



**SEPTEMBER 2011**

**Mine Health and Safety  
Inspectorate:  
Monthly Regional Newsletter**

**MPUMALANGA REGION**

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**mineral resources**

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

## **1. TOPICAL ISSUES OF THE MONTH**

### **1.1 Hours of Work**

From accident statistics it has become clear that fatigue is contributing to accidents on the mines, especially when twelve hour shifts are worked. On the South African Mine Reportable Accident Statistics System form (SAMRASS–1 and 2) there is a requirement to indicate whether an accident occurred in overtime or normal time. Time worked in excess of eight hours, although it may be the employee’s normal shift, must be reported as overtime. This will enable this office to at least keep track of accidents that occur after persons have been at work for more than eight hours.

### **1.2 Correspondence with the Principal Inspector**

The Principal Inspector and his staff frequently receive telephone calls and e-mails from safety officers on mines requesting assistance regarding the Mine Health and Safety Act and Regulations. In many cases the Principal Inspector or Inspector just has to quote from the Mine Health and Safety Act and Regulations to solve the problem.

From these inquiries, it has occurred to the Principal Inspector how little some of the appointed safety professionals know about the law. Furthermore, it is a concern that the various levels of management on the mine should be in a position to assist with matters regarding the Mine Health and Safety Act and Regulations, however, these matters are still channeled directly to the Principal Inspectors office.

The Principal Inspector is always prepared to help but he has a very busy schedule. If a problem is of such a nature that management on the mine cannot assist, it would be appreciated if the relevant manager calls him. E-mails from safety officers will no longer be replied to.

Managers sending e-mails must please identify themselves and the mine they represent. The Principal Inspector receives e-mails that make statements, sometimes incorrect statements containing the following “if you do not reply I will accept that you approve.” He will not respond to these statements and will not take responsibility for any damage or prosecution that may result.

The Principal Inspector also receives e-mails with attachments relating to dust results and applications for exemptions, permissions and approvals. The office of the DMR is not equipped to be a “paperless” office. The documents submitted are often not signed by the appointed manager. Any such documents will therefore be ignored. Information relating to accidents may be sent to [piet.mashiane@dmr.gov.za](mailto:piet.mashiane@dmr.gov.za)

### **1.2 Blasting at Opencast Mines**

Surface blasting operations undertaken by mines in close proximity to each other poses a significant risk to both operations. Managers must ensure that blasting procedures are in

place which will ensure that adjacent mines are adequately warned to ensure that areas within the blasting exclusion zone are cleared before blasting takes place.

The mine performing the blasting operations will be held responsible for any damage or injuries which may result from the blast.

### **1.3 Haul Road Safety Berm Construction and Accumulations of Water**

During September two fatal accidents occurred when ADT's breached the safety berms and landed in water which was 3,0m deep. Both the operators were drowned in the accidents.

The design of safety berms must be covered in the TMM COP to provide adequate protection to vehicles using the haul roads. Accumulations of water must also be adequately protected to prevent unauthorized entry by persons. Life saving equipment must be provided at pumping points in the event of a person falling into the water.

## **2. OCCUPATIONAL HEALTH**

Employers are reminded to ensure that adequate risk assessment is performed to ensure that the fatal dangers of unventilated areas, dead ends or confined spaces are clearly identified. The risk of asphyxiation, noxious gasses and heat stroke are fatal risks which need particular attention.

## **3. OCCUPATIONAL SAFETY**

### **3.1. Fatal Accidents**

Seven fatal accidents were recorded during the month of September 2011.

- On the 9<sup>th</sup> September a fall of ground accident took place at a platinum mine. The rock drill operator was killed when he was struck by the fall of ground.
- On the 10<sup>th</sup> September an articulated dump truck breached a safety berm and landed in 3,0m deep water. The operator drowned when the vehicle landed upside down in the water.
- On the 13<sup>th</sup> September a Bell hauler breached a safety berm at an aggregate crushing operation and landed in 3,0m deep water. The operator drowned.
- A team leader fell down an ore pass in a gold mine and was killed. Two proto members lost their lives during the rescue operation when they became entangled at the dog leg in the ore pass and were overcome by heat stroke.
- A shift boss was crushed between a feeder breaker and the side of the belt road whilst removing the feeder breaker with a loader.

### 3.2 Accidents reported

The mines in the region reported thirty five (35) accidents during September 2011, of which six (6) were fatal accidents and seven (7) were non casualty accidents.

The accidents per category were as follows:

General accidents	12
Transport and mining	6
Fall of ground	5
Machinery	3
Other	2
Non-casualty	7
<b>Total</b>	<b>35</b>

### 3.2. Details of accidents per mining Groups

	September 2011		Year Progressive		Projected Rate/1000 employees	
	Injured	Fatals	Injured	Fatals	Injured	Fatals
<b>Coal Mines</b>						
Sasol Coal	2	1	27	2	3.47	0.25
Exxaro	1	-	11	3	2.44	0.66
BECSA	4	-	21	-	2.25	-
Kangra Coal	-	-	5	-	6.13	-
Anglo Coal	1	-	20	1	2.73	0.13
Anker Coal	-	1	7	1	10.90	1.56
Xstrata Coal	3	-	19	-	4.06	-
Shanduka Coal	-	-	2	-	1.02	-
Total Coal SA	-	-	7	-	3.05	-
Umcebo Mining	-	-	3	-	2.06	-
Kuyasa Mining	1	-	1	-	2.13	-
Coal Of Africa	1	-	9	-	7.94	-
Siphethe Coal	-	-	1	-	3.24	-
Sudor Coal	-	-	1	-	1.66	-
Optimum Coal	2	-	11	-	2.81	-
Private Mines	3	-	10	-	5.31	-
<b>Gold &amp; Platinum</b>						
Harmony Gold	2	2	12	2	6.62	1.10
Aquarius Plat	-	1	11	2	5.94	1.08
Great Basin Gold	3	-	11	-	9.95	-
Pan African Resource	-	-	4	-	2.71	-
Private Mines	-	-	4	-	1.65	-
<b>Other Mines</b>						
Private Mines	2	1	14	1	3.62	0.25
<b>TOTAL</b>	<b>22</b>	<b>6</b>	<b>211</b>	<b>12</b>	<b>3.58</b>	<b>0.20</b>

### 3.3 ACCIDENT COMPARISON WITH PREVIOUS YEARS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2011	2010	2009	2008	2007	2006	Projected	% Improve
FATALS	0	3	0	0	0	0	3	0	6				12	13	23	25	23	20	16	-23%
DISABLED	0	0	0	0	0	0	0	0	0				0	1	0	0	0	0	0	100%
INJURIES	15	24	25	20	28	24	25	26	22				209	293	382	460	334	363	279	5%
NON-CASUALTIES	6	4	7	4	9	8	9	3	7				57	78	77	49	75	68	76	3%
TOTAL	21	31	32	24	37	32	37	29	35	0	0	0	278	385	482	534	432	451	371	4%

UNDERGROUND	10	22	19	15	23	12	21	19	19				160	216	292	345	295	319	213	1%
SURFACE	10	5	9	5	7	11	9	4	10				70	114	131	133	101	99	93	18%
OPENCAST	1	4	4	4	7	9	7	6	6				48	55	59	56	36	33	64	-16%
TOTAL	21	31	32	24	37	32	37	29	35	0	0	0	278	385	482	534	432	451	371	4%

FOG	0	6	2	1	2	4	3	4	5				27	28	49	80	63	70	36	-29%
MACHINERY	1	3	4	1	5	1	2	5	3				25	26	36	61	39	42	33	-28%
T&M	4	4	7	8	7	7	8	7	6				58	85	78	115	92	118	77	9%
GENERAL	8	12	9	9	10	10	8	8	12				86	148	162	205	142	150	115	23%
OTHER	8	6	10	5	13	10	16	5	9				82	98	157	73	96	71	109	-12%
TOTAL	21	31	32	24	37	32	37	29	35	0	0	0	278	385	482	534	432	451	371	4%

COAL	18	19	27	20	30	25	29	21	24				213	325	311	322	245	297	284	13%
GOLD	1	6	0	1	4	7	2	3	7				31	27	116	87	103	90	41	-53%
PLATINUM	0	5	0	2	1	0	5	3	1				17	7	16	47	33	30	23	-224%
OTHER	2	1	5	1	2	0	1	2	3				17	26	39	68	51	34	23	13%
TOTAL	21	31	32	24	37	32	37	29	35	0	0	0	278	385	482	534	432	451	371	4%

**NOTE: see attached annexure for brief descriptions of accident reports received during September 2011**

## 4. AUDITS, INSPECTIONS AND INVESTIGATIONS

### 4.1 Inspections: September 2011.

	PLANNED	ACTUAL
Mining inspections	21	23
Occupational Hygiene inspections	12	13
Occupational Medicine inspections	12	20
Machinery inspections	36	45
Statutory equipment inspections	0	0

### 4.2 Audits: September 2011

	PLANNED	ACTUAL
Health and Safety management systems audit. (Group)	4	3
Occupational Health Audits (Hygiene and Medical)	12	21
Occupational Safety Audits (Mining and Machinery)	29	15

#### Non conformances found during audits and inspections:

##### Medical

- Employees working with expired certificates of fitness.
- Occupational diseases not submitted for compensation.
- Occupational medical practitioner not appointed.
- Employees working without pre-employment certificates of fitness.

##### Occupational hygiene

- Under-reporting of dust levels
- Last through road velocity below standard.
- Headings not positively ventilated.
- Sub-standard stone dust application.

##### Engineering

- The safety system on the cable drum (mushroom switch) faulty.
- No guards on pulley and drives of conveyor belt.
- ADT with worn tyres.
- Excavator operated with door open – air conditioner faulty.
- Trackless mobile machine left idling and unattended.
- Deviations on machines (either priority “A”, “B” or “C”) are reported but not fixed and operators continue using these machines.
- Operators not trained on the lock out and TMM procedure.
- No notices at substations.
- Pull wire not operational.

- Return idler seized.
- Non adherence to mine parking procedures.
- Oil leaks on TLB.
- No fire extinguisher as required by mine standard.
- Damaged windscreen.
- LHD operator not adhering to lock out procedure.
- Tip attendant not using hearing protection.
- Lifting without necessary tools.
- Gas cylinders not secured.
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#### Mining

- Mining off line and creating excessive bord widths.
- Sub standard support.
- Sub standard procedure for installing grizzly at ore pass.
- Persons entering unsupported areas.
- Health and safety committees not functional.
- Sub standard rock bolt installation.
- No first aid equipment available.
- Poor explosives control.
- Stone dust not up to date.
- Sub standard barring at start of shift examination.

#### General

- Mine accidents not reported on SAMRASS.
- Persons not wearing required PPE.
- Shift boss logbooks, miner declarations and pre-use checklists not up to date.
- Refuge bays are not complying with the requirements.

## **5. SECTION 54 / 55 INSTRUCTIONS**

### **5.1 Compliance notices in terms of Section 55.**

Five Section 55 instructions were issued in August 2011 and they include the following:

- Health and safety committee to be established.
- Supervisors not in possession of valid first aid certificates.
- Occupational diseases not submitted for compensation.
- Appoint occupational medical practitioner.
- Employees working without pre-employment certificates of fitness.

## **5.2 Improvement instruction in terms of Section 54.**

One Section 54 improvement instruction was issued in September 2011 to attend to oil leaks on TMM and train operators regarding pre-use checklists.

## **5.3 Stoppage instructions in terms of Section 54.**

Nine Section 54 stoppage instructions were issued in September 2011 and they include the following;

- Employees working with expired certificates of fitness (2 instructions issued).
- Mines were stopped for total non compliance to MH&S Act.
- A shuttle car was stopped for a faulty safety device on cable drum.
- Conveyor belts were stopped for no guards on pulleys and drives and no pull wires.
- ADT's were stopped for worn tyres.
- Operations suspended due to fatal accidents (3 instructions issued).
- A conveyor belt was stopped due to no risk assessment for conveyor belt installation done.
- TMM's were stopped due to "A" class risks not being rectified.

## **6. EXAMINATIONS**

### **6.1 Mine Overseer' Certificate of Competency**

Four Mine Overseer Boards were held during September 2011.

### **6.2 Lampman's and Onsetter's Certificates**

No Boards held for Lampsman and Onsetters' Certificates.

## **7. LEGISLATION**

No new legislation updates were received during September 2011.

## **8. REGIONAL OVERVIEW**

### **8.1 Safety achievements**

No notifications were received during September 2011.

**LJA BEZUIDENHOUT  
PRINCIPAL INSPECTOR  
MPUMALANGA REGION**

**BRIEF ACCIDENT DESCRIPTION – MPUMALANGA REGION**  
**RECEIVED DURING SEPTEMBER 2011**

1.	A rock dislodged from the hanging wall and struck him on his back fatally injuring him.
2	Drove ADT over the safety berm and high wall into the pit resulting in the operator drowning when the ADT was submerged in water.
3	The driver drove a fully loaded articulated dump truck from quarry area to the jaw crusher; the truck left the haul road and the driver drowned when the vehicle was submerged in 3,0m deep water.
4	A team leader was killed when he fell down the ore pass whilst installing the grizzly in the raise.
5	Two proto members died as a result of heatstroke, while attempting to recover the body of a team leader that fell down an ore pass.
6	A Shift Boss was fatally injured when he was crushed between the pillar and the feeder beaker whilst being towed by a LHD.
7	A Pit Viper operator noticed a fire on the Pit Viper drill rig starter when switching on the machine.
8	A haul truck drove straight into the safety berm.
9	A haul truck drove into the lighting plant.
10	He ran down the stairs when his foot got stuck and fell.
11	The operator of an ADT drove through an undulation on the road near the loading face and bumped his head against the right side window of the ADT causing a laceration to the right side of his head.
12	He was installing a sprag between the coal cutter and the rib side when the rib side collapsed and fell onto his right lower leg.
13	A blasting attendant was injured while charging a face.
14	He made contact with the live contacts inside the cable drum causing an electrical burn on the outside of his left hand.
15	He was in the process of off-loading coal from the shuttle car at the feeder breaker, during this off-loading process his left index finger was caught between the flight chain motor and the cab of the shuttle car.
16	He was found lying next to a brazier in the weigh bridge security cabin. He was removed and resuscitated.
17	She was busy cleaning using a shovel and picking up loose bricks in a bent position. When she tried to stand up she felt a pain at her lower back.
18	After installing a duff chute his right leg got caught between the tractor and belt structure.
19	While cutting in Road No.7, split 15, flammable gas from the floor on bottom right hand side of the heading was ignited causing a flash.
20	The electrician noticed smoke from the engine compartment of a LDV, on closer inspection a small flame was seen on electrical wiring.

21	A fire incident occurred at main belt conveyor drive.
22	His left ring finger got caught between the screen and the deck.
23	He was busy offloading the transformer guard from the trailer, the guard door closed and his right thumb was pinched between the frames.
24	A power pack was lying on a bed of duff and he positioned himself alongside the power pack with his back to it. The power pack slid and fell over injuring his back.
25	A roof slab dislodged and fell onto his right lower leg.
26	A fall of ground incident measuring at 8.0m by 5.0m by 1.2m occurred.
27	He was walking from the parking bay to the workshop when the arm support of one of the crutches he was using broke off and he lost his balance and fell.
28	He was demolishing a redundant air crossing when the wall fell and struck him.
29	He was waiting to load at the waiting place. When he got up he experienced pain in his right ankle.
30	He was busy tightening a gasket at sump 12 when the gasket blew out. He spun around and twisted his right ankle.
31	He was transporting a pump when a rock dislodged from a side wall and struck his left index finger.
32	He was moving a fan in the drive past a hopper when his left ring finger was caught between the hopper and the fan.
33	He was busy with refresher training, after climbing down the stairs he slipped and twisted his ankle.
34	His jacket was caught between the tail-end pulley and conveyor belt and his arm got fractured against the structure.

**Because managers and employers are required to sign the SAMRASS forms, they are requested to ensure that a brief, meaningful and correct description of the accidents are submitted to assist with the correct presentation of information contained in the short descriptions above.**