

Emergency Management

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This session

- 1. Emergency Management Legislative requirements**
- 2. Types of Hpi's**
- 3. Audit Findings (based on DNRM inspectorate Inspections)**
 - Common issues in Emergency preparedness**

Legislative requirements relating to OCE Involvement – CMSHR section 35

- (1) A coal mine's safety and health management system must provide for managing emergencies at the mine.
- (2) The system must include provision for the following—
 - (a) **identifying, by risk assessment, potential emergency situations;**
 - (b) **minimising risks associated with potential emergency situations;**
 - (c) **carrying out aided rescue and self-escape of persons** from the mine in an emergency;
 - (d) **carrying out emergency exercises**, including testing the effectiveness of emergency management procedures and the readiness and fitness of equipment for use in an emergency;
 - (e) **auditing and reviewing the emergency exercises;**



Section 35 (f) surface mine – involving an OCE for the mine in

(i) developing and testing the emergency management procedures for activities, including mining activities, in and around the surface excavation;

And

(ii) auditing the documentation for the procedures;

Recognised Standard 8- conduct of Mine Emergency Exercises

https://www.dnrm.qld.gov.au/data/assets/pdf_file/0020/240374/recognised-standard-08.pdf

The four levels of the exercises are –

- Level 1 – State Level Exercise (N/A to Open cut)
- **Level 2 – Major Mine Site Exercise**
- **Level 3 – Minor Mine Site Exercises**
- **Level 4 – Supporting Exercises**



Types of HPI's .. 32 Open Cut mines x 15 months= 1294- Indication of Emergencies

High Level	Low Level	Total
Cable		54
Collision	Vehicle	133
Electric Shock		36
Electrical	Contact with equipt	1
Electrical Burn		1
Electrical Failure		10

Fall from Height		2
Fire	Electrical	5
Fire	Equipment	248
Fire	Explosives truck	1
Fire	Fixed plant	28
Fire	Grass	5
Fire	Hot work	12
Fire	Sponcomb	17
Fire	Tyre	6
Insufficient ERT		1
Isolation Breach		6
Lifting		1
Mechanical		2
Storm		1

Explosives	Downline severed	5
Explosives	Exceeds Site Licence	1
Explosives	Flyrock	10
Explosives	Fume	26
Explosives	Gas following blast	1
Explosives	Lead pulled out	1
Explosives	Misfire	278
Explosives	MPU kept Pumping	1
Explosives	Other	3
Explosives	Perimeter breach	7
Explosives	Security	8
Explosives	Slumped hole	5
Explosives	Theft	1
Explosives	Truck over hole	11
Explosives	Unplanned ignition	1

Structural Failure	Equipment	38
Structural Failure	Lifting	4
Structural Failure	Plant	2
Tyre		4
Unplanned Movement	Equipment	234
Unplanned Movement	Falling Obstacles	4
Unplanned Movement	Lifting	3
Unplanned Movement	Other	5
Unplanned Movement	Strata	32
Unprotected Edge		4
Vehicle Interaction		3
Serious Accidents		32

Audit

Emergency response capability was identified as an Inspectorate priority by the Mine Commissioner Safety and Health

Mines Inspector Darryl Casey has been seconded to a project from December 2014 and has inspected 11 open cut mines + undergrounds & quarries

Results shown in the next page

- Mines names have been intentionally left out

\Emergency Response analysis looked at..

Emergencies Responded in last 12 mths		Emergency response Capability		Incident Management Team	
	Debriefs conducted		Contract or Operator		Role owners trained
Activation			ERT - adequate number/shift		Set Up
First response			ERT Competencies	Emergency Management Exercises	
Incident Co-ordination			Medical	Rec Std 8	Level 2 exercises - Yearly
On scene control			Co-Ordination		Level 4
Emergence Response Plans			Equipment		
	Risk assessment		Equipment Maintenance		
	Plan	External Emergency response			
	Procedures		Mutual Assistance		
	Scenario , RARP's , Guidelines		Distance to Mutual assistance		
			External QFRS , SES, etc		
			Distance to External support		
			Involvement QMRS		

Audit result findings

	Directive	1									
	SCP		2	3	2		3	1	4	1	2
Emergencies Responded in last 12 mths											
	Debriefs conducted										
Activation											
First response											
	Incident Co-ordination	Dispatch	Dispatch	Dispatch	Dispatch		OCE/Supervisor	Dispatch	Dispatch	Dispatch	Dispatch
	On scene control	OCE/Sup	Sup/OCE	Sup/OCE	Sup/OCE		Sup/OCE	Sup/OCE	Sup/OCE	Sup/OCE	Sup/OCE
Emergency Response Plans											
	Risk assessment										
	Plan										
	Procedures										
	Scenario , RARP's , Guidelines										
Emergency response Capability											
	Contract or Operator	C	O	O	O	C	C	O	C	O	O
	ERT - adequate number/shift		2 to 3	>4	>4	3	1	3	4	7 to 8	4
	ERT Competencies										
	Medical	Paramedic - each shift	-	Paramedic - each shift	-	Nurse	Nurse	-	Paramedic -each shift	Paramedic D/S	Paramedic - each shift
	Co-Ordination										
	Equipment										
	Equipment Maintenance										
External Emergency response											
	Mutual Assistance										
	Distance to Mutual assistance	15		15			5		5		
	External QFRS , SES, etc										
	Distance to External support	25	15	50	15	50		15	50	50	60
	Involvement QMRS										
Incident Management Team											
	Role owners trained										
	Set Up										
Emergency Management Exercises											
	Rec Std 8	Level 2 exercises - Yearly	24/11/2014	13/12/2013		May-14		27/11/2014	16/12/2014	26/03/2014	9/09/2014
	Level 4		15/04/2014								
	Legend		S	D							
			SCP	Directive							

Issues Identified...

Risk assessment adequacy

Training of the On Scene Control

Training of the Incident Co-Ordination - Dispatch

Identification of Emergency Scenarios or RARP's

Contractor ERT training in "Mining scenarios"

Adequate manning in Owner Operator ERT

Mutual Assistance agreements which are maintained & checked

Level 2 exercises being undertaken each year