River Coal Mine Tragedy – Hearing Dates

Phase Two
Search and Rescue

Scheduled Hearings
Monday 5 September – Friday 23 September

Phase Three
What Happened at Pike River

Scheduled Hearings

Monday 14 November – Friday 25 November

Monday 5 December – Friday 16 December

Monday 19, Tuesday 20 & Wednesday 21 December
Set aside if needed

Tuesday 7 February - Friday 17 February 2012

Phase Two Search and Rescue Hearings

On 28 April 2011, the Commission prepared a list of issues it considered needed to be evaluated to address its Terms of Reference. In addition the Commission has identified 21 questions in relation to the search, rescue and recovery operation at Pike River Coal Mine that it wants addressed by witnesses during the hearings.

The Commission also wants to take a forward looking approach where possible to help address the question: how could things have been done better? Where appropriate witnesses will be asked what they would do differently in light of their experiences at Pike River.

Hearing logistics

The hearing plan timetable is indicative only. It provides a guide to participants about the general timing for particular witnesses to appear. This may change as the hearings proceed and cross examination applications are granted. The Commission may receive additional applications from Counsel to cross examine witnesses during the course of the hearings.

The Commission's Communications Advisor is available to provide information and deal with requests for documents from media representatives attending the hearings. Where possible, a written witness statement will be provided to media representatives covering the hearings when the witness appears.

The Commission has been advised that some family witnesses do not want their statements to be filmed or recorded. Media will be advised in advance of where this is the case.

Hearing Plan – Phase Two: Search and Rescue

Hearings are being held in Courtroom No.1, Greymouth District Court, 60 Guinness Street, Greymouth. The scheduled sitting hours are:

Monday	11.30am - 5.00pm
Tuesday-Thursday	10.00am - 5.00pm
Friday	10.00am - 1.00pm

Date	Witness/(Counsel)	Examination by:	
Monday 5 September	11:30am Opening Statement of Counsel Assisting (Kerryn Beaton)		
	Events of 19 November		
	1. Nigel Hughes - Detective Senior Sergeant, New Zealand Police (Simon Moore SC)	Parties granted leave Counsel Assisting	
	2. Johannes Strydom - former Pike River Coal Ltd (PRC) Electrician (Simon Moore SC)	Parties granted leave Counsel Assisting	
	3. Daniel Rockhouse - former PRC Miner (Simon Moore SC)	Parties granted leave Counsel Assisting	
Tuesday 6 – Thursday 8 September	Pike River’s emergency response		
	4. Douglas White - former PRC General Manager (John Haigh QC)	Parties granted leave Counsel Assisting	
	5. Stephen Ellis - Statutory Mine Manager PRC (Stacey Shortall)	Parties granted leave Counsel Assisting	
	6. Daniel Duggan - former PRC Control Room Officer (Simon Moore SC)	Parties granted leave Counsel Assisting	
	7. Neville Rockhouse - former PRC Safety and Training Manager (James Rapley)	Parties granted leave Counsel Assisting	
Friday 9 September	8. Glenville Stiles - Trainer contracted to Mines Rescue Service (Simon Moore SC)	Parties granted leave Counsel Assisting	

Date	Witness/(Counsel)	Examination by:	
	9. John Taylor - Project Investigations Manager, Solid Energy New Zealand (Craig Stevens)	Parties granted leave Counsel Assisting	
	The search, rescue and recovery operation		
Monday 12 – Friday 16 September	10. Grant Nicholls - Assistant Commissioner, New Zealand Police (Simon Moore SC)	EPMU, MRS, Families, Pike Officers, Counsel Assisting	
	11. Gary Knowles - Superintendent, New Zealand Police (Simon Moore SC)	EPMU, MRS, Families, Pike Officers, Counsel Assisting	
	12. Darren Brady - Manager, Safety in Mines Testing and Research Station (Simtars), Queensland. (Counsel Assisting)	Parties granted leave	
	13. Timothy Whyte - Industry Health and Safety Representative, Construction, Forestry, Mining and Engineering Union, Australia (Nigel Hampton QC)	Pike Officers, Parties granted leave, Counsel Assisting	
	14. Seamus Devlin - State Manager, NSW Mines Rescue, Australia (Brian Latimour)	EPMU, Families, Counsel Assisting	
	15. James Stuart-Black - National Manager, Special Operations, New Zealand Fire Service (Karen Clark QC)	Parties granted leave Counsel Assisting	
	16. Lesley Haines - Deputy Chief Executive, Labour Group, Department of Labour (Kristy McDonald QC)	Families, Pike Officers Counsel Assisting	
	17. Trevor Watts - General Manager, Mines Rescue Service (Jonathan Forsey)	Families, DOL, Pike Officers, Police, Counsel Assisting	
	18. Craig Smith - General Manager Underground Mines, Solid Energy New Zealand (Craig Stevens)	Parties granted leave Counsel Assisting	
	Communications with the Families		Deceased relative
Monday 19 September	19. Lauryn Marden	Pike Officers, Police Counsel Assisting	Husband - Francis Marden (41), contractor
	20. Tara Kennedy		Partner - Terry

Date	Witness/(Counsel)	Examination by:	
			Kitchen (41), contractor
	21. Sonya Rockhouse		Son - Ben Rockhouse (21), contractor
	22. Carol Rose		Son - Stuart Mudge (31), trainee miner
	23. Marty Palmer		Son - Brendon Palmer (27), trainee miner
	24. Richard Valli		Brother - Keith Valli (62), miner
	25. Bernard Monk		Son - Michael (23), contractor
	(Nick Davidson QC)		
Tuesday 20 September	26. Peter Whittall CEO PRC (Stacey Shortall)	Parties granted leave Counsel Assisting	

Phase Two Hearing Questions (as at 26 August 2011)

Cause of loss of life: (Issues 2.1 - 2.5)

1. Where within the mine were the men most likely located at the time of the explosion and what activities were being undertaken?
2. Is there any evidence (including video and laser images) that indicates the Coroner's finding as to the likely cause and timing of the deaths should be re-visited?

Search and Rescue: (Issue 2.5)

3. Were there suitable and sufficient outlets providing means of entry and exit for employees in the mine on 19 November?
4. Were the equipment and facilities for self-rescue adequate, properly maintained and situated in the right places within the mine?
5. Were the self-rescue policies and procedures of the Company clear and were the workers adequately trained?

Emergency Response Planning: (Issues 2.6 - 2.8)

6. Was the Company's emergency response plan (ERP) adequate for the eventuality of an explosion and had it been tested for this eventuality?
7. Had the Company's ERP been integrated and tested with those of other agencies including the New Zealand Fire Service and New Zealand Mines Rescue Service (MRS)?
8. Was the Company able to provide fundamental information required for the Search Rescue & Recovery (SR & R) operation?
9. Had the Company planned how testing of the mine atmosphere would occur following an explosion?

The SR & R Operation: (Issues 2.9 - 2.11)

10. Did the organisational structure, communications, information systems and decision-making processes established by the Police enable decisions to be made in a clear and timely manner?
11. Were the multiple levels of the organisational structure and their physical separation a hindrance to effective decision-making?
12. Were the roles of the Company, the Statutory Mine Manager and the other supporting agencies defined and understood by all participants?
13. Were the services of the technical experts used to best advantage?
14. What were the components of the risk assessment structure and did it operate effectively?
15. What was the role of DOL and MRS during the SR & R operation and what contributions did they make to the Incident Management Team?

The decisions reached: (Issue 2.12)

16. Is there an evidentiary basis for the proposition that a "window of opportunity" existed following the first explosion?
17. Were the decisions concerning:
 - the survival of the men;
 - the transition from rescue to recovery; and
 - controlling ventilation, sealing the mine and utilisation of the GAG machine

appropriate and timely?

18. Did the timing of these decisions have any adverse consequences in relation to the number of explosions and the conditions within the mine?

Resources: (Issue 2.13)

19. Were there deficiencies in the availability and level of logistical support for the SR & R operation?

Communications with the families: (Issue 2.20)

20. Were appropriate steps taken to contact the families immediately after the first explosion?
21. Subsequently, when briefings occurred:
 - were “false hopes” raised?
 - was material information withheld or its release unduly delayed?If so, was this by design or as a result of the exigencies of the situation?

Phase Two – List of Issues (issued 28 April 2011)

On 28 April 2011 the Royal Commission prepared a list of issues that it considered needed to be evaluated to address its Terms of Reference.

The list was provided for the assistance of parties, interested persons and potential witnesses and submitters. An inquiry is not a court case. The Commission is not able to determine legal rights and liabilities. Its responsibility is to inquire into and report upon the tragedy, and make recommendations for the future. There are no pleadings by which issues are identified. The Terms of Reference broadly define the subject matter of the inquiry, but the Commission must determine the issues which need to be assessed and answered to enable it to provide its final report.

The Phase Two: Search and Rescue list of issues is set out in full below. The full list for Phase One, Three and Four is available from <http://pikeriver.royalcommission.govt.nz/List-of-Issues>

Phase One: Context (summary)

The contextual phase comprising the New Zealand regulatory environment; the interaction of mining law and other law in New Zealand; the resourcing and implementation of mining law in New Zealand (ToR(e),(f) and (g)). The geography, conception, approval, design and development of the mine. The regulatory requirements and recognised practices in New Zealand (ToR(e))

Phase Two: Search and Rescue

The Cause of the Loss of Life. The search, rescue and recovery operations. (ToR(b) and (d)).

The cause of the loss of life

- 2.1 The likely injuries suffered by the men.
- 2.2 The cause(s) of the deaths of the men.
- 2.3 The likely timing of their deaths.

The search, rescue and recovery operations

- 2.4 The chronology of events and actions from the time of the first explosion to the present time.
- 2.5 The opportunity (if any) for the men to have taken steps towards self rescue, including:
 - a. the Company's rescue plan in the event of an explosion,
 - b. the equipment and resources available to the men, and
 - c. the training provided to them.
- 2.6 The content of any emergency response plans of the Company, and of other organisations which were in place at the incident date.
- 2.7 The extent to which such response plans:
 - a. were tested and remedial action taken,
 - b. were able to be deployed when the tragedy occurred, and
 - c. proved adequate in the course of the occurrence.
- 2.8 The extent of the information available to the Company and the external entities involved in the search, rescue and recovery operation in the period following the first explosion; including information as to the atmosphere, the location of the men and their work activities in the mine before and around the time of the first explosion.

- 2.9 The respective roles played by the Company and external entities in the search, rescue and recovery operations.
- 2.10 The reasons for the division of roles, including any relevant legislative provisions.
- 2.11 The liaison and decision making processes which were adopted in the course of the operations, including the expert advice received by the Company and external entities.
- 2.12 The decisions reached and whether these were made in a clear and timely manner.
- 2.13 The human and physical resources available for the purposes of the search, rescue and recovery operations.
- 2.14 The qualifications, experience and training of the organisations and individuals involved in the search, rescue and recovery operations.
- 2.15 The measures taken in an endeavour to stabilise the atmosphere within the mine.
- 2.16 The extent, if any, to which the search, rescue and recovery operations were impacted by the:
 - a. geography of the mine and its environment,
 - b. design of the mine,
 - c. systems in the mine, and
 - d. information and equipment provided by the Company.
- 2.17 The measures taken in an endeavour to regain full or partial access to the underground reaches of the mine.
- 2.18 The comparison between this search, rescue and recovery operation and:
 - a. previous similar operations in New Zealand,
 - b. previous similar operations in other countries, and
 - c. international best practice.
- 2.19 The nature of the search, rescue and recovery processes employed in other similar hazardous environments.
- 2.20 The communications with the families of the men during the search, rescue and recovery operations.

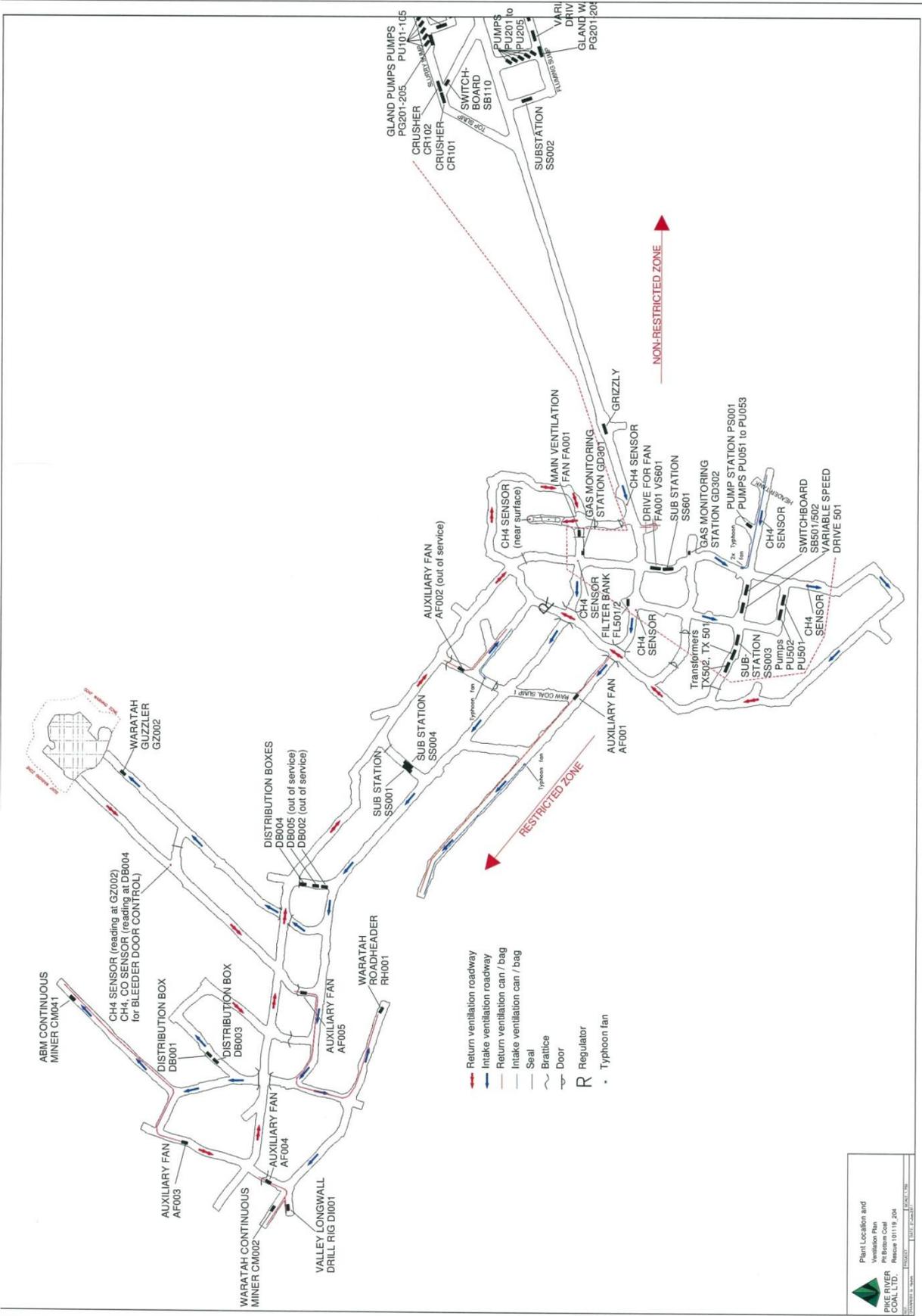
Phase Three: What happened at Pike River? (summary)

The cause of the explosions. The Company's operational and management practices. Regulatory oversight. (Terms of Reference (a) (c) and (g)).

Phase Four: Policy Aspects (summary)

The comparison between New Zealand and the selected countries in relation to:

- i) mining regulatory requirements and recognised practices,
- ii) their interaction with conservation, environmental and other legal requirements, and
- iii) the resourcing for, and the administration and implementation of mining law and practice (ToR(h)).



Glossary - Pike River Coal Mine: Search, Rescue and Recovery

Afterdamp	A noxious mixture of mine gases resulting from a coal mine explosion.
Anemometer	An instrument for measuring air velocity within roadways.
Calscan	A Cavity Auto Scanning Laser System (C-ALS), commonly referred to as a Calscan, is a 3D laser scanning system that is deployed through boreholes for surveys of inaccessible spaces, underground voids and cavities.
Carbon Dioxide	Chemical symbol CO ₂ . Formed by engine exhaust, oxidation of coal, or fire. CO ₂ is colourless but has a pungent odour. Makes up 0.03% of air.
Carbon Monoxide	Chemical symbol CO. A colourless, odourless gas formed by the incomplete combustion of carbon or a carbonaceous material. CO is highly flammable and very toxic in low concentrations
Control	The overall direction of response activities in an emergency situation. Authority for control is established in legislation or by agreement and carries with it the responsibility for tasking and coordinating other agencies. Control can operate at either the single-agency level or horizontally across agencies.
Coordinated Incident Management System	A structure to systematically manage emergency situations.
Delsar Equipment	Equipment that uses a seismic sensor to detect movement and an acoustic sensor to detect subtle sounds that might alert rescuers to a survivor.
Drift	A roadway driven in stone.
Drift Runner	A vehicle used to transport miners to and from the mine interior.
Floxal	A gas generating system used to pump nitrogen gas underground (into the mine) and prevent gas explosions.
Forward Commander	Police person based in the Incident Control Room at Pike River Coal. Their role was to provide a Police presence at the mine site, to supervise Police staff there, maintain control over the site and provide a safe working environment. Part of the role was to keep Police Incident Control (Operation Command) informed of events as they arose, through phone contact and Incident Action Plans.
Forward Controller	The Forward Controller was based at Pike River Coal, with a support team made up of all emergency services, including Police. Their role was to support the Police Incident Controller, who was predominantly based at Greymouth Police Station.
Fresh Air Base	Location underground where a known fresh air source is available. This may have an air source independent of the main ventilation air. An emergency refuge will generally have a supply of self contained breathing apparatus or refill station if using a Compressed Air Breathing Apparatus (CABA) system.

GAG	Works by pumping gas and steam into the mine so that over time the fire is starved of oxygen and is eventually smothered.
Gas chromatograph	Specialised equipment used to precisely measure an increased number of constituents of a mine gas.
Grahams Ratio	A ratio using selected mine gas concentrations to determine the intensity of oxidation and therefore whether spontaneous combustion is occurring.
Grizzly	A term specific to Pike River Coal where the underground cables are taken up a wide borehole to the fans. The top of the hole has a 'grizzly' i.e. a grating to allow these cables to pass through. It is a specific location and gas monitoring point.
Headings	Two or more roadways generally driven parallel to access different parts of the mine.
Inbye	The direction towards the coal face from any point of reference.
Inertisation	The process of reducing the Oxygen concentration in the mine.
Incident Action Plan	A statement of objectives, strategies and critical functions to be taken at an incident.
Incident Control	The overall management of the response to an incident.
Incident Controller	The Incident Controller (Operation Commander) has the primary responsibility for managing a particular incident. This will entail 'control' across organisations as well as 'command' within the home organisation.
Incident Management Team	The Incident Management Team made up of planning and intelligence, operations, logistics and Command provide support to the Police Incident Controller.
Inseam Drillers	Personnel who operate underground drilling equipment.
Methane	Coal seam gas, colourless and odourless. It is highly flammable (5.0 to 15%). Auto ignition temperature is 537C.
Outbye	The direction away from the coal face from any point of reference.
Pit bottom	First area to be developed in the coal seam where underground services are established e.g. the area of initial mine development at the end of the stone access roadway within the Pike River Coal mine.
Response Coordinator	The Response Coordinator's primary responsibility is to provide strategic direction, support and coordination to Incident Management Teams (IMTs).
Return	Any underground roadways that have 'used contaminated' air moving through them towards the surface after it has passed a mining area.
SIMTARS	Safety in Mines Testing and Research Station (Simtars) is a Queensland Government organisation focusing on research, consulting, testing, certification and training services for the improvement of the mining industry.

Self-contained self-rescuer	A temporary breathing system for use when the mine atmosphere becomes unbreathable. There are two systems: one has a simple filter and is rarely used; the other uses potassium peroxide, which reacts with exhaled CO ₂ and produces sufficient oxygen for approximately 20-60 minutes of use. Intended to allow the user to move to fresh air or another air source.
Slimline shaft	Small diameter shaft located within the pit bottom area of the Pike River Coal mine.
Spontaneous Combustion	Coal reacts with atmospheric oxygen even at ambient temperatures and this reaction creates heat. If the heat liberated during the process is allowed to accumulate, the rate of the above reaction increases exponentially and there is a further rise in temperature. When this temperature reaches the ignition temperature of coal, the coal starts to burn and the phenomena is described as spontaneous combustion.
Tube Bundle	A bundle of tubes spread throughout the underground workings to transport gas samples to the surface for Mairhak (or other) analysis.
Ventilation Shaft	The vertical access with a primary purpose of passing air in or out of the mine.

List of Counsel Representing as at 29 August 2011

Name of Party	Counsel
Gary Campbell	Philip Hall, Kerry Cook
CYB Construction Ltd (Chris Yeats Builders)	Brian Nathan
Coal Services Pty Limited (Mines Rescue Division)	Brian Latimour
Alexander Colligan Russell Smith Rem Markland Matthew Coll	Gregory King
Department of Conservation Department of Labour Ministry of Economic Development Ministry for the Environment	Aedeen Boadita-Cormican, Cameron Mander, Anthea Williams, Tim Smith, Kristy McDonald QC
Families of the Deceased	Nicholas Davidson QC, Jessica Mills, Richard Raymond, Colin Smith
McConnell Dowell Constructors Ltd	Grant Nicholson, Sarah-Lee Stead, Sophie Gilmour
New Zealand Mines Rescue Service	Garth Gallaway, Jonathan Forsey, Emily Whiteside
Minserv International Ltd	Garth Gallaway, Jonathan Forsey, Emily Whiteside
Gerard Morris	David Butler
Terence Moynihan	Gregory King
New Zealand Amalgamated Engineering, Printing & Manufacturing Union Inc	Nigel Hampton QC, Rowan Anderson
New Zealand Coal & Carbon Ltd	Sam Hetherington, Edward Bayley
New Zealand Council of Trade Unions	Peter Cranney
New Zealand Defence Force	Major Steve Taylor
New Zealand Fire Service Commission	Robert Buchanan, Karen Clark QC
New Zealand Oil and Gas	Tim Stephens, Nina Blomfield
New Zealand Police	Simon Moore SC, Katherine Anderson, Kirsten Lummis
PCS Investments Nominees Ltd - (Russell-LaPorte Family A/C) & others (Shareholders)	Garry Wakefield
Certain directors, officers and managers of Pike River Coal Limited (In Receivership)	Stacey Shortall, Anna Rawlings, Andy Glenie Duncan MacKenzie, Alison Gordon
Pike River Coal Limited (In Receivership)	Mike Colson, Fiona Tregonning
Pike River Contractors and Suppliers Group	Gregory King

Queensland Mines Rescue Service	Matthew Mallett
Leonard Richardson	Desmond Wood
Neville Rockhouse	James Rapley, Ian Kearney
Rockwell Automation	John Billington QC
Solid Energy New Zealand Ltd	Craig Stevens, Adam Holloway
Tai Poutini Polytechnic	Garth Gallaway, Emily Whiteside
URS New Zealand Limited	Mika Austin, Michael Heron
Valley Longwall International Pty Limited (VLI)	Pheroze Jagose, Richard May
Douglas White	John Haigh QC, Bridget Smith

Standing of Parties and Others as at 26 August 2011

Parties	Interested persons	Witnesses / submitters
Department of Conservation ¹	Gary Campbell	Stanley Alder
Department of Labour	Coal Association of NZ	Lindsay Arthur
Families of the deceased	Coal Services Pty Ltd	Hon Max Bradford
Ministry for the Environment	Buller District Council	Harry Bradshaw
Ministry of Economic Development	Grey District Council	Simon Breeze
NZ Amalgamated Engineering, Printing & Manufacturing Union Inc	McConnell Dowell Constructors Ltd	Buller Conservation Group
New Zealand Police	Mines Rescue Trust	Paul Caffyn
Pike River Coal Ltd (in receivership)	MinEx Health and Safety Council	Dr Murry Cave
	National Rural Fire Authority	Prof Dave Cliff
	NZ Coal & Carbon Ltd	Construction, Forestry, Mining and Energy Union
	NZ Council of Trade Unions	Kevin Curtis
	NZ Fire Service Commission	Paul Douglas
	NZ Fire Service	Alan Eastergaard
	NZ Defence Force	Bill Evans
	NZ Oil and Gas Ltd	Peter Ewen
	NZ Public Service Association	Peter Fairhall
	Pike River Contractors and Suppliers Group	Dave Feickert
	Current or former employees/Officers/Contractors of Pike River Coal Ltd	Harry Gair
	Rockwell Automation (NZ) Ltd	William Gardner
	Royal Forest & Bird Protection Society of NZ Inc	Charles Gawith (Newmont Waihi Gold)
	Solid Energy NZ Ltd	Glen Grindlay (Newmont Waihi Gold)
	Straterra Inc	Hawcroft Consulting International

¹ Inc. Minister of Conservation and DG of Conservation

	Tai Poutini Polytechnic	Impac Services Ltd
	URS NZ Ltd	Brian Jackson
	Valley Longwall International Pty Ltd	Mark Levene
	West Coast Regional Council	Andrew Loader
	West Coast Rural Fire Authority	John Menzies
		John Mildren
		Minserv International Ltd
		Gerard Morris
		Newman Energy Research Ltd
		NZ Society for Risk Management
		Te Kotahitanga Ngarimu
		Erik Nielsen
		Oceana Gold (NZ) Ltd
		Kenneth Palmer
		PCS Investments Nominees Ltd
		Ronald Pearson
		David Penney
		Jeremy Penrice
		D G Peterson
		Queensland Mines Rescue Service
		Harry Rayner
		William Rennie
		Leonard Richardson
		Simtars
		Robert Tait (Friends of the Earth (NZ))
		Benson Taylor
		William Taylor
		Robert Terry
		David Titheridge
		Basil Walker

The New Zealand Coordinated Incident Management System (CIMS)

NB: The NZCIMS document can be printed from the PDF on the Commission's website.

