

# NSW Mine Safety Performance Report

2010 - 2011

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NSW Trade & Investment – Mine Safety PO Box 344 Hunter Region Mail Centre NSW 2310

Telephone:	(02) 4931	6666
relephone.	(02)4931	0000

Website: www.dpi.nsw.gov.au/minesafety

Email: mine.safety@industry.nsw.gov.au

This report can be found on the NSW Trade & Investment – Mine Safety website at <a href="http://www.dpi.nsw.gov.au/minesafety">www.dpi.nsw.gov.au/minesafety</a>

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# DEFINITIONS

### **Injury Classifications**

### Fatal Injury (FI)

An injury that results in death.

### Lost Time Injury (LTI)

An injury that results in a minimum of one full shift's absence (AS1885.1 – 1990).

### **Medical Treatment Injury (MTI)**

An injury requiring medical treatment.

### **Restricted Duty Injury (RDI)**

An injury resulting in the injured person returning to alternative/restricted duties.

### **Total Recordable Injuries (TRI)**

The total number of fatal injuries, lost time injuries, medical treatment injuries and restricted duty injuries.

### Serious Bodily Injury (SBI)

An injury whose **nature of injury** is notifiable under the relevant legislation is classified as a Serious Bodily Injury (SBI) in this report and covers the following:

#### Serious Bodily Injury (SBI) - Coal

Refers to the nature of injury types specified in *Coal Mines (General) Regulation 1999* Clause 85 and the *Coal Mine Health & Safety Regulation 2006* Clauses 55 and 57.

### Serious Injury (SI) – Non-Coal

Refers to the nature of injury types specified in the *Mines Inspection Act 1901* Section 47 and the *Mine Health & Safety Regulation 2007* Clause 145.

### Serious Injury (SI) – Petroleum (Onshore)

Refers to serious injury as specified in the *Petroleum (Onshore) Schedule 1992* Clause 301(1) "an injury which requires immediate attention by a medical practitioner".

Refer to Appendix B.4 for details of Serious Bodily Injury Types and Relevant Legislation.

### **Notifiable Injury Outcomes**

An injury may result in one or more of the following notifiable injury outcomes:

- Fatality
- Entrapment
- Loss of consciousness
- Hospital inpatient admission
- At least seven days of lost time and/or alternative duties

With the exception of fatality, these injury outcomes became newly reportable under the Coal Mine Health and Safety Regulation 2006 Clauses 55, 56 and 57 from mid 2006-07, and the Mine Health and Safety Regulation 2007 Clause 145 and 146 from the second quarter of 2008-09.

Refer to Appendix B.5 for details of Notifiable Injury Outcomes and Relevant Legislation.

### Frequency Rates

#### Fatal Injury Frequency Rate (FIFR)

The number of fatal injuries per million hours worked.

#### Lost Time Injury Frequency Rate (LTIFR)

The number of lost time injuries per million hours worked.

#### Serious Bodily Injury Frequency Rate (SBIFR)

The number of serious bodily injuries per million hours worked.

### Total Recordable Injury Frequency Rate (TRIFR)

The total number of fatal injuries, lost time injuries, medical treatment injuries and restricted duty injuries per million hours worked.

#### **Five-Year Average**

A statistical technique which charts the average annual value for the last five years. It enables a long-term trend to be produced directly from raw data even where it varies widely from year to year.

**Note:** Frequency Rates in this report are provided for the Coal, Metalliferous and Extractives sectors only, as hours worked cannot be reliably sourced for the Non-Coal Other and Petroleum (Onshore) sectors.

Refer to Appendix B.9 for Sources of Data

### **Enforcement and Advice Notices**

#### Advice/Improvement Notice

Notice bringing concerns regarding health, safety or welfare to the attention of operators and Improvement Notices.

#### **Prohibition Notice**

Notice imposing a prohibition, restriction or direction to evacuate or close a mine.

#### **Investigation Notice**

Notice requiring stoppage of plant or non-disturbance of premises or in regard to the removal of any item or obtaining of information /documents/evidence by an inspector

#### **Explosives Notice**

Notice regarding certain powers of inspectors in relation to explosives.

Refer to Appendix B.8 for details of Enforcement Notice Categories, Relevant Legislation and Enforcement Types.

#### **Current Legislation**

Coal	CMHSA 2002 CMHSR 2006	Coal Mine Health and Safety Act 2002 Coal Mine Health and Safety Regulation 2006
Non-Coal	MHSA 2004 MHSR 2007	Mine Health and Safety Act 2004 Mine Health and Safety Regulation 2007
Petroleum	POSch 1992	Petroleum (Onshore) Schedule 1992
Explosives	EXPLA 2003 EXPLR 2005	Explosives Act 2003 Explosives Regulation 2005
OHS	OHSA 2000 OHSR 2001	Occupational Health and Safety Act 2000 Occupational Health and Safety Regulation 2001

# **COMET DATABASE TERMS**

### COMET

COMET (COmmon Mines EnvironmenT) is the database system which records the day-to-day business activities of NSW Trade & Investment's Mine Safety Operations branch.

### Event

Notifications from mines and mine safety activities involving mines and mining organisations are recorded in COMET as events.

### **Event Type**

This report covers Incident and Assessment events.

### **Event Subtype**

The Event Subtype reflects the general hazard area related to an incident event or the scope of an assessment event.

Refer to Appendix B.2 for details of COMET Incident Event Subtypes and Appendix B.7 for details of COMET Assessment Event Subtypes.

#### Incident

An occurrence that was required to be notified to NSW Trade & Investment under the relevant legislation, or a non-notifiable matter which has been reported, such as a High Potential Incident or Complaint.

### **Notifiable Incident**

An incident where the incident cause, nature of injury and/or injury outcome requires notification to NSW Trade & Investment according to the relevant legislation.

### Non-Notifiable Incident – High Potential Incident or Complaint

An incident where the incident cause, nature of injury and/or injury outcome does not require notification according to the relevant legislation. ie a High Potential Incident or Complaint.

### **Incident Type**

For a notifiable incident, the incident type identifies the clause of the relevant legislation relating to the 'cause' of the incident e.g. CMHSR 2006 Clause 55.

For a non-notifiable incident, the incident type will be either High Potential Incident or Complaint.

Refer to Appendix B.3 for details of COMET Incident Types and Relevant Legislation

### **Incident Subtype**

For a notifiable incident, the incident subtype identifies the sub-clause of the relevant legislation relating to the 'cause' of the incident e.g. CMHSR 2006 Clause 55(j).

When the cause of an incident is not notifiable, but the nature of injury and/or outcome of the injury is notifiable, the incident is recorded with an Incident Type of "Non-Specific Accident ending in Fatality/Injury" and an Incident Subtype of "Notifiable Injury/Outcome".

For a non-notifiable incident, the incident sub-type further identifies the nature of the High Potential Incident or Complaint.

### **Incident Investigation Level**

All incidents are investigated by an Inspector or Mine Safety Officer. An Incident Investigation Level is then assigned to an incident in order to trigger a follow-up site investigation where necessary:

- Level 1 No need to attend. Mine to investigate and report.
- Level 2 Official to attend mine.
- Level 3 Detailed investigation suitable for further action.

### Assessment

An Assessment is an inspection, audit, assessment or review by an NSW Trade & Investment Inspector or Mine Safety Officer of compliance with relevant legislation, standards, codes, guidance or advice.

### Mine Type

The mine type identifies the mining sector eg Coal, Metalliferous, Extractives.

Refer to Appendix B.1 for details of COMET Mine Types, Mining Sectors and Operation Types

### **Mine Operation Type**

The operation type identifies the nature of the mining work eg Underground, Open Cut, Processing. All operations types other than underground are considered to be Surface Operations.

Refer to Appendix B.1 for details of COMET Mine Types, Mining Sectors and Operation Types.

# **1 EXECUTIVE SUMMARY**

This report summarises the incidents and injuries notified to NSW Trade & Investment by the NSW Mining and Extractives industry, and the assessments conducted and enforcements and advice issued by the NSW Mine Safety inspectorate in the 2010-2011 financial year, set against twelve years of data from 1999.

It classifies data into the Coal, Metalliferous, Extractives, Non-Coal Other and Petroleum (Onshore) mining sectors, and into underground and surface operations. It also analyses serious bodily injuries and injury outcomes by mechanism, agency, nature of injury, bodily location, age group and employment type.

The report provides annual and five year rolling average frequency rates for fatalities, lost time injuries and serious bodily injuries, annual frequency rates for total recordable injuries and documents the growth of the mining workforce based on the number of hours worked as notified each quarter by mine operators.

In 2010-11 there was one fatality in the Coal underground sector, while the Metalliferous, Extractives and Petroleum (Onshore) sectors were fatality free.

Due to the single fatality in the Coal underground sector, the five year average fatal injury frequency rate to June 2011 increased 16.7% for coal and remained unchanged for metalliferous and extractives. Overall, the five year average fatal injury frequency rate (FIFR) to June 2011 fell by 37.5% compared to June 2006.

Five year average frequency rates of lost time injuries and serious bodily injuries continued their downward trend of the past decade. There were 14% fewer lost time injuries in 2010-11 than in the previous year. The five year average lost time injury frequency rate (LTIFR) to June 2011 fell 53.9% compared to June 2006. The five year average serious bodily injury frequency rate (SBIFR) for 2010-11 reached a record low of 0.88 and fell by 48.5% compared to June 2006. There were 9.2% fewer total recordable injuries in 2010-11 than in the previous year.

Both National OHS Strategy targets, to reduce fatalities by 20% and serious injuries by 40% in the ten years 2002-2012, have been achieved.

2010-11 was the fourth complete year under the new coal legislation which commenced in mid 2006-07. The new legislation generates more coal incident notifications due to new reporting requirements (including escape of fluid under pressure, unintended plant and vehicle movements and incidents with an injury that had a notifiable outcome) and reporting where thresholds became more inclusive (including gas detection, evidence of electrical arcing, explosive misfires and failure of explosion-protection equipment). Nine times the number of coal incidents were notified in 2010-11 than the average notified for the last five years (2001-02 to 2005-06) under the former legislation and 75% of all incidents occurred in the coal underground sector.

2010-11 was the second complete year under the new non-coal legislation which commenced in the second quarter of 2008-09, also with some new and more inclusive reporting requirements. The number of metalliferous and extractives incidents in 2010-11 was 20.4% higher than the average notified for the last five years (2003-04 to 2007-08) under the former legislation.

In 2010-11, serious bodily injuries were again predominantly associated with falls of person, and fractures were the most common nature of injury. The majority of serious bodily injuries were to direct mine employees, almost two thirds occurred in underground operations and almost all were related to the work environment or mobile mechanical plant.

In 2010-11, the most common causes of injuries with notifiable outcomes (mainly hospital inpatient admission or seven days of lost time and/or alternative duties) were slips and trips, muscular stressing, or being hit by moving or falling objects. Hand and finger injuries featured prominently, 81.4% occurred in underground operations and the majority were related to either the work environment or mobile mechanical equipment.

### Major Performance Measures

### Targets

NSW Trade & Investment – Mine Safety has a goal of zero fatalities and zero serious bodily injuries in the NSW Mining and Extractives industry.

The National OHS Strategy 2002-2012 set national targets to reduce the incidence of workrelated fatalities by at least 20% and to reduce the incidence of workplace injury (including musculoskeletal disorders) by at least 40% by 30 June 2012. Interim targets to be achieved by 30 June 2007 were to reduce fatalities by 10% and to reduce workplace injury by 20%.

Five year rolling average frequency rates are used throughout this report in order to reveal long term trends without undue influence from short term fluctuations.

NB Frequency Rates in this report are provided for the Coal, Metalliferous and Extractives sectors only, as hours worked cannot be reliably sourced for the Non-Coal Other and Petroleum (Onshore) sectors. Refer to the Definitions for details of Frequency Rates.

### **Fatalities**

In 2010-11 there was one fatality in the Coal underground, while the Metalliferous, Extractives and Petroleum (Onshore) sectors were fatality free.

The fatality-reduction targets were defined as reducing the Coal, Metalliferous & Extractives Five Year Average Fatal Injury Frequency Rate (FIFR) to 0.053 by June 2007 and to 0.047 by June 2012 (number of fatal injuries per million hours worked).

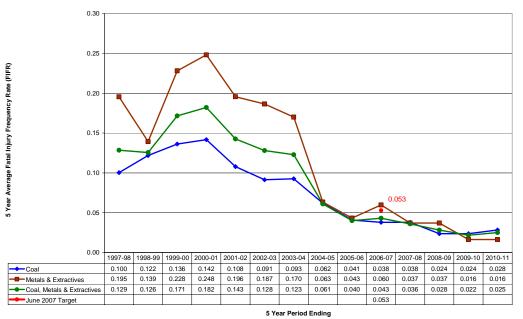
The Five Year Average Fatal Injury Frequency Rate to June 2007 was 0.043. This achieved both the mid-term and the ten-year targets.

The Five Year Average Fatal Injury Frequency Rate to June 2011 was 0.025. This was an improvement of 37.5% compared to the 0.040 recorded for the five years to June 2006 and is 46.8% below the June 2012 target. The industry goal remains zero fatalities.

### Figure 1

NSW Coal, Metalliferous & Extractives 5 Year Average Fatal Injury Frequency Rate (FIFR) 1997-98 to 2010-11

June 2012 National Target is 0.047

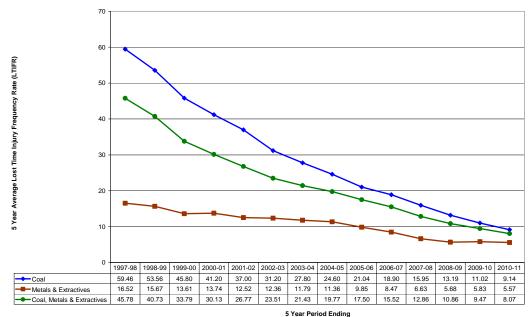


### **Lost Time Injuries**

The Five Year Average Lost Time Injury Frequency Rate (LTIFR) of 8.07 to June 2011 was down 53.9% from the 17.5 recorded for the five years to June 2006.

### Figure 2

NSW Coal, Metalliferous & Extractives 5 Year Average Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11

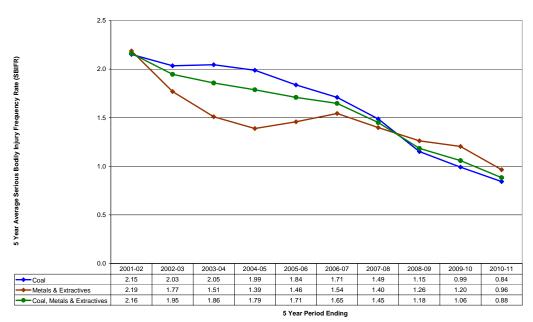


### **Serious Bodily Injuries**

The Five Year Average Serious Bodily Injury Frequency Rate (SBIFR) of 0.88 to June 2011 was down 48.5% from the 1.71 recorded for the five years to June 2006.

### Figure 3

NSW Coal, Metalliferous & Extractives 5 Year Average Serious Bodily Injury Frequency Rate (SBIFR) 2001-02 to 2010-11



# 2 INTRODUCTION

### Purpose

To report on incident and injury notifications by the NSW Mining and Extractives industry to NSW Trade & Investment.

### **Objectives**

- To inform industry and stakeholders
- To identify trends and areas of safety concern
- To provide information for developing evidence based decision-making

### About Industry & Investment NSW - Mine Safety

The NSW Department of Trade & Investment, Regional Infrastructure & Services (NSW Trade & Investment) is the statutory OHS regulator of the NSW Mining and Extractives industry.

The Department's Mine Safety Operations Branch and Mine Safety Performance Branch play a lead role in influencing change in industry health and safety culture through consultation, education, the development of competency standards, regulation of compliance of safety management systems, and the investigation of incidents. New legislation and the development of standards have established clear expectations of health and safety performance in the workplace. Safety in mining operations and the health of mine workers is of utmost priority for the NSW Government.

A major change program is being undertaken by the Department under the auspices of the Mine Safety Advisory Council for the industry to achieve significant improvements in OHS through a systematic performance based approach to managing risk. Industry has agreed that further OHS improvement will require OHS culture change to close an apparent disconnect between OHS management systems and actual behaviour at the site. Current projects being undertaken by the Mine Safety Advisory Council are addressing these issues to achieve the Council's vision of achieving World-leading OHS in the NSW mining and extractives industry.

The Department also operates the Mine Safety Technology Centre at Thornton in the Hunter Valley which provides commercial testing facilities for the mining industry and expertise on many critical aspects of health and safety in the mining industry.

Further information and resources are available from the websites:

- NSW Trade & Investment Mine Safety <u>www.dpi.nsw.gov.au/minerals/safety</u>
- NSW Mine Safety Advisory Council
   <u>www.nswminesafety.com.au</u>

### The COMET Database

COMET (COmmon Mines EnvironmenT) is the database system which is used to record the day-to-day business activities of NSW Trade & Investment's Mine Safety Operations branch. The system is used by Mine Inspectors, Information Managers, Regional and Head Office Administrators and System Officers.

Information, notifications and correspondence about events involving mines and mining organisations in NSW are recorded in COMET.

Incident and injury data is captured, reported back to the inspectorate and analysed in depth to identify trends and areas of safety concern with the aim of developing evidence-based strategies to improve the safety performance of the NSW Mining and Extractives industry.

COMET is also used to track general Mine Safety Operations Branch activities such as certain training, meetings, industry workshops, assessments conducted and the issuing of Enforcement and Advice Notices.

Industry currently notifies workplace incidents and injuries, and NSW Trade & Investment issues Enforcement and Advice Notices in accordance with the following New South Wales legislation:

Mine Category	Legislation	Referred to as	Commencement	
Coal	Coal Mines Health and Safety Act 2002	CMHSA 2002	23/12/2006	
Coal	Coal Mines Health and Safety Regulation 2006	CMHSR 2006	23/12/2000	
Non-Coal	Mine Health and Safety Act 2004	MHSA 2004	01/09/2008	
Non-Coal	Mine Health and Safety Regulation 2007	MHSR 2007	01/03/2000	
Petroleum (Onshore)	Petroleum (Onshore) Schedule 1992	POSch 1992	08/1992	
	Explosives Act 2003	EXPLA 2003	01/09/2005	
All	Explosives Regulation 2005	EXPLR 2005	01/09/2005	
	Occupational Health and Safety Act 2000	OHSA 2000	01/09/2001	
	Occupational Health and Safety Regulation 2001	OHSR 2001		

For further information refer to the Definitions and COMET Database Terms and Appendix B.9 for Sources of Data and further details of Incident Types, Serious Bodily Injury Types, Notifiable Injury Outcomes, Assessment Types and Enforcement Categories and relevant legislation.

# **3 INCIDENTS**

### 3.1 All Incidents

This section reports on the breakdown of incidents notified to NSW Trade & Investment in the Coal, Metalliferous, Extractives, Non-Coal Other and Petroleum (Onshore) mining sectors, including Complaints and High Potential incidents.

In 2010-11:

- The number of incidents notified was almost six times the average number of incidents notified for the five years (2001-02 to 2005-06) under the former legislation. This increase reflects the new and more inclusive reporting requirements of the legislation.
- 75% of all incidents occurred in the coal underground sector.

Refer to the Definitions, COMET Database Terms and Appendix B for details of the classifications used and a comparison of incident and injury notification requirements under former and current legislation.

The commencement of new coal legislation in mid 2006-07 and new non-coal legislation in the second quarter of 2008-09 resulted in an increase in incident notifications due to some new and more inclusive reporting requirements.

The following key applies to incidents in Figures 5, 7, 8, 15, 16, 17 and 25:

New requirementIncrease in notifications resulting from new reporting requirementsMore inclusiveIncrease in notifications resulting from wider scope of reporting requirementsSame/SimilarReporting requirements are unchanged or similar

Refer to Appendix B.6 for comparison of incident and injury notification requirements under former and current legislation

### 3.1.1 All Incidents by Sector

### Figure 4

All Incidents by Sector 1999-00 to 2010-11

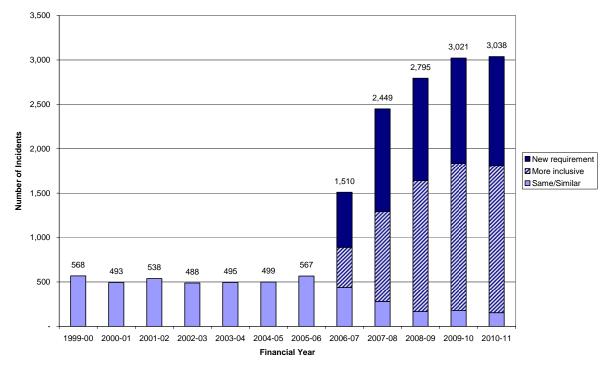
NB Increase from mid 2006-07 due to requirements of CMHSR 2006 from mid 2006-07 and MHSR 2007 from Q2 2008-09 "Unknown" refers to incidents reported by non-mine organisations

Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Coal	269	297	313	252	279	266	339	1,283	2,249	2,568	2,742	2,763	13,620
Metalliferous	177	119	141	132	136	147	155	148	130	144	185	160	1,774
Extractives	102	71	74	97	72	83	68	71	64	74	79	106	961
Non-Coal Other	9	2	1	3	4	1	3	1	2	2	3	2	33
Petroleum (Onshore)	1	1	2	-	1	-	-	3	-	3	10	2	23
Unknown	10	3	7	4	3	2	2	4	4	4	2	5	50
Total	568	493	538	488	495	499	567	1,510	2,449	2,795	3,021	3,038	16,461

### Figure 5

All Incidents 1999-00 to 2010-11

NB Increase from mid 2006-07 due to requirements of CMHSR 2006 from mid 2006-07 and MHSR 2007 from Q2 2008-09



### 3.1.2 All Incidents by Operation Type

### Figure 6

All Incidents by Surface / Underground Operation 1999-00 to 2010-11

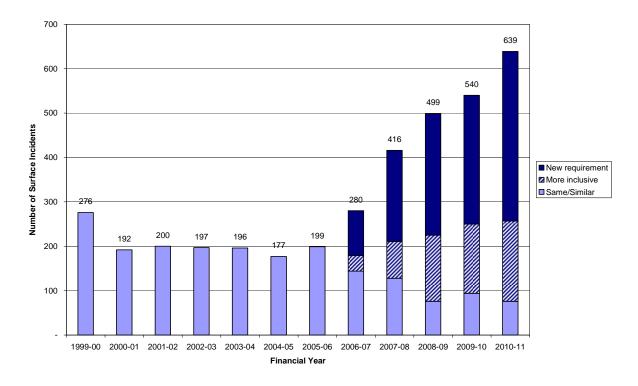
NB Increase from mid 2006-07 due to requirements of CMHSR 2006 from mid 2006-07 and MHSR 2007 from Q2 2008-09 "Unknown" refers to incidents reported by non-mine organisations, and therefore with no operation type.

Operation Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Underground	282	298	331	287	296	320	366	1,226	2,029	2,292	2,479	2,394	12,600
Surface	276	192	200	197	196	177	199	280	416	499	540	639	3,811
Unknown	10	3	7	4	3	2	2	4	4	4	2	5	50
Total	568	493	538	488	495	499	567	1,510	2,449	2,795	3,021	3,038	16,461

### Figure 7

All Surface Incidents 1999-00 to 2010-11

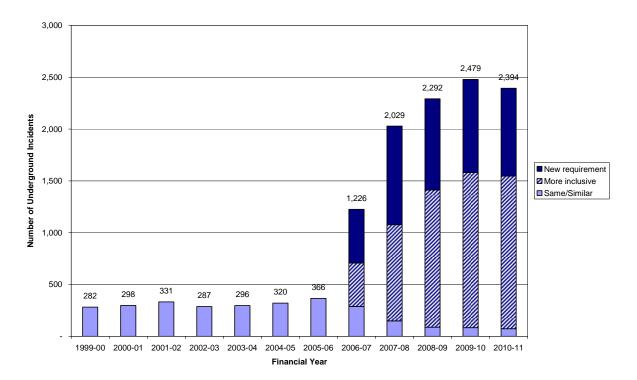
NB Increase from mid 2006-07 due to requirements of CMHSR 2006 from mid 2006-07 and MHSR 2007 from Q2 2008-09



### Figure 8

All Underground Incidents 1999-00 to 2010-11

NB Increase from mid 2006-07 due to requirements of CMHSR 2006 from mid 2006-07 and MHSR 2007 from Q2 2008-09



### 3.1.3 All Incidents by Incident Investigation Level

### Figure 9

All Incidents by Incident Investigation Level 1999-00 to 2010-11

NB Increase from mid 2006-07 due to requirements of CMHSR 2006 from mid 2006-07 and MHSR 2007 from Q2 2008-09

Investigation Level	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Level 1 - No need to attend. Mine to investigate & report.	215	263	209	214	239	220	289	1,039	2,028	2,345	2,504	2,548	12,113
Level 2 - Official to attend mine.	48	54	65	68	68	88	216	464	415	441	514	487	2,928
Level 3 - Detailed investigation suitable for further action	43	16	37	35	35	17	5	7	6	9	3	3	216
No Data	262	160	227	171	153	174	57	-	-	-	-	-	1,204
Total	568	493	538	488	495	499	567	1,510	2,449	2,795	3,021	3,038	16,461

### Figure 10

All Incidents by Incident Investigation Level 1999-00 to 2010-11 NB Increase from mid 2006-07 due to requirements of CMHSR 2006 from mid 2006-07 and MHSR 2007 from Q2 2008-09

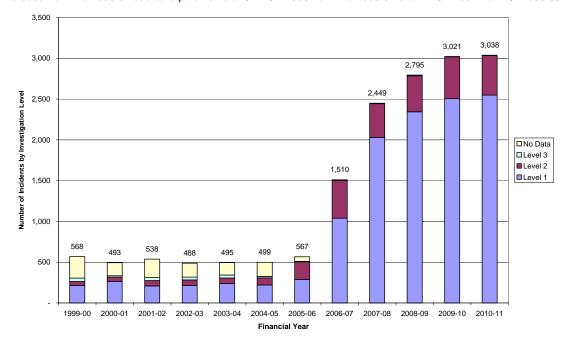
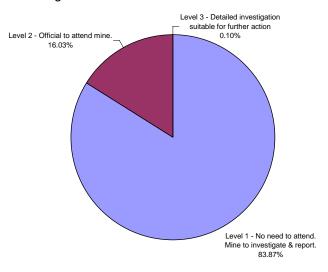


Figure 11 All Incidents by Incident Investigation Level 2010-11



### 3.1.4 All Incidents by Event Subtype

### Figure 12

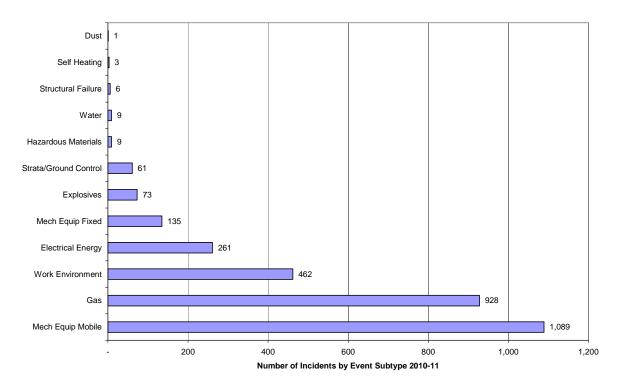
All Incidents by Event Subtype 1999-00 to 2010-11

NB Increase from mid 2006-07 due to requirements of CMHSR 2006 from mid 2006-07 and MHSR 2007 from Q2 2008-09

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Mech Equip Mobile	248	222	216	190	206	200	228	646	1,019	1,101	1,250	1,089	6,615
Gas	5	7	9	6	12	9	4	296	669	810	799	928	3,554
Work Environment	116	58	60	43	57	52	55	177	350	347	395	462	2,172
Electrical Energy	55	101	141	130	129	157	196	235	217	239	276	261	2,137
Mech Equip Fixed	47	34	33	43	32	25	26	46	64	159	159	135	803
Explosives	19	14	20	22	14	22	19	51	64	68	57	73	443
Strata/Ground Control	32	30	41	27	24	25	23	34	42	42	51	61	432
Hazardous Materials	15	8	5	8	6	1	1	5	7	9	8	9	82
Water	10	6	1	7	2	2	4	4	3	1	5	9	54
Structural Failure	10	5	4	5	8	5	7	10	11	10	11	6	92
Self Heating	7	4	3	3	3	-	4	5	3	7	7	3	49
Fatality - Non-mining	1	2	3	2	1	-	-	1	-	-	-	1	11
Dust	3	2	2	2	1	1	-	-	-	2	3	1	17
Total	568	493	538	488	495	499	567	1,510	2,449	2,795	3,021	3,038	16,461

### Figure 13

All Incidents by Event Subtype 2010-11



### 3.2 Coal Incidents

The commencement of new coal legislation (CMHSA 2002 and CMHSR 2006) in mid 2006-07 resulted in an increase in coal incident notifications due to some new reporting requirements (including escape of fluid under pressure, unintended plant and vehicle movements and incidents with an injury that had a notifiable outcome) and more inclusive reporting requirements (including gas detection, evidence of electrical arcing, explosive misfires and failure of explosion-protection equipment).

In 2010-11:

- The number of coal incidents notified was over nine times the average number of incidents notified for the last five years (2001-02 to 2005-06) under the former legislation. This increase reflects the new and more inclusive reporting requirements of the legislation.
- 82.3% of all coal incidents occurred in underground operations.

Refer to the Definitions, COMET Database Terms and Appendix B for details of the classifications used and a comparison of incident and injury notification requirements under former and current legislation.

### 3.2.1 Coal Incidents by Operation Type

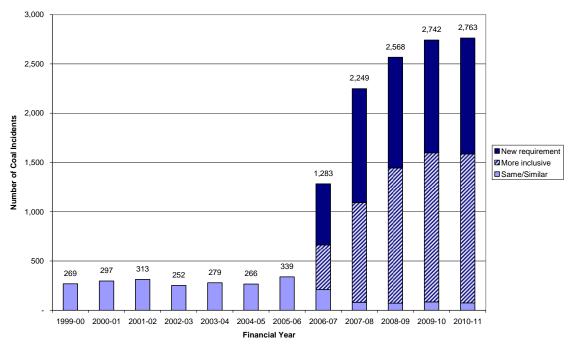
### Figure 14

Coal Incidents by Operation Type 1999-00 to 2010-11 NB Increase from mid 2006-07 due to requirements of CMHSR 2006

Operation Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Underground	143	197	220	181	191	207	244	1,111	1,933	2,187	2,351	2,275	11,240
Surface	126	100	93	71	88	59	95	172	316	381	391	488	2,380
Total	269	297	313	252	279	266	339	1,283	2,249	2,568	2,742	2,763	13,620

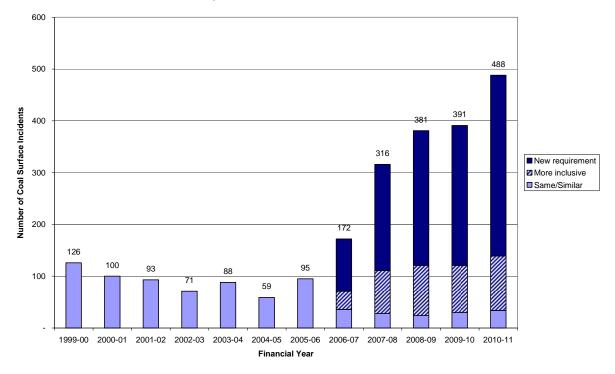
### Figure 15

NB Increase from mid 2006-07 due to requirements of CMHSR 2006

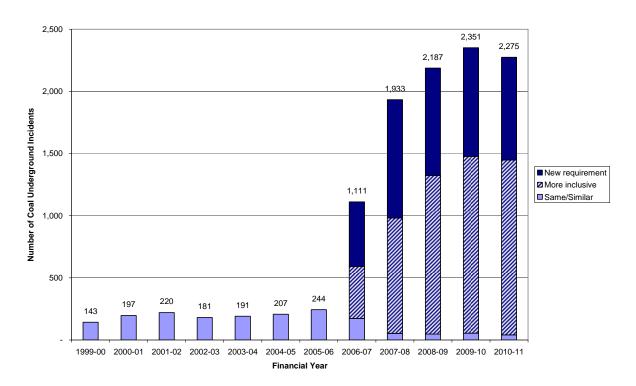


Coal Incidents 1999-00 to 2010-11

Figure 16 Coal Surface Incidents 1999-00 to 2010-11 NB Increase from mid 2006-07 due to requirements of CMHSR 2006



#### Figure 17 Coal Underground Incidents 1999-00 to 2010-11 NB Increase from mid 2006-07 due to requirements of CMHSR 2006



### 3.2.2 Coal Incidents by Incident Investigation Level

### Figure 18

Coal Incidents by Incident Investigation Level 1999-00 to 2010-11 NB Increase from mid 2006-07 due to requirements of CMHSR 2006

Investigation Level	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Level 1 - No need to attend. Mine to investigate & report.	119	192	148	138	159	146	154	919	1,925	2,224	2,343	2,388	10,855
Level 2 - Official to attend mine.	25	33	33	35	30	51	148	361	321	337	398	372	2,144
Level 3 - Detailed investigation suitable for further action	18	11	22	17	21	14	1	3	3	7	1	3	121
No Data	107	61	110	62	69	55	36	-	-	-	-	-	500
Total	269	297	313	252	279	266	339	1,283	2,249	2,568	2,742	2,763	13,620

### Figure 19

Coal Incidents by Incident Investigation Level 1999-00 to 2010-11 NB Increase from mid 2006-07 due to requirements of CMHSR 2006

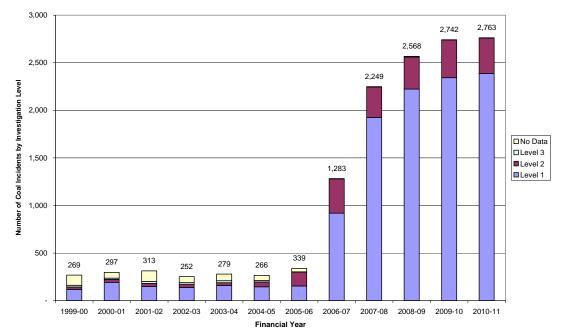
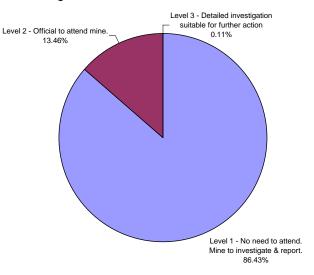


Figure 20 Coal Incidents by Incident Investigation Level 2010-11



### 3.2.3 Coal Incidents by Event Subtype

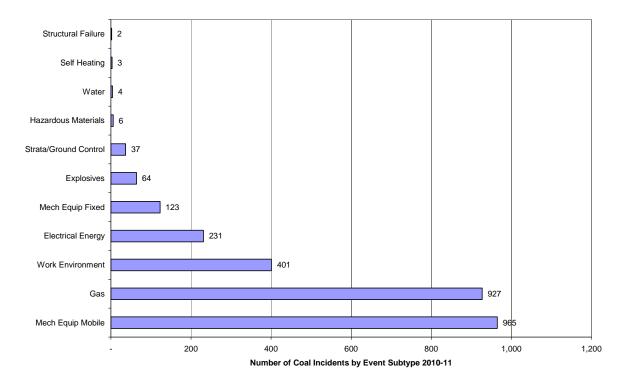
### Figure 21

Coal Incidents by Event Subtype 1999-00 to 2010-11 NB Increase from mid 2006-07 due to requirements of CMHSR 2006

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Mech Equip Mobile	141	145	121	94	114	96	116	538	938	983	1,122	965	5,373
Gas	2	2	6	5	11	7	4	294	665	810	799	927	3,532
Electrical Energy	36	70	111	84	91	116	166	200	187	212	241	231	1,745
Work Environment	24	16	24	17	22	18	21	136	308	312	333	401	1,632
Mech Equip Fixed	27	29	18	25	19	13	16	39	48	146	146	123	649
Strata/Ground Control	19	21	26	12	14	9	10	28	30	33	31	37	270
Explosives	-	1	-	2	1	4	-	30	55	55	49	64	261
Structural Failure	7	3	-	2	4	3	1	8	9	7	9	2	55
Self Heating	7	4	3	3	2	-	4	4	2	5	5	3	42
Hazardous Materials	5	1	1	5	-	-	-	4	6	3	5	6	36
Water	1	2	-	1	-	-	1	2	1	1	1	4	14
Dust	-	2	1	1	1	-	-	-	-	1	1	-	7
Fatality - Non-mining	-	1	2	1	-	-	-	-	-	-	-	-	4
Total	269	297	313	252	279	266	339	1,283	2,249	2,568	2,742	2,763	13,620

### Figure 22

Coal Incidents by Event Subtype 2010-11 NB Increase from mid 2006-07 due to requirements of CMHSR 2006



### 3.2.4 Coal Incidents by Incident Type

### Figure 23

Coal Incidents by Incident Type 1999-00 to 2010-11. NB Increase from mid 2006-07 due to requirements of CMHSR 2006

Legislation Category	Incident Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	*1984 Dangerous Occurrence O/C	38	7	-	-	-	-	-	-	-	-	-	-	45
	Serious Bodily Injury CMRA	-	2	7	20	14	-	-	-	-	-	-	-	43
*CMRA	*1984 Dangerous Occurrence U/G	22	8	-	-	-	-	-	-	-	-	-	-	30
	*Fatality	-	-	-	-	1	-	-	-	-	-	-	-	1
	Total	60	17	7	20	15	-	-	-	-	-	-	-	119
	Non Spec Acc Ending in Fat/Injury	40	38	31	20	32	29	29	33	-	-	-	-	252
*CMGNR	Notifiable Incidents DCCP CMGNR 1999, CI 83	18	20	20	9	8	8	15	5	-	-	-	-	103
	Total	58	58	51	29	40	37	44	38	-	-	-	-	355
*CMOCR	Notifiable Incidents CMOCR 1999, Cl 16	49	73	54	40	64	39	69	10	-	-	-	-	398
CMOCK	Total	49	73	54	40	64	39	69	10	-	-	-	-	398
	Other Notifiable Incidents CMUGR 1999 CI 34B	-	-	2	12	47	97	116	59	-	-	-	-	333
	Dangerous Occurrences CMUGR 1999, CI 34(1)	24	64	70	61	39	30	22	12	-	-	-	-	322
*CMUGR	Incidents CMUGR 1999, CI 34 (2) Repealed 4/7/2003	35	66	68	54	12	-		-	-	-	-	-	235
	Notifiable Incidents CMUGR 1999 CI 34A	-	1	7	1	38	38	74	45	-	-	-	-	204
	Total	59	131	147	128	136	165	214	114	-	-	-	-	1,094
	CMHSR 2006 CI 56(1)	-	-	-	-	-	-	-	789	1,547	1,877	2,015	2,037	8,265
	Non Spec Acc Ending in Fat/Injury	-	-	-	-	-	-	-	215	484	437	434	429	1,999
смнѕ	CMHSR 2006 CI 55	-	-	-	-	-	-	-	102	204	247	280	284	1,117
	CMHSR 2006 CI 57	-	-	-	-	-	-	-	-	-	1	5	4	10
	Total	-	-	-	-	-	-	-	1,106	2,235	2,562	2,734	2,754	11,391
Explosives	Explosives Regulation 2005	-	-	-	-	-	-	-	1	-	-	-	-	1
Explosives	Total	-	-	-	-	-	-	-	1	-	-	-	-	1
	High Potential Incident	24	14	14	18	23	24	12	12	12	5	8	8	174
N/A	Unknown	13	3	39	17	-	-	-	-	-	-	-	-	72
N/A	Complaint	6	1	1	-	1	1	2	-	2	1	-	1	16
	Total	43	18	54	35	24	25	14	12	14	6	8	9	262
Total		269	297	313	252	279	266	341	1,281	2,249	2,568	2,742	2,763	13,620

Refer to Appendix A.1 for a more detailed breakdown of Coal Surface and Underground Incidents by Incident Type and Subtype.

### 3.3 Non-Coal Incidents

The commencement of new non-coal legislation (MHSA 2004 and MHSR 2007) in the second quarter of 2008-09 resulted in some new and more inclusive reporting requirements.

In 2010-11:

• The number of metalliferous and extractives incidents was 23.8% higher than the average notified for the last five years (2003-04 to 2007-08) under the former legislation. This increase reflects the new and more inclusive reporting requirements of the legislation.

Refer to the Definitions, COMET Database Terms and Appendix B for details of the classifications used and a comparison of incident and injury notification requirements under former and current legislation.

### 3.3.1 Non-Coal Incidents by Operation Type

#### Figure 24

Non-Coal Incidents by Operation Type 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

Operation Type	Mine Category	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Metalliferous	38	18	30	26	34	39	39	34	36	41	61	44	440
Surface	Extractives	102	71	74	97	71	78	62	70	62	73	77	104	941
Surface	Non-Coal Other	9	2	1	3	2	1	3	1	2	1	1	1	27
	Total	149	91	105	126	107	118	104	105	100	115	139	149	1,408
	Metalliferous	139	101	111	106	102	108	116	114	94	103	124	116	1,334
Underground	Extractives	-	-	-	-	1	5	6	1	2	1	2	2	20
onderground	Non-Coal Other	-	-	-	-	2	-	-	-	-	1	2	1	6
	Total	139	101	111	106	105	113	122	115	96	105	128	119	1,360
Total		288	192	216	232	212	231	226	220	196	220	267	268	2,768

### Figure 25

Non-Coal Incidents 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

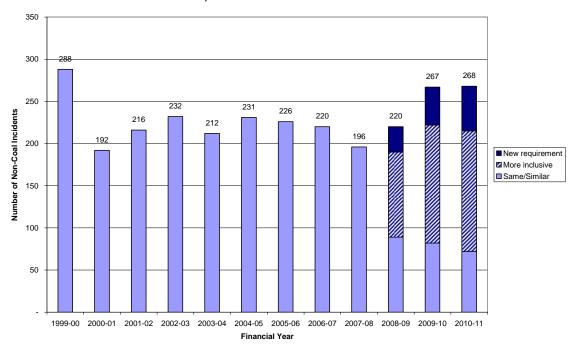
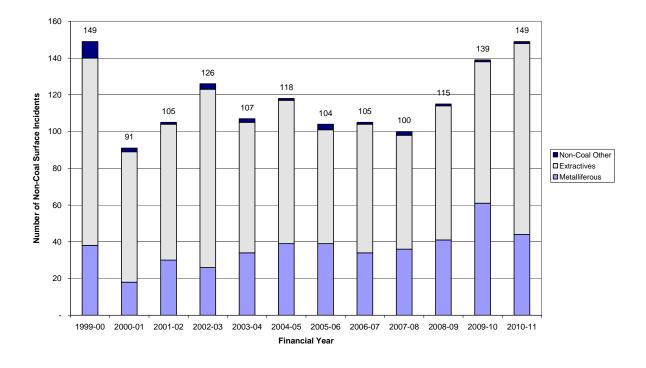
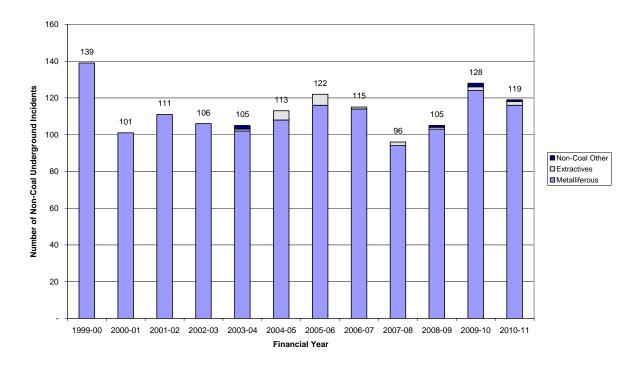


Figure 26 Non-Coal Surface Incidents 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007



**Figure 27** Non-Coal Underground Incidents 1999-00 to 2010-11 *NB Increase from Q2 2008-09 due to requirements of MHSR 2007* 



### 3.3.2 Non-Coal Metalliferous Incidents by Incident Investigation Level

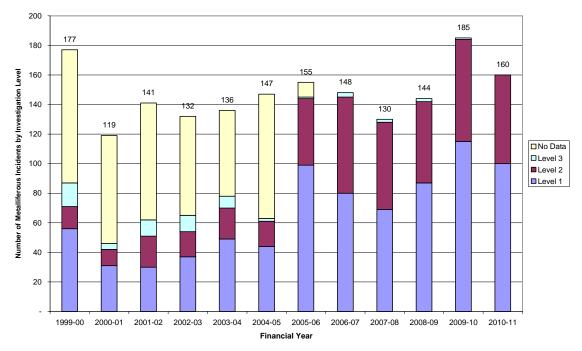
### Figure 28

Non-Coal Metalliferous Incidents by Incident Investigation Level 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

Investigation Level	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Level 1 - No need to attend. Mine to investigate & report.	56	31	30	37	49	44	99	80	69	87	115	100	797
Level 2 - Official to attend mine.	15	11	21	17	21	17	45	65	59	55	69	60	455
Level 3 - Detailed investigation suitable for further action	16	4	11	11	8	2	1	3	2	2	1	-	61
No Data	90	73	79	67	58	84	10	-	-	-	-	-	461
Total	177	119	141	132	136	147	155	148	130	144	185	160	1,774

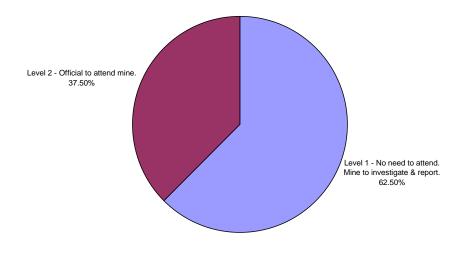
### Figure 29

Non-Coal Metalliferous Incidents by Incident Investigation Level 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007



### Figure 30

Non-Coal Metalliferous Incidents by Incident Investigation Level 2010-11



### 3.3.3 Non-Coal Metalliferous Incidents by Event Subtype

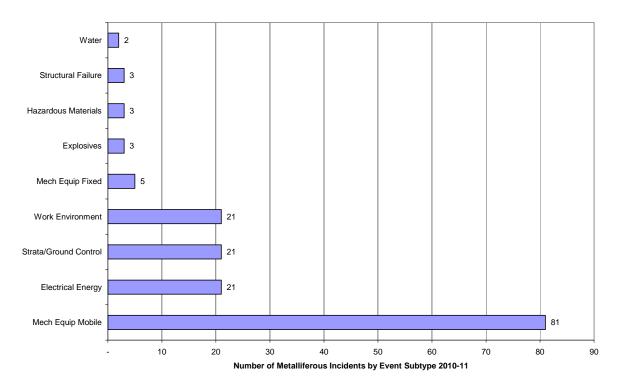
### Figure 31

Non-Coal Metalliferous Incidents by Event Subtype 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Mech Equip Mobile	59	50	64	56	58	67	87	75	51	80	86	81	814
Electrical Energy	17	27	27	28	26	31	23	27	22	17	22	21	288
Work Environment	54	18	15	10	23	18	17	24	24	18	35	21	277
Strata/Ground Control	13	7	12	14	9	13	10	6	10	6	17	21	138
Mech Equip Fixed	11	2	7	9	6	10	8	3	11	8	10	5	90
Explosives	5	4	6	2	4	2	2	5	4	5	5	3	47
Hazardous Materials	4	5	4	3	5	-	1	1	-	5	3	3	34
Water	8	3	-	5	2	2	3	2	2	-	3	2	32
Structural Failure	1	1	3	3	1	2	4	2	2	3	1	3	26
Gas	2	2	1	1	1	2	-	2	4	-	-	-	15
Dust	3	-	1	1	-	-	-	-	-	-	1	-	6
Self Heating	-	-	-	-	1	-	-	1	-	2	2	-	6
Fatality - Non-mining	-	-	1	-	-	-	-	-	-	-	-	-	1
Total	177	119	141	132	136	147	155	148	130	144	185	160	1,774

### Figure 32

Non-Coal Metalliferous Incidents by Event Subtype 2010-11



### 3.3.4 Non-Coal Metalliferous Incidents by Incident Type

### Figure 33

Non-Coal Metalliferous Incidents by Incident Type 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

Legislation Category	Incident Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Dangerous Incident	-	4	37	66	73	70	88	63	39	4	-	-	444
	*Pre Sept 2000 Dangerous Incident MIA	21	62	52	1	-	-	-	-	-	-	-	-	136
	Non Spec Acc Ending in Fat/Injury	69	9	6	2	4	4	11	18	9	4	-	-	136
*MIA	*1994 Emergency MIA	53	6	3	-	-	-	-	-	-	-	-	-	62
MILA	*Serious Injury MIA	-	-	3	3	8	-	-	-	-	-	-	-	14
	*Minor Accident MIA	-	-	1	4	•	-	-	-	-	-	-	-	5
	*Fatality		-	-	1	•	-	-		-	-	-	-	1
	Total	143	81	102	77	85	74	99	81	48	8	-	-	798
Explosives	Explosives Regulation 2005	-	-	-	-	•	-	-	2	-	-	-	-	2
	Total	-	-	-	-	-	-	-	2	-	-	-	-	2
	MHSR 2007 CI 145	-	-	-	-	•	-	-	-	-	91	137	121	349
мнѕ	Non Spec Acc Ending in Fat/Injury	-	-	-	-	-	-	-	-	-	10	20	21	51
	MHSR 2007 CI 146(1)		-	-	-	•	-	-		-	-	1		1
	Total	-	-	-	-	•	-	-	-	-	101	158	142	401
	High Potential Incident	21	33	30	50	38	62	45	59	71	27	13	11	460
N/A	Complaint	3	4	9	3	13	11	11	6	11	8	14	7	100
N/A	UNKNOWN	10	1	-	2	-	-	-	-	-	-	-		13
	Total	34	38	39	55	51	73	56	65	82	35	27	18	573
Total		177	119	141	132	136	147	155	148	130	144	185	160	1,774

Refer to Appendix A.1 for a more detailed breakdown of Non-Coal Metalliferous Surface and Underground Incidents by Incident Type and Subtype.

### 3.3.5 Non-Coal Extractives Incidents by Incident Investigation Level

### Figure 34

Non-Coal Extractives Incidents by Incident Investigation Level 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

Investigation Level	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Level 1 - No need to attend. Mine to investigate & report.	38	38	29	39	29	30	35	33	32	29	41	59	432
Level 2 - Official to attend mine.	6	9	11	16	15	20	21	37	31	45	38	47	296
Level 3 - Detailed investigation suitable for further action	8	1	3	5	6	1	1	1	1	-	-	-	27
No Data	50	23	31	37	22	32	11	-	-	-	-	-	206
Total	102	71	74	97	72	83	68	71	64	74	79	106	961

### Figure 35

Non-Coal Extractives Incidents by Incident Investigation Level 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

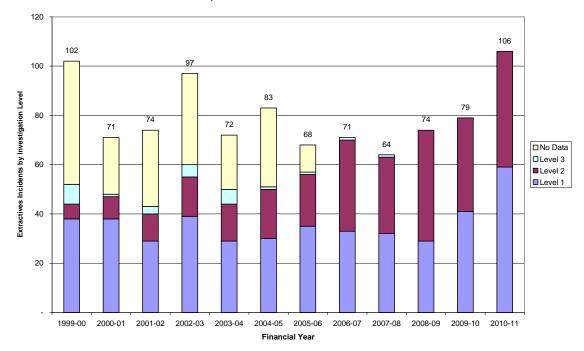
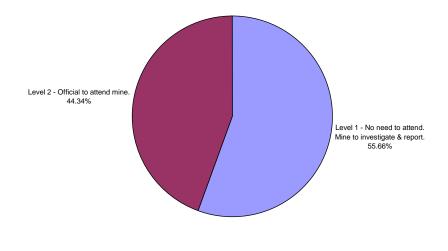


Figure 36

Non-Coal Extractives Incidents by Incident Investigation Level 2010-11



# 3.3.6 Non-Coal Extractives Incidents by Event Subtype

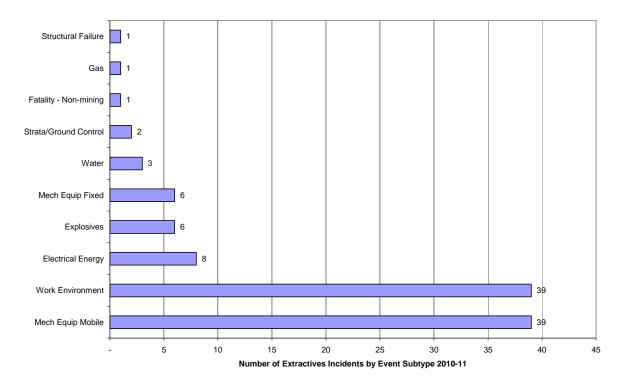
### Figure 37

Non-Coal Extractives Incidents by Event Subtype 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Mech Equip Mobile	43	26	27	38	29	37	25	28	29	33	33	39	387
Work Environment	32	23	19	16	11	14	14	14	14	15	25	39	236
Explosives	11	9	13	18	9	16	17	16	5	7	2	6	129
Electrical Energy	2	4	2	15	12	10	7	8	8	10	13	8	99
Mech Equip Fixed	7	3	8	8	7	2	2	4	4	5	2	6	58
Strata/Ground Control	-	2	2	1	1	2	2	-	2	2	2	2	18
Hazardous Materials	6	1	-	-	1	1	-	-	1	1	-	-	11
Structural Failure	1	1	1	-	1	-	1	-	-	-	-	1	6
Water	-	1	1	-	-	-	-	-	-	-	1	3	6
Fatality - Non-mining	-	1	-	1	1	-	-	1	-	-	-	1	5
Dust	-	-	-	-	-	1	-	-	-	1	1	-	3
Gas	-	-	1	-	-	-	-	-	-	-	-	1	2
Self Heating	-	-	-	-	-	-	-	-	1	-	-	-	1
Total	102	71	74	97	72	83	68	71	64	74	79	106	961

### Figure 38

Non-Coal Extractives Incidents by Event Subtype 2010-11



# 3.3.7 Non-Coal Extractives Incidents by Incident Type

#### Figure 39

Non-Coal Extractives Incidents by Incident Type 1999-00 to 2010-11 NB Increase from Q2 2008-09 due to requirements of MHSR 2007

Legislation Category	Incident Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Dangerous Incident	-	4	8	28	23	24	22	18	18	2	-	-	147
	Non Spec Acc Ending in Fat/Injury	40	14	6	2	5	1	3	11	4	-	-	-	86
	*1994 Emergency MIA	33	2	-	-	-	-	-	-	-	-	-	-	35
*MIA	*Pre Sept 2000 Dangerous Incident MIA	9	8	9	-	-	-	-	-	-	-	-	-	26
	*Serious Injury MIA	-	-	4	4	3	-	-	-	-	-	-	-	11
	*Minor Accident MIA	-	-	-	4	-	-	-	-	-	-	-	-	4
	Total	82	28	27	38	31	25	25	29	22	2	-	-	309
Explosives	Explosives Regulation 2005	-	-	-	-	-	-	1	1	-	-	-	-	2
Explosives	Total	-	-	-	-	-	-	1	1	-	-	-	-	2
	MHSR 2007 CI 145	-	-	-	-	-	-	-	-	-	37	41	57	135
MHS	Non Spec Acc Ending in Fat/Injury	-	-	-	-	-	-	-	-	-	7	10	22	39
	MHSR 2007 CI 146(1)	-	-	-	-	-	-	-	-	-	2	2	2	6
	Total	-	-	-	-	-	-	-	-	-	46	53	81	180
	High Potential Incident	12	33	26	40	30	40	29	27	33	15	8	11	304
N/A	Complaint	3	10	21	16	11	18	13	14	9	11	18	14	158
17/4	Unknown	5	-	-	3	-	-	-	-	-	-	-	-	8
	Total	20	43	47	59	41	58	42	41	42	26	26	25	470
Total		102	71	74	97	72	83	68	71	64	74	79	106	961

Refer to Appendix A.1 for a more detailed breakdown of Non-Coal Extractives Surface and Underground Incidents by Incident Type and Subtype.

# 3.3.8 Non-Coal Other Incidents by Incident Investigation Level

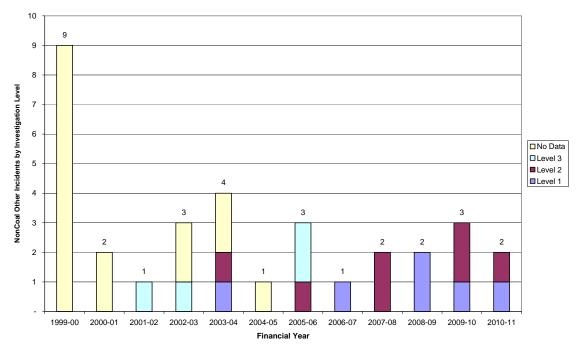
#### Figure 40

Non-Coal Other Incidents by Incident Investigation Level 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09

Investigation Level	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Level 1 - No need to attend. Mine to investigate & report.	-	-	-	-	1	-	-	1	-	2	1	1	6
Level 2 - Official to attend mine.	-	-	-	-	1	-	1	-	2	-	2	1	7
Level 3 - Detailed investigation suitable for further action	-	-	1	1	-	-	2	-	-	-	-	-	4
No Data	9	2	-	2	2	1	-	-	-	-	-	-	16
Total	9	2	1	3	4	1	3	1	2	2	3	2	33

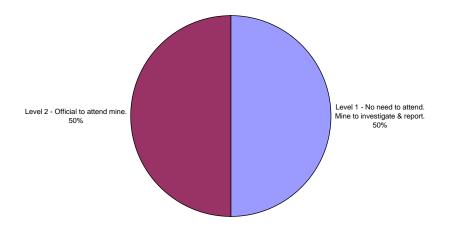
### Figure 41

Non-Coal Other Incidents by Incident Investigation Level 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09



#### Figure 42

Non-Coal Other Incidents by Incident Investigation Level 2010-11



# 3.3.9 Non-Coal Other Incidents by Event Subtype

### Figure 43

Non-Coal Other Incidents by Event Subtype 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Work Environment	3	1	-	-	1	-	2	-	1	1	1	-	10
Mech Equip Mobile	1	1	1	1	2	-	-	1	-	-	-	1	8
Structural Failure	1	-	-	-	1	-	1	-	-	-	1	-	4
Explosives	3	-	-	-	-	-	-	-	-	-	-	-	3
Mech Equip Fixed	-	-	-	1	-	-	-	-	1	-	-	1	3
Strata/Ground Control	-	-	-	-	-	1	-	-	-	1	1	-	3
Fatality - Non-mining	1	-	-	-	-	-	-	-	-	-	-	-	1
Water	-	-	-	1	-	-	-	-	-	-	-	-	1
Total	9	2	1	3	4	1	3	1	2	2	3	2	33

### Figure 44

Non-Coal Other Incidents by Event Subtype 2010-11



Number of Non-Coal Other Incidents by Event Subtype 2010-11

# 3.3.10 Non-Coal Other Incidents by Incident Type

### Figure 45

Non-Coal Other Incidents by Incident Type 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09

Legislation Category	Incident Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Dangerous Incident	-	-	1	1	1	1	1	1	1	-	-	-	7
	Non Spec Acc Ending in Fat/Injury	3	1	-	-	2	-	-	-	-	-	-	-	6
*MIA	*1994 Emergency MIA	2	-	-	-	-	-	-	-	-	-	-	-	2
MIA	*Minor Accident MIA	-	-	-	1	-	-	-	-	-	-	-	-	1
	*Pre Sept 2000 Dangerous Incident MIA	1	-	-	-	-	-	-	-	-	-	-	-	1
	Total	6	1	1	2	3	1	1	1	1	-	-	-	17
	MHSR 2007 CI 145	-	-	-	-	-	-	-	-	-	1	1	1	3
мнз	Non Spec Acc Ending in Fat/Injury	-	-	-	-	-	-	-	-	-	1	1	-	2
	Total	-	-	-	-	-	-	-	-	-	2	2	1	5
	High Potential Incident	-	-	-	1	-	-	2	-	1	-	1	-	5
N/A	Complaint	1	1	-	-	1	-	-	-	-	-	-	1	4
N/A	Unknown	2	-	-	-	-	-	-	-	-	-	-	-	2
	Total	3	1	-	1	1	-	2	-	1	-	1	1	11
Total		9	2	1	3	4	1	3	1	2	2	3	2	33

Refer to Appendix A.1 for a more detailed breakdown of Non-Coal Other Incidents by Incident Type and Subtype.

# 3.4 Petroleum (Onshore) Incidents

Petroleum incidents and injuries are notified under the Petroleum (Onshore) Schedule 1992 and those recorded in the COMET database appear below. Several additional legacy databases are currently being researched and merged to produce a more comprehensive picture of safety in the onshore petroleum sector from next year, to coincide with expected new legislation.

### 3.4.1 Petroleum (Onshore) Incidents by Incident Investigation Level

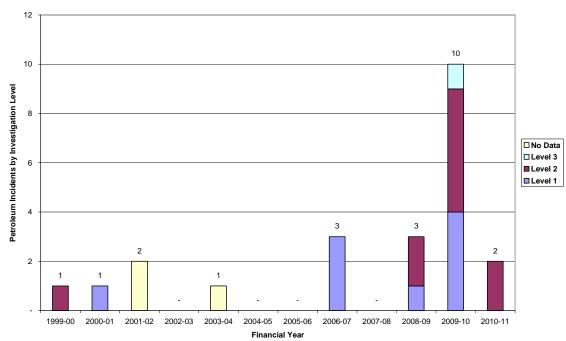
### Figure 46

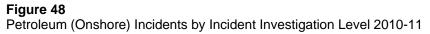
Petroleum (Onshore) Incidents by Incident Investigation Level 1999-00 to 2010-11

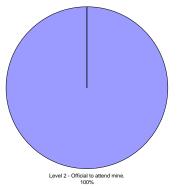
Investigation Level	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
No Data	-	-	2	-	1	-	-	-	-	-	-	-	3
Level 1 - No need to attend. Mine to investigate & report.	-	1	-	-	-	-	-	3	-	1	4	-	9
Level 2 - Official to attend mine.	1	-	-	-	-	-	-	-	-	2	5	2	10
Level 3 - Detailed investigation suitable for further action	-	-	-	-	-	-	-	-	-	-	1	-	1
Total	1	1	2	-	1	-	-	3	-	3	10	2	23

### Figure 47

Petroleum (Onshore) Incidents by Incident Investigation Level 1999-00 to 2010-11







# 3.4.2 Petroleum (Onshore) Incidents by Event Subtype

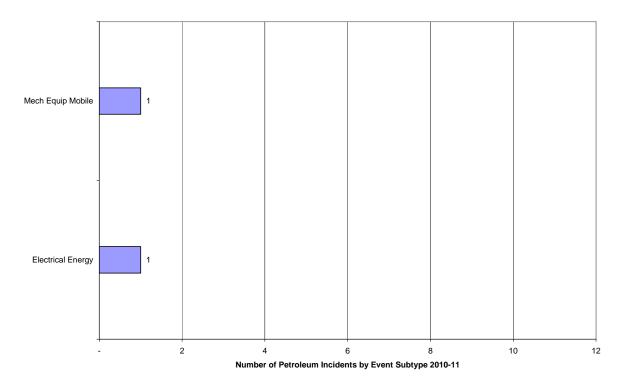
### Figure 49

Petroleum Incidents by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Mech Equip Mobile	1	-	-	-	1	-	-	2	-	3	9	1	17
Work Environment	-	-	2	-	-	-	-	1	-	-	-	-	3
Electrical Energy	-	-	-	-	-	-	-	-	-	-	-	1	1
Gas	-	1	-	-	-	-	-	-	-	-	-	-	1
Mech Equip Fixed	-	-	-	-	-	-	-	-	-	-	1	-	1
Total	1	1	2	-	1	-	-	3	-	3	10	2	23

#### Figure 50

Petroleum Incidents by Event Subtype 2010-11



## 3.4.3 Petroleum (Onshore) Incidents by Incident Type

### Figure 51

Petroleum (Onshore) Incidents by Incident Type 1999-00 to 2010-11

Legislation Category	Incident Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
POSch	POSch 1992	1	1	2	-	1	-	-	3	-	3	10	2	23
Total		1	1	2	-	1	-	-	3	-	3	10	2	23

Refer to Appendix A.1 for a more detailed breakdown of Petroleum (Onshore) Incidents by Incident Type and Subtype.

# 3.5 High Potential Incidents

This section provides a breakdown of near misses and other events which may have had the potential to cause damage or injury and were notified to NSW Trade & Investment, but where the relevant legislation did not require their notification.

## 3.5.1 High Potential Incidents by Sector

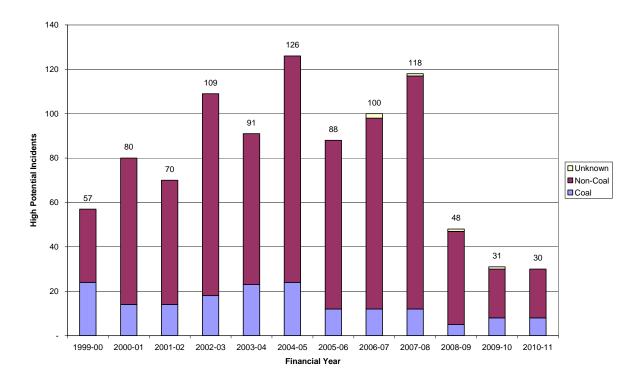
#### Figure 52

High Potential Incidents by Sector 1999-2000 to 2010-11 NB "Unknown" refers to incidents reported by non-mine organisations

Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Non-Coal	33	66	56	91	68	102	76	86	105	42	22	22	769
Coal	24	14	14	18	23	24	12	12	12	5	8	8	174
Unknown	-	-	-	-	-	-	-	2	1	1	1	-	5
Total	57	80	70	109	91	126	88	100	118	48	31	30	948

### Figure 53

High Potential Incidents by Sector 1999-2000 to 2010-11 NB "Unknown" refers to incidents reported by non-mine organisations



# 3.5.2 High Potential Incidents by Incident Investigation Level

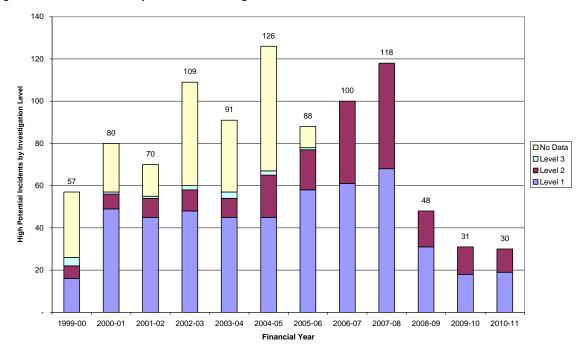
### Figure 54

High Potential Incidents by Incident Investigation Level 1999-00 to 2010-11

Investigation Level	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Level 1 - No need to attend. Mine to investigate & report.	16	49	45	48	45	45	58	61	68	31	18	19	503
Level 2 - Official to attend mine.	6	7	9	10	9	20	19	39	50	17	13	11	210
Level 3 - Detailed investigation suitable for further action	4	1	1	2	3	2	1	-	-	-	-	-	14
No Data	31	23	15	49	34	59	10	-	-	-	-	-	221
Total	57	80	70	109	91	126	88	100	118	48	31	30	948

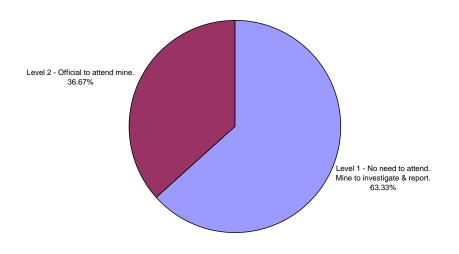
### Figure 55

High Potential Incidents by Incident Investigation Level 1999-00 to 2010-11



#### Figure 56

High Potential Incidents by Incident Investigation Level 2010-11



# 3.5.3 High Potential Incidents by Event Subtype

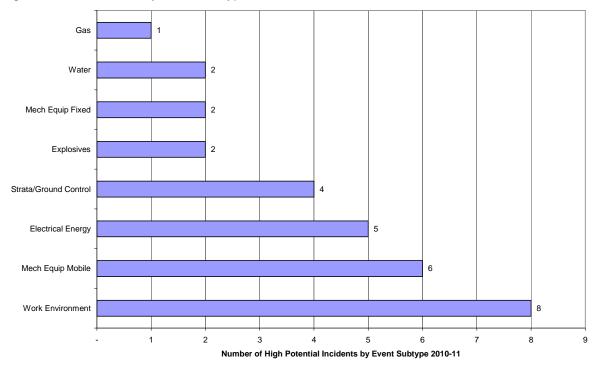
### Figure 57

High Potential Incidents by Event Subtype 1999-2000 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Work Environment	3	11	5	9	7	12	6	11	19	4	10	8	105
Mech Equip Mobile	27	31	28	43	38	68	46	53	52	24	10	6	426
Electrical Energy	11	14	13	12	19	11	12	17	16	7	2	5	139
Strata/Ground Control	-	5	3	13	4	12	8	4	9	4	4	4	70
Explosives	4	6	7	10	5	11	7	8	5	2	1	2	68
Mech Equip Fixed	4	7	5	11	12	6	4	3	10	3	-	2	67
Water	-	1	1	3	1	1	1	1	1	-	-	2	12
Gas	-	-	2	2	3	1	1	1	4	-	1	1	16
Dust	2	1	1	2	1	1	-	-	-	1	1	-	10
Hazardous Materials	5	3	2	2	-	1	1	1	-	-	2	-	17
Self Heating	-	-	1	-	1	-	-	1	1	2	-	-	6
Structural Failure	1	1	2	2	-	2	2	-	1	1	-	-	12
Total	57	80	70	109	91	126	88	100	118	48	31	30	948

### Figure 58

High Potential Incidents by Event Subtype 2010-11



# 3.6 Complaint Incidents

This section reports on all mine health and safety complaints received by NSW Trade & Investment from mine employees, members of the public, trade union representatives or anonymously.

## 3.6.1 Complaint Incidents by Sector

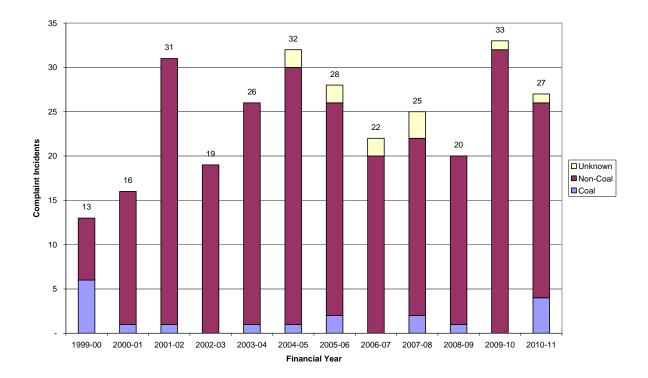
### Figure 59

Complaint Incidents by Sector 1999-00 to 2010-11 NB "Unknown" refers to incidents reported by non-mine organisations

Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Non-Coal	7	15	30	19	25	29	24	20	20	19	32	22	262
Coal	6	1	1	-	1	1	2	-	2	1	-	4	19
Unknown	-	-	-	-	-	2	2	2	3	-	1	1	. 11
Total	13	16	31	19	26	32	28	22	25	20	33	27	292

### Figure 60

Complaint Incidents by Sector 1999-00 to 2010-11 NB "Unknown" refers to incidents reported by non-mine organisations



# 3.6.2 Complaint Incidents by Incident Investigation Level

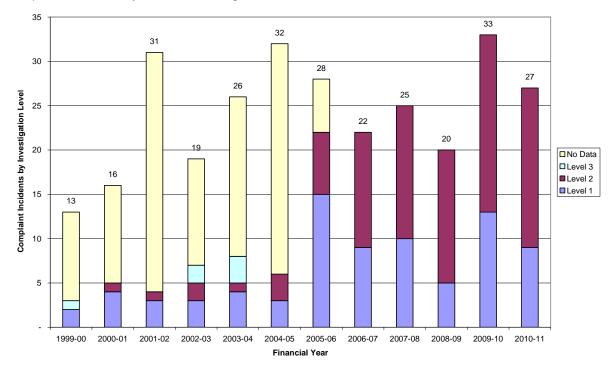
### Figure 61

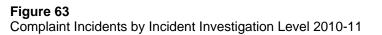
Complaint Incidents by Incident Investigation Level 1999-00 to 2010-11

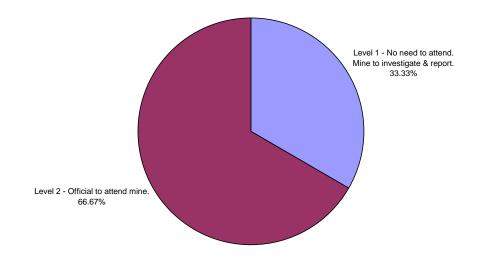
Investigation Level	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Level 1 - No need to attend. Mine to investigate & report.	2	4	3	3	4	3	15	9	10	5	13	9	80
Level 2 - Official to attend mine.	-	1	1	2	1	3	7	13	15	15	20	18	96
Level 3 - Detailed investigation suitable for further action	1	-	-	2	3	-	-	-	-	-	-	-	6
No Data	10	11	27	12	18	26	6	-	-	-	-	-	110
Total	13	16	31	19	26	32	28	22	25	20	33	27	292

### Figure 62

Complaint Incidents by Incident Investigation Level 1999-00 to 2010-11







# 3.6.3 Complaint Incidents by Event Subtype

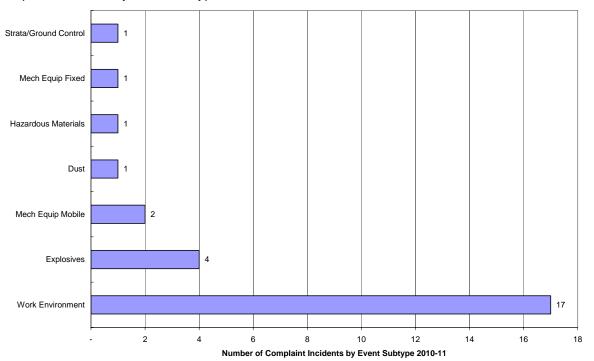
### Figure 64

Complaint Incidents by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Work Environment	5	11	19	10	16	22	19	17	15	11	26	17	188
Explosives	3	1	6	6	2	5	3	5	2	4	2	4	43
Mech Equip Mobile	2	3	2	1	7	3	3	-	5	3	1	2	32
Dust	-	-	1	-	-	-	-	-	-	1	2	1	5
Hazardous Materials	-	-	1	-	-	-	-	-	1	-	-	1	3
Mech Equip Fixed	-	-	1	-	-	1	-	-	-	-	-	1	3
Strata/Ground Control	1	-	-	-	1	-	1	-	1	1	1	1	7
Electrical Energy	2	-	1	-	-	-	-	-	-	-	1	-	4
Gas	-	-	-	-	-	1	-	-	1	-	-	-	2
Structural Failure	-	-	-	1	-	-	2	-	-	-	-	-	3
Water	-	1	-	1	-	-	-	-	-	-	-	-	2
Total	13	16	31	19	26	32	28	22	25	20	33	27	292

### Figure 65

Complaint Incidents by Event Subtype 2010-11



# 4 INJURIES

This section reports on the breakdown of hours worked, fatalities, lost time injuries, total recordable injuries, serious bodily injuries and injury outcomes that were notified to NSW Trade & Investment.

It includes annual frequency rates for fatalities, lost time injuries and serious bodily injuries. Corresponding five year average frequency rates are reported in the Executive Summary (Figures 1, 2 and 3).

Benchmarking of some national (Queensland and Western Australia) and international (USA and Ontario) annual fatal injury and lost time injury frequency rates are also included in this report.

Note that when comparing performance outcomes with other jurisdictions any differences between definitions and the hazard profile of the mining industry should be considered. Comparisons to jurisdictions with no underground coal may also be more informative if underground coal data are excluded from the NSW dataset.

### Important note regarding the source of NSW hours worked and lost time injuries

Coal hours worked and lost time injuries were sourced from Coal Services Pty Ltd until 2006-07 and from Quarterly Workplace Injury Reports reported to NSW Trade & Investment from 2007-08 onwards.

Metalliferous and Extractives hours worked and lost time injuries were compiled from several sources (see Appendix B.9) until 2008-09 and included some estimation. From 2009-10, Metalliferous and Extractives hours worked and lost time injuries were sourced solely from Quarterly Workplace Injury Reports reported to NSW Trade & Investment.

Medical Treatment Injuries and Restricted Duty Injuries were sourced from Quarterly Workplace Injury Reports reported to NSW Trade & Investment from 2007-08 onwards for Coal and from the second quarter of 2008-09 onwards for Metalliferous and Extractives.

Lost time injuries and restricted duty injuries to non-mine employees such as contractors and tradespersons could be underreported unless the date they resumed work (ie with their external employer) was reported back to the mine.

These factors should be considered when comparing lost time injuries before and after the change in the method of data collection.

Refer to the Definitions, COMET Database Terms and Appendix B.9 for Sources of Data and details of the classifications used.

# 4.1 Hours Worked

This section provides details of hours worked in the Coal, Metalliferous and Extractives mining sectors only, as hours worked cannot be reliably sourced for the Non-Coal Other and Petroleum (Onshore) mining sectors.

Due to legislative changes, these details became reportable to NSW Trade & Investment on Quarterly Workplace Injury Reports for Coal, under CMHSR 2006 Clause 206, from the beginning of 2007-08 and for Non-Coal, under MHSR 2007 Clause 155, from the second quarter of 2008-09.

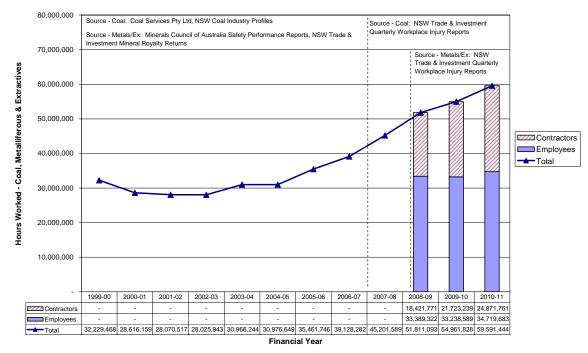
From 2009-10 to 2010-11:

- Coal sector hours worked rose by 7.8% and have more than doubled since 2004-05.
- Coal Underground hours worked fell by 4.4%.
- Coal Surface hours worked rose by 18.2%.
- Metalliferous sector hours worked rose by 13.3%.
- Extractives sector hours worked rose by 1.6%.
- For the combined Metalliferous and Extractives sector, hours worked rose by 10.1%.

# 4.1.1 Coal, Metalliferous and Extractives Hours Worked

### Figure 66

NSW Coal, Metalliferous and Extractives Total Hours Worked 1999-00 to 2010-11

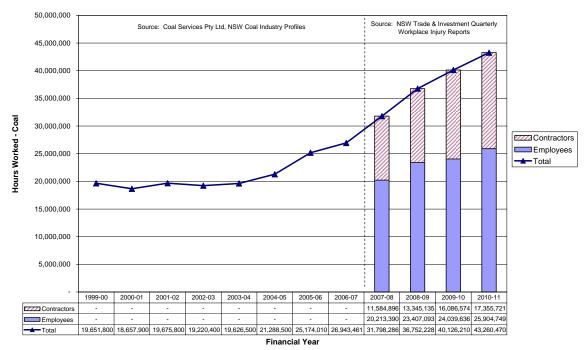


Refer to Appendix A.2 for details of Surface and Underground Hours Worked and Appendix B.9 for Sources of Data.

## 4.1.2 Coal Hours Worked

### Figure 67

NSW Coal Total Hours Worked 1999-00 to 2010-11

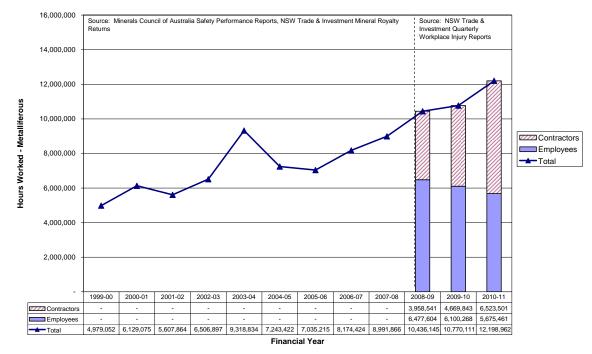


Refer to Appendix A.2 for details of Surface and Underground Hours Worked and Appendix B.9 for Sources of Data.

## 4.1.3 Metalliferous Hours Worked

### Figure 68

NSW Metalliferous Total Hours Worked 1999-00 to 2010-11

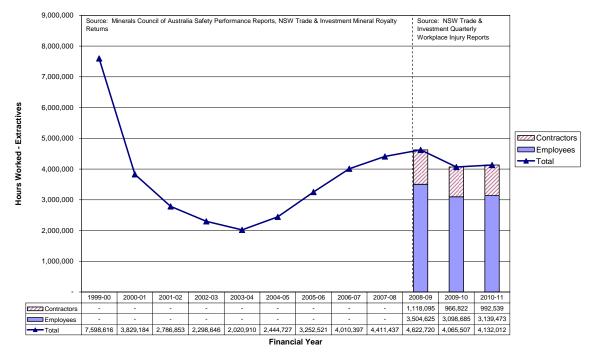


Refer to Appendix A.2 for details of Surface and Underground Hours Worked and Appendix B.9 for Sources of Data.

## 4.1.4 Extractives Hours Worked

### Figure 69

NSW Extractives Total Hours Worked 1999-00 to 2010-11



Refer to Appendix A.2 for details of Hours Worked and Appendix B.9 for Sources of Data.

# 4.2 Fatalities

This section provides a breakdown of fatalities in the NSW Mining and Extractives industry.

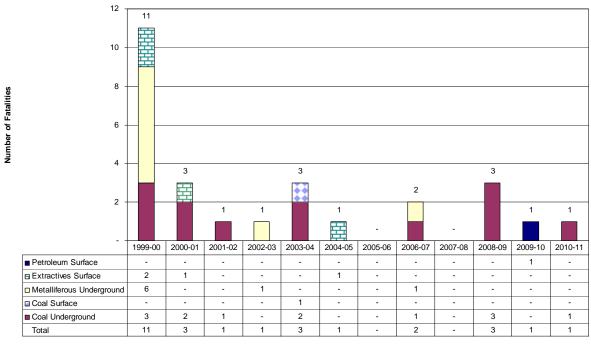
- While the Metalliferous, Extractives and Petroleum (Onshore) sectors were fatality free in 2010-11, there was one fatality in the Coal sector.
  - 3 June 2011 Underground coal mine worker received fatal crush injuries when coal fell on him from the side of a pillar during continuous mining operations.
- There were seven fatalities in the NSW Mining and Extractives industry in the five years to June 2011, compared to six (6) and 25 deaths respectively in the previous two five year periods.
- The NSW Mining and Extractives industry as a whole has had five twelve month periods without a fatality since 2002.
- The Coal sector has reported five fatalities in the past five years, compared to four in the previous five years.
- The Coal surface sector was fatality free for the seventh consecutive year and for the eleventh time in twelve years.
- The Metalliferous surface sector has been fatality free for seventeen years.
- The Metalliferous underground sector was fatality free for the fourth consecutive year and for the ninth time in eleven years. There was one fatality in each of the past two five year periods.
- The Extractives sector was fatality free for the sixth consecutive year and for the ninth time in ten years. There were zero fatalities in the past five years, and one in the previous five years.

Refer to the Definitions, COMET Database Terms and Appendix B.9 for Sources of Data and details of the classifications used.

# 4.2.1 Fatalities by Sector

### Figure 70

NSW Coal, Metalliferous & Extractives and Petroleum Fatalities by Sector 1999-99 to 2010-11



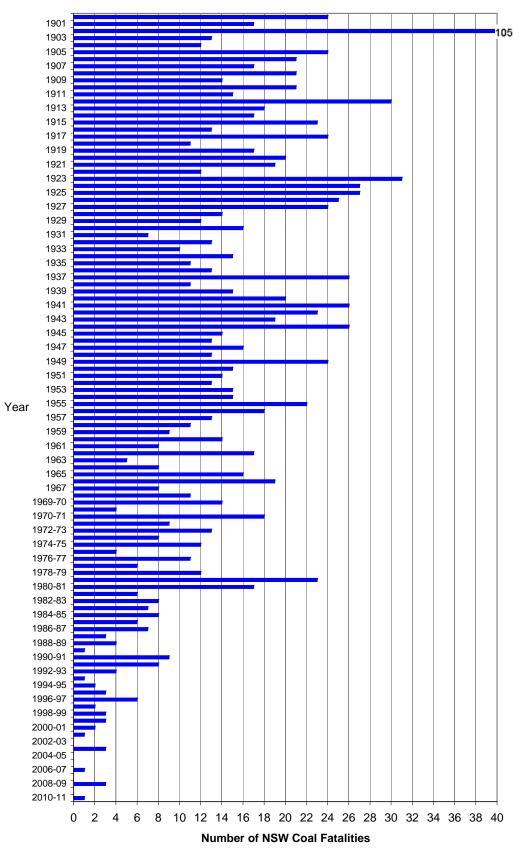
Financial Year

Refer to Appendix A.3 for further details of Fatalities by Sector and Operation Type.

## 4.2.2 Coal Fatalities since 1900

### Figure 71

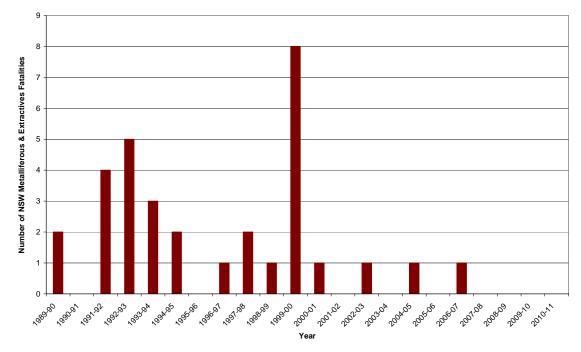
NSW Coal Annual Fatalities 1900 to 2010-11



## 4.2.3 Non-Coal Metalliferous & Extractives Fatalities since 1989-90

Figure 72

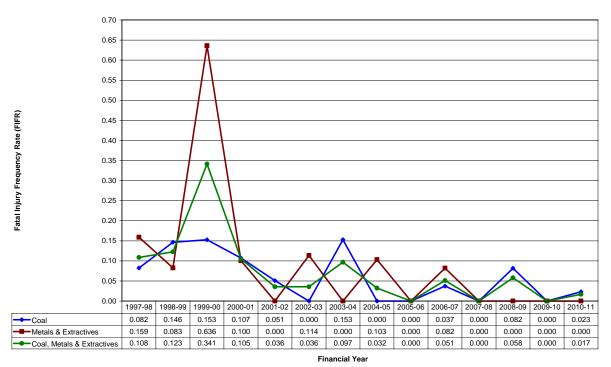
NSW Non-Coal Metalliferous & Extractives Annual Fatalities 1989-90 to 2010-11



### 4.2.4 Annual Fatal Injury Frequency Rate (FIFR) 1997-98 to 2010-11

#### Figure 73

NSW Coal, Metalliferous & Extractives Mining Annual Fatal Injury Frequency Rate (FIFR) 1997-98 to 2010-11

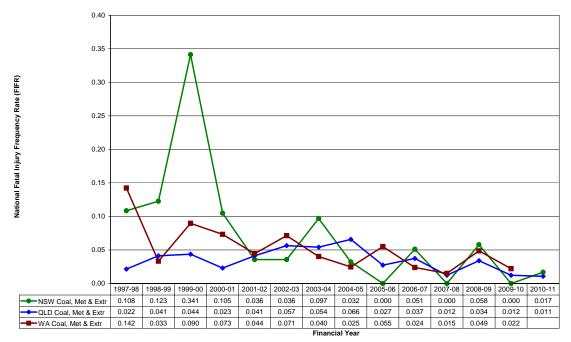


Refer to Figure 1 for Five Year Average Fatal Injury Frequency Rate 1997-98 to 2010-11

# 4.2.5 Annual Fatal Injury Frequency Rate (FIFR) National Comparison 1997-98 to 2010-11

Figure 74

NSW, QLD and WA Coal, Metalliferous & Extractives Annual Fatal Injury Frequency Rate (FIFR) 1997-98 to 2010-11

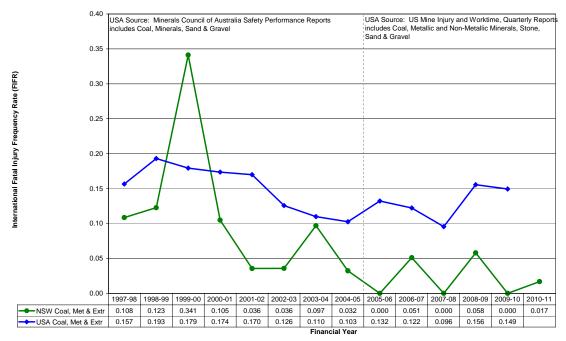


Refer to Appendix B.9 for Sources of Data

### 4.2.6 Annual Fatal Injury Frequency Rate (FIFR) International Comparison 1997-98 to 2010-11

#### Figure 75

NSW and USA Coal, Metalliferous & Extractives Annual Fatal Injury Frequency Rate (FIFR) 1997-98 to 2010-11



Refer to Appendix B.9 for Sources of Data

# 4.3 Lost Time Injuries (LTIs)

This section provides a breakdown of lost time injuries (LTIs) in the Coal, Metalliferous and Extractives sectors. A lost time injury is an injury that results in a minimum of one full shift's absence.

Due to legislative changes, these details became reportable to NSW Trade & Investment on Quarterly Workplace Injury Reports for Coal, under CMHSR 2006 Clause 206, from the beginning of 2007-08 and for Non-Coal, under MHSR 2007 Clause 155, from the second quarter of 2008-09.

Refer to "Important note regarding the source of hours worked and lost time injuries" in Section 4 Injuries.

### In 2010-11:

- Over two thirds of all LTIs occurred at underground operations.
- The Coal LTIFR of 5.83 was 36.2% below the five year average of 9.14.
- The Coal, Metalliferous & Extractives LTIFR of 5.45 was 32.5% below the five year average of 8.07.
- The Metalliferous & Extractives sector LTIFR of 4.47 was 19.7% below the five year average of 5.57

From 2009-10 to 2010-11:

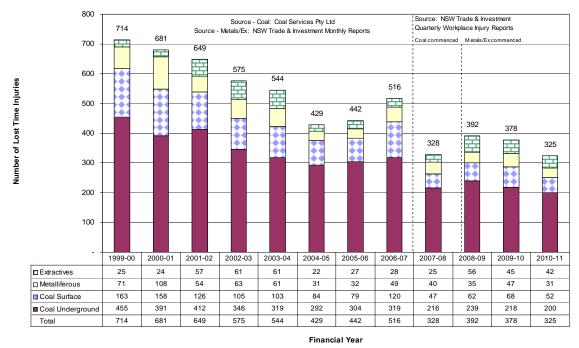
- The number of Coal sector LTIs fell by 11.9% from 286 to 252
- The NSW Coal sector LTIFR fell by 18.2% from 7.13 to 5.83.
- The number of LTIs in the Metalliferous & Extractives sector decreased by 20.7% from 92 to 73, and the LTIFR fell by 27.9% to a record low of 4.47
- The number of Metalliferous LTIs fell 34% to their lowest level in 6 years, while Extractives LTIs fell 6.7%.

Refer to the Definitions, COMET Database Terms and Appendix B.9 for Sources of Data and details of the classifications used.

### 4.3.1 Lost Time Injuries by Sector



NSW Coal, Metalliferous & Extractives Lost Time Injuries by Sector 1999-00 to 2010-11

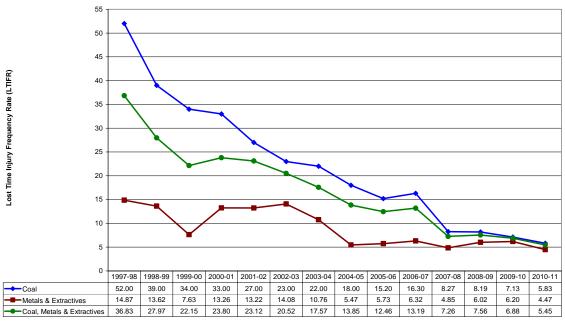


Refer to Appendix A.4 for further details of Lost Time Injuries by Sector and Operation Type.

## 4.3.2 Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11

#### Figure 77

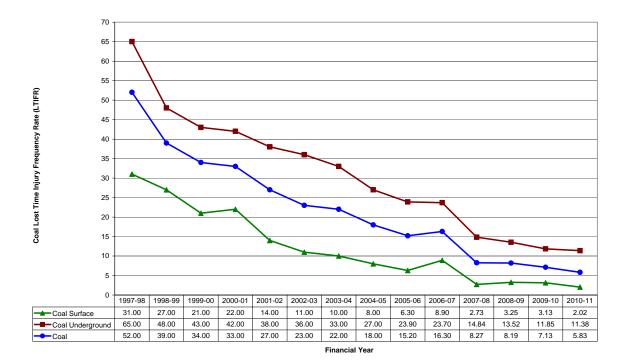
NSW Coal, Metalliferous & Extractives Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11



Financial Year

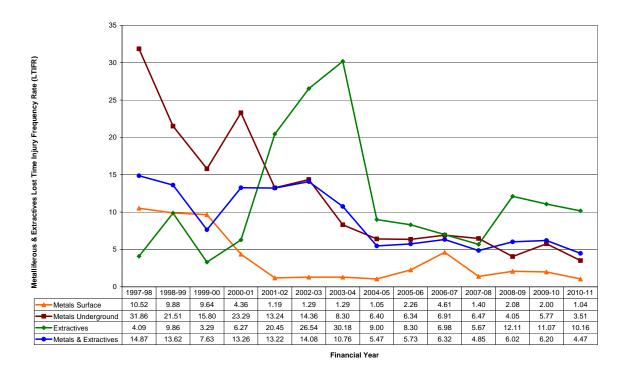
Refer to Figure 2 for Five Year Average Lost Time Injury Frequency Rate 1997-98 to 2010-11





#### Figure 79

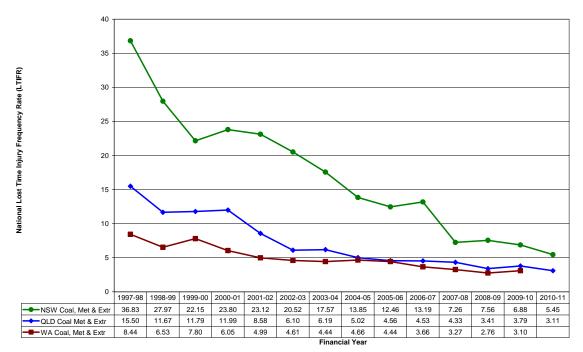
NSW Metalliferous & Extractives Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11



### 4.3.3 Annual Lost Time Injury Frequency Rate (LTIFR) National Comparison 1997-98 to 2010-11

#### Figure 80

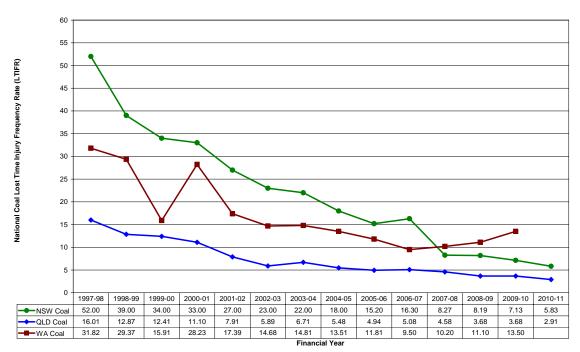
NSW, QLD and WA Coal, Metalliferous & Extractives Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11



Refer to Appendix B.9 for Sources of Data

#### Figure 81

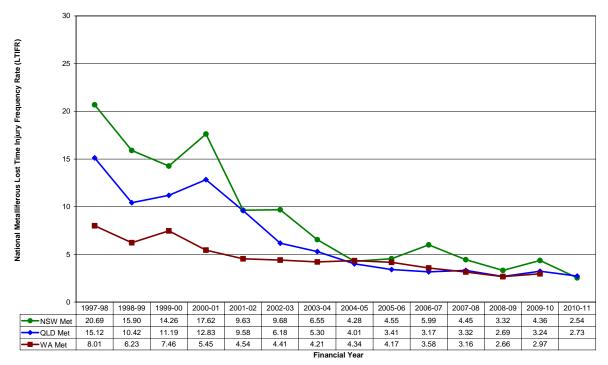
NSW, QLD and WA National Coal Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11



Refer to Appendix B.9 for Sources of Data

#### Figure 82

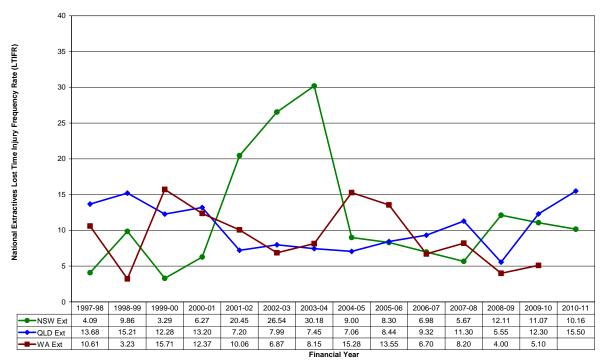
NSW, QLD and WA Metalliferous Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11



Refer to Appendix B.9 for Sources of Data

#### Figure 83

NSW, QLD and WA Extractives Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11

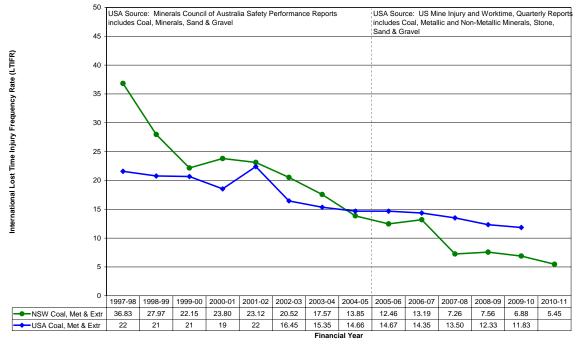


Refer to Appendix B.9 for Sources of Data

### 4.3.4 Annual Lost Time Injury Frequency Rate (LTIFR) International Comparison 1997-98 to 2010-11

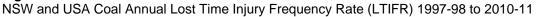
#### Figure 84

NSW and USA Coal, Metalliferous & Extractives Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11



Refer to Appendix B.9 for Sources of Data

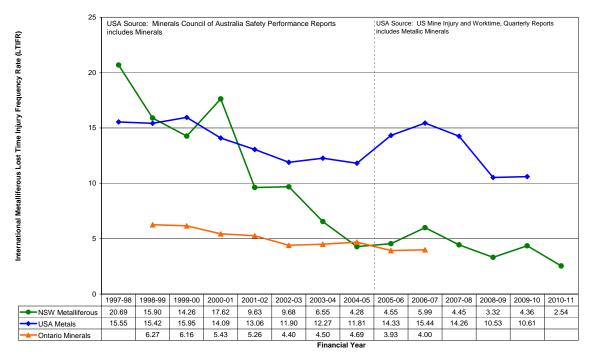
#### Figure 85





Refer to Appendix B.9 for Sources of Data

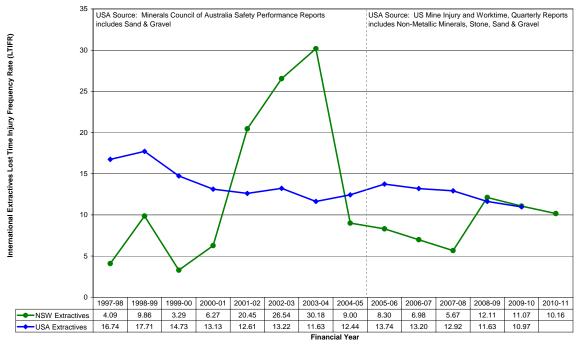
# **Figure 86** NSW, USA and Ontario Metalliferous Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11



Refer to Appendix B.9 for Sources of Data

### Figure 87

NSW and USA Extractives Annual Lost Time Injury Frequency Rate (LTIFR) 1997-98 to 2010-11



Refer to Appendix B.9 for Sources of Data

# 4.4 Total Recordable Injuries (TRIs)

This section provides a breakdown of the total recordable injuries in the Coal, Metalliferous and Extractives sectors. Total Recordable Injuries (TRIs) are the total number of fatalities and injuries resulting in lost time (LTI), restricted duties (RDI) or medical treatment (MTI).

Due to legislative changes, these details became uniformly reportable to NSW Trade & Investment on Quarterly Workplace Injury Reports for Coal, under CMHSR 2006 Clause 206, from the beginning of 2007-08 and for Non-Coal, under MHSR 2007 Clause 155, from the second quarter of 2008-09.

In 2010-11:

• Over two thirds of all TRIs occurred at underground operations

From 2009-10 to 2010-11:

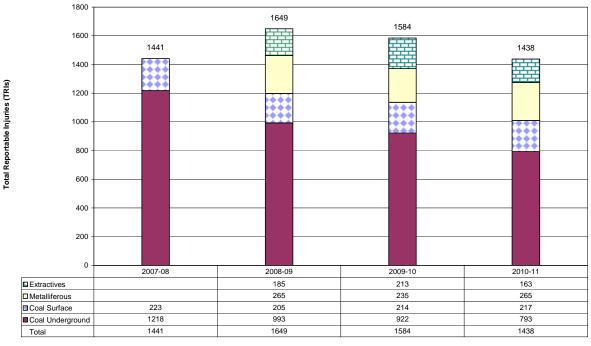
- The number of Coal sector TRIs fell by 11.1% from 1136 to 1010
- While the number of Metalliferous underground TRIs fell by 10.1% from 199 to 179, the number of Metalliferous surface TRIs more than doubled from 36 to 86
- The number of Extractives TRIs fell by 23.5% from 213 to 163

Refer to Appendix A.5 for further details of Total Recordable Injuries by Sector and Operation Type.

### 4.4.1 Total Recordable Injuries by Sector

#### Figure 88

NSW Coal, Metalliferous & Extractives Total Recordable Injuries (TRIs) by Sector 2007-08 to 2010-11

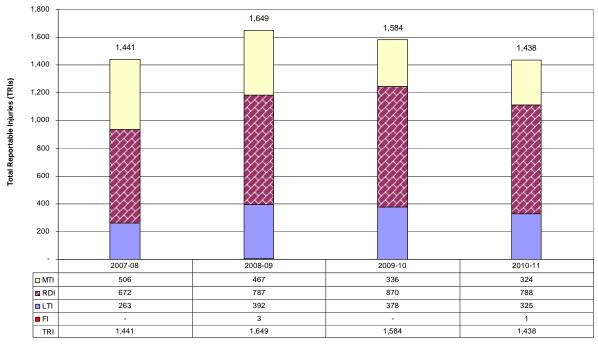


Financial Year

# 4.4.2 Total Recordable Injuries by Injury Type

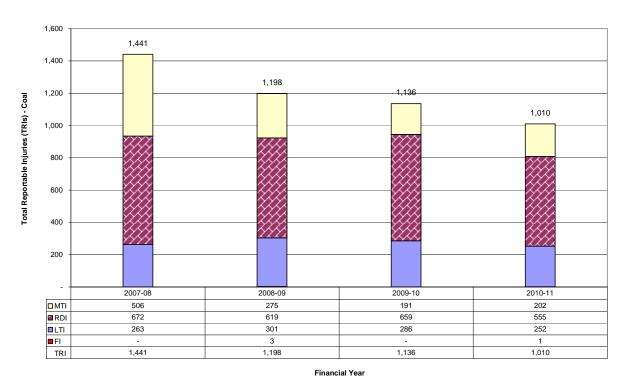
#### Figure 89

NSW Coal, Metalliferous & Extractives Total Recordable Injuries (TRIs) by Injury Type 2007-08 to 2010-11

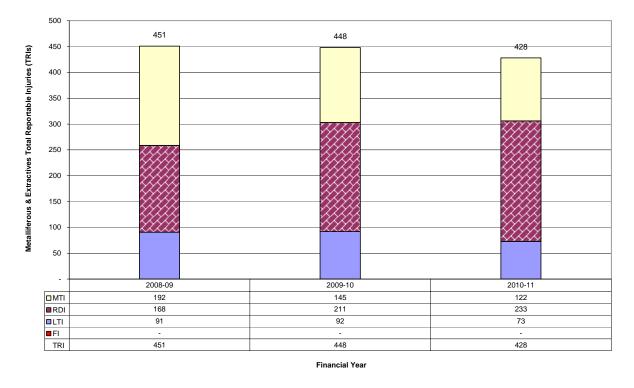


Financial Year





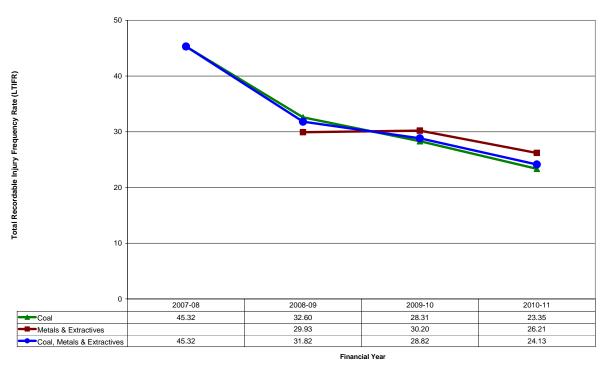
**Figure 91** NSW Metalliferous & Extractives Total Recordable Injuries (TRIs) by Injury Type 2007-08 to 2010-11

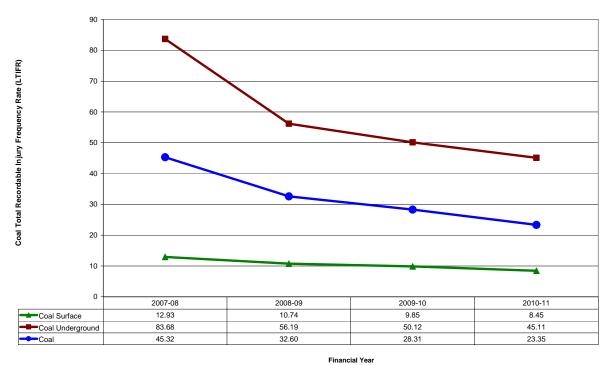


Refer to Appendix A.5 for further details of Total Recordable Injuries by Sector and Operation Type.

#### Figure 92

NSW Coal, Metalliferous & Extractives Total Recordable Injury Frequency Rate (TRIFR) 2007-08 to 2010-11





**Figure 93** NSW Coal Total Recordable Injury Frequency Rate (TRIFR) 2007-08 to 2010-11

### Figure 94

NSW Metalliferous & Extractives Total Recordable Injury Frequency Rate (TRIFR) 2007-08 to 2010-11



Financial Year

# 4.5 Serious Bodily Injuries (SBIs)

This section provides a breakdown of injuries that were required to be notified to NSW Trade & Investment under the relevant coal and non-coal legislation because of the nature of injury and under the relevant Petroleum (Onshore) legislation where the injury required immediate attention by a medical practitioner.

The classification of serious bodily injuries (SBIs) remains consistent under the new coal and non-coal legislation, although it omits dislocations and is slightly more inclusive for certain fractures and amputations.

Note that Petroleum (Onshore) serious bodily injuries are notified at a lower threshold than for the rest of the industry, but are still included in the analysis by event subtype, mechanism, agency, nature of injury, bodily location, age group and employment type.

Note also that the measure of serious bodily injuries is not directly comparable to other mining jurisdictions or the WorkCover Authority of NSW, which use varying definitions for disability injuries.

### In 2010-11:

- SBIs were predominantly associated with falls of person, and fractures were the most common nature of injury. The majority of SBIs were to direct mine employees, almost two thirds occurred in underground operations and almost all were related to the work environment or mobile mechanical plant.
- The Coal, Metalliferous & Extractives SBIFR of 0.62 was 29.5% below the five year average of 0.88.
- The Coal sector SBIFR of 0.65 was 22.6% below the five year average of 0.84.
- The Metalliferous & Extractives sector achieved a near-record low SBIFR of 0.55 which was 42.7% below the five year average of 0.96.

From 2009-10 to 2010-11:

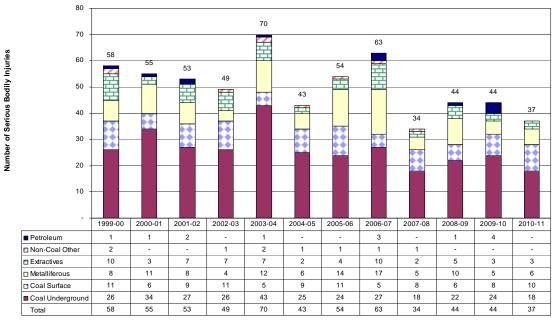
- Coal sector SBIs fell from 32 to 28.
- Metalliferous & Extractives sector SBIs rose from 8 to 9.
- Petroleum (Onshore) SBIs fell from 4 to 0.

Refer to the Definitions, COMET Database Terms and Appendix B for details of the classifications used.

## 4.5.1 Serious Bodily Injuries by Sector

### Figure 95

Serious Bodily Injuries by Sector 1999-00 to 2010-11



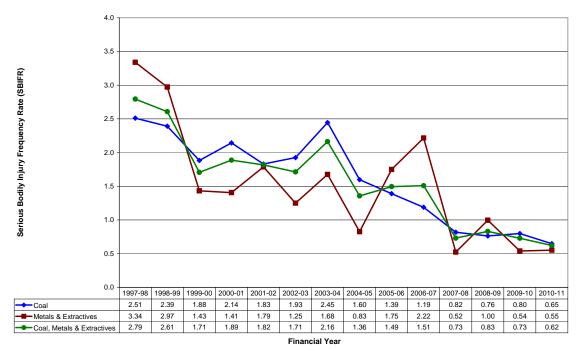
Financial Year

Refer to Appendix A.6 for further details of Serious Bodily Injuries by Sector and Operation Type.

# 4.5.2 Annual Serious Bodily Injury Frequency Rate (SBIFR) 1997-98 to 2010-11

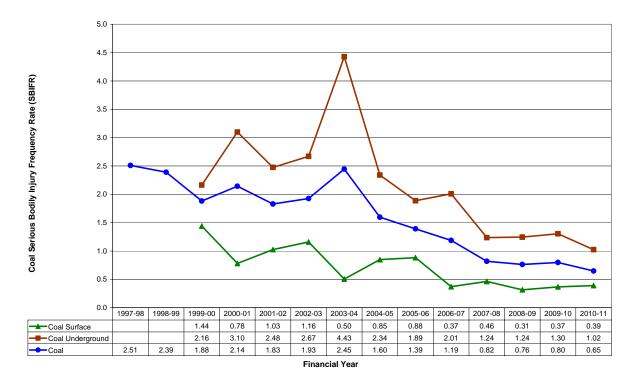
#### Figure 96

NSW Coal, Metalliferous & Extractives Annual Serious Bodily Injury Frequency Rate (SBIFR) 1997-98 to 2010-11



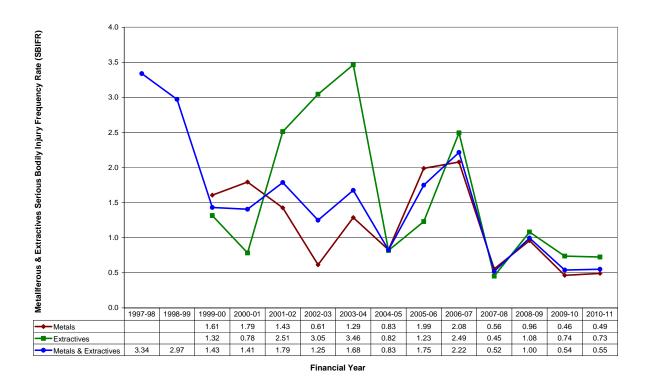
Refer to Figure 3 for Five Year Average Serious Bodily Injury Frequency Rate 2001-02 to 2010-11





#### Figure 98 NSW Metalliferous & Extractives Annual Serious Bodily Injury Frequency Rate (SBIFR) 1997-98 to

2010-11



# 4.5.3 Serious Bodily Injuries by Event Subtype

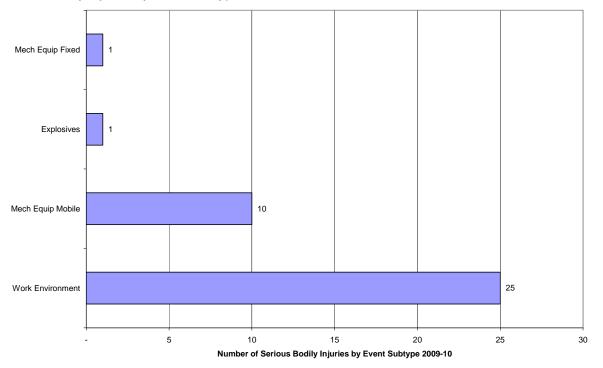
#### Figure 99

Serious Bodily Injuries by Event Subtype 1999-2000 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Mech Equip Mobile	20	18	16	21	24	22	24	33	15	22	15	10	240
Work Environment	19	16	23	16	30	15	17	20	17	19	23	25	240
Mech Equip Fixed	5	6	4	6	7	1	6	6	2	2	3	1	49
Strata/Ground Control	4	8	9	3	4	2	3	1	-	-	2	-	36
Electrical Energy	4	1	-	-	4	3	2	-	-	-	1	-	15
Hazardous Materials	3	2	1	3	-	-	-	-	-	1	-	-	10
Gas	1	3	-	-	-	-	1	1	-	-	-	-	6
Structural Failure	1	-	-	-	1	-	-	2	-	-	-	-	4
Water	1	1	-	-	-	-	1	-	-	-	-	-	3
Explosives	-	-	-	-	-	-	-	-	-	-	-	1	1
Total	58	55	53	49	70	43	54	63	34	44	44	37	604

### Figure 100

Serious Bodily Injuries by Event Subtype 2010-11

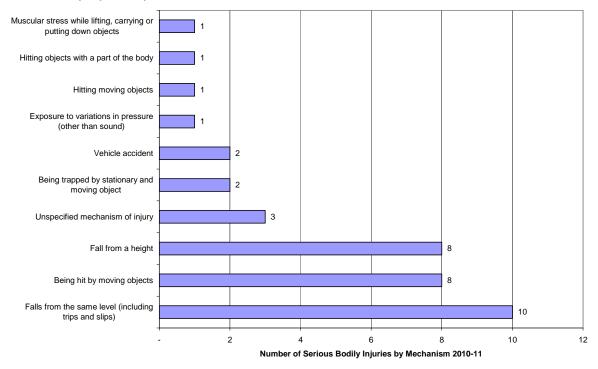


Refer to Appendix A.6 for further details of Serious Bodily Injuries by Event Subtype.

### 4.5.4 Serious Bodily Injuries by Mechanism

Figure 101

Serious Bodily Injuries by Mechanism 2010-11

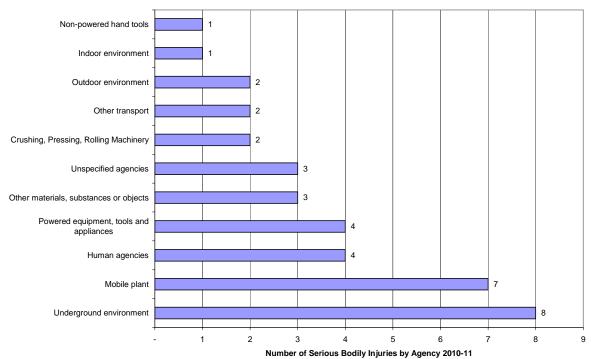


Refer to Appendix A.6 for further details of Serious Bodily Injuries by Mechanism.

# 4.5.5 Serious Bodily Injuries by Agency

### Figure 102

Serious Bodily Injuries by Agency 2010-11

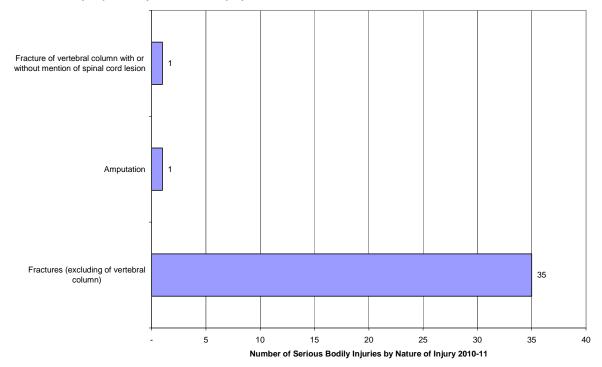


Refer to Appendix A.6 for further details of Serious Bodily Injuries by Agency.

# 4.5.6 Serious Bodily Injuries by Nature of Injury

#### Figure 103

Serious Bodily Injuries by Nature of Injury 2010-11

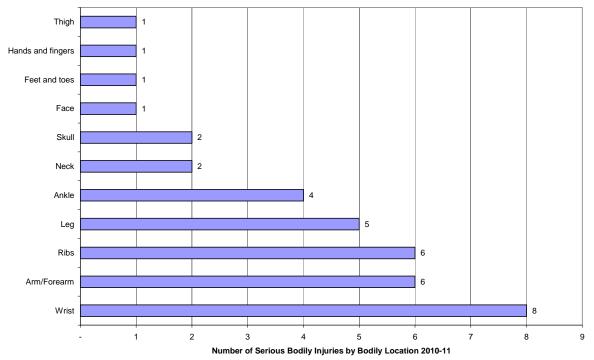


Refer to Appendix A.6 for further details of Serious Bodily Injuries by Nature of Injury.

# 4.5.7 Serious Bodily Injuries by Bodily Location

### Figure 104

Serious Bodily Injuries by Bodily Location 2010-11

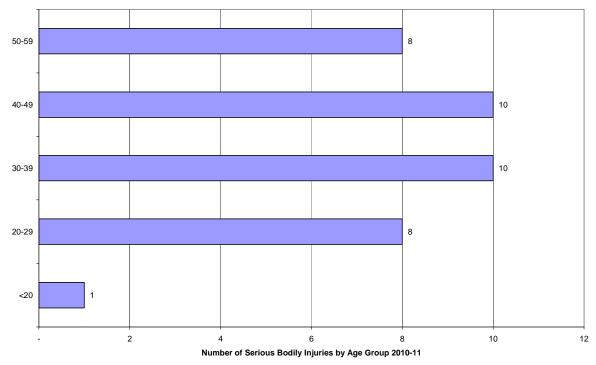


Refer to Appendix A.6 for further details of Serious Bodily Injuries by Bodily Location.

### 4.5.8 Serious Bodily Injuries by Age Group

### Figure 105

Serious Bodily Injuries by Age Group 2010-11

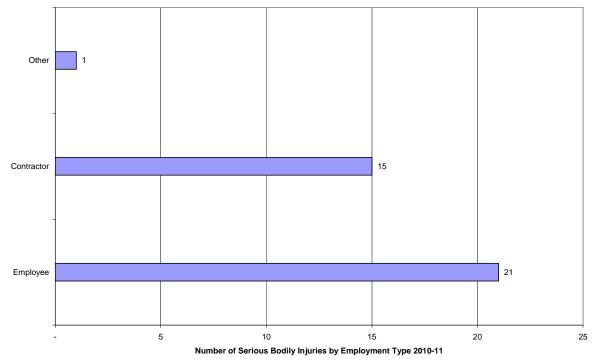


Refer to Appendix A.6 for further details of Serious Bodily Injuries by Age Group.

# 4.5.9 Serious Bodily Injuries by Employment Type

### Figure 106

Serious Bodily Injuries by Employment Type 2010-11



Refer to Appendix A.6 for further details of Serious Bodily Injuries by Employment Type.

# 4.6 Notifiable Injury Outcomes

This section provides a breakdown of injuries with outcomes that were required to be notified to NSW Trade & Investment.

An injury may result in one or more of the following notifiable injury outcomes:

- Fatality
- Entrapment
- Loss of consciousness
- Hospital inpatient admission
- At least seven days of lost time and/or alternative duties

These injury outcomes (except fatality) became reportable from mid-2007 for Coal under CMHSR 2006 Clauses 55, 56 and 57, and from the second quarter of 2008-09 for Non-Coal, under MHSR 2007 Clause 145 and 146.

#### In 2010-11:

• The most common causes of injuries with notifiable outcomes were slips and trips, muscular stressing, or being hit by moving or falling objects. Hand and finger injuries featured prominently, 81.3% occurred in underground operations and the majority were related to either the work environment or mobile mechanical equipment.

From 2009-10 to 2010-11:

- The number of injuries in the Coal sector that resulted in an outcome of at least seven days lost time and/or alternative duties increased by 1% while the number of injuries that resulted in an outcome of hospital inpatient admission decreased by 19.6%.
- The number of injuries in the Non-Coal sector that resulted in an outcome of at least seven days lost time and/or alternative duties increased by 13% while the number of injuries that resulted in an outcome of hospital inpatient admission decreased by 22.7%.

Refer to the Definitions, COMET Database Terms and Appendix B for details of the classifications used.

# 4.6.1 Notifiable Injury Outcomes by Injury Outcome

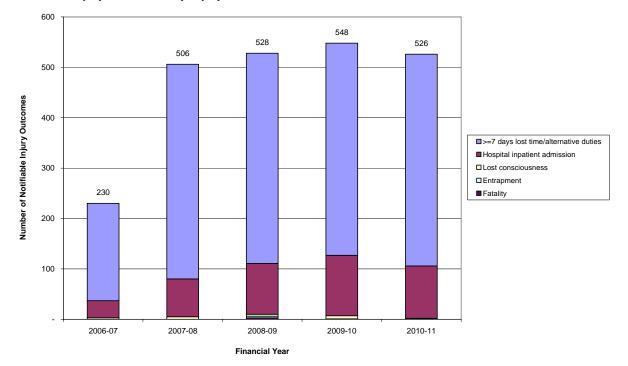
### Figure 107

Notifiable Injury Outcomes by Injury Outcome mid 2006-07 to 2010-11

Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
>=7 days lost time/alternative duties	193	426	417	421	420	1,877
Hospital inpatient admission	34	75	101	120	104	434
Lost consciousness	3	5	4	6	-	18
Entrapment	-	-	3	1	1	5
Fatality	-	-	3	-	1	4
Total	230	506	528	548	526	2,338

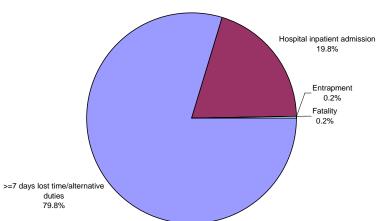
### Figure 108

Notifiable Injury Outcomes by Injury Outcome mid 2006-07 to 2010-11



### Figure 109

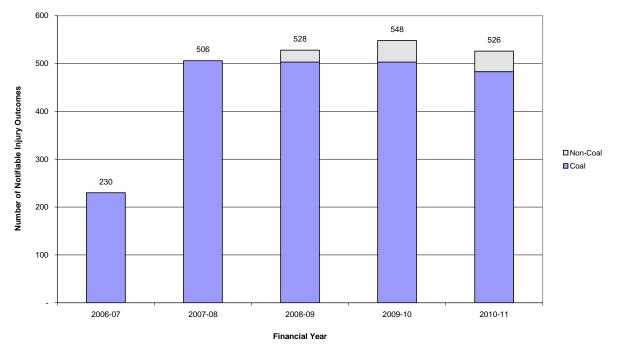
Notifiable Injury Outcomes 2010-11



Refer to Appendix A.7 for further details of Notifiable Injury Outcomes.

### 4.6.2 Notifiable Injury Outcomes by Sector

### Figure 110



Notifiable Injury Outcomes by Sector mid 2006-07 to 2010-11

Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Sector

### 4.6.3 Notifiable Injury Outcomes by Operation Type

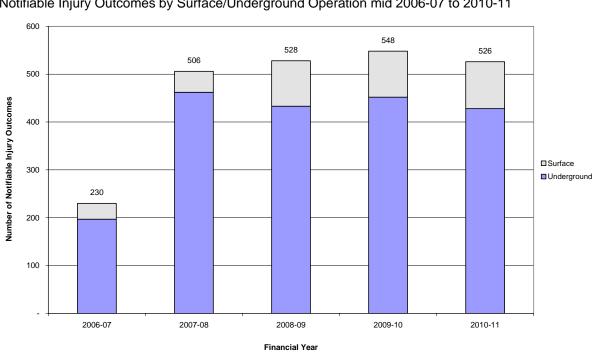


Figure 111 Notifiable Injury Outcomes by Surface/Underground Operation mid 2006-07 to 2010-11

Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Operation Type

# 4.6.4 Notifiable Injury Outcomes by Event Subtype

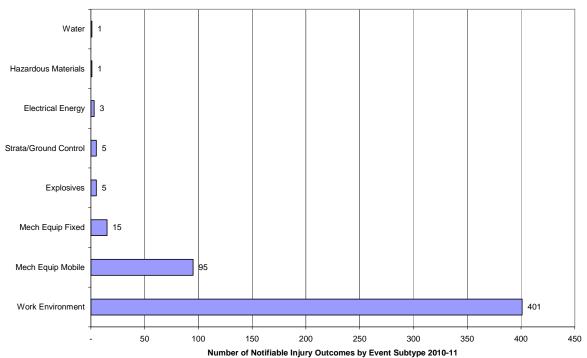
### Figure 112

Notifiable Injury Outcomes by Event Subtype mid 2006-07 to 2010-11

Event Subtype	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Work Environment	129	312	325	366	401	1,533
Mech Equip Mobile	87	178	174	153	95	687
Mech Equip Fixed	6	8	17	14	15	60
Strata/Ground Control	3	2	6	8	5	24
Electrical Energy	1	2	5	3	3	14
Hazardous Materials	3	2	-	2	1	8
Explosives	-	-	-	2	5	7
Gas	-	2	-	-	-	2
Structural Failure	1	-	1	-	-	2
Water	-	-	-	-	1	1
Total	230	506	528	548	526	2,338



Notifiable Injury Outcomes by Event Subtype 2010-11



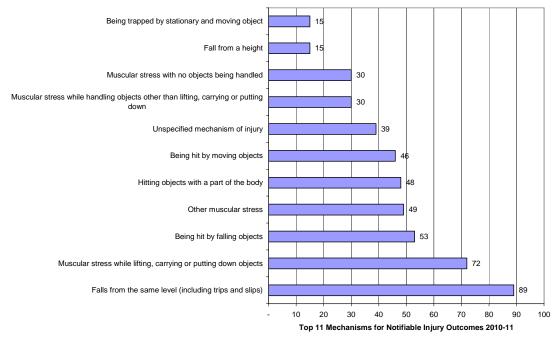
Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Event Subtype.

### 4.6.5 Notifiable Injury Outcomes by Mechanism

#### Figure 114

Top 11 Mechanisms for Notifiable Injury Outcomes 2010-11

The top 11 mechanisms represent 486 (92%) of 526 notifiable injury outcomes.



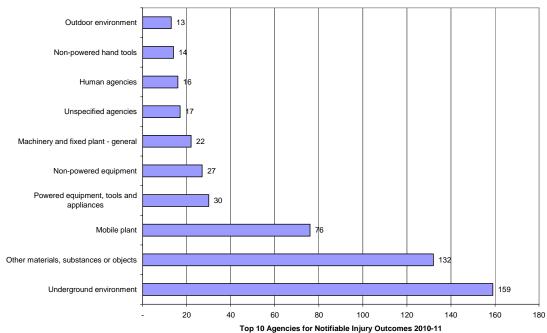
Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Mechanism.

### 4.6.6 Notifiable Injury Outcomes by Agency

#### Figure 115

Top 10 Agencies for Notifiable Injury Outcomes 2010-11

The top 10 agencies represent 506 (96%) of 526 notifiable injury outcomes.

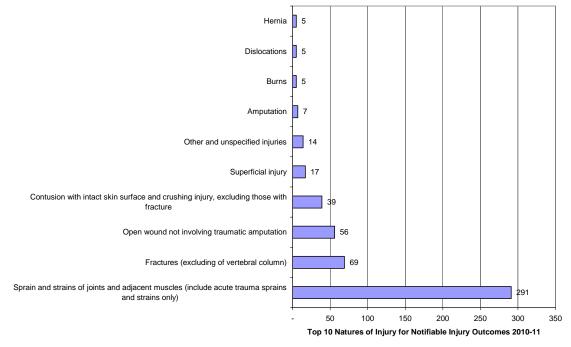


Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Agency.

### 4.6.7 Notifiable Injury Outcomes by Nature of Injury

#### Figure 116

Top 10 Natures of Injury for Notifiable Injury Outcomes 2010-11 The top 10 natures of injury represent 508 (97%) of 526 notifiable injury outcomes.

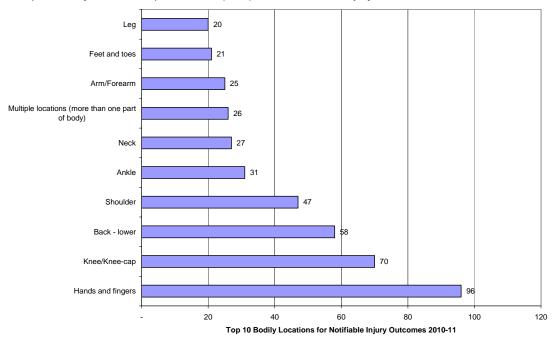


Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Nature of Injury.

# 4.6.8 Notifiable Injury Outcomes by Bodily Location

#### Figure 117

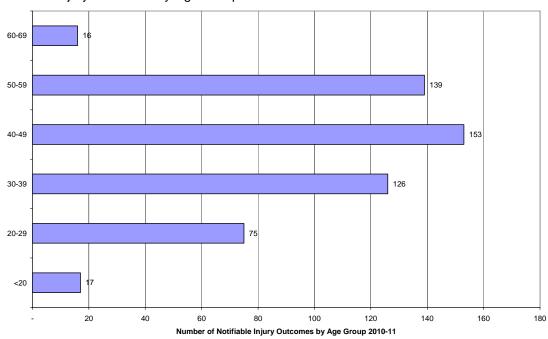
Top 10 Bodily Locations for Notifiable Injury Outcomes 2010-11 The top 10 bodily locations represent 421 (80%) of 526 notifiable injury outcomes



Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Bodily Location.

### 4.6.9 Notifiable Injury Outcomes by Age Group

Figure 118



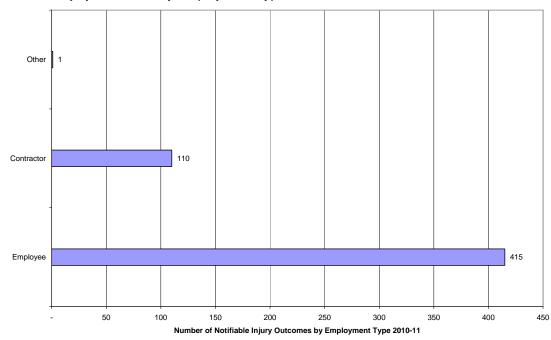
Notifiable Injury Outcomes by Age Group 2010-11

Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Age Group.

### 4.6.10 Notifiable Injury Outcomes by Employment Type



Notifiable Injury Outcomes by Employment Type 2010-11



Refer to Appendix A.7 for further details of Notifiable Injury Outcomes by Employment Type.

# 5 ASSESSMENTS

### 5.1 All Assessments

This section reports on formal and informal mining, electrical and mechanical inspections, audits, assessments and reviews conducted by NSW Trade & Investment Inspectors and Mine Safety Officers.

Refer to the Definitions, COMET Database Terms and Appendix B for details of the classifications used.

### 5.1.1 All Assessments by Sector

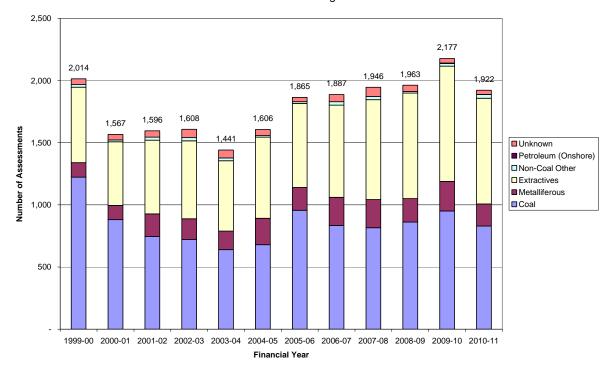
#### Figure 120

All Assessments by Sector 1999-00 to 2010-11 NB "Unknown" refers to assessments conducted for non-mine organisations

Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Coal	1,223	881	745	721	640	679	956	834	816	862	951	829	10,137
Metalliferous	117	115	183	167	149	213	184	227	227	189	238	178	2,187
Extractives	607	512	593	627	566	653	677	741	803	849	927	851	8,406
Non-Coal Other	21	14	24	26	23	12	13	28	26	13	21	29	250
Petroleum (Onshore)	-	-	-	-	-	-	-	-	-	-	4	2	6
Unknown	46	45	51	67	63	49	35	57	74	50	36	33	606
Total	2,014	1,567	1,596	1,608	1,441	1,606	1,865	1,887	1,946	1,963	2,177	1,922	21,592

### Figure 121

All Assessments by Sector 1999-00 to 2010-11 NB "Unknown" refers to assessments conducted for non-mine organisations



# 5.1.2 All Assessments by Operation Type

#### Figure 122

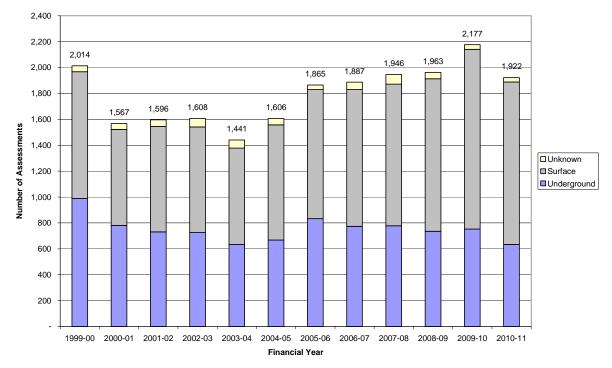
All Assessments by Operation Type 1999-00 to 2010-11 *NB "Unknown" refers to assessments conducted for non-mine organisations* 

Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Underground	989	780	731	725	633	668	833	773	778	735	753	634	9,032
Surface	979	742	814	816	745	889	997	1,057	1,094	1,178	1,388	1,255	11,954
Unknown	46	45	51	67	63	49	35	57	74	50	36	33	606
Total	2,014	1,567	1,596	1,608	1,441	1,606	1,865	1,887	1,946	1,963	2,177	1,922	21,592

#### Figure 123

All Assessments by Operation Type 1999-00 to 2010-11

NB "Unknown" refers to assessments conducted for non-mine organisations



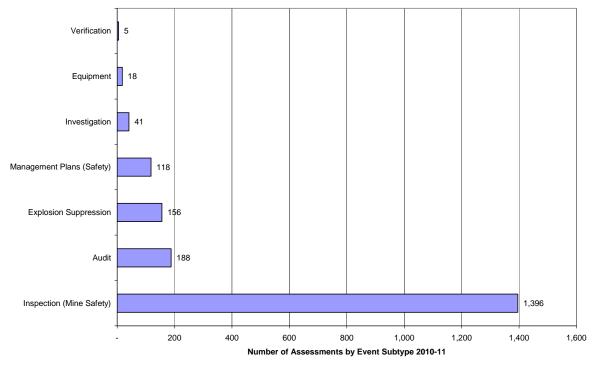
### 5.1.3 All Assessments by Event Subtype

#### Figure 124

All Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	1,106	1,062	1,127	1,077	927	1,177	1,272	1,270	1,370	1,375	1,440	1,396	14,599
Audit	80	146	199	233	204	101	288	212	263	302	391	188	2,607
Explosion Suppression	206	224	162	178	143	105	90	91	116	103	159	156	1,733
Management Plans (Safety)	431	53	29	59	54	86	118	149	58	71	115	118	1,341
Investigation	38	47	52	37	52	44	58	109	105	74	48	41	705
Verification	148	33	26	18	10	9	14	16	12	9	3	5	303
Equipment	3	-	-	-	-	44	16	31	9	18	17	18	156
Airborne Dust	1	2	1	6	50	34	1	2	8	8	1	-	114
Seminar/Workshop	-	-	-	-	1	-	5	2	5	3	-	-	16
Closure	1	-	-	-	-	2	2	4	-	-	2	-	11
Resource Recovery (Safety)	-	-	-	-	-	4	1	1	-	-	1	-	7
Total	2,014	1,567	1,596	1,608	1,441	1,606	1,865	1,887	1,946	1,963	2,177	1,922	21,592

#### Figure 125 All Assessments by Event Subtype 2010-11



### 5.2 Coal Assessments

### 5.2.1 Coal Assessments by Operation Type

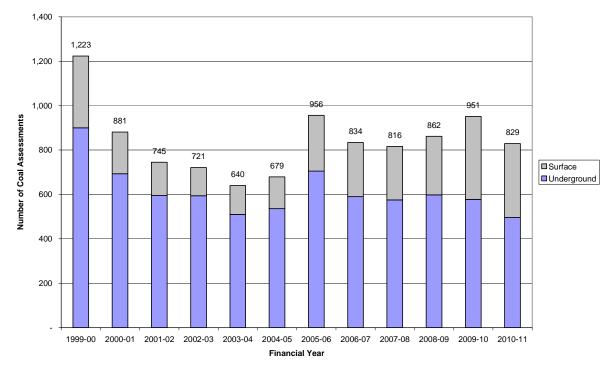
### Figure 126

Coal Assessments by Operation Type 1999-00 to 2010-11

Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Underground	900	693	595	594	510	536	705	590	575	598	578	496	7,370
Surface	323	188	150	127	130	143	251	244	241	264	373	333	2,767
Total	1,223	881	745	721	640	679	956	834	816	862	951	829	10,137

### Figure 127

Coal Assessments 1999-00 to 2010-11



### 5.2.2 Coal Assessments by Event Subtype

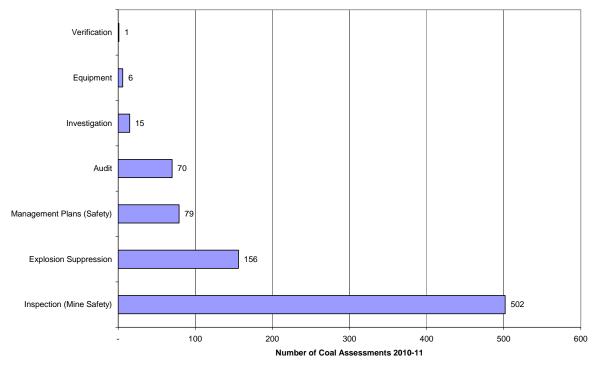
#### Figure 128

Coal Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	520	473	404	310	282	410	517	400	462	464	519	502	5,263
Explosion Suppression	204	223	161	177	143	105	90	91	116	103	159	156	1,728
Audit	66	118	156	184	109	43	224	143	122	187	205	70	1,627
Management Plans (Safety)	419	51	12	39	41	54	96	133	43	54	57	79	1,078
Investigation	4	14	9	4	18	7	17	50	64	40	8	15	250
Airborne Dust	1	2	1	6	47	34	1	2	4	3	1	-	102
Equipment	-	-	-	-	-	24	9	14	5	11	1	6	70
Verification	9	-	2	1	-	-	1	-	-	-	-	1	14
Resource Recovery (Safety)	-	-	-	-	-	1	1	-	-	-	1	-	3
Closure	-	-	-	-	-	1	-	-	-	-	-	-	1
Seminar/Workshop	-	-	-	-	-	-	-	1	-	-	-	-	1
Total	1,223	881	745	721	640	679	956	834	816	862	951	829	10,137

### Figure 129

Coal Assessments by Event Subtype 2010-11



Refer to Appendix A.8 for a breakdown of Surface and Underground Coal Assessments by Event Subtype

# 5.3 Non-Coal Assessments

### 5.3.1 Non-Coal Assessments by Operation Type

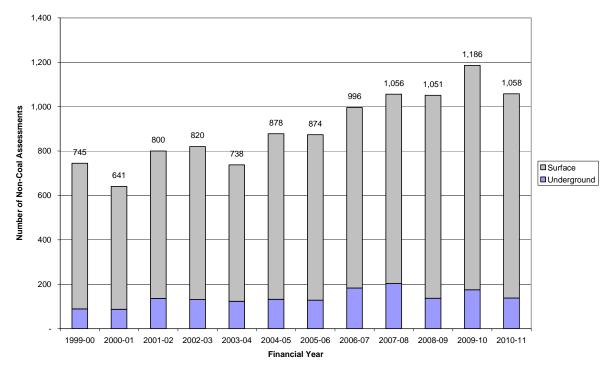
### Figure 130

Non-Coal Assessments by Operation Type 1999-00 to 2010-11

Operation Type	Mine Category	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Metalliferous	36	35	71	63	56	101	73	57	60	63	82	61	758
Surface	Extractives	606	511	588	622	558	644	668	729	787	842	917	839	8,311
Sunace	Non-Coal Other	14	8	5	4	1	1	5	27	6	9	12	20	112
	Total	656	554	664	689	615	746	746	813	853	914	1,011	920	9,181
	Metalliferous	81	80	112	104	93	112	111	170	167	126	156	117	1,429
Underground	Extractives	1	1	5	5	8	9	9	12	16	7	10	12	95
onderground	Non-Coal Other	7	6	19	22	22	11	8	1	20	4	9	9	138
	Total	89	87	136	131	123	132	128	183	203	137	175	138	1,662
Total		745	641	800	820	738	878	874	996	1,056	1,051	1,186	1,058	10,843

### Figure 131

Non-Coal Assessments 1999-00 to 2010-11



### 5.3.2 Non-Coal Metalliferous Assessments by Event Subtype

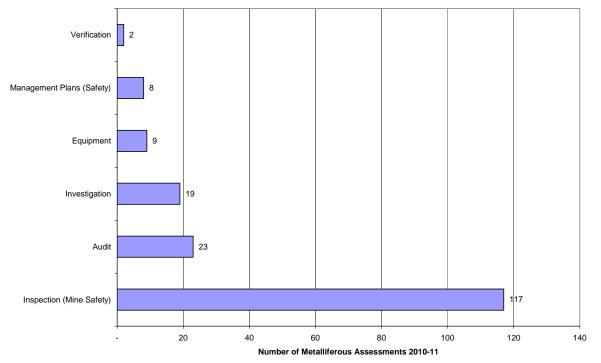
#### Figure 132

Non-Coal Metalliferous Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	85	89	128	125	113	164	134	148	150	143	154	117	1,550
Investigation	16	17	33	21	18	23	16	43	28	21	33	19	288
Audit	5	6	8	10	9	6	24	16	30	18	29	23	184
Verification	6	2	12	7	6	8	5	13	11	4	2	2	78
Management Plans (Safety)	4	1	2	4	3	7	4	3	8	3	10	8	57
Equipment	-	-	-	-	-	2	1	4	-	-	10	9	26
Resource Recovery (Safety)	-	-	-	-	-	3	-	-	-	-	-	-	3
Closure	1	-	-	-	-	-	-	-	-	-	-	-	1
Total	117	115	183	167	149	213	184	227	227	189	238	178	2,187

#### Figure 133

Non-Coal Metalliferous Assessments by Event Subtype 2010-11



Refer to Appendix A.8 for a breakdown of Surface and Underground Non-Coal Metalliferous Assessments by Event Subtype

### 5.3.3 Non-Coal Extractives Assessments by Event Subtype

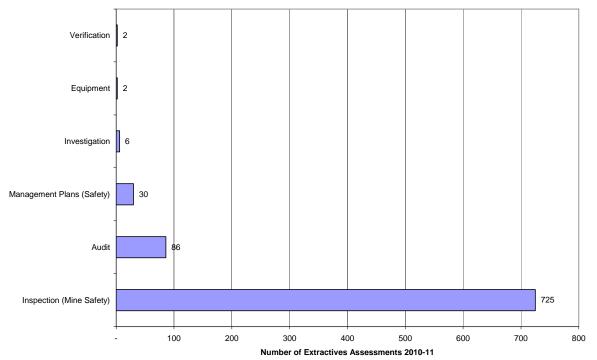
#### Figure 134

Non-Coal Extractives Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	457	464	548	583	482	562	584	664	716	728	720	725	7,233
Audit	2	7	14	8	57	49	34	46	63	86	149	86	601
Verification	129	31	12	10	4	1	8	3	1	4	1	2	206
Management Plans (Safety)	3	-	9	16	9	22	17	10	2	12	45	30	175
Investigation	13	10	10	10	14	13	23	14	13	10	7	6	143
Equipment	3	-	-	-	-	6	4	1	2	3	3	2	24
Airborne Dust	-	-	-	-	-	-	-	-	4	5	-	-	9
Seminar/Workshop	-	-	-	-	-	-	5	-	2	1	-	-	8
Closure	-	-	-	-	-	-	2	3	-	-	2	-	7
Total	607	512	593	627	566	653	677	741	803	849	927	851	8,406

#### Figure 135

Non-Coal Extractives Assessments by Event Subtype 2010-11



Refer to Appendix A.8 for a breakdown of Surface and Underground Non-Coal Extractives Assessments by Event Subtype

# 5.3.4 Non-Coal Other Assessments by Event Subtype

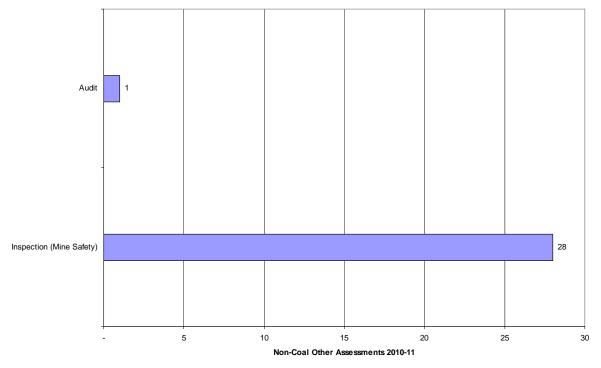
#### Figure 136

Non-Coal Other Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	18	9	20	12	20	10	13	27	24	12	19	28	212
Audit	2	3	3	13	3	-	-	1	2	-	-	1	28
Equipment	-	-	-	-	-	2	-	-	-	-	2	-	4
Investigation	-	2	-	1	-	-	-	-	-	-	-	-	3
Verification	1	-	-	-	-	-	-	-	-	1	-	-	2
Management Plans (Safety)	-	-	1	-	-	-	-	-	-	-	-	-	1
Total	21	14	24	26	23	12	13	28	26	13	21	29	250

#### Figure 137

Non-Coal Other Assessments by Event Subtype 1999-00 to 2010-11



Refer to Appendix A.8 for a breakdown of Surface and Underground Non-Coal Other Assessments by Event Subtype

# 5.4 Petroleum (Onshore) Assessments

Petroleum assessments recorded in the COMET database appear below. Several additional legacy databases are currently being researched and merged to produce a more comprehensive picture of safety in the onshore petroleum sector from next year, to coincide with expected new legislation.

### 5.4.1 Petroleum (Onshore) Assessments by Event Subtype

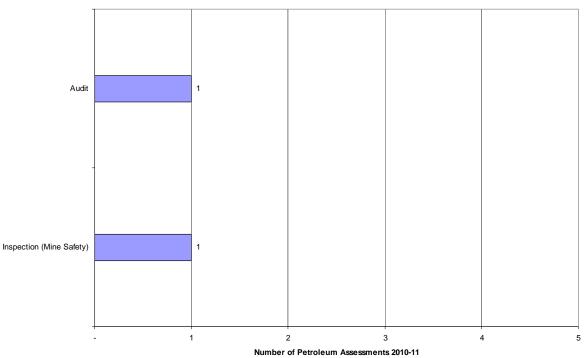
### Figure 138

Petroleum (Onshore) Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	-	-	-	-	-	-	-	-	-	-	4	1	5
Audit	-	-	-	-	-	-	-	-	-	-	-	1	1
Total	-	-	-	-	-	-	-	-	-	-	4	2	6

#### Figure 139

Petroleum (Onshore) Assessments by Event Subtype 2010-11



# **6 ENFORCEMENT AND ADVICE NOTICES**

### 6.1 All Enforcement and Advice Notices

This section reports on advice/improvement, prohibition, investigation and explosives enforcement and advice Notices issued by NSW Trade & Investment Inspectors and Mine Safety Officers.

The commencement of new coal legislation (CMHSA 2002 and CMHSR 2006) in mid 2006-07 and new non-coal legislation (MHSA 2004 and MHSR 2007) in the second quarter of 2008-09, together with the requirement that all advice to mines must now be in writing, has resulted in an increase in enforcement and advice notices issued.

Refer to the Definitions, COMET Database Terms and Appendix B for details of the classifications used.

### 6.1.1 All Enforcement and Advice Notices by Sector

#### Figure 140

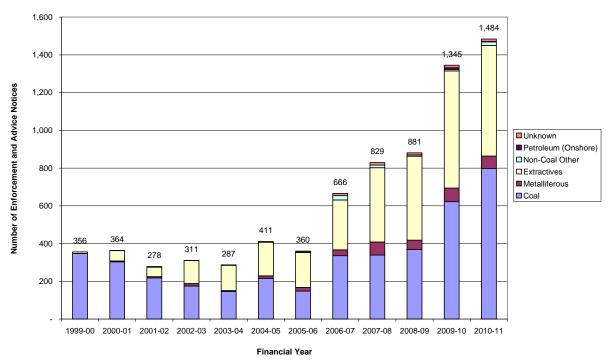
All Enforcement and Advice Notices by Sector 1999-00 to 2010-11 NB CMHSR 2006 commenced mid 2006-07 and MHSR 2007 commenced Q2 2008-09

"Unknown" refers to enforcements issued to non-mine organisations

Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Coal	347	303	218	175	147	216	148	336	339	369	622	797	4,017
Metalliferous	1	5	7	13	4	13	20	31	69	49	72	67	351
Extractives	8	55	50	122	134	178	185	264	394	445	621	586	3,042
Non-Coal Other	-	-	1	1	1	-	2	23	14	7	8	19	76
Petroleum (Onshore)	-	-	-	-	-	-	-	-	-	-	9	2	11
Unknown	-	1	2	-	1	4	5	12	13	11	13	13	75
Total	356	364	278	311	287	411	360	666	829	881	1,345	1,484	7,572

#### Figure 141

All Enforcement and Advice Notices by Sector 1999-00 to 2010-11 NB CMHSR 2006 commenced mid 2006-07 and MHSR 2007 commenced Q2 2008-09



### 6.1.2 All Enforcement and Advice Notices by Operation Type

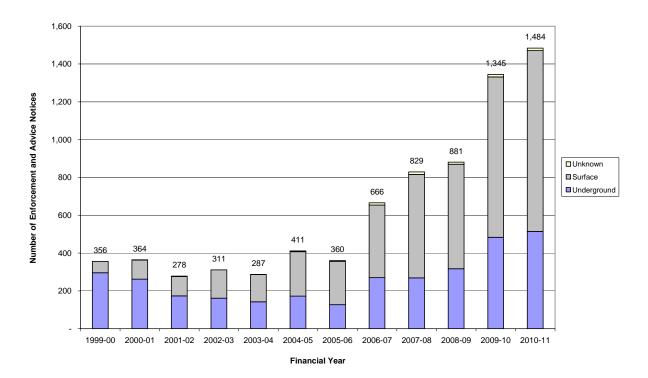
### Figure 142

All Enforcement and Advice Notices by Operation Type 1999-00 to 2010-11 NB CMHSR 2006 commenced mid 2006-07 and MHSR 2007 commenced Q2 2008-09

Operation Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Underground	296	262	173	161	142	172	127	270	269	317	483	514	3,186
Surface	60	101	103	150	144	235	228	384	547	553	849	957	4,311
Unknown	-	1	2	-	1	4	5	12	13	11	13	13	75
Total	356	364	278	311	287	411	360	666	829	881	1,345	1,484	7,572

#### Figure 143

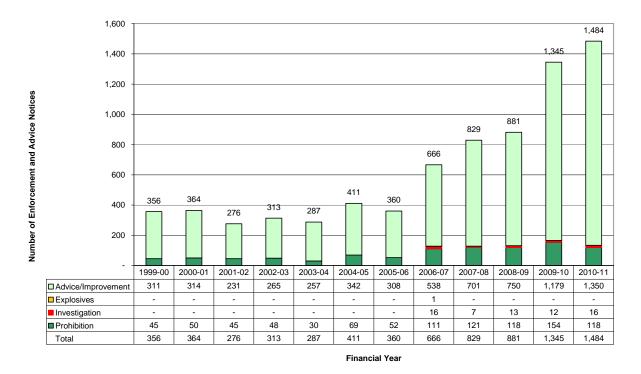
All Enforcement and Advice Notices by Operation Type 1999-00 to 2010-11 NB CMHSR 2006 commenced mid 2006-07 and MHSR 2007 commenced Q2 2008-09



### 6.1.3 All Enforcement and Advice Notices by Notice Category

#### Figure 144

All Enforcement and Advice Notices by Notice Category 1999-00 to 2010-11 NB CMHSR 2006 commenced mid 2006-07 and MHSR 2007 commenced Q2 2008-09



Refer to Appendix A.9 for a more detailed breakdown by Sector of Surface and Underground Enforcement and Advice Notices by Notice Category and Type

### 6.2 Coal Enforcement and Advice Notices

### 6.2.1 Coal Enforcement and Advice Notices by Operation Type

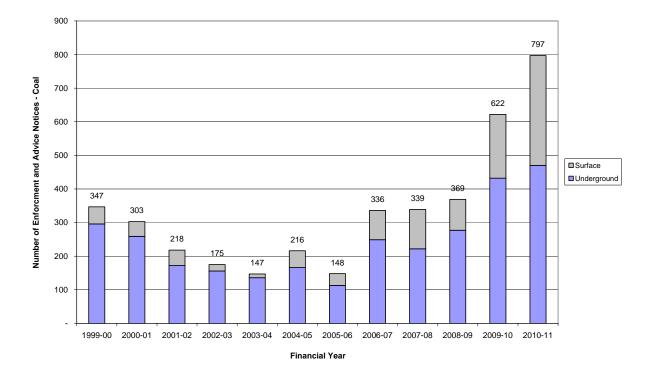
#### Figure 145

Coal Enforcement and Advice Notices by Operation Type 1999-00 to 2010-11 NB CMHSR 2006 commenced mid 2006-07

Operation Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Underground	296	259	172	156	136	166	113	249	222	277	432	470	2,948
Surface	51	44	46	19	11	50	35	87	117	92	190	327	1,069
Total	347	303	218	175	147	216	148	336	339	369	622	797	4,017

#### Figure 146

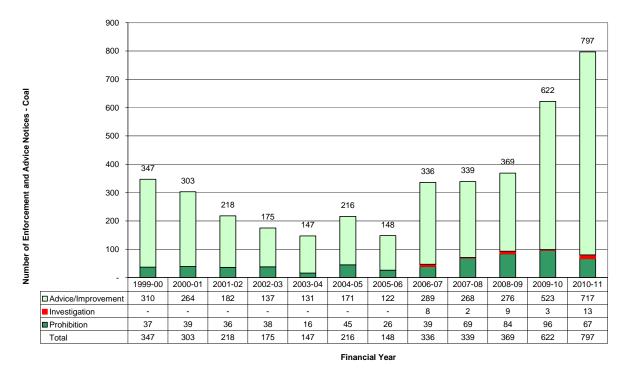
Coal Enforcement and Advice Notices 1999-00 to 2010-11 NB CMHSR 2006 commenced mid 2006-07



### 6.2.2 Coal Enforcement and Advice Notices by Notice Category

#### Figure 147

Coal Enforcement and Advice Notices by Notice Category 1999-00 to 2010-11 NB CMHSR 2006 commenced mid 2006-07



Refer to Appendix A.9 for a more detailed breakdown of Coal Surface and Underground Enforcement and Advice Notices by Notice Category and Type

# 6.3 Non-Coal Enforcement and Advice Notices

### 6.3.1 Non-Coal Enforcement and Advice Notices by Operation Type

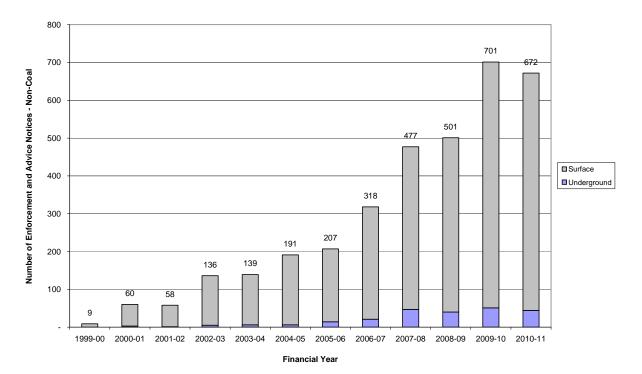
#### Figure 148

Non-Coal Enforcement and Advice Notices by Operation Type 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09

Operation Type	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Metalliferous	1	2	6	8	-	9	7	12	27	10	23	28	133
Surface	Extractives	8	55	50	122	132	176	184	262	389	444	619	581	3,022
Surface	Non-Coal Other	-	-	1	1	1	-	2	23	14	7	8	19	76
	Total	9	57	57	131	133	185	193	297	430	461	650	628	3,231
	Metalliferous		3	1	5	4	4	13	19	42	39	49	39	218
Underground	Extractives	-	-	-	-	2	2	1	2	5	1	2	5	20
onderground	Non-Coal Other	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	-	3	1	5	6	6	14	21	47	40	51	44	238
Total	otal		60	58	136	139	191	207	318	477	501	701	672	3,469

#### Figure 149

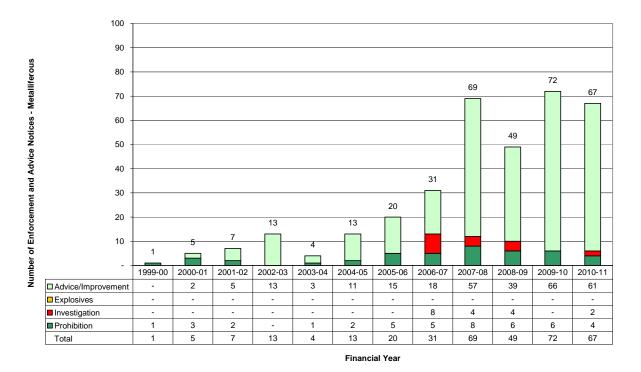
Non-Coal Enforcement and Advice Notices 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09



### 6.3.2 Non-Coal Metalliferous Enforcement and Advice Notices by Notice Category

#### Figure 150

Non-Coal Metalliferous Enforcement and Advice Notices by Notice Category 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09

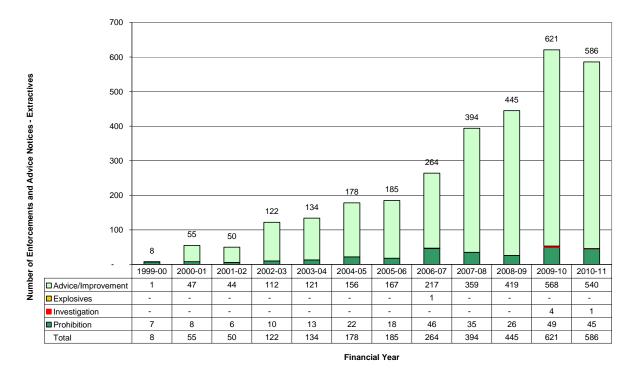


Refer to Appendix A.9 for a more detailed breakdown of Non-Coal Metalliferous Surface and Underground Enforcement and Advice Notices by Notice Category and Type

### 6.3.3 Non-Coal Extractives Enforcement and Advice Notices by Notice Category

#### Figure 151

Non-Coal Extractives Enforcement and Advice Notices by Notice Category 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09

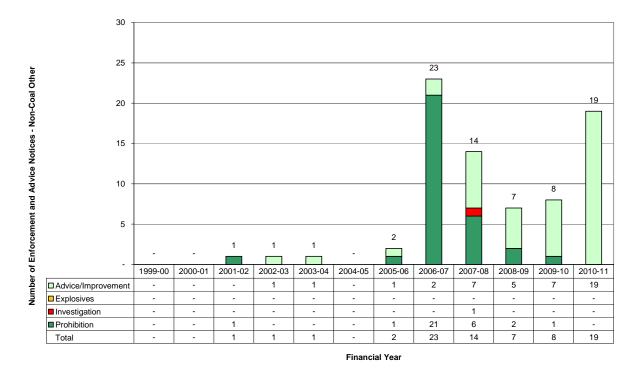


Refer to Appendix A.9 for a more detailed breakdown of Non-Coal Extractives Surface and Underground Enforcement and Advice Notices by Notice Category and Type

### 6.3.4 Non-Coal Other Enforcement and Advice Notices by Notice Category

#### Figure 152

Non-Coal Other Enforcement and Advice Notices by Notice Category 1999-00 to 2010-11 NB MHSR 2007 commenced Q2 2008-09



Refer to Appendix A.9 for a more detailed breakdown of Non-Coal Other Enforcement and Advice Notices by Notice Type

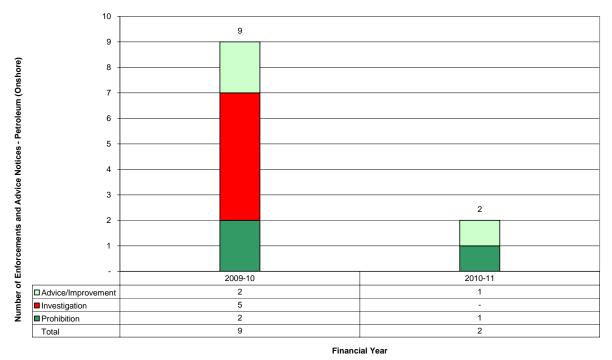
# 6.4 Petroleum (Onshore) Enforcement and Advice Notices

Petroleum enforcement and advice notices recorded in the COMET database appear below. Several additional legacy databases are currently being researched and merged to produce a more comprehensive picture of safety in the onshore petroleum sector from next year, to coincide with expected new legislation.

### 6.4.1 Petroleum (Onshore) Enforcement and Advice Notices by Notice Category

#### Figure 153

Petroleum (Onshore) Enforcement and Advice Notices by Notice Category 2009-10 to 2010-11



Refer to Appendix A.9 for a more detailed breakdown of Petroleum (Onshore) Enforcement and Advice Notices by Notice Type

### Appendix A.1 Incidents

#### Figure 154

Coal Surface Incidents by Incident Type and Subtype 1999-00 to 2010-11

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		*Unplanned movement 6(g) CMRA OC	22	3	-	-	-	-	-	-	-	-	-	-	25
		*Outbreak of fire 6(a) CMRA OC	12	1	-	-	-	-	-	-	-	-	-	-	13
	*1984 Dangerous Occurrence O/C	*Failure highwall,lowwall,spoil area 6(h) CMRA OC	2	-		-	-	-	-	-	-	-	-	-	2
*CMRA		*Self heating of coal 6(b) CMRA OC	2	-	-	-	-	-	-	-	-	-	-	-	2
		*Electric shock 6(d) CMRA OC	-	1	-	-	-	-	-	-	-	-	-	-	1
		Total	38	5	-	-	-	-	-	-	-	-	-	-	43
		*Fracture(s)	-	-	2	9	2	-	-	-	-	-	-	-	13 2
	*Serious Bodily	*Dislocation		-	1	-	1	-		-		-	-	-	2
	Injury CMRA	*Burns requiring hospital treatment Total	-	-	1	- 9	-	-	-	-	-	-	-	-	1 16
	*CMRA Total		38	5	4	9	3	-	-	-	-	-	-	-	59
		*SBI/SI	11	5	5	3	2	7	10	2		-		-	45
		*Lost Time Injury	-	1	-	1	1		-	2	-	-	-	-	
		*Fatality	-	-	-	-	1	-	-	-	-	-	-	-	1
	*Non Spec Acc	*Minor injury	-	-	-	-	-	-	-	1	-	-	-	-	1
	Ending in Fat/Injury	*MTI with NO Lost													
		Time	1	-	-	-	-	-	-	-	-	-	-	-	1
		Total	12	6	5	4	4	7	10	5	-	-	-	-	53
*CMGNR		*Elect shock 83(1)(b)	6	4	7	4	4	6	6	2	-	-	-	-	39
	*Notifiable Incidents	*Unplanned movement 83(1)(c)	5	8	3	1	1	2	5	1	-	-	-	-	26
	DCCP CMGNR 1999, CI 83	*Outbreak fire 83(1)(a)	1	-	-	-	1	-	4	-	-	-	-	-	6
		*Failure structure 83(1)(d) Total	2 14	- 12	1 11	- 5	2 8	- 8	- 15	-	-	-	-	-	5 76
	*CMGNR Total	TOLAI	26	12	16	9	12	15	25	8	-			-	129
	CINIGINA TOtal	*Unplanned										-	-	-	
		movement 16(1)(f)	30	42	32	21	49	26	46	3	-	-	-	-	249
		*Elect shock 16(1)(d)	6	13	12	6	8	6	10	5	-	-	-	-	66
		*Outbreak fire 16(1)(a) *Failure high-lowwall	7	11	5	7	2	2	5	2	-	-	-	-	41
*CMOCR	*Notifiable Incidents CMOCR 1999, CI 16	etc 16(1)(g)	3	5	5	2	3	4	3	2	-	-	<u> </u>	-	27
CWOCK	CHIOCK 1999, CI 16	*Self heat 16(1)(b)	1	1	-	1	1	-	2	-	-	-	-	-	6
		*Failure structure	2	1		1			-			-		_	4
		16(1)(h)			· · ·										
		*Flyrock 16(1)(j)	-	-	-	1	-	1	1	-	-	-	-	-	3
		*Injury from Blasting 16(1)(e)	-	-	-	1	1	-	-	-	-	-	·	-	2
		Total	49	73	54	40	64	39	67	12	-	-	-	-	398
	*CMOCR Total		49	73	54	40	64	39	67	12	-	-	-	-	398
		55(h) collision on surface involving vehicle or mobile plant with gross weight > 2 tonnes	-			-		-		30	71	60	67	89	317
CMHS C	CMHSR 2006 CI 55	55(i) loss of control of heavy vehicle or large plant on surface	-	-	-	-	-	-	-	15	11	22	25	22	95
	Canton 2000 Cl 35	55(j) overturning of heavy vehicle or large plant on surface	-	-	-	-	-	-	-	4	10	14	10	16	54
		55(c)(vi) unintended activation / movement of vehicles or machinery	-	-	-	-	-	-	-	3	5	5	11	9	33

### Coal Surface Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		55(c)(iv) failure of strata / slope stability control measures		-	-	-	-	-	-	1	5	6	3	6	21
		55(d)(i) involving electricity, person suffers injury, receives treatment from health professional or unable to attend work	-	-	-	-	-	-	-	1	6	4	7	1	19
		55(d)(ii) involving electricity, vehicle / machinery / other plant makes contact with energised high voltage source involving risk to person	-		-	-	-	-	-	1	1	2	7	6	17
		55(c)(i) damage to any plant / building / structure	-	-	-	-	-	-	-	-	3	3	3	6	15
		55(c)(ii) imminent risk of explosion or fire	-	-	-	-	-	-	-	-	5	3	-	1	9
		55(k) ejection of fly rock so that it falls outside blast exclusion zone or near people	-	-		-	-	-	-	-	2	-	3	1	6
		55(g) abnormal inrush of fluid	-	-	-	-	-	-	-	-	-	1	-	-	1
		Total 56(1)(n) uncontrolled	-	-	-	-	-	-	-	55	119	120	136	157	587
		explosion, fire / misfire of explosives in surface parts	-	-	-	-	-	-	-	35	80	94	88	102	399
		56(1)(p) unintended activation or movement of vehicles/machinery, no immediate threat to life or incapacitating injury	-	-		-	-	-	-	20	64	83	83	142	392
		56(1)(e) contact of person with energised electrical item supplied above extra low voltage	-	-	-	-	-	-	-	3	6	8	13	15	45
	CMHSR 2006 CI 56(1)	56(1)(o) escape of fluid under pressure that could place any person at risk	-	-	-	-	-	-	-	-	4	4	8	5	21
		56(1)(f) initial self- heating of coal / other material, heating of coal underground parts resulting in withdrawal of people	-	-	-	-	-	-	-	4	-	-	-	-	4
		56(1)(j) burial of machinery, cannot be recovered under own tractive effort	-	-	-	-	-	-	-	-	-	2	-	1	3
		56(1)(h) unplanned fall of roof / roof sides, impedes passage / disrupts mine ventilation / extends outside bolted zone	-	-	-	-	-	-	-	-	1	-	-	1	2
		Total 57(c) the unintended	-	-	-	-	-	-	-	62	155	191	192	266	866
	CMHSR 2006 CI 57	activation or movement of machinery (other than a vehicle)	-	-	-	-	-	-	-	-	-	1	5	4	10
	Non Cross As	Total Notifiable	-	-	-	-	-	-	-	-	-	1	5	4	10
	Non Spec Acc Ending in Fat/Injury	Injury/Outcome Total	-	-	-	-	-	-	-	31 <b>31</b>	38 38	68 68	56 56	57 57	250 250
	CMHS Total		-	-	-	-	-	-	-	148	312	380	389	484	1,713

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Explosives	Explosives Regulation 2005	Loss or theft of explosives or explosive precursors Cl 39 Total			·				•	1					1
	Explosives Total		-	-	-		-	-	-	1	-	-	-	-	1
	Complaint	Mine Employee Complaint Other	1	-	-	-	1	-	-	-	1	-	<u> </u>	•	3
		Total	1	-	-	-	1	-	1	-	1		-	-	4
		Electrical energy from apparatus such as cables, transformers, switch gear, connections	1	-	1	2	4	1	-	-	1	-	-	2	12
		Mobile mechanical equipment such as trucks, load-haul- dumps,utes,rail,winder s	2	2	-	1	-	2		2	-		1	1	11
		Other	2	-	-	-	-	1	-	1	-	-	-	-	4
		High wall/Pit wall	1	-	-	1	-	-	-	-	-	-	1	-	3
		Explosive dusts such as coal, sulphide dust	-	-	-	-	-	-	1	-	1	-	-	-	2
		Fixed mechanical equipment such as conveyors, crushers, screens	1	-		-	-	-	-	-		-		1	2
		Mining equipment such as continuous miners, excavators, drills, shovels	-	-	1	-	-	-	1	-	-	-	-	-	2
N/A	High Potential Incident	Thermal heat sources such as electrical apparatus, engines, pumps, friction points such as bearings, idlers	-	-	-	1	-	-		-	-	1	-	-	2
		Dusts that can effect health such as coal, silica	-	-	-	-	1	-	-	-		-	-	-	1
		Explosive gases such as H, CH4	-		-	-	1	-	-	-	-	-	-	-	1
		Fall of things (other than roof/wall & rib/sides) such as components, tools, structures	-	-		-				-	1			-	1
		Hydraulic pressure from pump stations & reticulation or equipment	-	1		-	-	-	-	-	-	-	-	-	1
		Lightning strike	-	-	-	-	1	-	-	-	-	-	-	-	1
		Spontaneous combustion such as coal	-	-	1	-	-	-	-	-	-	-	-	-	1
		Unknown	-	-	-	-	1	-	-	-	-	-	-	-	1
		Water - from rain or storms	-	-	-	-	-	1	-	-	-	-	-	-	1
		Total	7	3	3	5	8	5	2	3	3	1	2	4	46
	Unknown	Unknown	5	1	16		-	-	-	-	-	-			30
	Unknown	Total	5	1	16		-	-	-	-	-	-	-	-	30
	N/A Total		13	4	19		9				4		2		80
Coal Surface I	Surface Incidents Total		126	100	93	71	88	59	95	172	316	381	391	488	2,380

### Coal Surface Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

### Figure 155 Coal Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	*1984 Dangerous Occurrence O/C	*Outbreak of fire 6(a) CMRA OC		2	-	-	-	-	-	-	-	-	-	-	2
	Occurrence 0/C	Total	-	2	-	-	-	-	-	-	-	-	-	-	2
		*Fire below ground 6(b) CMRA UG	12	7	-	-	-	-	-	-	-	-	-	-	19
		*Arcing 6(n) CMRA UG	4	1	-	-		-		-	-	-	-	-	5
		*Buried continuous miner 7 CMRA UG	2			-		-		-	-	-		-	2
	*1984 Dangerous	*Electric shock 6(I) CMRA UG	1	-			-		-	-	-			-	1
	Occurrence U/G	*Fire on surface 6(c) CMRA UG	1	-		-		-		-	-	-			1
*CMRA		*Ignition of gas not dust 6(a) CMRA UG	1	-	-	-	-	-	-	-	-	-	-	-	1
•		*Insurge of gas 6(j) CMRA UG	1	-	-	-	-	-	-	-	-	-	-	-	1
		Total	22	8	-	-	-	-	-	-	-	-	-	-	30
	*Fatality	*Not Applicable	-	-	-	-	1	-	-	-	-	-	-	-	1
	Fatality	Total	-	-	-	-	1	-	-	-	-	-	-	-	1
		*Fracture(s)	-	-	3	7	9	-	-	-	-	-	-	-	19
		*Injection hydraulics 85(g)	-	-	-	1	2	-	-	-	-	-	-	-	3
	*Serious Bodily Injury CMRA	*Burns requiring hospital treatment		2		-			-	-	-		-	-	2
		*Dislocation	-	-	-	2	-	-	-	-	-	-	-	-	2
		*Amputation	-	-	-	1	-	-	-	-	-	-	-	-	1
		Total	-	2	3	11	11	-	-	-	-	-	-	-	27
	*CMRA Total	*SBI/SI	22 25	12 30	3 22	11 14	12 27	- 22	- 16	- 17	-	-	-	-	60 173
		*Fatality	25	2	22	14	1	- 22	- 10	1	-		-	-	173
	*Non Spec Acc	*Minor injury	-	-	1	1	-	-	1	6	-	-	-	-	9
	Ending in Fat/Injury	*Lost Time Injury	-	-	1	-	-	-	2	4	-	-	-	-	7
		Total	28	32	26	16	28	22	19	28	-	-	-	-	199
		*Unplanned movement 83(1)(c)	2	4	7	2	-	-	-	-	-	-	-	-	15
*CMGNR	*Notifiable Incidents	*Outbreak fire 83(1)(a)	1	1	-	2	-	-	-	2	-	-	-	-	6
	DCCP CMGNR 1999, CI 83	*Elect shock 83(1)(b)	-	2	2	-	-	-	-	-	-	-	-	-	4
		*Failure structure 83(1)(d)	1	1	-	-	-	-	-	-	-	-	-	-	2
	TOMOND Total	Total	4	8	9	4	-	-	-	2	-	-	-	-	27
	*CMGNR Total	*Failure explosion	32	40	35	20	28	22	19	30	-	-	-	-	226
		protection 34(1)(g) *Outbreak fire self	5	38	44	37	12	-	-	-	-	-	-	-	136
		heat 34(1)(b) *Ignition gas dust	17	18	17	15	17	24	15	6	-	-	-	-	129
		34(1)(a) *Damage failure	-	2	2	2	8	3	1	5	-	-	-	-	23
	*Dangerous Occurrences	haulage 34(1)(f) *Failure ventilation	2	4	4	4	-	-	5	-	-	-	-	-	19
	CMUGR 1999, CI	34(1)(c)	-	-	2	2	1	1	1	-	-		-	-	7
	34(1)	*Inrush 34(1)(d)	-	1	-	1	-	1	-	-	-	-	-	-	3
		*Outburst 34(1)(e)	-	1	1	-	-	-	-	1	-	-	-	-	3
		*Ignition explosives 34(1)(h)	-	-	-	-	-	1	-	-	-	-	-	-	1
*CMUGR		*Pillar collapse 34(1)(i)	-	-	-	-	1	-	-	-	-	-	-	-	1
		Total	24	64	70	61	39	30	22	12	-	-	-	-	322
		*Unplanned movement 34(2)(e)	17	37	51	38	9	-	-	-	-	-	-	-	152
		*Elect shock 34(2)(h)	5	7	7	9	1	-	-	-	-	-	-	-	29
		*Fall roof sides 34(2)(a)	3	6	4	4	2	-	-	-	-	-	-	-	19
	1000 CI 34 (2)	*Entrapment breaker line 34(2)(d)	2	9	2	1	-	-	-	-	-	-	-	-	14
	Repealeu 4/1/2003	*Entrapment cont. miner 34(2)	6	2	1	1	-	-	-	-	-	-	-	-	10
		*Windblast 34(2)(b)	-	4	2	-	-	-	-	-	-	-	-	-	6
		*Failure structure 34(2)(g)	2	1	1	1	-	-	-	-	-	-	-	-	5
	34(	Total	35	66	68	54	12	-	-	-	-	-	-	-	235

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		*Unplanned movement 34A (1)(b)	-	1	7	-	29	29	57	27	-	-	-	-	150
	*Notifiable Incidents CMUGR 1999 CI 34A	*Elect shock 34A	-	-	-	1	7	8	17	14	-	-	-	-	47
	CMUGR 1999 CI 34A	(1)(a) *Failure structure 34A	_	_		_	2	1	2	2	_	_		_	7
		(1)c Total	-	1	7	1	38	38	76	43	-		-	-	204
		*Arcing on electric			,	2	15	50	76	33					176
*CMUGR		cable 34B (1)(a) *Failure explosion	-	-	-			-			_	_	-		
omoon		protection 34B (1)(g)	-	-	1	9	24	39	34	20	-	-	-	-	127
	*Other Notifiable	*Fall roof sides 34B (1)(b)	-	-	1	-	6	3	4	4	-	-	-	-	18
	Incidents CMUGR 1999 CI 34B	*Entrapment cont.		-	-	1	1	3	1	1	-	-	-		7
		miner 34B (1)(d) *Entrapment breaker						2	1	1					4
		line 34B (1)(e) *Windblast 34B (1)c	-				1	-			-				1
		Total	-	-	2	12	47	97	116	59	-	-	-	-	333
	*CMUGR Total	55(I) failure of any part	59	131	147	128	136	165	214	114	-	-	-	-	1,094
		of powered winding system or damage to shaft or shaft equipment	-	-		-	-		-	14	12	31	54	46	157
		55(e) uncontrolled explosion / fire / misfire of explosives in underground parts	-	-	-	-	-	-	-	4	25	37	29	20	115
		55(h) collision on surface involving vehicle or mobile plant with gross weight > 2 tonnes			-		-	-	-	4	6	16	19	27	72
		55(c)(vi) unintended activation / movement of vehicles or machinery	-	-	-	-	-	-	-	6	14	6	15	5	46
		55(d)(ii) involving electricity, vehicle / machinery / other plant makes contact with energised high voltage source involving risk to person	-	-	-	-	-	-	-	7	8	10	7	10	42
СМНЗ	CMHSR 2006 CI 55	55(d)(i) involving electricity, person suffers injury, receives treatment from health professional or unable to attend work	-	-	-	-	-	-	-	3	7	13	7	8	38
		55(j) overturning of heavy vehicle or large plant on surface	-	-	-	-	-	-	-	-	5	6	5	3	19
		55(i) loss of control of heavy vehicle or large plant on surface	-	-		-	-	-	-	4	3	2	1	2	12
		55(c)(iv) failure of strata / slope stability control measures	-	-	-	-	-	-	-	1	3	2	1	3	10
		55(c)(ii) imminent risk of explosion or fire	-	-	-	-	-	-	-	2	1	2	3	-	8
		55(c)(i) damage to any plant / building / structure	-	-	-	-	-	-	-	2	1	-	1	1	5
		55(f) uncontrolled outburst of gas	-	-	-	-	-	-	-	-	-	1	2	-	3
		55(g) abnormal inrush		-		-	-	-	-		-	1		2	3
		of fluid Total	-	-	-	-	-	-	-	47	85	127	144	127	530

### Coal Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Salegory		56(1)(g) accumulation													
		of gas requires withdrawal of people								287	654	806	796	925	3,468
		or results in tripping	-	_	-	-	-	-	-	207	004	000	730	325	3,400
		off electric power													
		56(1)(m) in-service failure of explosion-													
		protection	-	-	-	-	-	-	-	57	137	322	477	344	1,337
		characteristics 56(1)(o) escape of													
		fluid under pressure that could place any	-	-	-	-	-	-	-	236	357	278	202	184	1,257
		person at risk													
		56(1)(p) unintended activation or													
		movement of vehicles/machinery,								69	121	164	217	190	761
		no immediate threat to	-	_	-	-	-	-	-	03	121	104	217	150	701
		life or incapacitating injury													
		56(1)(I) event in													
		hazardous zone, underground parts,													
		electric arc observed or leaves visible	-	-	-	-	-	-	-	49	69	76	82	71	347
		evidence on electric													
		cable													
		56(1)(h) unplanned fall of roof / roof sides,													
	CMHSR 2006 CI 56(1)	impedes passage / disrupts mine	-	-	-	-	-	-	-	20	27	29	24	23	123
CMHS		ventilation / extends													
		outside bolted zone													
		56(1)(n) uncontrolled explosion, fire / misfire									12	3	10	13	38
		of explosives in surface parts	-			-					12	5	10	13	30
		56(1)(e) contact of													
		person with energised electrical item	-	-		-	-			8	10	3	8	7	36
		supplied above extra low voltage													
		56(1)(j) burial of													
		machinery, cannot be recovered under own	-	-	-	-	-	-	-	1	4	1	4	9	19
		tractive effort													
		56(1)(f) initial self- heating of coal / other													
		material, heating of	-			-	-				-	4	3	1	8
		coal underground parts resulting in													
		withdrawal of people													
		56(1)(i) windblast													
		results in injuries requiring treatment by	-	-	-	-	-	-	-	-	1	-	-	2	3
		medical practictioner													
		561d Total	-	-	-	-	-	-	-	- 727	- 1,392	- 1,686	- 1,823	2 1,769	2 7,399
	Non Spec Acc	Notifiable	-	-	-	-	-	-	-	184	446	369	378	372	1,749
	Ending in Fat/Injury	Injury/Outcome Total	-	-	-	-	-	-	-	184	446	369	378	372	1,749
	CMHS Total	Mine Employee	-	-	-	-	-	-	-	958	1,923	2,182	2,345	2,268	9,678
		Complaint	2	-	1	-	-	-	-	-	-	1	-	1	5
		Other Public Complaint	2	-	-	-	-	1	1	-	- 1	-	-	-	5
		Total	5		1	-	-	1	1	-	1	1	-	1	12
		Electrical energy from apparatus such as													
		cables, transformers, switch gear,	2	1	4	4	5	3	3	5	2	1	-	1	31
N/A		connections													
		Mining equipment such as continuous				_	_	_	.						40
		miners, excavators, drills, shovels	4	1	1	2	2	6	1	-	1	-	-	-	18
		Other	-	-	1	3	1	4	-	1	-	1	1	1	13
		Mobile mechanical equipment such as													
		trucks, load-haul-	5	2	1	-	-	1	1	-	2	-	-	-	12
		dumps,utes,rail,winder s													
													•		

### Coal Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		Hydraulic pressure from pump stations & reticulation or equipment	-	1		1	1	1	2	2	1	-	-	-	9
		Explosive gases such as H, CH4 Fixed mechanical	-	1	-	1	2	-	-	-	2	-	1	1	8
		equipment such as conveyors, crushers, screens	1	3	2	-	-	-	-	1	-	-	-	-	7
		Dusts that can effect health such as coal, silica	-	2	1	1	-	-	-	-	-	-	1	-	5
		Fall of things (other than roof/wall & rib/sides) such as components, tools, structures	-	-		-	2	-	1		-	-	1	-	4
		Rib/sides	-	-	1	-	-	1	-	-	-	-	-	-	2
		Slopes/grades/ramps where equipment can move in a uncontrolled manner	2	-		-	-	-	-	-	-	-	-	-	2
		Water - in large volumes	-	-	-	-	-	1	-	-	-	1	-	-	2
		Explosive dusts such as coal, sulphide dust	-	-	-	-	-	-	-	-	-	1	-	-	1
		Fines or build up of combustible particles	1	-	-	-	-	-	-	-	-	-	-	-	1
		Flammable gases such as Acetylene, LPG	-	-	-	-	-	-	1	-	-	-	-	-	1
N/A	High Potential Incident	Flammable/explosive liquid chemicals such as petrol, diesel, oils, degreasers, solvents	1			-	-	-	-		-	-	-	-	1
		Floor Liquid chemicals that may effect health such as cleaners, oils/lubes, solvents, degreasers	-	-	-	-	-	-	-	-	-	-	- 1	-	1
		Other gases with health effects such as	-	-	-	-	-	1	-	-	-	-	-	-	1
		Pneumatic pressure from compressor stations & reticulation or equipment	-	-	-	-	1	-	-	-	-	-	-	-	1
		Roof/backs Spontaneous	-	-	-		-	1	-	-	-	-	-	-	1
		combustion such as coal	1	-	-	-	-	-	-	-	-	-	-	-	1
		Thermal heat sources such as electrical apparatus, engines, pumps, friction points such as bearings, idlers	-	-	-	-	-	-	1	-	-	-	-	-	1
		Unknown	-	-	-	-	1	-	-	-	-	-	-	-	1
		Water - from rain or storms	-	-	-	1	-	-	-	-	-	-	-	-	1
		Water pressure from pump stations & reticulation or equipment	-	-		-	-		-		1	-	-	-	1
		Wildlife such as kangaroos, snakes, spiders	-	-	-	-	-	-	-	-	-	-	1	-	1
		Total	17	11	11	13	15	19	10	9	9	4	6	4	128
	UNKNOWN	Unknown	8	2	23	9	-	-	-	-	-	-	-	-	42
	N/A Total	Total	8 30	2 14	23 35	9 22	- 15	- 20	- 11	- 9	- 10	- 5		- 5	42 182

### Coal Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

### Figure 156 Non-Coal Metalliferous Surface Incidents by Incident Type and Subtype 1999-00 to 2010-11

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		*Failure of workings of	5	-		-	-	-	-	-	-	-	-	-	5
		mine MIA *Machinery out of	5												5
		control MIA		-		-	-	-		-		-	-	-	
		*Outbreak of fire MIA *Potential to cause	5	-		-	-	-	-	-	-	-	-	-	5
	*1994 Emergency MIA	serious injury	2	-	-	-	-	-	-	-	-	-	-	-	2
		*Explosion/ignition dust MIA	1	-	-	-	-	-	-	-	-	-	-	-	1
		*Exposure hazardous													
		materials MIA	1	-	-	-	-	-	-	-	-	-	-	-	1
		Total	19	-	-	-	-	-	-	-	-	-	-	-	19
		*Mobile mechanical equipment such as													
		trucks, load-haul-	1	4	9	-	-	-	-	-	-	-	-	-	14
		dumps,utes,rail,winder													
		*Electrical energy													
		from apparatus such													
		as cables, transformers, switch	2	3	3	-	-	-	-	-		-	-	-	8
		gear, connections													
		*High wall/Pit wall *Thermal heat	-	-	3	-	-	-	-	-	-	-	-	-	3
		sources such as													
		electrical apparatus, engines, pumps,	-	3	· ·	-	-	-	-	-	-	-	-	-	3
		friction points such as													
	Dangerous Incident	bearings, idlers *Flammable gases													
	МІА	such as Acetylene,	1	-	-	-	-	-	-	-	-	-	-	-	1
		LPG													
		*Flammable/explosive liquid chemicals such													
		as petrol, diesel, oils,	-	-	1	-	-	-	-	-	-	-	-	-	1
		degreasers, solvents													
	s r c v v r r r	*Mining equipment													
		such as continuous miners, excavators,	1	-	-	-	-	-	-	-	-	-	-	-	1
		drills, shovels													
*MIA		*Slopes/grades/ramps where equipment can													
		move in a uncontrolled	-	-	1	-	-	-	-	-	-	-	-	-	1
		manner Total	5	10	17	-	-	-	-	-	-	-	-	-	32
		*Fracture(s)	-	-	-	2	2	-	-	-	-	-	-	-	4
	*Serious Injury MIA	*Asphyxia *Dislocation	-	-	-	-	1	-	-	-	-	-	-	-	1
		Total	-	-	-	2		-	-	-	-	-	-	-	6
		*Electric shock Cl 68(5)(a)	-	-	-	6	5	5	5	7	4	-	-	-	32
		*Mobile Plant -													
		general transport/traffic	-	-		3	1	6	11	2	2	-	-	-	25
		*Mobile Plant - fires on				1						1			
		equipment (surface)	-	-	3	5	5	2	2	-	1	-	-	-	18
		*Outbreak of fire due					1		1					1	
		to electrical equipment	-	-	2	-	1	1	1	-	1	-	-	-	6
		Cl 68(5)(c)													
		*Isolation of energy *Misfire - significant Cl	-	-		-	-	1	2	1		-		-	4
		65(1)	-	-	-	2	1	-	-	1	-	-	-	-	4
		*Fixed Equipment -	-	-	- 1	-	-	-	-	1	2	-	-	-	3
	*Dangerous Incident		-	-	-	-	-	-	1	1	1	-	-	-	3
		*Rock falls - ( major ) Ground Movement	-	-	-	1	-	-	-	-	1	-	-	-	2
		*Slope stability	-	-	1	-	1	-	-	-	-	-	-	-	2
		*Working at height *Ejection of Flyrock Cl	-	-	-	-	-	1	1	-	-	-	-	-	2
		64(2)	-	-	-	-	1	-	-	-	-	-	- ·	-	1
		*Inrush of Water,	-	-	-	-	-	-	-	1	-	-	-	-	1
		Material or Gas *Mobile Plant - tyres,					<u> </u>	1	-					<u> </u>	
		rims	-	-	-	-	-	1	-	-	-	-	· ·		1
		*Outbreak of Fire U/G	-	-	-	-	1	-	-	-	-	-	_ ·	-	1
		*Unplanned							4						1
		movement due to electricity Cl 68(5)(d)	-	-	· ·	-	-	-	1	-	·	-	·	-	1

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Category		*SBI/SI	•	2	•	1	1	1	2	5	1			•	14
*MIA	*Non Spec Acc Ending in Fat/Injury	*Lost Time Injury *Minor injury	8	-	-	-	-	-	-	-	-	-	-	-	9
mus		Total	9	2	-	1	1	1	3	5	1	1	-	-	24
	*MIA Total	Serious Incidents	33	12	23	20	21	18	27	19	13	1	-	-	187
Explosives	Explosives Regulation 2005	involving explosives Cl 75	-	-	-	-	-	-	-	1	-	-	-	-	1
	Fundaciona Tatal	Total	-	-	-	-	-	-	-	1	-	-	-	-	1
	Explosives Total	145(e) uncontrolled	-	-		-	-	-		-		- 15		- 13	45
		explosion or fire	-	-		-	-	-	-	-	-	15	17	13	45
		145(k) overturning of vehicle or other machinery	-	-	-	-	-	-	-	-	-	2	3	8	13
		145(n) unplanned fall of ground that													
		impedes passage,													
		disrupts production or ventilation or involves							-			4	5	3	12
		failure of ground										-	0	0	12
		support where persons could be													
		present													
		145(d)(iii) involving electricity, person													
		receives electric shock		-		-		-	-	-		1	6	2	9
		from source operating above extra low											Ű	-	Ű
		voltage													
		145(i) collision involving vehicle or													
		other machinery that		-	l .		-	-	-	-	l .	1	3	4	8
		results in substantial damage, impedes											Ű		0
		safe operations													
		145(c)(v) unintended activation or													
		movement of	-	-	-	-	-	-	-	-	-	1	4	2	7
		vehicles/machinery 145(j) the loss of													
	MHSR 2007 CI 145	control of a vehicle or					_	_		_		_	2	3	5
MHS		other machinery at the mine	-	-	-		-	-		-	_	-	2	5	5
WING		145(c)(ii) imminent													
		risk of explosion or fire	-	-	-	-	-	-	-	-	-	-	-	2	2
		145(d)(i) involving													
		electricity, person													
		suffers injury, receives medical treatment or	-	-	-	-	-	-	-	-	-	1	-	-	1
		unable to attend work													
		145(d)(ii) any incident													
		involving electricity: (ii) where a vehicle,													
		machinery or other													
		plant makes contact with an energised high		-		-	-	-	-	-	-	-	1	-	1
		voltage source													
		involving a risk to any person)													
		145(f) escape of fluid				<u> </u>			<u> </u>					<u> </u>	
		under high pressure that endangers a	-	-	-	-	-	-	-	-	-	1	-	-	1
		person													
		145(p) burial of machinery such that it													
		cannot be recovered	-	-	-	-	-	-	-	-	-	1	-	-	1
		under its own tractive effort													
		Total	-	-	-	-	-	-	-	-	-	27	41	37	105
	Non Spec Acc	Notifiable Injury/Outcome	-	-	-	-	-	-	-	-	-	3	7	5	15
	Ending in Fat/Injury	Total	-	-	-	-	-	-	-	-	-	3			15
	MHS Total	Mine Employee	-	-	-	-	-	-	-	-	-	30			120
		Complaint	-	2			2			-	3				20
	Complaint	Public Complaint Other	-	-	1		2				1		1	-	10 7
		Total	-	2	2		5				6				37
		Mobile mechanical equipment such as													
N/A		trucks, load-haul-	-	2	3	1	4	8	3	4	1	4	2	-	32
		dumps,utes,rail,winder s													
	High Potential Incident	Electrical energy from													
		apparatus such as cables, transformers,	1		1	1	2	-	3	3	6	1	1	-	19
		switch gear,	'		'	'						'	'		13
		connections Other		1	1	1	-	2	-	1	2	-	2	-	10
		Guidi			. I	<u> </u>	. <u> </u>	Z		!	L 2	. <u> </u>	L 4	· ·	10

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		Mining equipment such as continuous miners, excavators, drills, shovels	-	-	-	-	-	2	-	1	2	2	-	1	8
		High wall/Pit wall	-	-	-	-	-	1	-	2	3	-	-	-	6
		Thermal heat sources such as electrical apparatus, engines, pumps, friction points such as bearings, idlers	-	-		-	-		1	2	1	-	-	-	4
		Slopes/grades/ramps where equipment can move in a uncontrolled manner	-	-	-	1	1	-	-	1	-	-	-	-	3
		Explosive Incident not a Dangerous Incident	-	-	-	-	-	-	-	-	2	-	1	-	3
		Fall of things (other than roof/wall & rib/sides) such as components, tools, structures	1			-		1					-	-	2
		Fixed mechanical equipment such as conveyors, crushers, screens	1	-	-	1	-	-	-	-	-	-	-	-	2
		Stored pressure/energy such as accumulators, spring/tension devices	-	-		-	1	-	-	-		1	-	-	2
		Biological such as exposure to work related bacteria	-	1	-		-	-	-	-	-	-	-	-	1
		Explosive gases such as H, CH4	-	-	-	1	-	-	-	-	-	-	-	-	1
		Total	3	4	5	6	8	14	7	14	17	8	6	1	93
	UNKNOWN	UNKNOWN	2	-	-	-	-	-	-	-	-	-	-	-	2
		Total	2	-	-	-	-	-	-	-	-	-	-	-	2
	N/A Total		5			6	13		12	14	23	10	13	2	132
Non-Coal Meta	alliferous Surface Ir	ncidents Total	38	18	30	26	34	39	39	34	36	41	61	44	440

Non-Coal Metalliferous Surface Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

Figure 157 Non-Coal Metalliferous Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		*Machinery out of control MIA	15	1	1	-	-	-	-	-		-			17
		*Outbreak of fire MIA	7	3	2	-	-	-	-	-	-	-	-	-	12
	*1994 Emergency	*Potential to cause	7			-			-	-			-		9
	MIA	serious injury *Failure of workings of													
		mine MIA	4	-	-	-	-	-	-	-	-	-	-	-	4
		*Inrush of water MIA	1		-	-	-	-	-	-	-	-	-	-	1
		Total *Not Applicable	- 34		3	- 1	-	-	-	-	-	-	-	-	<b>43</b>
	*Fatality	Total	-	-	-	1		-	-	-	-	-	-	-	1
		*Lost Time Injury	-	-	-	3	-	-	-	-	-	-	-	-	3
	*Minor Accident MIA	*MTI with NO Lost Time	-	-	1	1	-	-	-	-	-	-	-	-	2
		Total	-	-	1	4	-	-	-	-	-	-	-	-	5
		*Mobile mechanical equipment such as trucks, load-haul- dumps,utes,rail,winder s	3	24	20	-	-	-	-	-		-	-	-	47
		*Electrical energy from apparatus such as cables, transformers, switch gear, connections	2	12	6	-	-	-	-	-	-	-	-	-	20
		*Other	-	3	2	-	-	-	-	-	-	-	-	-	5
		*Thermal heat sources such as electrical apparatus, engines, pumps, friction points such as bearings, idlers	2	2	1	-	-	-	-	-	-	-	-	-	5
		*Flammable/explosive liquid chemicals such as petrol, diesel, oils, degreasers, solvents	3		-	-	-	-	-	-		-	-	-	4
		*Roof/backs *Water - in large	2	-	1	-	-	-	-	-	-	-	-	-	3
		volumes	1	-	1	1	-	-	-	-	-	-	-	-	3
*MIA	*Pre Sept 2000 Dangerous Incident	*Fall of things (other than roof/wall & rib/sides) such as components, tools, structures		1	1		-	-		-		-		-	2
	MIA	*Fixed mechanical equipment such as conveyors, crushers, screens	1	-	1	-	-	-	-	-	-	-	-	-	2
		*Flammable gases such as Acetylene, LPG	1	1		-	-	-	-	-	-	-	-	-	2
		*High wall/Pit wall	-	1	1	-	-	-	-	-	-	-	-	-	2
		*Mining equipment such as continuous miners, excavators, drills, shovels *Rib/sides	-	2		-	-	-	-	-	-	-	-	-	2
			-	2	<u> </u>	-	-	-	-		<u> </u>		<u> </u>	-	2
		*Stored pressure/energy such as accumulators, spring/tension devices		1	1			-		-				-	2
		*Explosive dusts such as coal, sulphide dust	1	-	-	-	-	-	-	-	-	-	-	-	1
		*Other gases with health effects such as	-	1	-	-	-	-	-	-	-	-	-	-	1
		*Water - from rain or storms	-	1	-	-	-	-	-	-	·	-	·	-	1
		Total	16	52	35	1		-	-	-	-	-	-	-	104
	*Serious Injury MIA	*Fracture(s)	-	-	3	1			-	-	•	-	-	-	8
		Total *Mobile Plant - fires on equipment (underground)	-	-	3 1	3		- 9	- 26	- 29	- 9	-	-	-	<b>8</b> 81
		*Electric shock cl 68	-	1	7	10	11	13	7	7	8	1		-	65
	Dangerous Incident	(5) *Mobile Plant - fires on equipment (surface)	-	-	6	14		3		1	2		-	-	41
		*Outbreak of Fire U/G	-		8	9	14	3	2	-	1				37

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		*Mobile Plant - general	-	1	1	3	2	4	13	5	2	2	-	-	33
		transport/traffic *Rock falls - ( major )													
		Ground Movement	-	-	4	1	2	7	2	1	-	-	-	-	17
		*Outbreak of fire due to electrical equipment Cl 68(5)(c)	-	-	2	5	1	3	1	-	-	-	-	-	12
		*Isolation of energy *Inrush of Water,	-	-	1		3	1	1	2		-	-	-	9
		Material or Gas *Structural Failure	-	1	-	-	1	1	2	- 2	3	-	-	-	8
		*Unplanned movement due to	-	1	1	2	1	2	1						8
	*Dangerous Incident	electricity Cl 68(5)(d) *Winding systems	-	-	-	-	1	2	1	1	-	-	-	-	5
*MIA		*Guarding - conveyors	-	-	-	-	-	2	1	-	-	-	-	-	3
WIA		*Slope stability *Fixed Equipment -	-	-	-	-	1	-	1	1	-	- 1	-	-	3
		fire (surface) *Misfire - significant Cl		-			-		1		-	1	-	-	
		65(1) *Ventilation U/G -	-	-	•	-	2	-	-	-	-	-	-	-	2
		fumes *Hazardous chemicals	•	•	-	-	•	1	•	•	•	•	-	-	2
		*Working at height	-	-	-	-	-	1	-	-	-	-	-	-	1
		Total *Lost Time Injury	- 46	4	<b>31</b>	49	57	<b>53</b>	64 3	<b>49</b> 2	<b>27</b> 5	4	-	-	<b>338</b> 59
		*SBI/SI	7	6		-	2	1	5	8	3	3	-	-	39
	*Non Spec Acc Ending in Fat/Injury	*Fatality *MTI with NO Lost	3	- 1	-	- 1	-	-	-	-	-	-	-	-	6 5
		Time *Minor injury	-	-		-	1	-	-	2	-	-	-	-	3
	*MIA Total	Total	60 110	7 69	6 79	1 57	3 64	3 56	8 72	13 62	8 35	3	-	-	112 611
	Explosives	Serious Incidents involving explosives CI	-	-		-	-	-	-	1	-	-	-	-	1
Explosives	sives Regulation 2005 7 T Explosives Total	75 Total	-	-	-	-	-	-	-	1	-	-	-	-	1
			-	-	-	-	-	-	-	1	-	-	-	-	1
		145(e) uncontrolled explosion or fire	-	-	-	-	-	-	-	-	-	22	28	24	74
		145(j) loss of control of vehicle or other machinery	-	-	-	-	-	-	-	-	-	11	12	10	33
		145(n) unplanned fall of ground that impedes passage, disrupts production or ventilation or involves failure of ground support where persons could be present	-	-	-	-	-	-	-	-	-	2	12	14	28
		145(k) overturning of vehicle or other machinery	-	-	-	-			-	-		4	7	7	18
MHS		145(d)(iii) involving electricity, person receives electric shock from source operating above extra low voltage	-	-	-	-	-	-	-	-	-	3	5	8	16
		145(p) burial of machinery such that it cannot be recovered under its own tractive effort	-	-	-	-	-	-	-	-	-	2	6	5	13
		145(c)(v) unintended activation or movement of vehicles/machinery	-	-			-		-	-		4	5	3	12
		145(m) failure of any part of powered winding system or damage to shaft or shaft equipement	-	-	-	-	-	-	-	-	-	4	4	1	9
		145(d)(ii) involving electricity, vehicle / machinery / other plant makes contact with energised high voltage source involving risk to person	-	-	-	-	-	-	-	-	-	3	2	2	7

# Non-Coal Metalliferous Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		145(d)(i) involving electricity, person suffers injury, receives medical treatment or unable to attend work	-	-	-	-	-	-	-	-	-	1	3	2	6
		145(c)(i) damage to any plant, equipment, building or structure,	-	-	-	-	-	-	-	-	-	-	3	2	5
		145(f) escape of fluid under high pressure that endangers a person	-	-	-	-	-	-	-	-	-	3	1	1	5
	MHSR 2007 CI 145	145(g) uncontrolled issue of gas or fluids	-	-	-	-	-	-	-	-	-	2	3	-	5
MHS		145(h) an abnormal inrush of fluid materials	-	-	-	-	-	-	-	-	-	-	4	1	5
		145(i) collision involving vehicle or other machinery that results in substantial damage, impedes safe operations	-	-		-	-	-	-	-	-	-	1	3	4
		145(c)(ii) imminent risk of explosion or fire		-	-	-	-	-	-	-	-	3	-	-	3
		145(o) airblast Total	-	-	-	-	-	-	-	-	-	- 64	- 96	1 84	1 244
	MHSR 2007 CI 146(1)	146(1)(e) a significant misfire of explosives	-	-	-	-	-	-	-	-	-	-	1	-	1
		Total	-	-	-	-	-	-	-	-	-	-	1	-	1
	Non Spec Acc Ending in Fat/Injury	Notifiable Injury/Outcome	-	-	-	-	-	-	-	-	-	7	13	16	36
	MUC Tatal	Total	-	-	-	-	-	-	-	-	•	7	13	16	36
	MHS Total	Mine Employee						-		-	-	71	110	100	281
		Complaint	1	1	4	2	3	-	2	4	2	4	5	3	31
	Complaint	Public Complaint Union Official	-	1	3	1	4		4	1	1	1	2	1	23
		Complaint	-	-	-	-	-	-	-	-	2	1	-	2	5
		Other Total	2	- 2	- 7	- 3	1		- 6	1 6	- 5	- 6	- 7	- 6	4 63
		Mobile mechanical equipment such as trucks, load-haul- dumps,utes,rail,winder s	4	8	5	12	10	24	23	22	20	10	1	1	140
		Electrical energy from apparatus such as cables, transformers, switch gear, connections	7	10	6	2	3	3	3	6	3	2	-	-	45
		Other	2	- 5	3	3	5	74	3	7	5 2	- 3	2	5	42 27
N/A	N/A High Potential Incident	Roof/backs Fall of things (other than roof/wall & rib/sides) such as components, tools, structures	-	-	2	-	2	3	4	3	4	1	-	-	19
		Fixed mechanical equipment such as conveyors, crushers, screens	-	1	2	5	2	2	2	-	1	-	-	-	15
		Thermal heat sources such as electrical apparatus, engines, pumps, friction points such as bearings, idlers	1	2	-	4	-	1	-	-	3	-	1	-	12
		Rib/sides Explosive gases such	-	-		3	2		1		2	1	1	1	11
		as H, CH4 Flammable/explosive	-	-	1	-	4	-	-	1	-	-	-	-	6
		liquid chemicals such as petrol, diesel, oils, degreasers, solvents Mining equipment	-	1	-	1	-	-	-	2	1	1	-	-	6
		miners, excavators, drills, shovels	-	-	-	-	-	1	-	2	2	-	1	-	6

Non-Coal Metalliferous Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		Explosive Incident not a Dangerous Incident	-	-	-	-	-	-	-	-	3	-	-	1	4
		Flammable gases such as Acetylene, LPG	-	-	2	-	-	-	-	-	1	1	-	-	4
		Other gases with health effects such as	-	-	-	-	-	-	-	1	3	-	-	-	4
		Slopes/grades/ramps where equipment can move in a uncontrolled manner	1	-	1	2	-	-	-	-	-	-	-	-	4
		Stored pressure/energy such as accumulators, spring/tension devices	-	-	1	2	-	-	-	-	1	-			4
		Explosive dusts such as coal, sulphide dust	2	-	-	-	-	-	-	-	-	-	1	-	3
	High Potential Incident	Dusts that can effect health such as coal, silica	-	-	-	1	-	-	-	1	-	-	-	-	2
N/A		Floor	•	-	-	-	-	1	-	-	1	-	-	-	2
		Spontaneous combustion such as coal	1	-	-	1	-	-	-	-	-	-	-	-	2
		Water - with significant rates of make	-	-	-	-	-	-	-	-	-	-	-	2	2
		Fines or build up of combustible particles	-	-	-	-	-	1	-	-	-	-	-	-	1
		Low wall	-	-	-	1	-	-	-	-	-	-	-	-	1
		Noise greater than 85dBA	-	1	-	-	-	-	-	-	-	-	-	-	1
		Outbreak of Fire U/G	-	-	-	-	-	1	-	-	-	-	-	-	1
		Water - from rain or storms	-	-	-	-	-	-	-	-	1	-	-	-	1
		Water - in large volumes	-	1	-	-	-	-	-	-	-	-	· -	-	1
		Wildlife such as kangaroos, snakes, spiders	-	-	-	-	-	-	-	-	1	-	-	-	1
		Total	18	29	25	44	30	48	38	45	54	19	7	10	367
	UNKNOWN	Unknown	8	1		2	-	-	-	-		-	-	-	11
		Total	8 29	1	-	2	-	-	-	-	-	-	-	-	11
Nen Ceel Hat	I otal I/A Total iferous Underground Incidents Total			32 101	32 111	49 106	38 102	52 108	44 116	51 114	59 94	25 103	14 124	16 116	441

# Non-Coal Metalliferous Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

### Figure 158 Non-Coal Extractives Surface Incidents by Incident Type and Subtype 1999-00 to 2010-11

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		*Potential to cause serious injury	11	1	-	-	-	-	-	-	-	-	-	-	12
		*Machinery out of control MIA	10	1	-	-	-	-	-	-		-	-	-	11
		*Failure of workings of	5			-				-		-			5
	*1994 Emergency MIA	mine MIA *Outbreak of fire MIA	4	-	-	-	-	-		-	-	-	-	-	4
		*Exposure hazardous	2												2
		materials MIA		-	-	-	-	-		-		-		-	
		*Spillage MIA Total	1 33	- 2	-	-	-	-	-	-	-	-	-	-	1 35
	-	*Lost Time Injury	-	-	-	3	-	-	•	-	-	-	-	-	3
	*Minor Accident MIA	*MTI with NO Lost Time	-	-	-	1	-	-	-	-	-	-	-	-	1
		Total *Mobile mechanical	-	-	-	4	-	-	-	-	-	-	-	-	4
		equipment such as trucks, load-haul-	3	5	4	-	-	-	-	-	-	-	-	-	12
		dumps,utes,rail,winder s													
		*Other	2	3	2	-	-	-	-	-		-	-	-	7
		*Fixed mechanical equipment such as	2		1										3
		conveyors, crushers, screens	2		· ·	-			-	-		-		-	3
	*Pre Sept 2000	*Floor	1	-	-	-	-	-	-	-	-	-	-	-	1
	Dangerous Incident	*Slopes/grades/ramps where equipment can	1	-		-	-	-	-	-	-	-			1
		move in a uncontrolled manner *Thermal heat													
		sources such as													
		electrical apparatus, engines, pumps,	-	-	1	-	-	-	-	-	-	-	-	-	1
		friction points such as bearings, idlers													
		*Water - from rain or			1										1
		storms Total	9	8	9	-	-	-	-	-	-	-	-	-	26
		*Fracture(s)	-	-	4	3	3	-	-	-	•	-	-	-	10
	*Serious Injury MIA	*Burns requiring hospital treatment	-	-	-	1	-	-	-	-	-	-	-	-	1
*MIA		Total *Mobile Plant -	-	-	4	4	3	-	-	-	-	-	-	-	11
		general transport/traffic	-	1	3	10	7	10	7	3	7	1	-	-	49
		*Electric shock Cl 68(5)(a)	-	1	-	8	7	2	3	6	3	-	-	-	30
		*Outbreak of fire due to electrical equipment cl 68 (5)	-	-	-	2	2	5	2	1	-	-	-	-	12
		*Misfire - significant Cl 65(1)(c)	-	-	-	2	-	2	3	2	-	-	-	-	9
		*Ejection of Flyrock Cl	-		1	1	2		2	-	1	1			8
		64(2) *Isolation of energy	-	1	-	2	2	1		-	1	-		-	8
		*Guarding - conveyors	-	-	2	-	-	-	-	-	3	-	-	-	5
		*Mobile Plant - fires on	-	-	2	-	1	1	-	-	-	-		. I	4
	*Dangerous Incident	equipment (surface)		<u> </u>							L		L		
		*Slope stability *Explosives - NEC	-	-	-	-	-	-	- 1	1	1	-	-	-	4
		*Fault with an explosive Cl 66(2)	-	-	-	-	-	-	-	1	1	-	- 1	-	2
		*Rock falls - ( major )	-	-	-	1	1	-		-		-			2
		Ground Movement *Structural Failure	-	-	-	-	-	-	-	2	-	-	-	-	2
		*Working at height	-	-	-	-	-	1		-	-	-	-	-	2
		*Fixed Equipment - fire (surface)	-	-	-	-	-	-	-	-	1	-	-	-	1
	* r *	*Mobile Plant - tyres, rims	-	-	-	1	-	-	-	-	-	-	-	-	1
		*Unplanned movement due to electricity Cl 68(5)(d)	-	-	-	1	-	-		-		-	-	-	1
		Total	-	4	8	28	22	23	20	18	18	2	-	-	143
		*Lost Time Injury	20	7	3	-	1	-	1	1	1	-	-	-	34
	*****	*SBI/SI *MTI with NO Lost	9	2	2	1	3			9	2	-	-	-	31
	*Non Spec Acc Ending in Fat/Injury	Time	9	1	-	-	-	-	-	-		-	-	-	10
		*Fatality *Minor injury	2	2	- 1	-	1	-	-	-	- 1	-	-	-	74
		Total	40	14	6	2	5	1	3	11	4	-	-	-	86

Category     Induction rype     Instant Category     Instant Category <th< th=""><th>1 1 - - -</th><th>1 1 - - -</th><th></th><th>- - 8 5 6</th><th>7</th><th>8</th><th>17</th></th<>	1 1 - - -	1 1 - - -		- - 8 5 6	7	8	17
Total         - <td>-</td> <td>-</td> <td>-</td> <td>- 8 5 6</td> <td>- 7 4</td> <td>- 10 8</td> <td>2 25 17</td>	-	-	-	- 8 5 6	- 7 4	- 10 8	2 25 17
145(k) overturning of vehicle or other       -	-	-	-	8 5 6	7	10 8	25 17
vehicle or other       -	-			6	4	8	17
explosion or fire         -	-	-	-	6			
of vehicle or other	-	-	-		7	3	16
145(i) collision       Image: Im	-	-	-				
any plant, equipment, building or structure 145(d)(i) involving electricity, person				3	1	7	11
electricity, person		-	-	2	1	6	9
suffers injury, receives	-	-	-	1	7	1	9
145(d)(iii) involving electricity, person receives electric shock from source operating above extra low voltage	-	-	-	5	2	2	9
145(f) escape of fluid under high pressure that endangers a person	-	-	-	4	3	2	9
145(c)(v) unintended activation or movement of vehicles/machinery	-	-	-	2	2	4	8
MHSR 2007 Cl 145 MHSR 2007 Cl 145 MHS MHS	-	-	-	1	1	3	5
145(d)(ii) where a vehicle, machinery or other plant makes contact with an energised high voltage source involving a risk to any person)	-	-	-	-	1	3	4
145(g) an uncontrolled	-	-	-		1	3	4
145(h) an abnormal inrush of fluid materials	-	-		-	1	2	3
145(I) ejection of fly rock so that it falls outside a blast exclusion zone (being the area below, at or above ground level from which all unauthorised persons are excluded during blasting)	145(h) an abnormal inrush of fluid materials       -       -       -       -       -       1         145(l) ejection of fly rock so that it falls outside a blast exclusion zone (being the area below, at or above ground level from which all unauthorised persons are excluded during       -       -       -       -       -       1	1	1				
145(p) the burial of machinery such that it cannot be recovered under its own tractive effort	-	-	-	-	1	-	1
Total	-	-	-	37	39	55	131
146(1)(f) a problem or fault in an explosive       -	-	-	-	-	2	-	2
146(1)(e) significant misfire of explosives	-		-	1	-	2	3
Total	-	-	-			2	
Non Spec Acc Ending in Fat/Injury/Outcome	-		-	7			
MHS Total	-	-	-	7			

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
outogory		Public Complaint	2	7	16	12	7	11	11	10	7	7	11	9	110
	Complaint	Mine Employee Complaint	-	2	3	2	2	2	-	4	1	3	6	4	29
	complaint	Other	1		2	2	2	3	1	-	1		1		16
		Total	3	10	21	16	11	16	12	14	9	11	18	14	155
		Mobile mechanical equipment such as													
		trucks, load-haul-	3	8	10	14	11	16	12	10	16	8	3	2	113
		dumps,utes,rail,winder s													
		Other	5	9	8	11	9	13	7	9	3	-	1	1	76
		Electrical energy from apparatus such as													
		cables, transformers,	-	4	-	2	-	2	1	2	4	2	1	2	20
		switch gear, connections													
		Slopes/grades/ramps													
		where equipment can move in a uncontrolled	2	-	3	4	6	2	1	-	-	-	-	-	18
		manner													
		Fall of things (other than roof/wall &													
		rib/sides) such as	1	2	3	3	1	1	2	-	1	-	-	2	16
		components, tools,													
		structures Mining equipment													
		such as continuous	-	1		2	1	1	1	3	2	-	-	-	11
		miners, excavators, drills, shovels													
		Fixed mechanical													
		equipment such as conveyors, crushers,	1	2	-	-	1	1	-	-	2	3	-	-	10
		screens													
		High wall/Pit wall	-	1	1	-	-	1	1	-	1	-	•	1	6
		Explosive Incident not a Dangerous Incident	-	-	-	-	-	-	-	-	1	2	-	1	4
		a Dangerous incident													
N/A	High Potential	Flammable/explosive													
	Incident	liquid chemicals such as petrol, diesel, oils,	-	2	-	2	-	-	-	-	-	-	-	-	4
		degreasers, solvents													
		Busis that can enect	-	-	-	-	-	1	-	-	-	-	1		2
		Floor		-	-	1	-	-	1	-		-	-	-	2
		Stored													
		pressure/energy such as accumulators,	-	1	-	-	-	-	-	1	-	-	-	-	2
		spring/tension devices													
		Thermal heat sources			<u> </u>								<u> </u>		
		such as electrical													
		apparatus, engines,	-	-	-	-	-	-	-	1	1	-	-	-	2
		pumps, friction points such as bearings,													
		idlers													
		Water - in large volumes	-	-	-	-	-	-	-	-	-	-	2	-	2
		Explosive gases such		1	-	-	-	-	-	-		-	-	-	1
		as H, CH4													
		Fines or build up of combustible particles	-	1		-	-	-	-	-	-	-	-	-	1
		Flammable gases													
		such as Acetylene,		-	1	-	-	-	-	-		-	-	-	1
		LPG		-	-	-	-	-		-		-	-	1	1
		Lightning strike	-	1	-	-	-	-	-	-	-	-	-	-	1
		Low wall Noise greater than		-	-	1	-	-		-		-	-	-	1
		85dBA	-	-	-	-	1	-	-	-	-	-	<u> </u>	-	1
		Water - from rain or	-	-	-	-	-	-	-	-	-	-	-	1	1
		storms Total	12	33	26	40	30	38	26	26	31	15	8	11	296
	UNKNOWN	UNKNOWN	5	-	-	3	-	-	-	-	-	-	-	-	8
	N/A Total	Total	5 20	- 43	- 47	3 59	- 41	- 54	- 38	- 40	- 40	- 26	- 26	- 25	8 459
Non-Coal Extra	actives Surface Incid	lentsTotal	102		74		71		62		62		77	104	941

### Non-Coal Extractives Surface Incidents by Incident Type and Subtype 1999-00 to 2010-11 continued

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		*Ejection of Flyrock Cl						1	-						1
		64(2)	-	-	-	-	-		-	-	-	-	-	-	
		*Electric shock Cl							1						1
	*Dangerous Incident	68(5)(a)	_	-		_	-	_		_	-	-		_	
*MIA	Bungerous meluent	*Rock falls - ( major )	-	-	- I	-	1	-	-	-	-	-	- I	-	1
		Ground Movement													
		*Airblast	-	-	•	-	-	-	1	-	•			-	1
	*****	Total	-	-	-	-	1	1	2	-	-	-		-	4
	*MIA Total	445(1)	-	-	-	-	1	1	2	-	-	-	-	-	4
		145(h) an abnormal													3
		inrush of fluid materials	-	-	-	-	-	-	-	-	-	-	1	2	3
1		145(p) the burial of													
1		machinery such that it													
	WINSK 2007 CI 145	cannot be recovered											4		1
MHS		under its own tractive		-	-		-			-	-	-	· ·		· ·
WIN5		effort													
		Total	-	-	-	-	-	-	-	-	-	-	2	2	4
		146(1)(e) significant											-	-	
	MHSR 2007 CI 146(1)		-	-	-	-	-	-	-	-	-	1	-	-	1
		Total	-	-	-	-	-	-	-	-	-	1	8-09     2009-10     2       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       -     -     -       1     -     -       -     -	-	1
	MHSR 2007 Cl 146(1) m To MHS Total Complaint	. otal	-	-	-	-	-	-	-	-	-		2	2	
		Mine Employee													
		Complaint	-	-	-	-	-	1	1	-	-	-	-	-	2
		Other	-	-	-	-	-	1	-	-	-	-	-	-	1
		Total	-	-	-	-	-	2	1	-	-	-	-	-	3
		Mobile mechanical													
		equipment such as													
		trucks, load-haul-	-	-	-	-	-	-	1	1	2	-	-	-	4
		dumps,utes,rail,winder													
		s													
		Roof/backs	-	-	-	-		1	1	-	-	-	-	-	2
N/A		Electrical energy from													
		apparatus such as													
	Incident	cables, transformers,	-	-	-	-	-	1	-	-	-	-	-	-	1
		switch gear,													
		connections													
		Fall of things (other													
		than roof/wall &													
		rib/sides) such as	-	-	· ·	-	-	-	1	-	· ·	-	· ·	-	1
		components, tools, structures													
		Total	-	-		-		2	3	1	2			-	8
		-	-	-	-	-	2	3		4	-	-	-		
	N/A Total		-		-	-	-	4	4	1	2				11

### Figure 159 Non-Coal Extractives Underground Incidents by Incident Type and Subtype 1999-00 to 2010-11

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
outogory	*1994 Emergency	*Explosion/ignition dust MIA	2	-		-	-	-	-	-		-	-		2
	MIA	Total	2	-	-	-	-	-	-	-	-	-	-	-	2
		*MTI with NO Lost				1									1
	*Minor Accident MIA	Time	-	-	-		-	-	-	-	-	-	-	-	
		Total	-	-	-	1	-	-	-	-	-	-	-	-	1
		*Mobile mechanical													
	*Pre Sept 2000	equipment such as													
	Dangerous Incident	trucks, load-haul-	1	-	-	-	-	-	-	-	-	-	-	-	1
	MIA	dumps,utes,rail,winder													
		s											L		<u> </u>
		Total	1	-	-	-	-	-	-	-	-	-	-	-	1
*MIA		*Mobile Plant -													2
		general transport/traffic	-	-	-	1	-	-	-	1	-	-	-	-	2
		*Isolation of energy	-			-			1	-	-				1
		*Rock falls - ( major )		-					-	-		-		-	
	*Dangerous Incident	Ground Movement	-	-	-	-	-	1	-	-	-	-	-	-	1
		*Structural Failure	-	-	-	-	1	-	-	-	-	-	-	-	1
		*Winding systems	-	-	1	-	-	-	-	-	-	-	-	-	1
		*Working at height	-	-	-	-	-	-	-	-	1	-	-	-	1
		Total	-	-	1	1	1	1	1	1	1	-	-	-	7
	this Owner Ass	*SBI/SI	2	-	-	-	2	-	-	-	-	-	-	-	4
	*Non Spec Acc	*Lost Time Injury	1	1	-	-	-	-	-	-	-	-	-	-	2
	Ending in Fat/Injury	Total	3	1		-	2	-	-	-	-	-	-	-	6
	*MIA Total		6	1	1	2	3	1	1	1	1	-	-	-	17
MUS	*MIA Total MHSR 2007 CI 145	145(n) unplanned fall of ground that impedes passage, disrupts production or ventilation or involves failure of ground support where persons could be present	-	-	-	-	-	-	-	-	-	1	1	-	2
		145(k) overturning of vehicle or other machinery	-	-	-	-	-	-	-	-	-	-	-	1	1
		Total	-	-	-	-	-	-	-	-	-	1	1	1	3
	Non Spec Acc	Notifiable Injury/Outcome	-	-	-	-	-	-	-	-	-	1	1	-	2
	Ending in Fat/Injury	Total	-	-	-	-	-	-	-	-	-	1	1	-	2
	MHS Total		-	-	-	-	-	-	-	-	-	2	2	1	5
		Mine Employee					1							1	2
		Complaint													
	Complaint	Other	-	1	-	-	-	-	-	-	-	-	-	-	1
		Public Complaint	1	-	-	-		· ·	-	-	-	-	· ·	-	1
		Total	1	1	-	-	1	-	-	-	-	-	-	1	4
		Other	-	-	-	-	-	-	2	-	1	-	1	-	4
N/A	High Potential Incident	Mobile mechanical equipment such as trucks, load-haul- dumps,utes,rail,winder s	-	-	-	1	-		-	-	-	-	-	- - - - - - - - - - - - - - - - - - -	1
		Total	-	-	-	1	-	-	2	-	1	-	1	-	5
		UNKNOWN	2	-	-	-	-	-	-	-	-	-		- - - - - - - - - - - - - - - - - - -	2
	UNKNOWN	Total	2	-	-	-	-	-	-	-	-	-	-	-	2
	N/A Total		3	1	-	1	1	-	2	-	1	-	1	1	11
Non-Coal Oth	er Incidents Total		9	2	1	3	4	1	3	1	2	2	3	2	33

#### Figure 160 Non-Coal Other Incidents by Incident Type and Subtype 1999-00 to 2010-11

### Figure 161

Petroleum (Onshore) Incidents by Incident Type and Subtype 1999-00 to 2010-11

Legislation Category	Incident Type	Incident Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		POASch1992 Cl 301(2) death or serious injury POASch1992 Cl 304 potentially hazardous event	1	1	2	-	-	-	-	3	-	1	3	- 2	12 9
POASch	POASch 1992	POASch1992 CI 306(1)(c) uncontrolled escape or ignition of petroleum, flammable or combustible material or toxic chemicals causing potentially hazardous situation	-	-	-	-	-	-	-	-	-	1	1	-	2
		Total	1	1	2	-	1	-	-	3	-	3	10	2	23
Petroleum Inc	idents Total		1	1	2	-	1	-	-	3	-	3	10	2	23

## Appendix A.2 Hours Worked

Figure 162 NSW Coal Hours Worked by Operation Type 1999-00 to 2010-11

Financial		Coal Surface		C	oal Undergrou	nd		Coal Total	
Year	Employees	Contractors	Hours Worked	Employees	Contractors	Hours Worked	Employees	Contractors	Hours Worked
1999-00	-	-	7,635,700	-	-	12,016,100	-	-	19,651,800
2000-01	-	-	7,684,600	-	-	10,973,300	-	-	18,657,900
2001-02	-	-	8,772,400	-	-	10,903,400	-	-	19,675,800
2002-03	-	-	9,485,000	-	-	9,735,400	-	-	19,220,400
2003-04	-	-	9,918,400	-	-	9,708,100	-	-	19,626,500
2004-05	-	-	10,604,500	-	-	10,684,000	-	-	21,288,500
2005-06	-	-	12,455,955	-	-	12,718,055	-	-	25,174,010
2006-07	-	-	13,502,348	-	-	13,441,113	-	-	26,943,461
2007-08	10,184,642	7,058,893	17,243,535	10,028,748	4,526,003	14,554,751	20,213,390	11,584,896	31,798,286
2008-09	11,456,845	7,622,264	19,079,109	11,950,248	5,722,871	17,673,119	23,407,093	13,345,135	36,752,228
2009-10	12,003,442	9,728,510	21,731,952	12,036,194	6,358,064	18,394,258	24,039,636	16,086,574	40,126,210
2010-11	14,467,097	11,212,245	25,679,342	11,437,652	6,143,476	17,581,128	25,904,749	17,355,721	43,260,470

#### Figure 163

NSW Metalliferous Hours Worked by Operation Type 1999-00 to 2010-11

Financial	Met	talliferous Surf	ace	Metall	iferous Underg	round	М	etalliferous Tot	al
Year	Employees	Contractors	Hours Worked	Employees	Contractors	Hours Worked	Employees	Contractors	Hours Worked
1999-00	-	-	1,244,763	-	-	3,734,289	-	-	4,979,052
2000-01	-	-	1,834,521	-	-	4,294,554	-	-	6,129,075
2001-02	-	-	1,680,604	-	-	3,927,260	-	-	5,607,864
2002-03	-	-	2,329,522	-	-	4,177,375	-	-	6,506,897
2003-04	-	-	2,329,522	-	-	6,989,312	-	-	9,318,834
2004-05	-	-	2,868,840	-	-	4,374,582	-	-	7,243,422
2005-06	-	-	3,093,397	-	-	3,941,818	-	-	7,035,215
2006-07	-	-	3,253,094	-	-	4,921,330	-	-	8,174,424
2007-08	-	-	3,578,403	-	-	5,413,463	-	-	8,991,866
2008-09	2,159,677	1,694,508	3,854,185	4,317,927	2,264,033	6,581,960	6,477,604	3,958,541	10,436,145
2009-10	2,108,575	1,897,338	4,005,913	3,991,693	2,772,505	6,764,198	6,100,268	4,669,843	10,770,111
2010-11	2,025,290	2,766,478	4,791,768	3,650,171	3,757,023	7,407,194	5,675,461	6,523,501	12,198,962

#### Figure 164

NSW Extractives Total Hours Worked 1999-00 to 2010-11

Financial	E	extractives Tota	al
Year	Employees	Contractors	Hours Worked
1999-00	-	-	7,598,616
2000-01	-	-	3,829,184
2001-02	-	-	2,786,853
2002-03	-	-	2,298,646
2003-04	-	-	2,020,910
2004-05	-	-	2,444,727
2005-06	-	-	3,252,521
2006-07	-	-	4,010,397
2007-08	-	-	4,411,437
2008-09	3,504,625	1,118,095	4,622,720
2009-10	3,098,685	966,822	4,065,507
2010-11	3,139,473	992,539	4,132,012

### Appendix A.3 Fatalities

#### Figure 165

NSW Coal, Metalliferous & Extractives Fatalities by Sector 1999-99 to 2010-11

Sector	Operation Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Surface	-	-	-	-	1	-	-	-	-	-	-	-	1
Coal	Underground	3	2	1	-	2	-	-	1	-	3	-	1	13
	Total	3	2	1	-	3	-	-	1	-	3	-	1	14
Metalliferous	Underground	6	-	-	1	-	-	-	1	-	-	-	-	8
Metainierous	Total	6	-	-	1	-	-	-	1	-	-	-	-	8
Extractives	Surface	2	1	-	-	-	1	-	-	-	-	-	-	4
Extractives	Total	2	1	-	-	-	1	-	-	-	-	-	-	4
Petroleum	Surface	-	-	-	-	-	-	-	-	-	-	1	-	1
Petroleum	Total	-	-	-	-	-	-	-	-	-	-	1	-	1
Total		11	3	1	1	3	1	-	2	-	3	1	1	27

### Figure 166

NSW Coal, Metalliferous & Extractives Fatalities by Operation Type 1999-99 to 2010-11

Operation Type	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Coal	-	-	-	-	1	-	-	-	-	-	-	-	1
Surface	Extractives	2	1	-	-	-	1	-	-	-	-	-	-	4
Surface	Petroleum	-	-	-	-	-	-	-	-	-	-	1	-	1
	Total	2	1	-	-	1	1	-	-	-	-	1	-	6
	Coal	3	2	1	-	2	-	-	1	-	3	-	1	13
Underground	Metalliferous	6	-	-	1	-	-	-	1	-	-	-	-	8
	Total	9	2	1	1	2	-	-	2	-	3	-	1	21
Total		11	3	1	1	3	1	-	2	-	3	1	1	27

### Appendix A.4 Lost Time Injuries (LTIs)

#### Figure 167

NSW Coal, Metalliferous & Extractives Lost Time Injuries by Sector 1999-00 to 2010-11

Sector	Operation Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Surface	163	158	126	105	103	84	79	120	47	62	68	52	1,167
Coal	Underground	455	391	412	346	319	292	304	319	216	239	218	200	3,711
	Total	618	549	538	451	422	376	383	439	263	301	286	252	4,878
	Surface	12	8	2	3	3	3	7	15	5	8	8	5	79
Metalliferous	Underground	59	100	52	60	58	28	25	34	35	27	39	26	543
	Total	71	108	54	63	61	31	32	49	40	35	47	31	622
Extractives	Surface	25	24	57	61	61	22	27	28	25	56	45	42	473
Extractives	Total	25	24	57	61	61	22	27	28	25	56	45	42	473
Total		714	681	649	575	544	429	442	516	328	392	378	325	5,973

#### Figure 168

NSW Coal, Metalliferous & Extractives Lost Time Injuries by Operation Type 1999-00 to 2010-11

Operation Type	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Coal	163	158	126	105	103	84	79	120	47	62	68	52	1,167
Surface	Metalliferous	12	8	2	3	3	3	7	15	5	8	8	5	79
Surface	Extractives	25	24	57	61	61	22	27	28	25	56	45	42	473
	Total	200	190	185	169	167	109	113	163	77	126	121	99	1,719
	Coal	455	391	412	346	319	292	304	319	216	239	218	200	3,711
Underground	Metalliferous	59	100	52	60	58	28	25	34	35	27	39	26	543
g	Total	514	491	464	406	377	320	329	353	251	266	257	226	4,254
Total		714	681	649	575	544	429	442	516	328	392	378	325	5,973

## Appendix A.5 Total Recordable Injuries (TRIs and TRIFRs)

#### Figure 169

NSW Coal, Metalliferous & Extractives Total Recordable Injuries (TRIs) by Sector 2007-08 to 2010-11

Sector	Operation Type			2007-08					2008-09					2009-10					2010-11			Total
360101	Operation Type	FI	LTI	RDI	MTI	TRI	FI	LTI	RDI	MTI	TRI	FI	LTI	RDI	MTI	TRI	FI	LTI	RDI	MTI	TRI	TRI
	Surface	-	47	81	95	223	-	62	81	62	205	-	68	77	69	214	-	52	88	77	217	859
Coal	Underground	-	216	591	411	1,218	3	239	538	213	993	-	218	582	122	922	1	200	467	125	793	3,926
	Total		263	672	506	1,441	3	301	619	275	1,198	-	286	659	191	1,136	1	252	555	202	1,010	4,785
	Surface		-	-		-	-	8	16	13	37	-	8	20	8	36		5	64	17	86	159
Metalliferous	Underground	-	-	-	-	-	-	27	91	111	228	-	39	94	66	199		26	97	56	179	606
	Total	-	-	-	-	-	-	35	107	124	265	-	47	114	74	235		31	161	73	265	765
Extractives	Surface	-	-	-	-	-	-	56	61	68	185	-	45	97	71	213		42	72	49	163	561
	Total	-	-	-	-	-	-	56	61	68	185	-	45	97	71	213		42	72	49	163	561
Total			263	672	506	1,441	3	392	787	467	1,649	-	378	870	336	1,584	1	325	788	324	1,438	6,112

#### Figure 170

NSW Coal, Metalliferous & Extractives Total Recordable Injuries (TRIs) by Operation Type 2007-08 to 2010-11

Sector	Operation Type			2007-08					2008-09					2009-10					2010-11			Total
Sector	Operation Type	FI	LTI	RDI	MTI	TRI	FI	LTI	RDI	MTI	TRI	FI	LTI	RDI	MTI	TRI	FI	LTI	RDI	MTI	TRI	TRI
	Coal		47	81	95	223		62	81	62	205		68	77	69	214	-	52	88	77	217	859
Surface	Metalliferous			-		-		8	16	13	37		8	20	8	36	-	5	64	17	86	159
Surrace	Extractives	-	-	-	-	-	-	56	61	68	185	-	45	97	71	213	-	42	72	49	163	561
	Total		47	81	95	223		126	158	143	428		121	194	148	463	-	99	224	143	466	1,580
	Coal		216	591	411	1,218	3	239	538	213	993		218	582	122	922	1	200	467	125	793	3,926
Underground	Metalliferous			-		-		27	91	111	228		39	94	66	199	-	26	97	56	179	606
	Total		216	591	411	1,218	3	266	629	324	1,221		257	676	188	1,121	1	226	564	181	972	4,532
Total		-	263	672	506	1,441	3	392	787	467	1,649	-	378	870	336	1,584	1	325	788	324	1,438	6,112

## Appendix A.6 Serious Bodily Injuries (SBIs)

Figure 171 Serious Bodily Injuries by Sector 1999-2000 to 2010-11

Sector	Operation Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Surface	11	6	9	11	5	9	11	5	8	6	8	10	99
Coal	Underground	26	34	27	26	43	25	24	27	18	22	24	18	314
	Total	37	40	36	37	48	34	35	32	26	28	32	28	413
	Surface	-	3	-	3	5	2	7	6	1	2	2	1	32
Metalliferous	Underground	8	8	8	1	7	4	7	11	4	8	3	5	74
	Total	8	11	8	4	12	6	14	17	5	10	5	6	106
Extractives	Surface	10	3	7	7	7	2	4	10	2	5	3	3	63
Extractives	Total	10	3	7	7	7	2	4	10	2	5	3	3	63
	Surface	2	-	-	1	1	1	1	1	1	-	-	-	8
Non-Coal Other	Underground	-	-	-	-	1	-	-	-	-	-	-	-	1
	Total	2	-	-	1	2	1	1	1	1	-	-	-	9
Petroleum	Surface	1	1	2	-	1	-	-	3	-	1	4	-	13
renoieum	Total	1	1	2	-	1	-	-	3	-	1	4	-	13
Total		58	55	53	49	70	43	54	63	34	44	44	37	604

#### Figure 172

Serious Bodily Injuries by Operation Type 1999-2000 to 2010-11

Operation Type	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	Coal	11	6	9	11	5	9	11	5	8	6	8	10	99
	Metalliferous	-	3	-	3	5	2	7	6	1	2	2	1	32
Surface	Extractives	10	3	7	7	7	2	4	10	2	5	3	3	63
Surface	Non-Coal Other	2	-	-	1	1	1	1	1	1	-	-	-	8
	Petroleum	1	1	2	-	1	-	-	3	-	1	4	-	13
	Total	24	13	18	22	19	14	23	25	12	14	17	14	215
	Coal	26	34	27	26	43	25	24	27	18	22	24	18	314
Underground	Metalliferous	8	8	8	1	7	4	7	11	4	8	3	5	74
onderground	Non-Coal Other	-	-	-	-	1	-	-	-	-	-	-	-	1
	Total	34	42	35	27	51	29	31	38	22	30	27	23	389
Total		58	55	53	49	70	43	54	63	34	44	44	37	604

Figure 173
Serious Bodily Injuries by Mechanism 1999-2000 to 2010-11

Mechanism	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Falls from the same level (including trips and slips)	7	5	11	11	17	6	9	15	12	7	10	10	120
Fall from a height	7	11	8	11	14	4	9	13	7	5	10	8	107
Being hit by moving objects	7	8	6	5	7	6	6	12	-	8	5	8	78
Being hit by falling objects	7	7	6	5	4	2	6	7	1	3	5	-	53
Unspecified mechanism of injury	8	3	1	-	4	-	1	1	4	1	2	3	28
Being trapped by stationary and moving object	-	-	1	2	2	2	1	6	2	5	2	2	25
Vehicle accident	1	1	2	3	3	3	1	-	2	4	3	2	25
Hitting objects with a part of the body	-	-	1	1	1	6	3	2	3	3	1	1	22
Single contact with chemical or substance (excludes insect and spider bites and stings)	4	2	1	2	3	3	2	-	-	2	2	-	21
Contact with exposure to heat and cold	-	3	1	2	-	4	7	3	-	-	-	-	20
Hitting moving objects	2	1	2	2	1	-	2	1	2	5	-	1	19
Slide or cave-in	3	1	3	-	3	1	2	-	-	-	-	-	13
Contact with electricity	2	1	-	-	4	3	2	-	-	-	-	-	12
Unknown	2	5	1	1	1	-	-	-	-	-	-	-	10
Other contact with chemical or substance (includes insect and spider bites and stings	2	1	2	1	-	1	2	-	-	-	-	-	9
Exposure to mechanical vibration	2	2	3	-	1	-	-	-	-	-	-	-	8
Other and multiple mechanisms of injury	1	1	-	1	1	1	-	2	1	-	-	-	8
Hitting stationary objects	1	3	1	-	2	-	-	-	-	-	-	-	7
Exposure to variations in pressure (other than sound)	-	-	1	1	-	-	-	-	-	-	2	1	5
Contact with hot objects	-	-	-	-	-	-	-	-	-	1	2	-	3
Other muscular stress	-	-	-	1	1	-	1	-	-	-	-	-	3
Contact with, or exposure to, biological factors	1	-	-	-	-	1	-	-	-	-	-	-	2
Exposure to radiation	1	-	1	-	-	-	-	-	-	-	-	-	2
Muscular stress while lifting, carrying or putting down objects	-	-	-	-	-	-	-	1	-	-	-	1	2
Exposure to sharp sudden sound	-	-	-	-	1	-	-	-	-	-	-	-	1
Long term contact with chemical or substance	-	-	1	-	-	-	-	-	-	-	-	-	1
Total	58	55	53	49	70	43	54	63	34	44	44	37	604

### Figure 174 Serious Bodily Injuries by Agency 1999-2000 to 2010-11

Agency	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Mobile plant	9	6	8	16	11	18	18	14	7	13	10	7	137
Underground environment	10	11	14	5	22	7	11	16	11	3	8	8	126
Machinery and fixed plant - general	8	13	9	8	10	2	6	7	4	4	1	-	72
Powered equipment, tools and appliances	2	4	-	3	7	5	3	2	1	2	5	4	38
Outdoor environment	3	1	7	1	4	3	5	5	2	2	2	2	37
Other materials, substances or objects	2	-	2	1	2	1	4	4	2	5	9	3	35
Human agencies	4	-	2	4	2	1	1	1	2	2	2	4	25
Other	10	3	3	2	4	-	-	-	-	-	-	-	22
Non-powered equipment	1	1	1	1	2	-	2	2	1	5	1	-	17
Road transport	1	2	1	2	1	1	-	4	-	2	3	-	17
Crushing, Pressing, Rolling Machinery	1	2	2	2	-	-	-	4	1	1	1	2	16
Unspecified agencies	3	1	-	-	1	2	1	-	1	2	1	3	15
Chemicals	2	2	2	1	1	2	2	-	-	-	-	-	12
Indoor environment	-	-	1	1	2	1	-	4	1	-	1	1	12
Unknown	2	5	1	1	1	-	-	-	-	-	-	-	10
Other transport	-	2	-	1	-	-	-	-	1	1	-	2	7
Non-powered hand tools	-	2	-	-	-	-	1	-	-	2	-	1	6
Total	58	55	53	49	70	43	54	63	34	44	44	37	604

## Figure 175

Serious Bodily Injuries by Nature of Injury 1999-2000 to 2010-11

Nature of Injury	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Fractures (excluding of vertebral column)	31	31	35	33	46	24	28	46	25	33	34	35	401
Burns	12	8	8	4	7	11	13	3	-	2	2	-	70
Dislocations	1	1	4	4	4	2	7	3	3	1	-	-	30
Fracture of vertebral column with or without mention of spinal cord lesion	3	3	-	2	5	2	2	3	2	1	1	1	25
Amputation	2	1	1	2	2	1	1	3	2	5	1	1	22
Injection of fluid	1	2	1	2	3	1	1	1	2	1	2	-	17
Multiple injuries (only to be used where no principal injury can be identified)	4	2	1	1	-	-	1	2	-	-	-	-	11
Unknown	2	4	1	1	1	-	-	-	-	-	-	-	9
Asphyxia	1	2	1	-	1	-	1	-	-	-	-	-	6
Haemorrhage - Internal	-	-	-	-	-	1	-	-	-	1	1	-	3
Sight - Loss/Impairment	-	1	1	-	-	1	-	-	-	-	-	-	3
Contusion with intact skin surface and crushing injury, excluding those with fracture	-	-	-	-	-	-	-	-	-	-	2	-	2
Superficial injury	1	-	-	-	-	-	-	-	-		1	-	2
Internal injury of chest, abdomen and pelvis	-	-	-	-	1	-	-	-	-	-	-	-	1
Intracranial injury, including concussion	-	-	-	-	-	-	-	1	-	-	-	-	1
Sprain and strains of joints and adjacent muscles (include acute trauma sprains and strains only)	-	-	-	-	-	-	-	1	-	-	-	-	1
Total	58	55	53	49	70	43	54	63	34	44	44	37	604

#### Figure 176 Serious Bodily Injuries by Bodily Location 1999-2000 to 2010-11

Bodily Location	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Arm/Forearm	10	9	11	12	11	11	11	8	4	2	1	6	96
Leg	-	8	5	6	10	5	11	11	7	9	8	5	85
Ribs	1	5	9	8	10	4	4	6	4	5	5	6	67
Hands and fingers	5	3	5	2	7	4	5	4	1	4	4	1	45
Ankle	-	3	5	6	7	3	1	6	2	1	5	4	43
Multiple locations (more than one part of body)	11	4	3	1	1	1	3	3	-	2	3	-	32
Wrist	-	1	-	-	-	-	-	7	4	5	5	8	30
Face	2	3	1	-	1	2	2	1	1	3	5	1	22
Back - unspecified	2	3	1	1	4	1	2	3	2	-	-	-	19
Shoulder-blade	-	-	3	2	4	1	4	1	-	1	1	-	17
Нір	7	4	-	1	1	1	-	-	-	-	-	-	14
Shoulder	1	1	1	1	1	-	-	2	4	2	1	-	14
Skull	-	-	1	1	-	2	1	5	1	-	-	2	13
Trunk (other than back and excl internal organ)	7	1	-	-	1	1	-	-	-	1	-	-	11
Knee/Knee-cap	-	2	1	2	2	1	1	1	-	-	-	-	10
Elbow	-	-	-	-	2	1	4	-	-	-	2	-	9
Head (other than eye, ear and face)	4	-	-	1	1	-	-	1	-	2	-	-	9
Unknown	2	4	1	1	1	-	-	-	-	-	-	-	9
Neck	2	-	-	1	-	2	-	-	-	1	-	2	8
Eye	2	1	1	-	-	1	1	-	-	1	-	-	7
Feet and toes	-	-	1	1	1	-	-	-	1	2	-	1	7
Pelvis	-	-	1	-	-	-	-	2	1	2	1	-	7
Respiratory system	1	3	1	-	1	-	1	-	-	-	-	-	7
Thigh	-	-	1	-	1	1	2	-	1	-	-	1	7
Back - lower	-	-	-	1	1	1	-	-	1	-	2	-	6
Jaw	1	-	-	-	2	-	1	-	-	-	1	-	5
Collar-bone	-	-	1	-	-	-	-	1	-	-	-	-	2
Internal organs (located in the trunk)	-	-	-	-	-	-	-	1	-	1	-	-	2
Back - upper	-	-	-	1	-	-	-	-	-	-	-	-	1
Total	58	55	53	49	70	43	54	63	34	44	44	37	604

#### Figure 177

Serious Bodily Injuries by Age Group 1999-2000 to 2010-11

Age Group	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
<20	2	3	2	3	-	1	1	1	1	1	-	1	16
20-29	8	9	8	2	10	7	9	11	7	7	9	8	95
30-39	14	10	17	13	13	7	6	17	5	10	12	10	134
40-49	13	19	16	13	22	9	13	12	7	12	12	10	158
50-59	10	9	6	11	17	8	6	13	9	11	9	8	117
60-69	3	1	2	1	2	1	-	2	3	3	2	-	20
>=70	3	-	-	-	2	1	1	-	-	-	-	-	7
Unknown	5	4	2	6	4	9	18	7	2	-	-	-	57
Total	58	55	53	49	70	43	54	63	34	44	44	37	604

Figure 178 Serious Bodily Injuries by Employment Type 1999-2000 to 2010-11

Employment Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Employee	46	40	44	33	57	25	37	36	23	26	27	21	415
Contractor	9	9	7	15	12	17	17	27	11	18	17	15	174
Other	3	6	2	1	1	1	-	-	-	-	-	1	15
Total	58	55	53	49	70	43	54	63	34	44	44	37	604

## Appendix A.7 Notifiable Injury Outcomes

Figure 179 Notifiable Injury Outcomes by Sector mid 2006-07 to 2010-11

Sector	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	193	426	408	399	403	1,829
	Hospital inpatient admission	34	75	86	97	78	370
Coal	Lost consciousness	3	5	3	6	0	17
Coal	Entrapment	0	0	3	1	1	5
	Fatality	0	0	3	0	1	4
	Total	230	506	503	503	483	2,225
	Hospital inpatient admission	-	-	9	22	17	48
Non-Coal	>=7 days lost time/alternative duties	-	-	15	23	26	64
Non-Coal	Lost consciousness	-	-	1	-	-	1
	Total	-	-	25	45	43	113
Total		230	506	528	548	526	2,338

### Figure 180

Notifiable Injury Outcomes by Surface/Underground Operation mid 2006-07 to 2010-11

Operation Type	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	28	31	66	71	68	264
	Hospital inpatient admission	5	12	26	25	29	97
Surface	Lost consciousness	-	1	2	-	-	3
	Entrapment		-	1	-	1	2
	Total	33	44	95	96	98	366
	>=7 days lost time/alternative duties	165	395	351	350	352	1,613
	Hospital inpatient admission	29	63	75	95	75	337
Underground	Lost consciousness	3	4	2	6	-	15
onderground	Fatality	-	-	2	1	-	3
	Entrapment	-	-	3	-	1	4
	Total	197	462	433	452	428	1,972
Total		230	506	528	548	526	2,338

Event Subtype	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	118	268	276	296	332	1,290
	Hospital inpatient admission	10	42	47	66	68	233
	Lost consciousness	1	2	1	4	-	8
Work Environment	Entrapment	-	-	-	-	-	-
	Fatality	-	-	1	-	1	2
	Total	129	312	325	366	401	1,533
	>=7 days lost time/alternative duties	67	147	125	111	68	518
	Hospital inpatient admission	19	28	44	40	26	157
	Lost consciousness	1	3	2	2	-	8
Mech Equip Mobile	Entrapment	-	-	1	-	1	2
	Fatality	-	-	2	-	-	2
	Total	87	178	174	153	95	687
	>=7 days lost time/alternative duties	5	6	9	7	9	36
	Hospital inpatient admission	1	2	8	. 7	6	24
	Lost consciousness		-	-	-	-	
Mech Equip Fixed	Entrapment		-	-	-	_	-
	Fatality	-	-	-	-	-	_
	Total	6	8	17	14	15	60
	>=7 days lost time/alternative duties	1	2	4	5	5	17
	Hospital inpatient admission	2	2	4	2	5	4
	Lost consciousness	-		-	-	-	-
Strata/Ground Control				2	- 1	-	3
	Entrapment			-	-	-	
	Fatality Total	3	2	6	8	5	- 24
	>=7 days lost time/alternative duties	-	1	2	<b>o</b> 1	<b>3</b>	<b>24</b> 5
		1	1	2	2	2	8
	Hospital inpatient admission			2	- 2	- 2	0
Electrical Energy	Lost consciousness	•	-				
	Entrapment	· ·	-	-	-	-	-
	Fatality			5			
	Total	1	2	5	3	3	14 3
	>=7 days lost time/alternative duties	2	1		2	- 1	5
	Hospital inpatient admission		1	-			
Hazardous Materials	Lost consciousness	•	-	-	-	-	-
	Entrapment	•	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	3	2	-	2	1	8
	>=7 days lost time/alternative duties	-	-	-	1	4	5
	Hospital inpatient admission	-	-	-	1	1	2
Explosives	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	
	Total	-	-	-	2	5	7
	>=7 days lost time/alternative duties	-	1	-	-	-	1
	Hospital inpatient admission	-	1	-	-	-	1
Gas	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	2	-	-	-	2
	>=7 days lost time/alternative duties	-	-	1	-	-	1
	Hospital inpatient admission	-	-	-	-	-	-
Structural Failure	Lost consciousness	1	-	-	-	-	1
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	1	-	1	-	-	2
	>=7 days lost time/alternative duties	-	-	-	-	1	1
	Hospital inpatient admission	-	-	-	-	-	-
Water	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	-	-	1	1
Total		230	506	528	548	526	2,338

### Figure 181 Notifiable Injury Outcomes by Event Subtype mid 2006-07 to 2010-11

### Figure 182 Notifiable Injury Outcomes by Mechanism mid 2006-07 to 2010-11

Mechanism	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	68	106	57	60	46	337
	Hospital inpatient admission	7	7	3	5	3	25
	Lost consciousness	-	-	-	-	-	-
Other muscular stress	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	75	113	60	65	49	362
	>=7 days lost time/alternative duties	28	46	77	75	76	302
	Hospital inpatient admission	1	6	13	12	13	45
Falls from the same level	Lost consciousness	· ·	_	-	1	-	1
(including trips and slips)	Entrapment	· ·	-	-	-	-	-
	Fatality		-	-	-	-	-
	Total	29	52	90	88	89	348
	>=7 days lost time/alternative duties	8	39	52	69	65	233
	Hospital inpatient admission		7	4	13	7	31
Muscular stress while lifting,	Lost consciousness	-	-	-	-	_	-
carrying or putting down objects	Entrapment	-	-	-	-	-	-
	Fatality	· -	-	-	-	-	-
	Total	8	46	56	82	72	264
	>=7 days lost time/alternative duties	11	34	37	37	37	156
	Hospital inpatient admission	2	12	17	16	16	63
	Lost consciousness	2		1	-	-	4
Being hit by falling objects	Entrapment	-	-	-	-	-	-
	Fatality	<u> </u>	-	2	-	_	2
	Total	15	47	57	53	53	225
	>=7 days lost time/alternative duties	8	29	26	30	25	118
	Hospital inpatient admission	6	8	23	15	20	72
	Lost consciousness	1	2	1	10	20	5
Being hit by moving objects	Entrapment		-	-			-
	Fatality	· .	-	1	-	1	2
	Total	15	39	51	46	46	197
	>=7 days lost time/alternative duties	25	51	36	21	30	163
	Hospital inpatient admission	3	5	2	5	9	24
	Lost consciousness		1	-	-	-	1
Unspecified mechanism of injury	Entrapment			-	-	_	
	Fatality	<u> </u>	-	-	-	_	_
	Total	28	57	38	26	39	188
	>=7 days lost time/alternative duties	11	25	30	25	40	131
	Hospital inpatient admission		5	7	9	40	29
. Proto an a balancia contrato da consecta de de se	Lost consciousness		5	-	1	-	1
Hitting objects with a part of the body	Entrapment						-
	Fatality	-	-	-	-	_	
	Total	11	30	37	35	48	161
	>=7 days lost time/alternative duties	9	27	26	26	<b>40</b> 29	117
		2	4	1	1	29	8
Muscular stress with no objects being handled	Hospital inpatient admission Lost consciousness	2	4	-		-	0
		<u> </u>	-		-	-	- 1
	Entrapment		-	-	-	1	1
	Fatality	- 44	-	-			-
	Total	11	31 8	<b>27</b> 9	27 22	<b>30</b>	126
	>=7 days lost time/alternative duties	1	8	9 5		8	48
	Hospital inpatient admission	3	5		14	7	34
Being trapped by stationary and moving object	Lost consciousness		-	1	-	-	1
	Entrapment		-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	4	13	15	36	15	83

Mechanism	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	2	15	15	14	27	73
	Hospital inpatient admission	-	2	-	3	3	8
Muscular stress while handling	Lost consciousness	-	-	-	-	-	-
objects other than lifting, carrying or putting down	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	2	17	15	17	30	81
	>=7 days lost time/alternative duties	7	6	6	14	10	43
	Hospital inpatient admission	1	1	3	10	5	20
	Lost consciousness	-	-	-	1	-	1
Fall from a height	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	8	7	9	25	15	64
	>=7 days lost time/alternative duties	6	9	12	10	5	42
	Hospital inpatient admission		2	4	2	1	9
	Lost consciousness		-	-	1	-	1
Hitting stationary objects	Entrapment		-	-	-	-	-
	Fatality		-	-	-	-	-
	Total	6	11	16	13	6	52
	>=7 days lost time/alternative duties	-	10	12	3	5	30
	Hospital inpatient admission		2	3	3	-	8
	Lost consciousness		-	-	1	-	1
Hitting moving objects	Entrapment		-	-	-	-	-
	Fatality		-	-	-	-	-
	Total	-	12	15	7	5	39
	>=7 days lost time/alternative duties	3	6	6	2	2	19
	Hospital inpatient admission	2	2	4	1	2	11
	Lost consciousness		-	-	-	-	-
Vehicle accident	Entrapment		-	-	-	-	-
	Fatality		-	-	-	-	-
	Total	5	8	10	3	4	30
	>=7 days lost time/alternative duties	1	1	4	5	2	13
	Hospital inpatient admission	-	1	3	5	4	13
Single contact with chemical or	Lost consciousness		-	-	-	-	-
substance (excludes insect and spider bites and stings)	Entrapment		-	-	-	-	-
spider bites and stings)	Fatality	· .	-	_	-	_	_
	Total	1	2	7	10	6	26
	>=7 days lost time/alternative duties	1	3	3	6	5	18
	Hospital inpatient admission	1	-	2	2	1	6
Rep move't with low muscle	Lost consciousness	-	-	-	-	-	-
loading	Entrapment	-	-	-	-	-	-
	Fatality		-	-	-	-	-
	Total	2	3	5	8	6	24
	>=7 days lost time/alternative duties	1	1	3	-	2	7
	Hospital inpatient admission	1	3	2	-	2	8
Other and multiple mechanisms	Lost consciousness	-	1	-	-	-	1
Other and multiple mechanisms of injury	Entrapment		-	1	-	-	1
	Fatality		-	-		-	
	Total	2	5	6	-	4	17
	>=7 days lost time/alternative duties	-	1	2		1	4
	Hospital inpatient admission	1	1	3	2	2	9
	Lost consciousness			1			<u>9</u> 1
Contact with electricity		-	-	-	-	-	
	Entrapment Eatality	-	-	-	-	-	-
	Fatality	-					
	Total	1	2	6	2	3	14

### Notifiable Injury Outcomes by Mechanism mid 2006-07 to 2010-11 continued

Notifiable Injury Outcomes b	y Mechanism mid 2006-07	to 2010-11 continued
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Set Tays lost time/alternative dules         1         4         -         2           Other contact with chemical or substance (includes insect and spider bits and stings         - <th>Mechanism</th> <th>Outcome</th> <th>2006-07</th> <th>2007-08</th> <th>2008-09</th> <th>2009-10</th> <th>2010-11</th> <th>Total</th>	Mechanism	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total	
Other contact with chemical of spider bites and stings         Lost consciousness         -		>=7 days lost time/alternative duties	1	4	-	-	2	7	
Substance (includes insect of interpriner)Image of interpriner)Image of interpriner)Image of interpriner)Image of interpriner)Image of interpriner)Solide or cave-inP-7 days lost time/alternative duties124102Part dutine interpriner)P-7 days lost time/alternative duties102000Part dutine interpriner)P-7 days lost time/alternative duties00<		Hospital inpatient admission	1	-	1	-	-	2	
EntropmentFatality <td></td> <td>Lost consciousness</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>		Lost consciousness		-	-	-	-	-	
FatalityTotal224122 <t< td=""><td></td><td>Entrapment</td><td>· ·</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>		Entrapment	· ·	-	-	-	-	-	
slide or cave-in         >=7 days lost time/alternative duties         1         -         2         -	opidor bitoo dila otiligo	Fatality	-	-	-	-	-	-	
Hospital inpatient admission         2         -         -         -         -           Silde or cave-in         Lost consciousness         -         2         1         -           Entrapment         -         2         1         -         -         -         -           Fatality         -         -         4         1         -         -         -         1         2         1         -           Contact with hot objects         -		Total	2	4	1	-	2	9	
Slide or cave-in         Lost consciousness <th< td=""><td></td><td>&gt;=7 days lost time/alternative duties</td><td>1</td><td>-</td><td>2</td><td>-</td><td>-</td><td>3</td></th<>		>=7 days lost time/alternative duties	1	-	2	-	-	3	
Slide or cave-in         Entrapment         -         -         2         1         -           Fatality         -         <		Hospital inpatient admission	2	-	-	-	-	2	
Entrapment         -         2         1         -           Fatality         -         -         2         1         -           Total         3         -         4         1         -           Contact with hot objects         2-7 days lost time/alternative duties         -         1         2         1           Contact with hot objects         Entrapment         -         -         0			-	-	-	-	-	-	
Total         3         -         4         1         -           Contact with hot objects         >=7 days lost time/alternative duties         -         1         2         1           Hospital inpatient admission         -         1         -         2         1           Contact with hot objects         Entragment         -         -         -         -         -           Fatality         -         -         -         -         -         -         -           Social with exposure to heat and cold         -         1         1         4         2         -	Slide or cave-in	Entrapment	-	-	2	1	-	3	
Contact with hot objects         >=7 days lost time/alternative duties         -         1         2         1           Contact with hot objects         Hospital inpatient admission         -         1         2         1           Contact with hot objects         Fatality         - </td <td></td> <td>Fatality</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>		Fatality	-	-	-	-	-	-	
Hospital inpatient admission         1         2         1           Contact with hot objects         Hospital inpatient admission         -		Total	3	-	4	1	-	8	
Contact with hot objects         Hospital inpatient admission         -         1         2         1           Contact with hot objects         Entrapment         - </td <td></td> <td>&gt;=7 days lost time/alternative duties</td> <td>-</td> <td>-</td> <td>1</td> <td>2</td> <td>1</td> <td>4</td>		>=7 days lost time/alternative duties	-	-	1	2	1	4	
Contact with hot objects         Lost consciousness         -			-	1	-	2	1	4	
			· .	-	-	-	-	-	
Fatality         ·<	Contact with hot objects		-	-	-	-	-     2       -     -       -     -       1     -       2     1       2     1       2     1       2     1       2     1       2     1       -     -    - <tr< td=""><td>-</td></tr<>	-	
Total         -         1         1         4         2           Contact with exposure to heat and cold         >=7 days lost time/alternative duties         1         1         -         1           Exposure to mechanical vibration         Image: transment frame         -	Contact with exposure to heat and cold		· .	-	-	-	-	-	
>=7 days lost time/alternative duties         1         -         1         -         -           Contact with exposure to heat and cold         Lost consciousness         -			-	1	1	4	2	8	
Contact with exposure to heat and cold         Hospital inpatient admission         1         1         1         .         .           Entrapment         .			1	-				2	
Contact with exposure to heat and cold         Lost consciousness         -				1		-	-	2	
and cold         Entrapment         -	Contact with experience to best					-	_	-	
Fatality         ·<				-	-	-	_	-	
Total         1         1         2         -         -           Exposure to mechanical vibration         >=7 days lost time/alternative duties         3         -								-	
Exposure to mechanical vibration         >=7 days lost time/alternative duties         -         3         -         -         -           Exposure to mechanical vibration         Lost consciousness         -			1	1	2	-	-	4	
			_			-	-	3	
			1				_	1	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				-	-	-	-	-	
$\begin{tabular}{ c c c c c c c } \hline Fatality & - & - & - & - & - & - & - & - & - & $	Exposure to mechanical vibration		· .	-	-	-	_	_	
Total         1         3         -         -           >=7 days lost time/alternative duties         -         -         2         1           Hospital inpatient admission         -         -         2         1           Hospital inpatient admission         -         -         -         2         1           Lost consciousness         -         -         -         -         1				-	-	-	-	-	
Exposure to mental stress factors         >=7 days lost time/alternative duties         -         -         -         2           Hospital inpatient admission         -			1	3	-	-	-	4	
$ \begin{tabular}{ c c c c c } \hline Hospital inpatient admission & - & - & - & - & - & - & - & - & - & $								2	
				-	-	-	-	-	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				-	-	-	_	-	
$ \begin{array}{ c c c c c c c } \hline Fatality & - & - & - & - & - & - & - & - & - & $	Exposure to mental stress factors			-	-	-	_	-	
Total2Total2>=7 days lost time/alternative duties-10Hospital inpatient admission00Lost consciousness00Entrapment00Fatality10Total-100Lost consciousness-10Fatality-1-00Lost solution-1-00Lost consciousness00Interpret000Lost consciousness00Intrapment00Fatality00Total-1-0Total-1-0				-	-	-	_	-	
>=7 days lost time/alternative duties         -         1         -			-	-	-	-	2	2	
Contact with, or exposure to, biological factorsHospital inpatient admission<			· ·	1		-		- 1	
$\begin{array}{c} \mbox{Contact with, or exposure to,} \\ \mbox{biological factors} \end{array} \qquad \begin{array}{c c c c c c } \mbox{Lost consciousness} & - & - & - & - & - & - & - & - & - & $		,			-	-	-	-	
Entrapment         -	Contact with or expective to			-	-	-	_	-	
Fatality       -        - <th -<<="" td=""><td rowspan="2"></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th>	<td rowspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Total     -     1     -     -       >=7 days lost time/alternative duties     -     1     -     -     -       Hospital inpatient admission     -     -     -     -     -       Lost consciousness     -     -     -     -     -       Entrapment     -     -     -     -     -       Total     -     1     -     -     -			· .			-	-	-	
Long term contact with chemical       >=7 days lost time/alternative duties       -       1       -			-			-	-	1	
Long term contact with chemical or substance       Hospital inpatient admission       -			-					1	
Long term contact with chemical or substance       Lost consciousness       -					-	-	-	-	
Entrapment         -	I ong torm contact with charging		· ·					-	
Fatality         -<			-						
Total - 1			- ·	_	_	-		-	
				1		-		1	
	Total	- Ctar	230	506	- 528	- 548	- 526	2,338	

### Figure 183 Notifiable Injury Outcomes by Agency mid 2006-07 to 2010-11

Agency	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	74	169	157	125	137	662
	Hospital inpatient admission	10	26	18	17	21	92
	Lost consciousness	1	2	-	4	-	7
Underground environment	Entrapment	-	-	2	-	-	2
	Fatality	-	-	-	-	1	1
	Total	85	197	177	146	159	764
	>=7 days lost time/alternative duties	42	94	101	95	63	395
	Hospital inpatient admission	11	20	31	23	12	97
	Lost consciousness	-	-	1	1	-	2
Mobile plant	Entrapment	· -	-	-	-	1	1
	Fatality	· -	-	1	-	-	1
	Total	53	114	134	119	76	496
	>=7 days lost time/alternative duties	13	50	53	83	108	307
	Hospital inpatient admission	1	8	15	30	24	78
Other meterials, substances or	Lost consciousness	1	2	1			4
Other materials, substances or objects	Entrapment	· ·	-	-	1	_	. 1
	Fatality		-	-	-	_	· ·
	Total	15	60	69	114	132	390
		5	9	11	12	21	58
	>=7 days lost time/alternative duties	3	3	6	12	9	
	Hospital inpatient admission	-	-	-	- 15	9	36
Powered equipment, tools and appliances	Lost consciousness	-	-	-	-	-	-
appliances	Entrapment		-		-	-	-
	Fatality	8		1	27		1
	Total	-	12	18		30	95
	>=7 days lost time/alternative duties	17	14	19	21	13	84
	Hospital inpatient admission	-	1	2	4	4	11
Unspecified agencies	Lost consciousness	-				-	-
	Entrapment	-	-	-	-	-	-
	Fatality	- 47	-			47	-
	Total	17	15	21	25	17	95
	>=7 days lost time/alternative duties	3	15	13	15	14	60
	Hospital inpatient admission	1	3	9	8	8	29
Machinery and fixed plant - general	Lost consciousness	-	1	1	-	-	2
general	Entrapment	-	-	-	-	-	-
	Fatality	-	-	1	-	-	1
	Total	4	19	24	23	22	92
	>=7 days lost time/alternative duties	4	8	14	23	18	67
	Hospital inpatient admission	-	3	5	8	9	25
Non-powered equipment	Lost consciousness		-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	4	11	19	31	27	92
	>=7 days lost time/alternative duties	11	18	10	13	11	63
Human agencies	Hospital inpatient admission	1	1	2	3	5	12
	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	12	19	12	16	16	75
	>=7 days lost time/alternative duties	10	12	14	10	10	56
	Hospital inpatient admission	-	4	2	4	3	13
Outdoor environment	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	1	-	-	1
	Fatality	-	-	-	-	-	-
	Total	10	16	17	14	13	70

Agency	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	2	6	5	7	12	32
	Hospital inpatient admission	-	1	5	2	2	10
	Lost consciousness	1	-	-	-	-	1
Non-powered hand tools	Entrapment	· ·	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	3	7	10	9	14	43
	>=7 days lost time/alternative duties	5	14	6	8	4	37
	Hospital inpatient admission	2		1	2	1	6
	Lost consciousness	-		-	-	-	-
Road transport		-	-	-	-		-
	Entrapment	-	-	-	-	-	-
	Fatality	_	-				-
	Total	7	14	7	10	5	43
	>=7 days lost time/alternative duties	1	4	3	4	2	14
	Hospital inpatient admission	3	2	4	2	2	13
Crushing, Pressing, Rolling	Lost consciousness	-	-	1	-	-	1
Machinery	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	4	6	8	6	4	28
	>=7 days lost time/alternative duties	3	5	4	2	3	17
	Hospital inpatient admission	1	-	1	-	3	5
Indoor environment	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	4	5	5	2	6	22
	>=7 days lost time/alternative duties	1	3	5	2	4	15
	Hospital inpatient admission	-	1	-	-	1	2
	Lost consciousness	-	-	-	1	-	1
Other transport	Entrapment	-	-	-	-	-	-
	Fatality	· ·	-	-	-	-	-
	Total	1	4	5	3	5	18
	>=7 days lost time/alternative duties	1	2	2	1	-	6
	Hospital inpatient admission	-	1	-	-	_	1
	Lost consciousness	-	-	-	-	-	-
Non-physical agencies	Entrapment	· .	-	-	_	-	-
		-	_	-	-		
	Fatality Total	1	3	2	1		7
		-	2	2	-	-	
	>=7 days lost time/alternative duties	1		-	-	-	3
	Hospital inpatient admission	1	1	-	1	-	3
Chemicals	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	2	3	-	1	-	6
	>=7 days lost time/alternative duties	-	1	-	-	-	1
	Hospital inpatient admission	-	-	-	-	-	-
Biological agencies	Lost consciousness	-	-	-	-	-	-
2.0.09.00.090.000	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	1	-	-	-	1
	>=7 days lost time/alternative duties	-	-	-	-	-	-
	Hospital inpatient admission	-	-	-	1	-	1
	Lost consciousness	-	-	-	-	-	-
Live Animals	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	-	1	_	1
	1						

### Notifiable Injury Outcomes by Agency mid 2006-07 to 2010-11 continued

Nature of Injury	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11
	>=7 days lost time/alternative duties	126	281	270	255	266
Sprain and strains of joints and	Hospital inpatient admission	8	19	20	32	24
adjacent muscles (include	Lost consciousness	-	1	-	1	-
acute trauma sprains and	Entrapment	-	-	-	1	1
strains only)	Fatality	-	-	-	-	-
	Total	134	301	290	289	291
	>=7 days lost time/alternative duties	4	22	37	56	44
	Hospital inpatient admission	1	15	25	31	25
Fractures (excluding of	Lost consciousness	-	-	1	-	-
vertebral column)	Entrapment	-	-	-	-	-
	Fatality	-	-	2	-	-
	Total	5	37	65	87	69
	>=7 days lost time/alternative duties	1	19	35	41	36
	Hospital inpatient admission	2	8	18	20	20
Open wound not involving	Lost consciousness	-	-	-	-	-
raumatic amputation	Entrapment	-	-	-	-	-

# Figure 184 Notifiable Injury Outcomes by Nature of Injury mid 2006-07 to 2010-11

	Iotal	134	301	290	289	291	1,305
	>=7 days lost time/alternative duties	4	22	37	56	44	163
	Hospital inpatient admission	1	15	25	31	25	97
Fractures (excluding of	Lost consciousness	-	-	1	-	-	1
vertebral column)	Entrapment	-	-	-	-	-	-
	Fatality	-	-	2	-	-	2
	Total	5	37	65	87	69	263
	>=7 days lost time/alternative duties	1	19	35	41	36	132
	Hospital inpatient admission	2	8	18	20	20	68
Open wound not involving	Lost consciousness	-	-	-	-	-	-
traumatic amputation	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	3	27	53	61	56	200
	>=7 days lost time/alternative duties	22	41	31	15	11	120
	Hospital inpatient admission	3	7	7	10	6	33
	Lost consciousness	3	-	2	1	-	6
Superficial injury	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	28	48	40	26	17	159
	>=7 days lost time/alternative duties	3	26	15	33	30	107
	Hospital inpatient admission	3	10	9	8	9	39
Contusion with intact skin	Lost consciousness	-	1	-	-	-	1
surface and crushing injury, excluding those with fracture	Entrapment	-	-	1	-	-	1
energineee interaction	Fatality	-	-	-	-	-	-
	Total	6	37	25	41	39	148
	>=7 days lost time/alternative duties	18	15	4	3	9	49
	Hospital inpatient admission	3	3	2	4	5	17
	Lost consciousness	-	-	-	-	-	-
Other and unspecified injuries	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	21	18	6	7	14	66
	>=7 days lost time/alternative duties	-	1	3	-	4	8
	Hospital inpatient admission	4	3	6	1	3	17
A	Lost consciousness	-	-	-	-	-	-
Amputation	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	4	4	9	1	7	25
	>=7 days lost time/alternative duties	6	5	3	2	3	19
Disorders of muscle tendens	Hospital inpatient admission	4	1	-	-	-	5
Disorders of muscle, tendons and other soft tissues	Lost consciousness	-	-	-	-	-	-
(includes synovitis, tenosynovitis, bursitis)	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	10	6	3	2	3	24
	>=7 days lost time/alternative duties	2	-	5	2	2	11
	Hospital inpatient admission	1	2	2	3	3	11
Burne	Lost consciousness	-	-	-	-	-	-
Burns	Entrapment	-	-	-	-	-	-
							-
	Fatality	-	-	-	-	-	-

Total 1,198 103 2 2 -1,305

Nature of Injury	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	2	-	3	3	3	11
	Hospital inpatient admission	1	2	2	2	2	9
	Lost consciousness	-	-	-	-	-	-
Hernia	Entrapment		-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	3	2	5	5	5	20
	>=7 days lost time/alternative duties	3	4	2	-	4	13
	Hospital inpatient admission	-	1	-	1	1	3
	Lost consciousness			-	-		-
Dislocations	Entrapment		-		-		
	Fatality				-		
	Total	3	5	2	1	5	16
		-	1	-	2	1	4
	>=7 days lost time/alternative duties			- 1			
	Hospital inpatient admission	· ·	-		-	-	1
Intracranial injury, including concussion	Lost consciousness	· ·	2	-	4	-	6
001100331011	Entrapment	-	-	-	-	-	-
	Fatality	-	-	1	-	-	1
	Total	-	3	2	6	1	12
	>=7 days lost time/alternative duties	-	1	1	1	2	5
Multiple injuries (enly to be	Hospital inpatient admission	1	-	2	1	-	4
Multiple injuries (only to be used where no principal injury	Lost consciousness	· ·	1	-	-	-	1
can be identified)	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	1	1
	Total	1	2	3	2	3	11
	>=7 days lost time/alternative duties	-	1	-	-	1	2
	Hospital inpatient admission	1	-	3	1	2	7
Electrocution, electric shock (excl serious electrical burn,	Lost consciousness	-	-	1	-	-	1
lightning, static)	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	1	1	4	1	3	10
	>=7 days lost time/alternative duties	-	-	6	1	1	8
	Hospital inpatient admission	-	-	-	-	-	-
	Lost consciousness	-	-	-	-	-	-
Mental disorders	Entrapment	-	-	2	-	-	2
	Fatality	-	-	-	-	-	-
	Total	-	-	8	1	1	10
	>=7 days lost time/alternative duties	2	1	1	-	1	5
	Hospital inpatient admission	1	1	-	2	-	4
Foreign body on external eye, in ear or nose or in respiratory,	Lost consciousness		-	-	-	-	-
digestive or reproductive	Entrapment	-	-	-	-	-	-
systems (include choking)	Fatality	-	-	-	-	-	-
	Total	3	2	1	2	1	9
	>=7 days lost time/alternative duties	2	-	1	-	2	5
	Hospital inpatient admission	· ·	-	1	-	1	2
	Lost consciousness		-	-	-	-	_
Eye disorders (non-traumatic)	Entrapment		-	-	-	-	_
	Fatality		- I	-	-		-
	Total	2		2	-	3	7
	>=7 days lost time/alternative duties	-	2	-	1	-	3
	Hospital inpatient admission		2		-	- 1	3
Fracture of vertebral column	Lost consciousness				-		5
with or without mention of		-	-	-	-	-	-
spinal cord lesion	Entrapment					-	-
	Fatality	-	-	-	-	-	-
	Total	-	4	-	1	1	6

### Notifiable Injury Outcomes by Nature of Injury mid 2006-07 to 2010-11 continued

Nature of Injury	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	· ·	-	-	1	-	1
	Hospital inpatient admission	· ·	1	1	2	-	4
	Lost consciousness	· ·	-	-	-	-	-
Injection of fluid	Entrapment	· ·	-	-	-	-	-
	Fatality	· ·	-	-	-	-	-
	Total		1	1	3	-	5
					2	-	2
	>=7 days lost time/alternative duties						
Injuries to nerves and spinal	Hospital inpatient admission	1	-	1	-	1	3
cord without evidence of spinal	Lost consciousness	· ·	-	-	-	-	-
bone injury	Entrapment	· ·	-	-	-	-	-
	Fatality	· ·		-	-	-	-
	Total	1	-	1	2	1	5
	>=7 days lost time/alternative duties	· ·	-	-	1	-	1
	Hospital inpatient admission	-	-	1	2	-	3
Haemorrhage - Internal	Lost consciousness	-	-	-	-	-	-
naemorriage - internai	Entrapment	· ·	-	-	-	-	-
	Fatality	· ·	-	-	-	-	-
	Total	-	-	1	3	-	4
	>=7 days lost time/alternative duties	1	2	-	-	-	3
	Hospital inpatient admission		-	-	-	-	-
	Lost consciousness	· .	-	-	-	-	-
Dermatitis and other eczema	Entrapment	· .	-	-	-	-	
	Fatality	<u> </u>	-		-	_	
	Total	1	2	-	-	-	3
	>=7 days lost time/alternative duties	· ·	2	-	-	-	2
	Hospital inpatient admission	· ·	-	-	-	-	-
Other diseases	Lost consciousness	· ·	-	-	-	-	-
	Entrapment	· ·	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	2	-	-	-	2
	>=7 days lost time/alternative duties	· ·	1	-	1	-	2
	Hospital inpatient admission	· ·	-	-	-	-	-
Poisoning and toxic effects of	Lost consciousness	•	-	-	-	-	-
substances	Entrapment	-	-	-	-	-	-
	Fatality	· ·	-	-	-	-	-
	Total	-	1	-	1	-	2
Effects of months a final	>=7 days lost time/alternative duties	1	-	-	-	-	1
Effects of weather (incl lightning, static), exposure, air	Hospital inpatient admission	· ·	-	-	-	-	-
pressure and other external	Lost consciousness	· .	-	-	-	-	-
causes, not elsewhere	Entrapment	· .		-	-	-	-
classified (includes bends, drowning, electrocution,		<u> </u>	-	-	-		
electric shock)	Fatality	1					-
	Total	-	-	-	-	-	1
	>=7 days lost time/alternative duties	· ·	-	-	-	-	-
	Hospital inpatient admission	· ·	-	-	-	1	1
Infectious and parasitic	Lost consciousness	· ·	-	-	-	-	-
diseases	Entrapment	· ·	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	-	-	1	1
	>=7 days lost time/alternative duties	-	-	-	1	-	1
	Hospital inpatient admission	-	-	-	-	-	-
Other diseases of the musculoskeletal system and connective tissue	Lost consciousness	· ·	-	-	-	-	-
	Entrapment	· ·	-	-	-	-	-
	Fatality	· ·	-	-	-	-	-
	Total	-	-	-	1	-	1
	>=7 days lost time/alternative duties	· ·	1	-		-	1
	Hospital inpatient admission	<u> </u>	-	-	-	-	
			-	-	-	-	-
Sight - Loss/Impairment	Lost consciousness	_					
	Entrapment	· ·	-	-	-	-	-
	Fatality	· ·	-	-		-	-
	Total		1	-	-	-	1
Total		230	506	528	548	526	2,338

### Notifiable Injury Outcomes by Nature of Injury mid 2006-07 to 2010-11 continued

### Figure 185 Notifiable Injury Outcomes by Bodily Location mid 2006-07 to 2010-11

Bodily Location	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Hands and fingers	>=7 days lost time/alternative duties	15	73	61	70	68	287
	Hospital inpatient admission	6	29	33	38	27	133
	Lost consciousness	1	-	1	-	-	2
	Entrapment	-	-	-	-	1	1
	Fatality	-	-	-	-	-	-
	Total	22	102	95	108	96	423
	>=7 days lost time/alternative duties	36	61	49	45	61	252
	Hospital inpatient admission	2	8	6	4	9	29
	Lost consciousness	-	-	-	1	-	1
Knee/Knee-cap	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	38	69	55	50	70	282
	>=7 days lost time/alternative duties	45	72	65	16	12	210
	Hospital inpatient admission	-	2	5	1	-	8
Deale mean aified	Lost consciousness	-	-	-	-	-	-
Back - unspecified	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	45	74	70	17	12	218
	>=7 days lost time/alternative duties	16	42	41	32	41	172
	Hospital inpatient admission	3	7	4	14	6	34
Chaulder	Lost consciousness	-	1	-	-	-	1
Shoulder	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	19	50	45	46	47	207
	>=7 days lost time/alternative duties	-	-	22	61	55	138
	Hospital inpatient admission	-	-	-	7	3	10
Back - lower	Lost consciousness	-	-	-	-	-	-
Dack - IOwer	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	22	68	58	148
	>=7 days lost time/alternative duties	15	38	22	29	26	130
	Hospital inpatient admission	1	-	2	4	5	12
Ankle	Lost consciousness	-	-	-	-	-	-
Alikie	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	16	38	24	33	31	142
	>=7 days lost time/alternative duties	9	29	23	23	22	106
	Hospital inpatient admission	-	2	1	7	5	15
Neck	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality		-	-	-	-	-
	Total	9	31	24	30	27	121
Feet and toes	>=7 days lost time/alternative duties	5	23	22	26	17	93
	Hospital inpatient admission	4	5	9	4	4	26
	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	1	-	-	1
	Total	9	28	32	30	21	120

Bodily Location	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	7	20	19	14	12	72
Leg	Hospital inpatient admission	3	4	9	6	8	30
	Lost consciousness	1	-	-	-	-	1
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	11	24	28	20	20	103
	>=7 days lost time/alternative duties	3	13	18	24	24	82
	Hospital inpatient admission	-	-	3	9	2	14
Multiple locations (more than	Lost consciousness	-	1	-	-	-	1
one part of body)	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	3	14	21	33	26	97
	>=7 days lost time/alternative duties	8	8	10	7	15	48
	Hospital inpatient admission	4	4	7	1	10	26
	Lost consciousness	-	-	1	-	-	1
Arm/Forearm	Entrapment	· ·	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	12	12	18	8	25	75
	>=7 days lost time/alternative duties	6	5	10	12	14	47
	Hospital inpatient admission	1	1	1	3	3	9
	Lost consciousness	· ·	-	-	-	-	-
Wrist	Entrapment	· ·	-	-	-	-	-
	Fatality	· ·	-	-	-	-	-
	Total	7	6	11	15	17	56
	>=7 days lost time/alternative duties	4	5	6	7	4	26
	Hospital inpatient admission	1	-	2	-	2	5
Head (other than eye, ear and	Lost consciousness	1	3	1	5	-	10
face)	Entrapment	· ·	-	2	-	-	2
	Fatality	· ·	-	1	-	-	1
	Total	6	8	12	12	6	44
	>=7 days lost time/alternative duties	7	4	7	4	5	27
	Hospital inpatient admission	4	2	3	2	2	13
Trunk (other than back and	Lost consciousness	· ·	-	-	-	-	-
excluding internal organ)	Entrapment	· ·	-	1	-	-	1
	Fatality	-	-	-	-	-	-
	Total	11	6	11	6	7	41
	>=7 days lost time/alternative duties	2	5	4	4	15	30
	Hospital inpatient admission	1	1	2	2	1	7
	Lost consciousness	· ·	-	-	-	-	-
Elbow	Entrapment	· ·	-	-	-	-	-
	Fatality	· ·	-	-	-	-	-
	Total	3	6	6	6	16	37
	>=7 days lost time/alternative duties	· ·	5	6	11	4	26
	Hospital inpatient admission	-	1	1	1	2	5
	Lost consciousness	-	-	-	-	-	-
Ribs	Entrapment	· ·	-	-	-	-	-
	Fatality	· ·	-	-	-	-	-
	Total	-	6	7	12	6	31

### Notifiable Injury Outcomes by Bodily Location mid 2006-07 to 2010-11 continued

Bodily Location	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Face	>=7 days lost time/alternative duties	3	3	4	5	3	18
	Hospital inpatient admission	1	3	2	4	2	12
	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	4	6	6	9	5	30
	>=7 days lost time/alternative duties	2	-	10	1	4	17
	Hospital inpatient admission	-	3	2	3	1	9
General and unspecified	Lost consciousness	-	-	-	-	-	-
locations	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	1	1
	Total	2	3	12	4	6	27
	>=7 days lost time/alternative duties	2	5	3	7	3	20
	Hospital inpatient admission	-	1	1	1	-	3
	Lost consciousness	-	-	-	-	-	-
Нір	Entrapment	-	-	-	1	-	1
	Fatality	-	-	-	-	-	-
	Total	2	6	4	9	3	24
	>=7 days lost time/alternative duties	4	4	5	-	2	15
	Hospital inpatient admission	2	-	3	1	2	8
<b>F</b>	Lost consciousness	-	-	-	-	-	-
Eye	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	6	4	8	1	4	23
	>=7 days lost time/alternative duties	-	-	1	11	5	17
	Hospital inpatient admission	-	-	-	3	2	5
Abdominal Muscles and	Lost consciousness	-	-	-	-	-	-
Tendons	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	1	14	7	22
	>=7 days lost time/alternative duties	1	5	4	2	1	13
	Hospital inpatient admission	-	-	2	1	5	8
Thinh	Lost consciousness	-	-	-	-	-	-
Thigh	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	1	5	6	3	6	21
	>=7 days lost time/alternative duties	1	-	1	2	-	4
	Hospital inpatient admission	-	1	1	2	-	4
Pelvis	Lost consciousness	-	-	1	-	-	1
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
Shoulder-blade	Total	1	1	3	4	-	9
	>=7 days lost time/alternative duties	2	1	2	2	-	7
	Hospital inpatient admission	1	-	-	-	1	2
	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	3	1	2	2	1	9

### Notifiable Injury Outcomes by Bodily Location mid 2006-07 to 2010-11 continued

Bodily Location	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Skull	>=7 days lost time/alternative duties	-	-	-	-	3	3
	Hospital inpatient admission	-	1	-	-	2	3
	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	1	-	-	5	6
	>=7 days lost time/alternative duties	-	2	1	-	-	3
	Hospital inpatient admission	-	-	2	1	-	3
Internal organs (located in the	Lost consciousness	-	-	-	-	-	-
trunk)	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	2	3	1	-	6
	>=7 days lost time/alternative duties	-	2	-	1	1	4
	Hospital inpatient admission	-	-	1	-	-	1
For	Lost consciousness	-	-	-	-	-	-
Ear	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	2	1	1	1	5
	>=7 days lost time/alternative duties	-	-	-	2	2	4
	Hospital inpatient admission	-	-	-	-	-	-
Deale unner	Lost consciousness	-	-	-	-	-	-
Back - upper	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	-	2	2	4
	>=7 days lost time/alternative duties	-	-	1	1	1	3
	Hospital inpatient admission	-	-	-	-	-	-
Back - other and multiple	Lost consciousness	-	-	-	-	-	-
Back - other and multiple	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	1	1	1	3
	>=7 days lost time/alternative duties	-	-	-	1	-	1
	Hospital inpatient admission	-	-	-	1	-	1
Jaw	Lost consciousness	-	-	-	-	-	-
Jaw	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	-	2	-	2
	>=7 days lost time/alternative duties	-	1	-	-	-	1
	Hospital inpatient admission	-	-	-	-	-	-
Collar-bone	Lost consciousness	-	-	-	-	-	-
Collai-Dolle	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	1	-	-	-	1
Respiratory system	>=7 days lost time/alternative duties	-	-	-	1	-	1
	Hospital inpatient admission	-	-	-	-	-	-
	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	-	1	-	1
Total		230	506	528	548	526	2,338

### Notifiable Injury Outcomes by Bodily Location mid 2006-07 to 2010-11 continued

### Figure 186 Notifiable Injury Outcomes by Age Group mid 2006-07 to 2010-11

Age Group	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
<20	>=7 days lost time/alternative duties	-	8	6	4	11	29
	Hospital inpatient admission	-	-	1	2	6	9
	Lost consciousness	1	-	-	-	-	1
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	1	8	7	6	17	39
	>=7 days lost time/alternative duties	23	53	57	70	58	261
	Hospital inpatient admission	3	18	18	24	17	80
aa aa	Lost consciousness	-	1	2	1	-	4
20-29	Entrapment	-	-	2	-	-	2
	Fatality	-	-	-	-	-	-
	Total	26	72	79	95	75	347
	>=7 days lost time/alternative duties	39	101	101	112	96	449
	Hospital inpatient admission	9	13	33	29	30	114
	Lost consciousness	-	1	1	1	-	3
30-39	Entrapment	-	-	1	1	-	2
	Fatality	-	-	1	-	-	1
	Total	48	115	137	143	126	569
	>=7 days lost time/alternative duties	60	120	110	114	126	530
	Hospital inpatient admission	12	18	23	29	26	108
	Lost consciousness	1	2	1	3	-	7
40-49	Entrapment	-	-	-	-	1	1
	Fatality	-	-	1	-	-	1
	Total	73	140	135	146	153	647
	>=7 days lost time/alternative duties	66	130	130	102	115	543
	Hospital inpatient admission	8	23	21	31	23	106
	Lost consciousness	1	1	-	1	-	3
50-59	Entrapment	-	-	-	-	-	-
	Fatality	-	-	1	-	1	2
	Total	75	154	152	134	139	654
	>=7 days lost time/alternative duties	3	14	13	19	14	63
	Hospital inpatient admission	2	2	5	4	2	15
	Lost consciousness	-	-	-	-	-	-
60-69	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	5	16	18	23	16	78
-	>=7 days lost time/alternative duties	-	-	-	-	-	-
>=70	Hospital inpatient admission	-	1	-	-	-	1
	Lost consciousness	-	-	-	-	-	-
	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	1	-	-	-	1
Unknown	>=7 days lost time/alternative duties	2	-	-	-	-	2
	Hospital inpatient admission	-	-	-	1	-	1
	Lost consciousness	-	-	-	-	-	-
	Entrapment		-	-	-	-	-
	Fatality		-	-	-	-	-
	Total	2	-	-	1	-	3
Total		230	506	528	548	526	2,338

# Figure 187 Notifiable Injury Outcomes by Employment Type mid 2006-07 to 2010-11

Employment Type	Outcome	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	>=7 days lost time/alternative duties	169	367	356	344	342	1,578
	Hospital inpatient admission	28	58	74	79	71	310
Employee	Lost consciousness	2	4	4	5	-	15
Employee	Entrapment	-	-	2	1	1	4
	Fatality	-	-	2	-	1	3
	Total	199	429	438	429	415	1,910
	>=7 days lost time/alternative duties	24	59	61	77	78	299
	Hospital inpatient admission	6	17	27	41	32	123
Contractor	Lost consciousness	1	1	-	1	-	3
Contractor	Entrapment	-	-	1	-	-	1
	Fatality	-	-	1	-	-	1
	Total	31	77	90	119	110	427
	>=7 days lost time/alternative duties	-	-	-	-	-	-
	Hospital inpatient admission	-	-	-	-	1	1
Other	Lost consciousness	-	-	-	-	-	-
Other	Entrapment	-	-	-	-	-	-
	Fatality	-	-	-	-	-	-
	Total	-	-	-	-	1	1
Total		230	506	528	548	526	2,338

## Appendix A.8 Assessments

Figure 188 Coal Surface Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	141	151	134	104	86	111	156	165	191	181	239	244	1,903
Audit	18	20	10	12	21	11	69	44	33	48	103	27	416
Management Plans (Safety)	159	12	3	9	12	10	14	28	9	25	27	58	366
Investigation	-	5	3	1	5	1	7	4	6	6	3	4	45
Equipment	-	-	-	-	-	7	4	3	2	3	-	-	19
Airborne Dust	-	-	-	1	6	3	1	-	-	1	-	-	12
Verification	5	-	-	-	-	-	-	-	-	-	-	-	5
Resource Recovery (Safety)	-	-	-	-	-	-	-	-	-	-	1	-	1
Total	323	188	150	127	130	143	251	244	241	264	373	333	2,767

# Figure 189

Coal Underground Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	379	322	270	206	196	299	361	235	271	283	280	258	3,360
Explosion Suppression	204	223	161	177	143	105	90	91	116	103	159	156	1,728
Audit	48	98	146	172	88	32	155	99	89	139	102	43	1,211
Management Plans (Safety)	260	39	9	30	29	44	82	105	34	29	30	21	712
Investigation	4	9	6	3	13	6	10	46	58	34	5	11	205
Airborne Dust	1	2	1	5	41	31	-	2	4	2	1	-	90
Equipment	-	-	-	-	-	17	5	11	3	8	1	6	51
Verification	4	-	2	1	-	-	1	-	-	-	-	1	9
Resource Recovery (Safety)	-	-	-	-	-	1	1	-	-	-	-	-	2
Closure	-	-	-	-	-	1	-	-	-	-	-	-	1
Seminar/Workshop	-	-	-	-	-	-	-	1	-	-	-	-	1
Total	900	693	595	594	510	536	705	590	575	598	578	496	7,370

## **Figure 190** Non-Coal Metalliferous Surface Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	23	31	49	51	45	73	45	41	43	44	58	41	544
Investigation	6	2	15	4	8	13	11	13	6	8	12	9	107
Audit	1	1	3	1	-	3	12	1	5	8	8	5	48
Verification	4	-	3	5	3	6	2	1	5	2	-	-	31
Management Plans (Safety)	1	1	1	2	-	3	3	1	1	1	3	4	21
Equipment	-	-	-	-	-	-	-	-	-	-	1	2	3
Resource Recovery (Safety)	-	-	-	-	-	3	-	-	-	-	-	-	3
Closure	1	-	-	-	-	-	-	-	-	-	-	-	1
Total	36	35	71	63	56	101	73	57	60	63	82	61	758

# Figure 191

Non-Coal Metalliferous Underground Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	62	58	79	74	68	91	89	107	107	99	96	76	1,006
Investigation	10	15	18	17	10	10	5	30	22	13	21	10	181
Audit	4	5	5	9	9	3	12	15	26	10	21	18	137
Verification	2	2	9	2	3	2	3	12	6	2	2	2	47
Management Plans (Safety)	3	-	1	2	3	4	1	2	6	2	7	4	35
Equipment	-	-	-	-	-	2	1	4	-	-	9	7	23
Total	81	80	112	104	93	112	111	170	167	126	156	117	1,429

# Figure 192

Non-Coal Extractives Surface Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	456	463	543	578	475	554	577	655	702	723	712	714	7,152
Audit	2	7	14	8	57	49	34	44	61	84	148	85	593
Verification	129	31	12	10	4	1	8	3	1	4	1	2	206
Management Plans (Safety)	3	-	9	16	9	22	16	10	2	12	45	30	174
Investigation	13	10	10	10	13	12	22	13	13	10	6	6	138
Equipment	3	-	-	-	-	6	4	1	2	3	3	2	24
Airborne Dust	-	-	-	-	-	-	-	-	4	5	-	-	9
Seminar/Workshop	-	-	-	-	-	-	5	-	2	1	-	-	8
Closure	-	-	-	-	-	-	2	3	-	-	2	-	7
Total	606	511	588	622	558	644	668	729	787	842	917	839	8,311

# Figure 193

Non-Coal Extractives Underground Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	1	1	5	5	7	8	7	9	14	5	8	11	81
Audit	-	-	-	-	-	-	-	2	2	2	1	1	8
Investigation	-	-	-	-	1	1	1	1	-	-	1	-	5
Management Plans (Safety)	-	-	-	-	-	-	1	-	-	-	-	-	1
Total	1	1	5	5	8	9	9	12	16	7	10	12	95

# **Figure 194** Non-Coal Other Surface Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	11	6	5	3	1	1	5	26	5	8	12	19	102
Audit	1	-	-	-	-	-	-	1	1	-	-	1	4
Investigation	-	2	-	1	-	-	-	-	-	-	-	-	3
Verification	1	-	-	-	-	-	-	-	-	1	-	-	2
Mech Equip Mobile	1	-	-	-	-	-	-	-	-	-	-	-	1
Total	14	8	5	4	1	1	5	27	6	9	12	20	112

# Figure 195

Non-Coal Other Underground Assessments by Event Subtype 1999-00 to 2010-11

Event Subtype	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Inspection (Mine Safety)	6	3	15	9	19	9	8	1	19	4	7	9	109
Audit	1	3	3	13	3	-	-	-	1	-	-	-	24
Equipment	-	-	-	-	-	2	-	-	-	-	2	-	4
Management Plans (Safety)	-	-	1	-	-	-	-	-	-	-	-	-	1
Total	7	6	19	22	22	11	8	1	20	4	9	9	138

# Appendix A.9 Enforcement and Advice Notices

**Figure 196** Coal Surface and Underground Enforcement and Advice Notices by Notice Category and Type 1999-00 to 2010-11

Sector/Operation Type	Enforcement Category	Enforcement Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		CMRA S 61	38	34	28	12	9	32	25	29					207
		CMHSA S 150								46	94	60	132	296	628
	Advice/Improvement	OHSA S 91							1	5	10	4	24	5	49
		Total	38	34	28	12	9	32	26	80	104	64	156	301	884
		CMRA S 63	13	10	18	7	2	18	9	-					77
	Prohibition	CMHSR CI 51								6	10	27	30	15	88
Coal Surface	FIOIDILION	OHSA S 93							-	-	2	-	3	4	9
Coal Sullace		Total	13	10	18	7	2	18	9	6	12	27	33	19	174
		OHSA S 62								1	1	•	1	6	9
		OHSA S 70								-	-	-	-	1	1
	Investigation	OHSA S 72								-	-	-	-	-	-
		OHSA S 89								-	-	1	-	-	1
		Total	-	•	-	•	-	-	-	1	1	1	1	7	11
	Total		51	44	46	19	11	50	35	87	117	92	190	327	1,069
		CMRAS 61	272	230	154	125	122	139	92	94					1,228
	Advice/Improvement	CMHSA S 150								88	149	194	342	401	1,174
	Advice/improvement	OHSA S 91							4	27	15	18	25	15	104
		Total	272	230	154	125	122	139	96	209	164	212	367	416	2,506
		CMRA S 63	24	29	18	31	14	27	17	15					175
	Prohibition	CMHSR CI 51								10	50	53	59	45	217
Coal Underground	Frombriden	OHSA S 93							-	8	7	4	4	3	26
coal onderground		Total	24	29	18	31	14	27	17	33	57	57	63	48	418
		OHSA S 62								-	-	2	1	5	8
		OHSA S 70								-	-	-	-	-	-
	Investigation	OHSA S 72								-	-		-	-	-
		OHSA S 89								7	1	6	1	1	16
		Total	-	-	-	-	-	-	-	7	1	8	2	6	24
	Total			259	172	156	136	166	113	249	222	277	432	470	2,948
Total		347	303	218	175	147	216	148	336	339	369	622	797	4,017	

# Figure 197

Non-Coal Metalliferous Surface and Underground Enforcement and Advice Notices by Notice Category and Type 1999-00 to 2010-11

Sector/Operation Type	Enforcement Category	Enforcement Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		MIA S 36B	-	2	5	8	-	9	5	7	20	2			58
	Advice/Improvement	MHSA S 131										6	22	24	52
	Auvice/improvement	OHSA S 91							-	1	1	1	-	2	5
		Total	-	2	5	8	-	9	5	8	21	9	22	26	115
		MIA S 37	1	-	1	-	-	-	1	-	-	-			3
		MIA S 37A	-	-	-	-	-	-	-	-	-	-			-
	Prohibition	MHSR CI 158										-	-	-	-
		OHSA S 93							1	4	2	-	1	2	10
Metalliferous Surface		Total	1	-	1	1	-	-	2	4	2	-	1	2	13
		OHSA S 62								-	2	-	-	-	2
		OHSA S 70								-	1	-	-	-	1
	Investigation	OHSA S 72								-	1	1	-	-	2
		OHSA S 89								-	-	-	-	-	-
		Total	-	-	-	-	-	-	-	-	4	1	-	-	5
	Explosives	EXPLR CI 99						-	-	-	-	-	-	-	-
		Total	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total		1	2	6	8	-	9	7	12	27	10	23	28	133
		MIA S 36B	-	-	-	5	3	2	8	10	33	7			68
	Advice/Improvement	MHSA S 131										22	44	34	100
	Autocamprovement	OHSA S 91							2	-	3	1	-	1	7
		Total	-	-	-	5	3	2	10	10	36	30	44	35	175
		MIA S 37	-	1	1	-	-	-	-	-	-	-			2
		MIA S 37A	-	2	-	-	1	2	2	-	2	-			9
	Prohibition	MHSR CI 158										4	4	1	9
Metalliferous		OHSA S 93							1	1	4	2	1	1	10
Underground		Total	-	3	1	-	1	2	3	1	6	6	5	2	30
		OHSA S 62								8	-	-	-	1	9
		OHSA S 70								-	-	-	-	-	-
	Investigation	OHSA S 72								-	-	1	-	-	1
		OHSA S 89								-	-	2	-	1	3
		Total	-	-	-	-	-	-	-	8	-	3	-	2	13
	Explosives	EXPLR CI 99						-	-	-	-	-	-	-	-
		Total	-		-	-	-	-	-	-	-	-	-	-	-
	Total		-	3	1	5	4	4	13	19	42	39	49	39	218
Total	Total		1	5	7	13	4	13	20	31	69	49	72	67	351

# Figure 198

Non-Coal Extractives Surface and Underground Enforcement and Advice Notices by Notice Category and Type 1999-00 to 2010-11

Sector/Operation Type	Enforcement Category	Enforcement Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		MIA S 36B	1	47	44	112	120	154	155	177	277	52			1,139
	Advice/Improvement	MHSA S 131										296	481	495	1,272
	Autochinproteinent	OHSA S 91							11	38	77	70	85	40	321
		Total	1	47	44	112	120	154	166	215	354	418	566	535	2,732
		MIA S 37	6	6	6	8	9	11	5	2	2	•			55
		MIA S 37A	1	2	-	2	3	11	4	1	4	-			28
	Prohibition	MHSR CI 158										11	25	37	73
		OHSA S 93							9	43	29	15	24	8	128
Extractives Surface		Total	7	8	6	10	12	22	18	46	35	26	49	45	284
		OHSA S 62								-	-	-	4	-	4
		OHSA S 70								-	-	-	-	-	-
	Investigation	OHSA S 72								-	-	-	-	-	-
		OHSA S 89								-	-	-	-	1	1
		Total	-	-	-	-	-	-	-	-	-	-	4	1	5
	Explosives	EXPLR CI 99						-	-	1	•	•	•	-	1
	Explosives	Total	-	-	-	-	-	-	-	1	•	•	-	-	1
	Total		8	55	50	122	132	176	184	262	389	444	619	581	3,022
		MIA S 36B	-	-	-	-	1	2	-	2	5	-			10
	Advice/Improvement	MHSA S 131										1	2	5	8
	Autochinproteinent	OHSA S 91							1	-	-	-	-	-	1
		Total	-	-	-	-	1	2	1	2	5	1	2	5	19
		MIA S 37	-	-	-	-	-	-	-	-	-	-			-
		MIA S 37A	-	-	-	-	1	-	-	-	-	-			1
	Prohibition	MHSR CI 158										-	-	-	-
		OHSA S 93							-	-	-	-	-	-	-
Extractives Underground		Total	-	•	-	-	1	-	-	-	•	•	1	-	1
		OHSA S 62								-	•	•	-	-	-
		OHSA S 70								-	•	•	-	-	-
	Investigation	OHSA S 72								-	•	•	-	-	-
		OHSA S 89								-	-	-	-	-	-
		Total	-	-	-	-	-	-	-	-	-	-	-	-	-
	Explosives	EXPLR CI 99						-	-	-	-	-	-	-	-
	LAPIOSIVES	xplosives EXPLR CI 99 Total	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total		-	-	-	-	2	2	1	2	5	1	2	5	20
Total	Total			55	50	122	134	178	185	264	394	445	621	586	3,042

# Figure 199

Non-Coal Other Enforcement and Advice Notices by Notice Category and Type 1999-00 to 2010-11

Sector	Enforcement Category	Enforcement Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
		MIA S 36B	-	-	-	1	1	•	1	•	2	-			5
	Advice/Improvement	MHSA S 131										4	7	19	30
	Advice/improvement	OHSA S 91							-	2	5	1	-	-	8
		Total	-	-	-	1	1	1	1	2	7	5	7	19	43
		MIA S 37	-	-	-	-	-	-	-	-	-	-			-
	IonCoal Other Prohibition	MIA S 37A	-	-	1	-	-	-	-	•	•	-			1
NonCoal Other		MHSR CI 158										-	-	-	-
		OHSA S 93							1	21	6	2	1	-	31
		Total	-	-	1	-	-	-	1	21	6	2	1	-	32
	Investigation	OHSA S 89								•	1	-	-	-	1
	Tot	Total	-	-	-	-	-	-	-	-	1	-	-	-	1
		EXPLR CI 99						•		-	-	-	-	-	-
	Lypiosives	Total	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	1	1	1	-	2	23	14	7	8	19	76

# Figure 200

Petroleum (Onshore) Enforcement and Advice Notices by Notice Category and Type 1999-00 to 2010-11

Sector	Enforcement Category	Enforcement Type	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Total
	A duine for a new sector								-	-	-	-	2	1	3
	Advice/Improvement	Total	-	-	-	-	-	-	-		-	-	2	1	3
Petroleum	Prohibition	OHSA S 93							-	-	-	-	2	1	3
renoleum	FIONDIGON	Total	-	-	-	-	-	-	-		-	-	2	1	3
	Investigation	OHSA S 62							-	-	-	-	5	-	5
	Investigation	Total	-	-	-	-	-	-	-		-	-	5	-	5
Total			-	-	-	-	-	-	-	-	-	-	9	2	11

# APPENDIX B ADDITIONAL INFORMATION

# Appendix B.1 COMET Mine Types, Mining Sectors and Mine Operation Types

# Figure 201

COMET Mine Types and Mining Sectors

Mining Sector		Mine Type
Coal		Coal Declared Plant – CPP
	Metalliferous	Metals Mineral Sands
	Extractives	Construction Materials Industrial Minerals
Non Coal	Other	Gemstones or Precious Stones Opal Claim Readymix/Bitumen Ancillary to Mining Waste Mining Treatment Plant To Be Determined
Petroleum (Onshore)		Petroleum

# Figure 202

COMET Mine Operation Types

Operation	Operation Type
Underground	Underground
Surface	Open Cut Processing Borrow Pit Dredging Drilling Exploration Exploration Wells Opal Mining (All Types) Production Wells To Be Determined

# Appendix B.2 COMET Incident Event Subtypes

Figure 203 COMET Incident Event Subtypes

Incident Event Subtype	Description
Dust	dust ignition; sulphide dust explosion; silica exposure
Electrical energy	electrical energy (electric shock); burns caused by electrical heat; outbreak of fire due to electricity; unplanned movement due to electricity
Explosives	explosives general (ejection of flyrock); fault with an explosive; misfire - significant
Gas	gas ignition; asphyxiate gases such as CO2; poisonous gases such as H2S or CO; explosive gases such as H; flammable gases.
Hazardous materials	scolding, injection of hydraulic fluid, flammable / explosive liquids, liquid chemicals, etc
Mechanical equipment fixed	winding systems, crushers, screens, conveyors, guarding, etc.
Mechanical equipment mobile	mobile plant
Self heating	spontaneous combustion involving increase in temperature of coal or other combustible material from the oxidation process
Strata control	fall of roof or sides, slope stability – High wall, Windblast
Structural failure	Infrastructure failure – bins, buildings, etc
Water	inrush of water
Work Environment	slips, trips and falls; falling or flying objects; fall from a height; ventilation; lightning strike; noise; radiation

## Appendix B.3 **COMET Incident Types and Relevant Legislation**

Figure 204 COMET Incident Types under former and current legislation

Mine Category	Legislation		Commenced	Status	Legislation Category	COMET Incident Type
	Coal Mines Regulation Act 1982	CMRA 1982	26/03/1984	Repealed	*CMRA	*1984 Dangerous Occurrence O/C *1984 Dangerous Occurrence U/G *Serious Bodily Injury CMRA *Fatality
	Coal Mines (General) Regulation 1999	CMGNR1999	1/09/1999	Repealed	*CMGNR	*Notifiable Incidents DCCP CMGNR 1999, CI 83 *Non Spec Acc Ending in Fat/Injury
Coal	Coal Mines (Open Cut) Regulation 1999	CMOCR 1999	1/09/1999	Repealed	*CMOCR	*Notifiable Incidents CMOCR 1999, CI 16
	Coal Mines (Underground) Regulation 1999 CMUGR 19		1/09/1999	Repealed	*CMUGR	*Dangerous Occurrences CMUGR 1999, Cl 34(1) *Notifiable Incidents CMUGR 1999 Cl 34A *Other Notifiable Incidents CMUGR 1999 Cl 34B *Incidents CMUGR 1999, Cl 34(2) Repealed 4/7/2003
	Coal Mine Health and Safety Act 2002 Coal Mine Health and Safety Regulation 2006	CMHSA 2002 CMHSR 2006	23/12/2006	Current	CMHS	CMHSR 2006 CI 55 CMHSR 2006 CI 56(1) Non Spec Acc Ending in Fat/Injury
Non-Coal	Mines Inspection Act 1901 Mines Inspection Regulation 1999 Mines Inspection General Rule 2000	MIA 1901 MIR 1999 MIGR 2000	1/02/1902 30/07/1999 01/09/2000	Repealed	*MIA	*1994 Emergency MIA *Minor Accident MIA *Pre Sept 2000 Dangerous Incident MIA *Serious Injury MIA *Dangerous Incident *Non Spec Acc Ending in Fat/Injury
	Mine Health and Safety Act 2004 MHSA 2004 Mine Health and Safety Regulation 2007 MHSR 2007		1/09/2008	Current	MHS	MHSR 2007 Cl 145 MHSR 2007 Cl 146(1) Non Spec Acc Ending in Fat/Injury
Petroleum	Petroleum (Onshore) Schedule 1992	POSch 1992	08/1992	Current	POSch	POSch 1992
	Explosives Regulation 2005	EXPLR 2005	1/09/2005	Current	Explosives	Explosives Regulation 2005
AII	Not Applicable			N/A	Complaint	
			N/A	High Potential Incident		

\* indicates repealed legislation

# Appendix B.4 Serious Bodily Injury Types and Relevant Legislation

## Figure 205

Coal Serious Bodily Injury (SBI) clauses under former and current legislation

Serious Bodily Injury (SBI) – Coal						
Coal Mines (General) Regulation 1999 Clause 85	Coal Mine Health & Safety Regulation 2006 Clauses 55 and 57					
<ul> <li>a) a fracture of the skull, jaw, spine, pelvis, arm, shoulder- blade, collar-bone, forearm, thigh, leg, knee cap, ankle or ribs</li> </ul>	55, 57(a)(ii) any fracture other than a fracture of a finger, toe, hand or foot					
(b) a dislocation of the shoulder, elbow, hip, knee or spine	-					
(c) an amputation of the hand or foot or a substantial part of the hand or foot	55, 57(a)(i) an amputation of one or more fingers or toes or any other part of a hand or foot					
(d) the serious impairment or loss of sight of an eye	55, 57(a)(iii) loss of sight of an eye,					
(e) an internal haemorrhage receiving hospital treatment	55, 57(a)(iv) an internal haemorrhage receiving hospital treatment,					
(f) burns receiving treatment from a registered medical practitioner	55(c)(v) serious burns to a person					
(g) an injury involving injection of hydraulic fluid	55, 57(a)(v) the injection of fluid (including hydraulic fluid, oil, air or water) under pressure					
(h) asphyxia.	55, 57(a)(vi) asphyxia					

## Figure 206

Non-Coal Serious Injury (SI) clauses under former and current legislation

Serious Injury (SI) – Non-Coal						
Mines Inspection Act 1901 Section 47	Mine Health & Safety Regulation 2007 Clause 145					
<ul> <li>(a) a fracture of the skull, jaw, spine, pelvis, arm, shoulder- blade, collar-bone, forearm, thigh, leg, knee cap, ankle or ribs</li> </ul>	145(a)(ii) any fracture other than a fracture of a finger, toe, hand or foot					
(b) a dislocation of the shoulder, elbow, hip, knee or spine	-					
(c) an amputation of the hand or foot or a substantial part of the hand or foot	145(a)(i) the amputation of one or more fingers or toes or any other part of a hand or foot					
(d) the loss of sight of an eye	145(a)(iii) loss of sight of an eye					
(e) an internal haemorrhage requiring hospital treatment	145(a)(iv) an internal haemorrhage receiving hospital treatment					
(f) burns requiring hospital treatment	145(c)(iv) serious burns to a person					
-	145(a)(v) the injection of fluid under pressure					
(g) asphyxia	145(a)(vi) asphyxia					
(h) any other kind of injury prescribed by the general rules	-					

# Figure 207

Petroleum (Onshore) Serious Injury (SI) clauses under current legislation

# Serious Injury (SI) – Petroleum (Onshore)

## Petroleum (Onshore) Schedule 1992

301(1) an injury which requires immediate attention by a medical practitioner

# Appendix B.5 Notifiable Injury Outcomes and Relevant Legislation

Figure 208 Notifiable Injury Outcomes under current legislation

Notifiable Outcome	Legislation					
	CMHSA 2002	S 110(1)(a)	any incident at the coal operation site that has resulted in a person being killed			
Fatality		S 110 (2)(a)	any incident at the exploration site that has resulted in a person being killed			
	MHSA 2004	S 88(1)(a)	any incident at the mine that has resulted in a person being killed			
	CMHSR 2006	Cl 55(a)	<ul> <li>an injury to a person that results (at any time after the injury) in any of the following:</li> <li>(vii) the loss of consciousness of the person caused by impact of physical force, exposure to hazardous substances, electric shock or lack of oxygen</li> </ul>			
Lost consciousness	CMHSR 2006	Cl 57(a)	<ul> <li>an injury to a person that results (at any time after the injury) in any of the following:</li> <li>(vii) the loss of consciousness of the person caused by impact of physical force, exposure to hazardous substances, electric shock or lack of oxygen</li> </ul>			
	MHSR 2007	Cl 145(a)	<ul> <li>an injury to a person that results (at any time after the injury) in any of the following:</li> <li>(vii) the loss of consciousness of the person caused by impact of physical force, exposure to hazardous substances, electric shock or lack of oxygen</li> </ul>			
		Cl 55(b)	an event that results (at any time after the event) in the admission of a person to hospital as an in-patient			
Hospital inpatient admission	CMHSR 2006	Cl 57(b)	an event that results (at any time after the event) in the admission of a person to hospital as an in-patient			
	MHSR 2007	Cl 145(b)	an event that results (at any time after the injury) in the admission of a person to hospital as an in-patient			
Entropment	CMHSR 2006	Cl 55(c)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (iii) entrapment of a person			
Entrapment	MHSR 2007	Cl 145(c)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (iii) entrapment of a person			

Notifiable Injury Outcomes under current legislation continued

Notifiable Outcome	Legislation						
		Cl 56(1)(a)	an injury to a person that results in the person being unfit, for a continuous period of at least 7 days, to attend the person's usual place of work, to perform his or her usual duties at his or her place of work or, in the case of a non-employee, to carry out his or her usual work activities (where that unfitness is supported by a medical certificate)				
	CMHSR 2006	Cl 56(1)(b)	an illness of a person that is related to work processes and results in the person being unfit, for a continuous period of at least 7 days, to attend the person's usual place of work or to perform his or her usual duties at that place of work (where that unfitness is supported by a medical certificate)				
>=7 days lost time and/or		Cl 56(1)(c)	any incidence of violence at a place of work that results in an employee being unfit, for a continuous period of at least 7 days, to attend the employee's usual place of work or to perform his or her usual duties at that place of work (where that unfitness is supported by a medical certificate)				
alternative duties		Cl 146(1)(a)	an injury to a person that results in the person being unfit, for a continuous period of at least 7 days, to attend the person's usual place of work, to perform his or her usual duties at his or her place of work or, in the case of a non-employee, to carry out his or her usual work activities (where that unfitness is supported by a medical certificate)				
	MHSR 2007	Cl 146(1)(b)	an illness of a person that is related to work processes and results in the person being unfit, for a continuous period of at least 7 days, to attend the person's usual place of work or to perform his or her usual duties at that place of work (where that unfitness is supported by a medical certificate)				
		Cl 146(1)(c)	any incidence of violence at a place of work that results in an employee being unfit, for a continuous period of at least 7 days, to attend the employee's usual place of work or to perform his or her usual duties at that place of work (where that unfitness is supported by a medical certificate)				

# Appendix B.6 Comparison of Incident and Injury Notification Requirements under Former and Current Legislation

# Figure 209

CMRA 1982	egislation , CMGR 1999 , CMUGR 1999	Currer CMHSA 20	Comment	
CMRA 1982 S86	Fatality	S 110(1)(a)	any incident at the coal operation site that has resulted in a person being killed	Same
		S 110(2)(a)	any incident at the exploration site that has resulted in a person being killed	Same
CMGR 1999 CI 85	a) a fracture of the skull, jaw, spine, pelvis, arm, shoulder-blade, collar-bone, forearm, thigh, leg, knee cap, ankle or ribs	Cl 55(a)(ii) Cl 57(a)(ii)	<ul> <li>an injury to a person</li> <li>that results (at any time</li> <li>after the injury) in any</li> <li>of the following:</li> <li>(ii) any fracture other</li> <li>than a fracture of a</li> <li>finger, toe, hand or</li> <li>foot,</li> </ul>	Similar More inclusive
CMGR 1999 CI 85	(b) a dislocation of the shoulder, elbow, hip, knee or spine	Reported if the dis	location results in a notifiab	le injury outcome
CMGR 1999 CI 85	(c) an amputation of the hand or foot or a substantial part of the hand or foot	Cl 55(a)(i) Cl 57(a)(i)	<ul> <li>an injury to a person that results (at any time after the injury) in any of the following:</li> <li>(i) the amputation of one or more fingers or toes or any other part of a hand or foot,</li> </ul>	Similar More inclusive
CMGR 1999 CI 85	(d) the serious impairment or loss of sight of an eye	Cl 55(a)(iii) Cl 57(a)(iii)	an injury to a person that results (at any time after the injury) in any of the following: (iii) loss of sight of an eye,	Same
CMGR 1999 CI 85	(e) an internal haemorrhage receiving hospital treatment	Cl 55(a)(iv) Cl 57(a)(iv)	an injury to a person that results (at any time after the injury) in any of the following: (iv) an internal haemorrhage receiving hospital treatment,	Same
CMGR 1999 CI 85	(f) burns receiving treatment from a registered medical practitioner	Cl 55(c)(v)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (v) serious burns to a person	Same

CMRA 1982	egislation , CMGR 1999 , CMUGR 1999		Current Legislation CMHSA 2002, CMHSR 2006		
CMGR 1999 CI 85	(g) an injury involving injection of hydraulic fluid	Cl 55(a)(v) Cl 57(a)(v)	an injury to a person that results (at any time after the injury) in any of the following: (v) the injection of fluid (including hydraulic fluid, oil, air or water) under pressure,	Similar More inclusive	
CMGR 1999 CI 85	(h) asphyxia.	Cl 55(a)(vi) Cl 57(a)(vi)	an injury to a person that results (at any time after the injury) in any of the following: (vi) asphyxia,	Same	
		Cl 55(a)(vii) Cl 57(a)(vii)	an injury to a person that results (at any time after the injury) in any of the following: (vii) the loss of consciousness of the person caused by impact of physical force, exposure to hazardous substances, electric shock or lack of oxygen	New	
		Cl 55(b) Cl 57(b)	an event that results (at any time after the event) in the admission of a person to hospital as an in-patient	New	
CMUGR 1999 Cl34(1)	Entombment person 34(1)(j) The entombment of a person	Cl 55 (c)(iii)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (iii) entrapment of a person	Similar More inclusive	
		Cl 56(1)(a)	an injury to a person that results in the person being unfit, for a continuous period of at least 7 days, to attend the person's usual place of work, to perform his or her usual duties at his or her place of work or, in the case of a non- employee, to carry out his or her usual work activities (where that unfitness is supported by a medical certificate)	New	

CMRA 1982,	egislation CMGR 1999 CMUGR 1999		t Legislation 02, CMHSR 2006	Comment
		Cl 56(1)(b)	an illness of a person that is related to work processes and results in the person being unfit, for a continuous period of at least 7 days, to attend the person's usual place of work or to perform his or her usual duties at that place of work (where that unfitness is supported by a medical certificate)	New
		Cl 56(1)(c)	any incidence of violence at a place of work that results in an employee being unfit, for a continuous period of at least 7 days, to attend the employee's usual place of work or to perform his or her usual duties at that place of work (where that unfitness is supported by a medical certificate)	New
CMUGR 1999 CI 34(1)	Damage failure haulage 34(1)(f) Damage to or a failure in haulage equipment used to transport persons in a shaft or drift that may endanger any person, interfere with the normal working of a mine or disrupt access to a second means of egress from a mine		any of the following events or circumstances that	
CMOCR 1999 CI 16 CMUGR 1999 CI 34A CMGNR 1999 CI 83	Failure structure 16(1)(h) A failure or collapse of any structure such as to endanger persons or property Failure structure 34A(1)(c) A failure or collapse of any structure such as to endanger persons or property Failure structure 83(1)(d) A failure or collapse of any structure such as to endanger persons or property	CI 55(c)(i)	circumstances that present an immediate threat to life or of permanent incapacitating injury: (i) damage to any plant, building or structure,	Similar

Former Legislation CMRA 1982, CMGR 1999 CMOCR 1999, CMUGR 1999			nt Legislation 002, CMHSR 2006	Comment
		Cl 55(c)(ii)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (ii) imminent risk of explosion or fire,	New
CMOCR 1999, CI 16	Failure high-lowwall etc 16(1)(g) A fall, slumping, loss of strength, failure or collapse of the high wall, low wall or spoil area such as to endanger persons or property	Cl 55(c)(iv)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (iv) failure of strata, or of slope stability control measures,	Similar
CMOCR 1999 CI 16 CMUGR 1999 CI 34A CMGNR 1999 CI 83	Unplanned movement 16(1)(f) An unplanned movement of a vehicle, machine or any item of plant or equipment such as to endanger persons or cause serious property damage Unplanned movement 34A(1)(b) An unplanned movement of a vehicle, machine or any item of plant or equipment such as to endanger persons or cause serious property damage Unplanned movement 83(1)(c) An unplanned movement of a vehicle, machine or any item of plant or equipment such as to endanger persons or cause serious property damage Unplanned movement 83(1)(c) An unplanned movement of a vehicle, machine or any item of plant or equipment such as to endanger persons or cause serious property damage	Cl 55(c)(vi)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (vi) the unintended activation or movement of vehicles or machinery	Similar Less inclusive
		Cl 57(c)	the unintended activation or movement of machinery (other than a vehicle)	New

	egislation	Currer	t Legislation	Commont
	, CMGR 1999 , CMUGR 1999	CMHSA 2002, CMHSR 2006		Comment
CMOCR 1999 CI 16 CMUGR 1999 CI 34A CMGNR 1999 CI 83	Elect shock 16(1)(d) The receiving by a person of an electric shock from a source, or the suffering by a person of burns received from an electric circuit, that is above extra low voltage (as defined in Australian Standard 3000 (SAA Wiring rules)) Elect shock 34A(1)(a) An electric shock to a person from a source that is above extra low voltage (as defined in AS/NZS 3000:2000, Electrical Installations (known as the Australian/New Zealand Wiring Rules)) Elect shock 83(1)(b) The receiving by a person of an electric shock from a source, or the suffering by a person of burns received from an electric circuit, that is above extra low voltage (as defined in Australian Standard 3000 (SAA Wiring Rules))	Cl 55(d)(i)	any incident involving electricity: (i) as a consequence of which a person suffers injury, receives treatment from a health care professional or is unable (on medical advice) to attend work for any period of time,	Similar
		Cl 55(d)(ii)	any incident involving electricity: (ii) where a vehicle, machinery or other plant makes contact with an energised high voltage source involving a risk to any person	New
CMUGR 1999 CI 34(1)	Ignition gas dust (34)(1)(a) An unplanned ignition of gas or dust underground Ignition explosives	Cl 55(e)	an uncontrolled explosion or fire or a misfire of explosives in	Different
CMUGR 1999 CI 34(1)	<b>34(1)(h)</b> An unplanned ignition or explosion of a blasting agent or an explosive underground		the underground parts of a coal operation	More inclusive

CMRA 1982,	egislation CMGR 1999 CMUGR 1999		t Legislation 02, CMHSR 2006	Comment
CMOCR 1999 CI 16 CMUGR 1999 CI 34(1) CMGNR 1999 CI 83	Outbreak fire 16(1)(a) An outbreak of fire endangering persons or causing serious property damage Outbreak fire self heat 34(1)(b) an outbreak of fire or spontaneous heating of coal or other material underground or initial spontaneous heating in a coal stock pile on the surface Outbreak fire 83(1)(a) An outbreak or fire endangering persons or causing serious property damage	Cl 55(e)	an uncontrolled explosion or fire or a misfire of explosives in the underground parts of a coal operation	Different More inclusive
CMUGR 1999 CI 34(1)	Outburst 34(1)(e) A coal or rock outburst that endangers a person or disrupts mine ventilation	CI 55(f)	an uncontrolled outburst of gas	Similar Less inclusive
CMOCR 1999, CI 16 CMUGR 1999 CI 34(1)	Inrush 16(1)(c) An abnormal inrush of water, or material that flows when wet, from any source such as to endanger persons or property Inrush 34(1)(d) An inrush within the meaning of Division 8	Cl 55(g)	an abnormal inrush of fluid	Similar More inclusive
		Cl 55(h)	a collision on the surface part of the coal operation involving a vehicle or mobile plant with a gross weight of more than 2 tonnes	New
		CI 55(i)	the loss of control of a heavy vehicle or other large plant on the surface part of the coal operation	New
		CI 55(j)	the overturning of a heavy vehicle or other large plant on the surface part of the coal operation	New
CMOCR 1999, CI 16	Flyrock 16(1)(j) The ejection of flyrock outside the boundary of a mine's lease area during shotfiring such as to endanger persons or property	CI 55(k)	ejection of fly rock so that it falls outside a blast exclusion zone (that is an area from which persons are excluded during blasting) or near people	Similar More inclusive
		CI 55(I)	failure of any part of a powered winding system or damage to a shaft or shaft equipment	New

Former Legislation CMRA 1982, CMGR 1999 CMOCR 1999, CMUGR 1999			nt Legislation 002, CMHSR 2006	Comment
		Cl 56(1)(d)	a spill or incident resulting in exposure or potential exposure of a person to a notifiable carcinogenic substance or a prohibited carcinogenic substance	New
		Cl 56(1)(e)	contact of a person with an energised electrical item that is supplied at above extra low voltage	New
CMOCR 1999, CI 16 CMUGR 1999 CI 34(1)	Self heat 16(1)(b) Initial self-heating of the coal strata or overburden in a part of a mine Outbreak fire self heat 34(1)(b) An outbreak of fire or spontaneous heating of coal or other material	Cl 56(1)(f)	initial self-heating of coal or other material, or any heating of coal in the underground parts of a coal operation that results in withdrawal of people	Similar
CMUGR 1999 CI 34(1)	Failure ventilation 34(1)(c) Failure of ventilation that results in an accumulation of gas that requires the withdrawal of persons	Cl 56(1)(g)	an accumulation of gas that requires the withdrawal of people or results in the tripping off of electric power	Different More inclusive
CMUGR 1999 CI 34B	Fall roof sides 34B(1)(b) An unplanned fall of roof or sides of a mine that impedes passage or disrupts mine ventilation	Cl 56(1)(h)	an unplanned fall of a roof or sides that impedes passage or disrupts mine ventilation or extends outside the bolted zone	Similar More inclusive
CMUGR 1999 CI 34B	Windblast 34B(1)(c) A windblast that results in injuries requiring first-aid treatment	Cl 56(1)(i)	A windblast that results in injuries requiring treatment by a medical practitioner	Similar Less inclusive
CMUGR 1999 CI 34B	Entrapment breaker line 34B(1)(e) Entrapment of a breaker line support by a fall of roof such that it is unable to be recovered under its own tractive effort	Cl 56(1)(j)	the burial of machinery such that it cannot be	Similar
CMUGR 1999 CI 34B	Entrapment cont miner 34B(1)(d) Entrapment of a continuous miner by a fall of roof or sides such that it is unable to be recovered under its own tractive effort		recovered under its own tractive effort	More inclusive
CMUGR 1999 CI 34B	Creep 34B(1)(f) A creep, progressive pillar collapse or significant deviation from predicted surface subsidence	Cl 56(1)(k)	A creep or progressive pillar collapse	Similar Less inclusive

CMRA 1982,	egislation CMGR 1999 CMUGR 1999		nt Legislation 102, CMHSR 2006	Comment
CMUGR 1999 CI 34B	Arcing on electric cable 34B(1)(a) An event that occurs in a hazardous zone and leaves visible evidence on an electric cable of arcing having occurred	Cl 56(1)(l)	an event that occurs in a hazardous zone in the underground parts of the coal operation and from which an electric arc is observed or that leaves visible evidence on an electric cable of arcing having occurred	Similar More inclusive
CMUGR 1999 CI 34B	Failure explosion protection 34B(1)(g) The inservice failure of the explosion protection characteristic of explosion protected apparatus located in a hazardous zone	Cl 56(1)(m)	the in-service failure of the explosion- protection characteristics of explosion-protected plant	Similar More inclusive
CMOCR 1999, CI 16	Injury from Blasting 16(1)(e) The suffering by a person of bodily injury occasioned by an explosion or discharge of blasting material	Cl 56(1)(n)	an uncontrolled explosion or fire or a misfire of explosives in the surface parts of a coal operation	Different More inclusive
		Cl 56(1)(o)	an escape of fluid under pressure that could place any person at risk	New
		Cl 56(1)(p)	an unintended activation or movement of vehicles or machinery that does not present an immediate threat to life or of permanent incapacitating injury	New
CMUGR 1999 CI 34(1)	Pillar collapse 34(1)(i) A sudden pillar collapse	Cl 56(1)(q)	A sudden pillar collapse	Same
CMOCR 1999, CI 16	Insurge gas 16(1)(i) An insurge of noxious or flammable gas from old workings		·	Deleted

	Legislation I, MIGR 2000		Legislation 4, MHSR 2007	Comment
MIA S47	Fatality	S 88(1)(a)	any incident at the mine that has resulted in a person being killed	Same
MIA S47	<ul> <li>(a) a fracture of the skull, jaw, spine, pelvis, arm, shoulder-blade, collar-bone, forearm, thigh, leg, knee cap, ankle or ribs</li> </ul>	Cl 145(a)(ii)	an injury to a person that results (at any time after the injury) in any of the following: (ii) any fracture other than a fracture of a finger, toe, hand or foot,	Similar More inclusive
MIA S47	(b) a dislocation of the shoulder, elbow, hip, knee or spine	Reported if the dislo	cation results in a notifiab	le injury outcome
MIA S47	(c) an amputation of the hand or foot or a substantial part of the hand or foot	Cl 145(a)(i)	<ul> <li>an injury to a person that results (at any time after the injury) in any of the following:</li> <li>(i) the amputation of one or more fingers or toes or any other part of a hand or foot,</li> </ul>	Similar More inclusive
MIA S47	(d) the loss of sight of an eye	Cl 145(a)(iii)	an injury to a person that results (at any time after the injury) in any of the following: (iii) loss of sight of an eye,	Same
MIA S47	(e) an internal haemorrhage requiring hospital treatment	Cl 145(a)(iv)	an injury to a person that results (at any time after the injury) in any of the following: (iv) an internal haemorrhage receiving hospital treatment,	Same
MIA S47	(f) burns requiring hospital treatment	Cl 145(c)(iv)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (iv) serious burns to a person	Same
		Cl 145(a)(v)	an injury to a person that results (at any time after the injury) in any of the following: (v) the injection of fluid under pressure	New
MIA S47	(g) asphyxia	Cl 145(a)(vi)	an injury to a person that results (at any time after the injury) in any of the following: (vi) asphyxia,	Same

Former Legislation MIA 1901, MIGR 2000		Legislation 94, MHSR 2007	Comment
	Cl 145 (a)(vii)	an injury to a person that results (at any time after the injury) in any of the following: (vii) the loss of consciousness of the person caused by impact of physical force, exposure to hazardous substances, electric shock or lack of oxygen	New
	Cl 145 (b)	an event that results (at any time after the injury) in the admission of a person to hospital as an in- patient	New
	Cl 145 (c)(iii)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (iii) entrapment of a person	New
	Cl 146 (1) (a)	an injury to a person that results in the person being unfit, for a continuous period of at least 7 days, to attend the person's usual place of work, to perform his or her usual duties at his or her place of work or, in the case of a non- employee, to carry out his or her usual work activities (where that unfitness is supported by a medical certificate)	New
	Cl 146 (1) (b)	an illness of a person that is related to work processes and results in the person being unfit, for a continuous period of at least 7 days, to attend the person's usual place of work or to perform his or her usual duties at that place of work (where that unfitness is supported by a medical certificate)	New

	Legislation I, MIGR 2000		Legislation 4, MHSR 2007	Comment
		Cl 146 (1) (c)	any incidence of violence at a place of work that results in an employee being unfit, for a continuous period of at least 7 days, to attend the employee's usual place of work or to perform his or her usual duties at that place of work (where that unfitness is supported by a medical certificate)	New
MIGR 2000 Dangerous Incident	Structural Failure An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	Cl 145(c)(i)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (i) damage to any plant, equipment, building or structure,	Different More inclusive
		Cl 145(c)(ii)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (ii) imminent risk of explosion or fire	New
MIGR 2000 Dangerous Incident CI 68(5)(d)	Unplanned movement due to electricity CI 68(5)(d) any unintended movement of electrically powered or controlled equipment (including any failure of that equipment to stop) that endangered persons or caused serious property damage	Cl 145 (c)(v)	any of the following events or circumstances that present an immediate threat to life or of permanent incapacitating injury: (v) the unintended activation or movement of vehicles or machinery	Different More inclusive
MIGR 2000 Dangerous Incident CI 68(5)(b)	Burns caused by electrical heat CI 68(5)(b) any burns requiring first aid treatment, where the heat source that caused the burn was electrical equipment	Cl 145(d)(i)	<ul> <li>any incident involving electricity:</li> <li>(i) as a consequence of which a person suffers injury, receives medical treatment or is unable (on medical advice) to attend work for any period of time</li> </ul>	Similar More inclusive

Former Legislation MIA 1901, MIGR 2000		Current Legislation MHSA 2004, MHSR 2007		Comment
	·	Cl 145(d)(ii)	any incident involving electricity: (ii) where a vehicle, machinery or other plant makes contact with an energised high voltage source involving a risk to any person)	New
MIGR 2000 Dangerous Incident CI 68(5)(a)	Electric shock Cl 68(5)(a) any electric shock sustained by any person from an electricity source above extra low voltage	Cl 145(d)(iii)	any incident involving electricity: (iii) where a person receives an electric shock from a source operating above extra low voltage (as defined by AS/NZS 3000)	Same
MIGR 2000 Dangerous Incident CI 68(5)(c) MIGR 2000 Dangerous Incident	Outbreak of fire due to electrical equipment Cl 68(5)(c) any fire caused by the malfunction of electrical equipment Outbreak of Fire U/G An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the			
MIGR 2000 Dangerous Incident	vicinity of the mine Fixed Equipment – fire (surface) An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	CI 145(e)	an uncontrolled explosion or fire	Different More inclusive
MIGR 2000 Dangerous Incident	Fixed Equipment – fire (underground) An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine			

Former MIA 1901	Legislation I, MIGR 2000		Legislation 4, MHSR 2007	Comment
MIGR 2000 Dangerous Incident	Mobile Plant – fires on equipment (surface) An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine			
MIGR 2000 Dangerous Incident	Mobile Plant – fires on equipment (underground) An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	CI 145(e)	an uncontrolled explosion or fire	Different More inclusive
MIGR 2000 Dangerous Incident	Ventilation U/G – dust (including sulphide) An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine			
		Cl 145(f)	an escape of fluid under high pressure that endangers a person	New
		Cl 145(g)	an uncontrolled issue of gas or fluids	New
MIGR 2000 Dangerous Incident Cl 25(d)	Inrush of Water, Material or Gas Cl 25(d) a dangerous incident involving an inrush of water, or material that flows when wet, from any source	Cl 145(h)	an abnormal inrush of fluid materials	Same
	Mobile Plant – general transport/traffic	Cl 145 (i)	a collision involving a vehicle or other machinery that results in substantial damage, or impedes safe operations, at the mine	
MIGR 2000 Dangerous Incident	An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the	Cl 145 (j)	the loss of control of a vehicle or other machinery at the mine	Different More inclusive
	vicinity of the mine	Cl 145 (k)	the overturning of a vehicle or other machinery at the mine	

	Legislation I, MIGR 2000		Legislation 4, MHSR 2007	Comment
MIGR 2000 Dangerous Incident CI 64(2)	Ejection of Flyrock Cl 64(2) If rock from any blasting is projected outside the boundaries of a mining area, the general manager of the mine must notify an inspector or a mine safety officer as soon as practicable but, in any event, no later than 24 hours after the blasting	Cl 145(l)	ejection of fly rock so that it falls outside a blast exclusion zone (being the area below, at or above ground level from which all unauthorised persons are excluded during blasting)	Similar More inclusive
MIGR 2000 Dangerous Incident	Winding systems An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	Cl 145(m)	failure of any part of a powered winding system or damage to a shaft or shaft equipment	Different More inclusive
MIGR 2000 Dangerous Incident	Rock falls – (major) Ground Movement An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	Cl 145(n)	an unplanned fall of ground that impedes passage, disrupts production or ventilation or involves failure of ground support where persons could be present	Different More inclusive
MIGR 2000 Dangerous Incident	Airblast An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	Cl 145(o)	an airblast (that is, the significant overpressure and air velocities forced out of a large void from collapse of mass of rock or materials)	Different More inclusive
		Cl 145 (p)	the burial of machinery such that it cannot be recovered under its own tractive effort	New
MIGR 2000 Dangerous Incident	Hazardous chemicals An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	Cl 146(1)(d)	a spill or incident resulting in exposure or potential exposure of a person to a notifiable carcinogenic substance or a prohibited carcinogenic substance	Different More inclusive
MIGR 2000 Dangerous Incident CI 65(1)	Misfire – significant CI 65(1) The general manager of a mine at which blasting is being carried out must notify an inspector or a mine safety officer of any significant misfire (cannot be refired without a significant risk to mine personnel or the public) as soon as practicable but, in any event, no later than 24 hours after it occurs	Cl 146(1)(e)	a significant misfire of explosives	Same

	Legislation	Current Legislation MHSA 2004, MHSR 2007 Comment		
MIA 1901, MIGR 2000		MHSA 200		
MIGR 2000 Dangerous Incident CI 66(2)	Fault with an explosive CI 66(2) 66(1) A person at a mine who discovers or suspects a problem or fault in an explosive product or accessory must notify a person acting in a supervisory capacity at the mine of the problem or fault as soon as practicable 66(2) The person so notified must, in turn, notify the general manager of the mine who must report the matter to an inspector or mine safety officer within 24 hours after being notified of the problem or fault	Cl 146(1)(f)	a problem or fault in an explosive product or accessory	Same
MIGR 2000 Dangerous Incident	Explosives – NEC An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	Reported under the Explosives Regulation 2005		
MIGR 2000 Dangerous Incident	Slope stability An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	Cl 146(1)(g)	a progressive stope or progressive pillar collapse	Different More inclusive
MIGR 2000 Dangerous Incident	Guarding – conveyors Isolation of energy Mobile Plant – tyres, rims Ventilation U/G – fumes Working at height An incident at a mine that has the potential to cause loss of life to a number of persons at the mine or in the vicinity of the mine	Reported if the incident results in an injury where the nature of injury and/or injury outcome is notifiable		

# Appendix B.7 COMET Assessment Event Subtypes

Figure 211 COMET Assessment Event Subtypes

Assessment Event Subtype	Description	
Airborne Dust	Evaluation of the implementation of an operation's safety systems and procedures relevant to the control and analysis of airborne dust at the mine.	
Audit	Formal evaluation of site activities, plant and equipment and management systems in relation to compliance with legislation, standards and guidelines.	
Closure	Evaluation of the implementation of an operation's safety systems and procedures relevant to the closure or abandonment of a mine or part of a mine.	
Equipment	Formal or informal inspection of equipment or plant in relation to compliance with legislation, standards and guidelines.	
Explosion Suppression	Sampling inspections, analysis and reports of roadway dust conditions.	
Inspection (Mine Safety)	Formal or informal inspection of site activities, plant and equipment and management systems relevant to the continued safe operation of a mine or health, safety and welfare of persons who work at the mine.	
Investigation	Investigation of a mine incident requiring the collection and analysis of information obtained from premises off-site or not at the mine.	
Management Plans (Safety)	Desk top review of Mine Safety Management Plans in relation to compliance with legislation, standards and guidelines.	
Resource Recovery (Safety)	Evaluation of information on planning, operation and geology in relation to the safe operation of a mine or health, safety and welfare of persons who work at the mine.	
Seminar/Workshop	Review of information presented on safety matters relating to the mining industry.	
Verification	Verification of the implementation of an operation's Mine Safety Management Plan safety systems and procedures	

NB Use of Assessment Event Subtypes may change over time due to changes in recording approach.

# Appendix B.8 Enforcement and Advice Notice Categories and Relevant Legislation

# Figure 212

Enforcement and Advice Notice Categories and Types

Enforcement and Advice Notice Category	Legislation and Enforcement and Advice Notice 1		nt and Advice Notice Type
	*CMRA 1982	S 61	Inspector or mine safety officer to inform mine management of exercise of certain powers
	CMHSA 2002	S 150	Bringing of concerns regarding health, safety or welfare to the attention of operators
Advice/Improvement	*MIA	S 36B	Inspector or mine safety officer to inform mine management of certain matters
	MHSA 2004	S 131	Bringing of concerns regarding health, safety or welfare to the attention of operators
	OHSA 2000	S 91	Issue of improvement notices
	*CMRA 1982	S 63	Inspector may impose prohibitions or restrictions or direct evacuation or closure of mine
	CMHSR 2006	CI 51	Chief Inspector may impose prohibitions or restrictions or direct evacuation or closure of coal operation
Prohibition		S 37	Notice to be given of cause of danger
	*MIA	S 37A	Order to withdraw persons from mine
	MHSR 2007	CI 158	Chief Inspector may impose prohibitions or restrictions or direct evacuation or closure of mine
	OHSA 2000	S 93	Issue of prohibition notices
	OHSA 2000	S 62	Power of Inspectors to obtain information, documents and evidence
Investigation		S 70	Notice of taking or dismantling plant, substances or other things
Investigation		S 72	Receipt for things taken
		S 89	Investigation notice to stop plant or prevent disturbance of premises to allow investigation
Explosives	EXPLR 2005	CI 99	Certain powers of inspectors and police officers

\*indicates repealed legislation

# Appendix B.9 Sources of Data

Figure 213 Sources of NSW Data

Data	Mining Sector	Source
	Coal	<ul> <li>Coal Services Pty Ltd to 2006-07</li> <li>NSW Coal Industry Profiles to 2006-07</li> <li>NSW Trade &amp; Investment Quarterly Workplace Injury Reports – Coal Mine Health and Safety Regulation 2006 Cl 206 from 2007-08</li> </ul>
Employees Hours Worked	Metalliferous Extractives	<ul> <li>Minerals Council of Australia Safety Performance Reports to 2004-05</li> <li>NSW Trade &amp; Investment Mineral Royalty Returns to 2006-07</li> <li>NSW Trade &amp; Investment Quarterly Workplace Injury Reports – Mine Health and Safety Regulation 2007 Cl 155 from second quarter 2008-09</li> </ul>
	Coal	<ul> <li>Coal Services Pty Ltd to 2006-07</li> <li>NSW Trade &amp; Investment Quarterly Workplace Injury Reports – Coal Mine Health and Safety Regulation 2006 Cl 206 from 2007-08</li> </ul>
LTIS	Metalliferous Extractives	<ul> <li>Minerals Council of Australia Safety Performance Reports to 2004-05</li> <li>NSW Trade &amp; Investment Monthly Injury (Non Serious) Forms - Mines Inspection General Rule 2000 Cl 26</li> <li>NSW Trade &amp; Investment Incident and Injury Notifications to first quarter 2008-09</li> <li>NSW Trade &amp; Investment Quarterly Workplace Injury Reports – Mine Health and Safety Regulation 2007 Cl 155 from second quarter 2008-09</li> </ul>
MTIs	Coal	NSW Trade & Investment Quarterly Workplace Injury Reports – Coal Mine Health and Safety Regulation 2006 CI 206 from 2007-08
RDIs	Metalliferous Extractives	<ul> <li>NSW Trade &amp; Investment Quarterly Workplace Injury Reports - Mine Health and Safety Regulation 2007 CI 155 from second quarter 2008-09</li> </ul>
Incidents Fatalities Serious Bodily Injuries Notifiable Injury Outcomes	All	NSW Trade & Investment Incident and Injury Notifications
Assessments Enforcement and Advice Notices	All	NSW Trade & Investment COMET Mine Safety database

Figure 214 Sources of Other National and International Data

Data Source			
Data	Source		
Queensland, Australia	<ul> <li>Commissioner for Mine Safety and Health Queensland Mines Inspectorate Annual Performance Report 2010-11 (data for 2009-10 to 2010-11)</li> <li>Queensland Mines and Quarries Safety Performance and Health Reports 2000-01 to 2009-10 (data to 2008-09)</li> </ul>		
Western Australia	<ul> <li>Safety Performance in the Western Australian Mineral Industry Accident and Injury Statistics 2006-07 to 2009-10</li> <li>Note:         <ul> <li>Coal is surface only</li> <li>Metalliferous excludes construction materials</li> <li>Extractives includes construction materials</li> <li>Exploration is not included</li> </ul> </li> <li>Safety Performance Report of the Australian Minerals Industry – Minerals Council of Australia 2007-08 (data to 2005-06)</li> </ul>		
United States of America	<ul> <li>USA Mine Safety and Health Administration Mine Injury and Worktime, Quarterly Reports from 2006</li> <li>Note:         <ul> <li>Metalliferous includes metallic minerals</li> <li>Extractives includes non-metallic minerals, stone, sand &amp; gravel</li> </ul> </li> <li>Safety Performance Report of the Australian Minerals Industry – Minerals Council of Australia 2007-08 (data to 2005)</li> <li>Note:         <ul> <li>Metalliferous includes metals</li> <li>Extractives includes sand &amp; gravel</li> </ul> </li> </ul>		
Ontario, Canada	<ul> <li>Safety Performance Report of the Australian Minerals Industry – Minerals Council of Australia 2007-08 (data to 2007)</li> </ul>		

# Appendix B.10 Links to Other Sources of Information

- Note: These references to sources of other mining industry injury statistics are provided as a guide only and were correct at the time of compilation. Industry & Investment NSW accepts no responsibility for the content of external sites.
- NSW Trade & Investment Mine Safety www.dpi.nsw.gov.au/minesafety
- WorkCover Authority of NSW Statistical Bulletins
   <u>http://www.workcover.nsw.gov.au/injuriesclaims/Injurystatistics/Pages/default.aspx</u>
- Coal Services Pty Ltd Annual reports
   <u>http://www.coalservices.com.au/annualreports.aspx</u>
- NSW Minerals Council Key Industry Statistics
   <u>http://www.nswmin.com.au/Media-Speeches-and-Info/Key-Statistics/default.aspx</u>
- Queensland Mines and Quarries Safety Performance and Health Reports
   <u>http://www.dme.qld.gov.au/</u>
- Western Australia Department of Mines and Petroleum Resources Safety statistics <u>http://www.dmp.wa.gov.au/</u>
- Minerals Council of Australia Safety and Health Performance Reports <a href="http://www.minerals.org.au/safety/safety/safety">http://www.minerals.org.au/safety/safety</a> and <a href="health">health</a> performance/index.html
- Safe Work Australia data and statistics
   <a href="http://safeworkaustralia.gov.au/AboutSafeWorkAustralia/WhatWeDo/Statistics/Pages/Statistics.aspx">http://safeworkaustralia.gov.au/AboutSafeWorkAustralia/WhatWeDo/Statistics/Pages/Statistics.aspx</a>
- National Data Set for Compensation-based Statistics (NDS) National Online Statistics Interactive (NOSI) (NB NOSI has been decommissioned. See Safe Work Australia.)
- USA Mine Health and Safety Administration
   <u>http://www.msha.gov/</u>
- Association of Workers Compensation Boards of Canada <u>http://www.awcbc.org/en/nationalworkinjuriesstatisticsprogramnwisp.asp/</u>
- South Africa Department of Minerals and Energy Mine Safety statistics <u>http://www.dmr.gov.za/mine-health-a-safety.html</u>

# Industry & Investment NSW – Mine Safety

PO Box 344 Hunter Region Mail Centre NSW 2310

Telephone:(02) 4931 6666Website:www.dpi.nsw.gov.au/minesafetyEmail:mine.safety@industry.nsw.gov.au

# **Regional Offices**

## Maitland

Industry & Investment NSW Mineral Resources 516 High Street Maitland NSW 2320 Phone: (02) 4931 6666 Fax: (02) 4931 6790 Postal: PO Box 344 Hunter Region MC NSW 2310

# Armidale

Industry & Investment NSW Earth Sciences Building (C2) Ring Road North University of New England Armidale NSW 2351 Phone: (02) 6738 8500 Fax: (02) 6772 8664 Postal: PO Box U86 UNE Armidale NSW 2351

# **Broken Hill**

Industry & Investment NSW Level 2, 32 Sulphide Street Broken Hill NSW 2880 Phone: (08) 8088 9300 Fax: (08) 8087 8005 Postal: PO Box 696 Broken Hill NSW 2880 Please note changed PO Box details

# Cobar

Industry & Investment NSW Government Offices 62-64 Marshall Street Cobar NSW 2835 Phone: (02) 6836 6000 Fax: (02) 6836 4395 Postal: PO Box 157 Cobar NSW 2835

# Lightning Ridge

Industry & Investment NSW Miners Association Building Lot 60 Morilla Street Lightning Ridge NSW 2834 Phone: (02) 6829 9200 Fax: (02) 6829 0825 Postal: PO Box 314 Lightning Ridge NSW 2834

## Lithgow

Industry & Investment NSW Hartley Building Suite 1, Level 1, 184 Mort Street Lithgow NSW 2790 Phone: (02) 6350 7888 Fax: (02) 6352 3876 Postal: PO Box 69 Lithgow NSW 2790

# Orange

Industry & Investment NSW 161 Kite Street Orange NSW 2800 Phone: (02) 6360 5333 Fax: (02) 6360 5363 After-hours emergencies only: (02) 6360 5343 Postal: Locked Bag 21 Orange NSW 2800

# Singleton

Industry & Investment NSW Coal Services Building 1 Civic Avenue Singleton NSW 2330 Phone: (02) 6571 8788 Fax: (02) 6572 1201 Postal: PO Box 51 Singleton NSW 2330

# Thornton

Industry & Investment NSW 8 Hartley Drive Thornton NSW 2322 Phone: (02) 4924 4000 Fax: (02) 4924 4080 Postal: PO Box 343 Hunter Region MC NSW 2310

# Wollongong

Industry & Investment NSW State Government Offices Level 3, Block F, 84 Crown Street Wollongong NSW 2500 Phone: (02) 4222 8333 Fax: (02) 4226 3851 Postal: PO Box 674 Wollongong NSW 2500

