

# QUEENSLAND MINING INCIDENT REPORTING SYSTEM

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## SUMMARY

This paper outlines changes to the Queensland Incident Reporting System, which took effect from the 1/7/99. Emphasis is now on reporting "high potential incidents" rather than just lost time injury "accidents". Changes include reporting "High potential" (serious near miss) incidents, human, equipment, environment factors contributing to incidents, permanency of incapacity, time on alternative duties and deletion of redundant information e.g. work experience, shift type. These changes to the reporting system are considered to be a better reflection of the changing safety and health issues relevant to the industry. Collection of this information will help lead to more relevant and effective safety management and reporting within the industry.

## INTRODUCTION

Accident reporting has been a requirement under the Coal Mining Act 1925 and Mines Regulation Act. Statistical analyses of this information commenced in 1984 following development of the current repository of accident information, the Lost Time Accident Database (LTAD), which became operational in 1983.

From 1983 to 1990 only accident information from coal mines was stored in the database. In 1990 a review of the reporting system was conducted, the outcome of which included, a revision of the accident report form (version current until 30/6/99), and storage of accident data from metalliferous mines.

In recent times such issues as reporting/recording "near miss" incidents (cases where no lost time injury occurred, but there was a "high potential" for serious or fatal injury/ies) and the relevance of the Lost Time Injury Frequency Rate (LTIFR) industry standard to reflect the true safety performance of the industry were raised for consideration.

In relation to LTIFR its relevance has been questioned (Bell, 1998) with one factor being the effect from the increasing emphasis on rehabilitation programs within the industry. Such cases where a worker, following an accident, does not "lose time" but instead goes back on alternative/light duties are not

captured and recorded under the definitions of a Lost Time Injury.

The increasing frequency of these cases is arguably a contributing factor to the current improvement in the LTIFR across most sectors of the Queensland mining industry, refer to Figure 1.

Following on from a Mine Safety Review Taskforce in 11/97 and a Queensland Mining Council discussion paper "Collection and Dissemination of High Potential Incident Information" (2/98), a joint committee comprising members from the Queensland Mining Council and Department of Mines and Energy first sat in 6/98 to review the current Queensland Mining accident reporting system.

The outcome of this review committee resulted in a revision of the accident report form and monthly summary of lost time and hours worked submitted by mines and quarries (refer Appendix). These revisions include recording/capturing information on: -

**"High potential"** (or near miss) incidents, defined as "an occurrence, whether or not people were present, which did or had the potential to result in either a fatality or a person receiving a permanent incapacity". The importance of recording these incidents was based on observations that suggest that although the LTIFR is improving, i.e. on a declining trend, fatalities are still occurring. It is considered that collection of any information on incidents that had the potential to cause a fatality or serious injury (permanent disability), would be of benefit to improving safety performance within the industry.

**"Causal factors"** contributing to the incident. These are considered to be underlying factors that lead to the incident occurring, grouped under the categories of human, equipment/material and environment. Recording of these causation factors would help both the mine where the incident occurred and the industry in general identify "reasons" for the incident so that appropriate preventative measures could then be formulated to prevent a recurrence of a similar incident. This approach emphasises a level of incident investigation rather than just reporting and can be utilised in a pro-active approach to improving safety management.

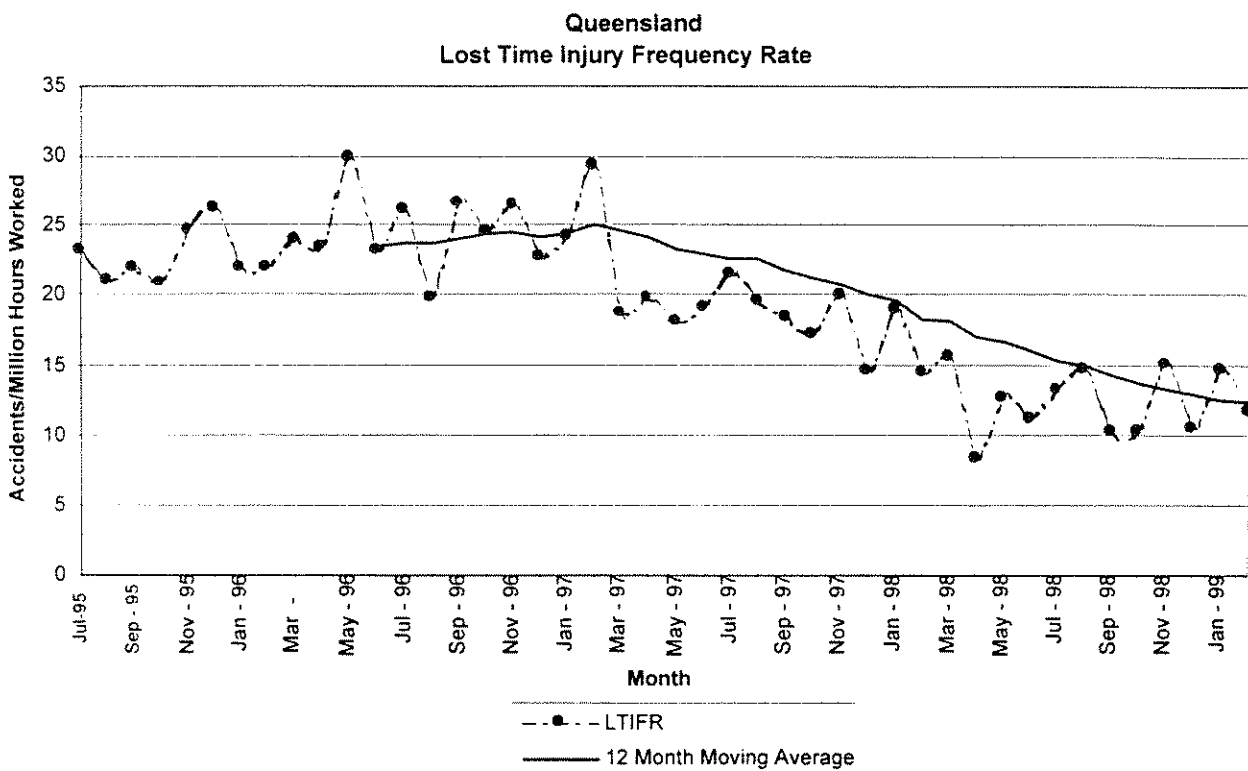
**"Permanent Incapacity"** being any work-related injury or disease that leads to any

permanent loss or impairment of a physical or mental function and may include permanent job transfer or termination of work. Collection of this information will help monitor safety performance levels in terms of serious injury cases. This index is now being considered for, or actually adopted in other states as a relevant new safety performance measure.

"Disabling injuries/alternative duties" being cases where as a result of a work-related injury or disease the person is unable to

resume their normal duties and other/"alternative" duties are assigned. These cases may or may not involve, in part, some lost time (complete absent from duties) during the course of the incapacity. Capture of this information will be instructive to help measure a more "complete" picture of work injuries in terms of their number and subsequent total time lost. This measure will be able to track rehabilitation program levels within the industry and also give a more meaning measure to overall safety performance.

Figure 1: Queensland Lost Time Injury Frequency Rate (All Mines & Quarries)



**PROPOSED OUTPUTS/REPORTS**

With the collection of this new information it is proposed to report the following statistics, starting from the 99/2000 financial year.

For "High potential" incidents, reported by individual mine and sector:-

High potential incidents with no lost time:

- number and type (eg explosion),
- contributing casual factors (human, equipment, environment)

High potential incidents with associated lost time:

- number and type (eg explosion),
- contributing casual factors (human, equipment, environment).

For "Causal Factors", reported by individual mine and sector:-

by human factors:

- number and type, eg fatigue,

by equipment factor:

- number and type, eg design defect,

and by environment factors,

- number and type, eg rain.

For **"Permanent incapacities"** reported by individual mine and sector:-

- the number,
- a "permanent disability frequency rate", ie the number of permanent incapacities per million hours worked,
- contributing casual factors (human, equipment, environment).

For **"Disabling injuries/alternative duties"** reported by individual mine and sector:-

- the number,
- a "disabling injury frequency rate", ie the number of disabling injuries per million hours worked,

## CONCLUSIONS

The continuing improvement in Lost Time Injury Frequency Rates throughout most

sectors, arguably in part a reflection of increasing rehabilitation programs within industry, brings into question the value of this index as an adequate industry safety performance measure. This together with the relatively stable rate of industry fatalities has seen the need to develop a reporting process that more effectively reflects current safety performance and issues within the mining industry. At a national level an ongoing review of safety measures is being undertaken to formulate relevant national safety standard measures. At the state level, a review of these issues has been undertaken and implemented resulting in the reporting by mines and quarries of high potential incidents, disabling injuries, permanent incapacities and causal factors. From analyses of these new safety performance parameters by DME and feedback to the industry, it is felt that this more relevant information on safety performance will contribute to more effective safety management planning. This in turn will ultimately manifest itself in improved safety performance both in terms of accident/incident and fatalities rates throughout the mining industry.

## REFERENCES

Bell S. 1998. Cooking the books: lies, lies and damned statistics. *Australia's Mining Monthly*. p32.

# QUEENSLAND MINING INDUSTRY INCIDENT REPORT FORM XXXXX

## TYPE OF INCIDENT

1.  LOST TIME       HIGH POTENTIAL LOST TIME       HIGH POTENTIAL NO LOST TIME       FATAL

## MINE DETAILS

2. MINE NAME: \_\_\_\_\_

3. MINE TYPE:  COAL SURFACE       COAL UNDERGROUND  
 METALLIFEROUS SURFACE       METALLIFEROUS UNDERGROUND  
 QUARRY       EXPLORATION       OTHER

4. COMPANY CONTACT: \_\_\_\_\_ Ph: \_\_\_\_\_

## INJURED PERSON DETAILS (if applicable)

5. SURNAME: \_\_\_\_\_ 6. DATE OF BIRTH (DDMMYYYY):

7. FIRST NAME AND INITIAL: \_\_\_\_\_ 8. SEX  M  F

9. WORK ACTIVITY AT TIME OF INCIDENT: \_\_\_\_\_ OR DISEASE/EXPOSURE

10. TYPE OF EMPLOYEE  FULL TIME       PART TIME       CONTRACTOR  
      ↓

## DATE AND TIME

COMPANY NAME: \_\_\_\_\_

11. DATE OF INCIDENT (DDMMYYYY):

12. TIME OF INCIDENT (24 HOUR CLOCK):

13. DATE OF FIRST FULL WORKING DAY LOST (if applicable) (DDMMYYYY):

## INCIDENT DETAILS - CAUSES & DESCRIPTION

14. WHAT HAPPENED LEADING UP TO THE INJURY/INCIDENT? DESCRIBE IN TERMS OF THE FOLLOWING POSSIBLE CONTRIBUTING FACTORS:-  
HUMAN:     
\_\_\_\_\_  
\_\_\_\_\_

EQUIPMENT / MATERIALS:     
\_\_\_\_\_  
\_\_\_\_\_

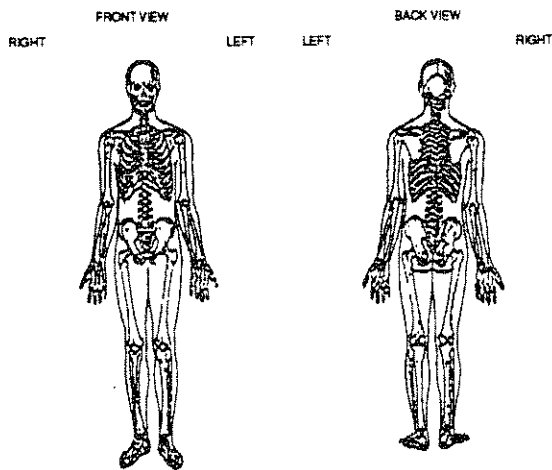
ENVIRONMENT:     
\_\_\_\_\_  
\_\_\_\_\_

15. WHAT HAPPENED UNEXPECTEDLY?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

16. HOW EXACTLY WAS THE INJURY OR DISEASE SUSTAINED OR COULD HAVE BEEN SUSTAINED?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**DESCRIPTION OF ACTUAL PERSONAL DAMAGE (if applicable)**

17. LOCATION OF ACTUAL PERSONAL DAMAGE : INDICATE TYPE OF DAMAGE AT EACH SITE



- AM TRAUMATIC AMPUTATION, INCL. LOSS OF EYEBALL
- BU BURN
- CA CANCERS AND OTHER NEOPLASMS
- CD DISEASE OF CIRCULATORY SYSTEM (INCL. HEART DISEASE, HYPERTENSION)
- CO CONTUSION WITH INTACT SKIN SURFACE AND CRUSHING INJURY (EXCL. THOSE WITH FRACTURE)
- DE DERMATITIS AND OTHER ECZEMA
- DF DEAFNESS
- DI DISLOCATION
- EC EFFECTS OF WEATHER, EXPOSURE AND OTHER EXTERNAL CAUSES NOT ELSEWHERE CLASSIFIED (INCL. ELECTROCUTION)
- FB FOREIGN BODY
- FR FRACTURE (EXCL. VERTEBRAL COLUMN)
- FV FRACTURE OF VERTEBRAL COLUMN WITH OR WITHOUT SPINAL CORD LESION
- HE HERNIA
- IC INTRACRANIAL INJURY, INCL. CONCUSSION
- II INTERNAL INJURY OF CHEST, ABDOMEN AND PELVIS
- MD DISORDERS OF MUSCLES, TENDONS AND OTHER SOFT TISSUE (INCL. TENOSYNOVITIS, BURSTITIS)
- ME MENTAL/EMOTIONAL (EG. STRESS)
- NI INJURY TO NERVES OR SPINAL CORD WITHOUT EVIDENCE OF SPINAL BONE INJURY
- OW OPEN WOUND NOT INVOLVING TRAUMATIC AMPUTATION
- PO POISONING AND TOXIC EFFECTS OF SUBSTANCES
- PD DISEASE OF RESPIRATORY SYSTEM (INCL. ASTHMA, PNEUMOCONIOSIS)
- SS SPRAIN/STRAIN
- SU SUPERFICIAL INJURY (EG. ABRASION)
- OT OTHER

18. DESCRIPTION OF PERSONAL DAMAGE: \_\_\_\_\_ IS THIS A PERMANENT INCAPACITY? YES  NO

\_\_\_\_\_

\_\_\_\_\_

**WORKSITE LOCATION**

19. LOCATION OF INCIDENT: \_\_\_\_\_

SURFACE  UNDERGROUND

**EQUIPMENT DETAILS**

20. PRIMARY EQUIPMENT/TOOL INVOLVED IN INCIDENT (INCLUDE MAKE & MODEL)

DESCRIPTION: \_\_\_\_\_

21. SECONDARY/OTHER EQUIPMENT/TOOL INVOLVED IN INCIDENT (INCLUDE MAKE & MODEL)

DESCRIPTION: \_\_\_\_\_

**SHIFT DETAILS**

22. TIME SHIFT STARTED (24 HOUR CLOCK):

SHIFT DURATION (HOURS:MINUTES)

**PREVENTATIVE ACTION**

23. HAVE ANY CONTROL MEASURES BEEN CONSIDERED TO PREVENT RECURRENCES? YES  NO

24. IF YES, GIVE DETAILS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SIGNATURE: \_\_\_\_\_ (DESIGNATION) DATE: \_\_\_\_\_


# QUEENSLAND MINING INDUSTRY MONTHLY INCIDENT SUMMARY.

REPORT FOR THE MONTH: \_\_\_\_\_ YEAR: \_\_\_\_\_ MINE/QUARRY: \_\_\_\_\_ COMPANY: \_\_\_\_\_

HOURS WORKED AT THE MINE DURING THE MONTH: \*COMPANY EMPLOYEES \_\_\_\_\_ WORK HOURS \*CONTRACTORS: \_\_\_\_\_ WORK HOURS

(FROM: \_\_\_\_\_ TO: \_\_\_\_\_ INCLUSIVE, IF NOT EXACT CALENDAR MONTH)

FORM NO.	NAME	BRIEF DESCRIPTION OF PERSONAL DAMAGE (INCLUDE BODY LOCATIONS)	DATE OF FULL WORKING DAY LOST (if applicable)	NO. OF WORKING DAYS LOST THIS MONTH (if applicable)	DATE OF ALTERNATE DUTIES (if applicable)	DAYS ON ALTERNATE DUTIES THIS MONTH (if applicable)	TOTAL NO. OF WORKING DAYS LOST AND/OR ON ALTERNATE DUTIES	STATE OF WORK (PS) OR TERMINALLY (T) OR ON ALTERNATE DUTIES (A)	EMPLOYER'S PERFORMANCE (P)	WORKCOVER REFERENCE NO. (if applicable)
<b>NEW / DISABLING INCIDENTS THIS MONTH (1)</b>										
<b>CARRY OVERS FROM PREVIOUS MONTHS: LIST ORIGINAL INCIDENT FORM NUMBER (2)</b>										
<b>RE-OPENING CLAIMS (RETURNED TO WORK, BUT HAD TO CEASE WORK AGAIN) LIST ORIGINAL INCIDENT FORM NUMBER (3)</b>										

1. LIST ALL NEW CASES OF COMPANY EMPLOYEES AND CONTRACTORS OFF WORK DURING THE MONTH
2. LIST CARRY-OVER INCIDENTS FROM PREVIOUS MONTH
3. LIST ALL RE-OPENED CLAIMS - LIST ORIGINAL FORM NUMBER
4. ALL MINES AND QUARRIES PLEASE FORWARD A COPY OF THIS REPORT TO: (1) DISTRICT INSPECTOR OF MINES, (2) STATISTICIAN, SAFETY AND HEALTH DIVISION, DEPARTMENT OF MINES AND ENERGY, PO BOX 194, BRISBANE 4001. MARKED CONFIDENTIAL.

SIGNATURE \_\_\_\_\_  
(DESIGNATION)

DATE: \_\_\_\_\_