Professional Standards in the Queensland Mining Industry

The Role of the Australasian Insitute of Mining and Metallurgy'

Bruce Ham

BE (Mining), BSc (Geology), MCom (Economics) and MSc (OHS)

10/25/2013

Introduction

- AusIMM and CP Program
- Work Health and Safety Act 2011
- Coal Mining Safety and Health Act 1999
- Queensland Professional Engineers Act
- Engineers Australia
- Australian WHS Strategy 2012 2022
- Safe Design of Structures Code
- SIA Body of Knowledge Project

Australasian Institute of Mining and Metallurgy

- Professional organization for the minerals sector
- All members are bound by ethical standards.
- Avenues for communications and networking
- Provides advocacy on industry issues
- Professional development and technical program
- Numerous committees covering special interests

10/25/2013

Chartered Professional' Program

- By-laws 'Chartered Professional'
- Areas of practice and expected levels of competence are outlined.
- Guidelines include Safety, health and risk
- Applications desk-top assessment
- A program of continuing professional development is expected and is audited

Safety & health Components

- Implementing workplace safety systems.
- Support occupational / general health programs.
- Undertaking health and safety auditing.
- Planning and implementing of risk management,
- Planning identifying and monitoring existing and potential hazards.
- Enabling of control measures and processes

10/25/2013

Work Health and Safety Act 2011

- Obligations Section 19 Primary duty of care A person conducting a business to ensure the health and safety of workers etc
- Regulations 35 Management of risk
- (a) eliminate risks to health and safety so far as is reasonably practicable; otherwise
- (b) minimise those risks so far as is reasonably practicable

Coal Mining Safety and Health Act 1999 – S 42 - SSE

- '(a) to ensure the risk to persons from coal mining operations is at an acceptable level;
- (c) to implement a single safety and health management system for all persons at the mine;
- (d) to develop, implement and maintain a management structure ..
- (e) to train coal mine workers so that they are competent to perform their duties;

10/25/2013

Coal Mining S & H Regs 2001 S 49 – Monitoring Exposure to Hazards

- (1) A coal mine's safety and health management system must provide for periodic monitoring of the level of risk from hazards at the mine that are likely to create an unacceptable level of risk.
- (2) The system must also provide for notice of any appreciable increase in the level of risk to a coal mine worker at the mine to be given to the worker's employer.

Queensland Professional Engineers Act - 2002

- Objective protect the public by registration and professional and competent service
- PE service requires, or is based on, the application of engineering principles and data to a design, or to a construction or production activity, relating to engineering
- Annual self reporting of fitness to practice
- Auditing by Assessing Entities who make recommendations based on the results of their

PE Continuing competency requirements

Maintain competency in the practice of engineering in the area registered.

May include —

- the nature, extent and period of practice;
- continuing professional development;
- research, study or teaching,
- administrative work, relating to engineering.

PE Act Assessing entities – S 112B

- (a) the scheme provides for the assessment of qualifications and competencies of engineers in an identifiable area of engineering; and
- (c) the scheme includes procedures for the assessment that are conducted in an independent and professional manner; and
- (d) the entity conducting the scheme has adequate procedures for monitoring and improving the assessment process carried out under the scheme

10/25/2013

Co-regulation role with AusIMM

- engineers are capable of designing, constructing and operating plant and facilities in such a way that the risk to workers and the public is constrained to acceptable levels.
- Chartered Professional status recognised as meeting the requirements of a registered professional engineer.

Engineers Australia

- CPD activities are designed to extend knowledge, skill or judgement and enable professionals to:
- Maintain technical competence
- Retain and enhance effectiveness in the workplace
- Be able to help, influence and lead others by example
- Successfully deal with changes in your career
- Better serve the community

10/25/2013

Health and safety and associated risk assessment (E A)

- identify, assess and manage risks that could be caused by material, economic, social or environmental factors
- establish and maintain a documented audit trail of technical and operational changes
- assess the likelihood of each event, and the consequences

General Industry Workplace Health and Safety Competency Standards

- 1. Hazard identification, risk assessment and control
- 2. Work environment
- 3. Noise
- 4. Plant
- 5. Electrical
- 6. Hazardous substances
- 7. Manual tasks
- 8. Information, instruction, training and supervision,

10/25/2013

Australian Work Health and Safety Strategy 2012 - 2022

Action Area 1 - Health and safe by design

- Hazards are eliminated or minimised by design
- Structures, plant and substances are designed to eliminate or minimise hazards and risks before they are introduced into the workplace.
- Work, work processes and systems of work are designed and managed to eliminate or minimise hazards and risks

Work Australia (2012) "Safe Design of Structures" Code of Practice

- Use a risk management approach
- Consider the lifecycle
- Knowledge and capability
- Consultation, co-operation and co-ordination
- Information transfer

10/25/2013

Body of Knowledge Project - Safety Institute of Australia

- Project provided for an outline of the scope of occupational health and safety
- Assists in developing a standards for education health and safety professionals
- Provides a check list for professionals in other areas to ensure they have identified the OHS issues that need to be addressed as a part of their professional and statutory responsibilities

Conclusions

- Identifying, eliminating and /or controlling hazards at the design stage
- Code of Practice for Safe Design of Structures".
- Professional Engineers Act 2002 requires professional engineering services are provided.
- AusIMM 'peer group' assessment process is in place to recommend engineers for registration.
- Should demonstration of Safe Design practices should be incorporated in the process for initial and on-going registration of engineers.