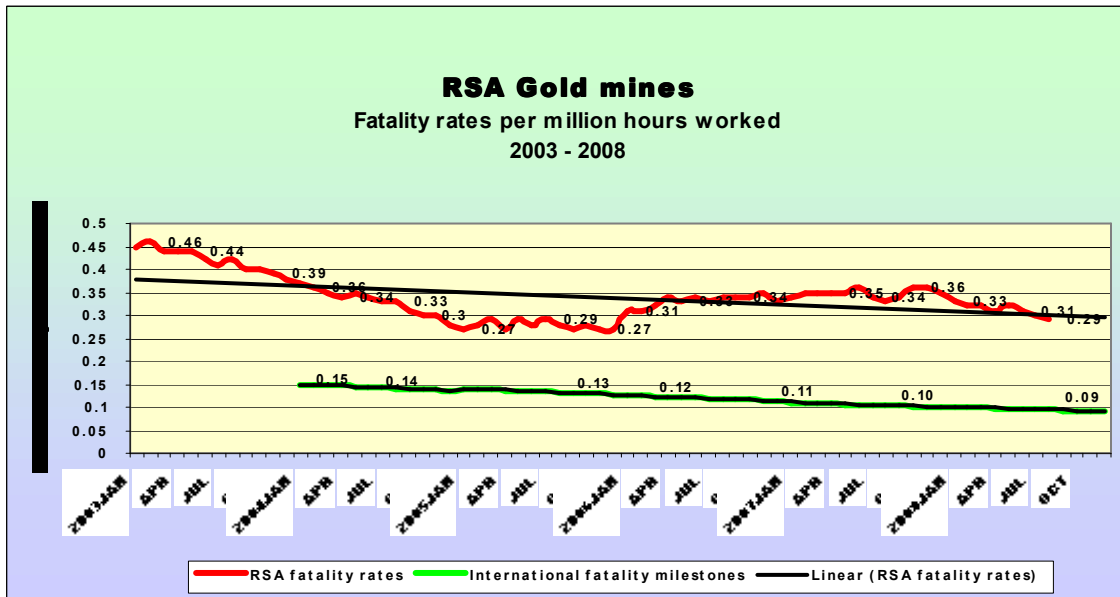


# MONTHLY Newsletter

## Analysis of accidents reported during August 2008



ing with respect to the number of fatalities reported in August 2008 are listed below:

- **Gold sector**  
Five (5) fatalities and 146 injuries were reported.
- **Platinum sector**  
Five (5) fatalities and 26 injuries were reported.
- **Coal sector**  
Two (2) fatalities and 22 injuries were reported.
- **Other sector**  
No fatalities and 7 injuries were reported.

The total number of accidents reported during August 2008 totalled 201 accidents of which

12 were fatalities and 194 injuries. The gold sector remains to be

the main contributor to mining related deaths. The performances of different sectors of min-

The safety performance during August 2008 by classification:

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## Mining Summit 2008: "Creating a conducive mining environment - pursuing the paradigm shift"

For the fourth year running, the Department of Minerals and Energy (DME) declared the Mining Summit to coincide with Electra Mining Africa. The Mining Summit was held at NASREC in Gauteng from 9-10 September 2008. The event aimed to promote South African mining and attract local and foreign investment into the mining industry.

The Mining Summit was a multi-stakeholder event which included government, labour and civil society. It was hosted by the Advisory Board of the Minister of Minerals and Energy. Mrs. Brigitte Radebe, Deputy Chairperson of the Advisory Board of

the Minister of Minerals and Energy chaired the round table discussion targeted at decision makers pursuing the paradigm shift in the mining industry on 9 September 2008. Adv. Sandile Nogxina, Director-General to the DME chaired the event on the second day of the event targeting

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## Platinum sensitivity

Exposure to platinum salts is mainly confined to occupational environments.

The symptoms of hypersensitivity include urticaria, contact dermatitis of the skin and respiratory disorders ranging from sneezing, shortness of breath and cyanosis to severe asthma.

The latency period from first contact with platinum to the occurrence of the first symptoms varies from a few weeks to several years. Once sensitization is established, symptoms tend to become worse as long as the workers are exposed to platinum salts in the workplace. Usually these symptoms disappear on removal from exposure.

However, if long duration exposure occurs after sensitization, individuals may never become

completely free of the symptoms. The term "platinosis" is no longer used for platinum-salt-related diseases, as it implies a chronic fibrosing lung disease such as silicosis. Instead, "platinum salt allergy", "allergy to platinum compounds containing reactive halogen ligands", and "platinum salt hypersensitivity" (PSH) have been used, the last being preferred.

The clinical manifestations of platinum salt hypersensitivity reflect a true allergic response. It is believed that the platinum salts of low relative molecular mass act as haptens that combine with serum proteins to form the complete antigen.

Skin prick tests with diluted concentrations of soluble platinum complexes appear to provide

reproducible, reliable, reasonably sensitive and highly specific biological monitors of allergenicity.

Smoking, atopy, and non-specific pulmonary hyper-reactivity have been associated with platinum salt hypersensitivity and could be predisposing factors.

No data are available to assess the carcinogenic risk of platinum or its salts to humans. Repeated exposure to soluble platinum salts may cause both respiratory and skin allergies.

### Summary of toxicology.

- Soluble platinum salts in the form of dusts and sprays causes asthma, skin sensitisation and eye irritation. Elemental platinum does not produce these effects.
- Removal from platinum salt exposure result in almost

immediate relief of asthma, the dermatitis usually clears in one to two days but may be persistent. In the eyes the dust cause a burning sensation, lacrimation and conjunctival hyperemia sometimes associated with photophobia.

### Monitoring and measurement procedures

- Measurements to determine employee exposure are the best taken so that the average eight-hour exposure is based on a single eight-hour sample.
- Air samples should be taken in the employee's breathing zone. (Air that would most nearly represent that inhaled by the employee).

*Amori van der Merwe*

## Analysis of accidents reported during August 2008

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- **Fall of ground (FOG)**  
Four (4) fatalities and 78 injuries were reported.
- **Machinery**  
One (1) fatality and 20 injuries were reported.
- **Transportation and mining**  
Two (2) fatalities and 50 injuries were reported.
- **Conveyance accidents**  
Five (5) injuries were reported.
- **Electricity**  
Four (4) injuries were reported.
- **Heat Sickness**  
Twelve (12) cases were

reported.

- **Miscellaneous**  
Nine (9) injuries reported.
- **Explosives**  
Four (4) injuries were reported.
- **General**  
Three (3) fatalities and 148 injuries were reported.

The general category refers to fatalities caused by accidents as a result of slipping and falling, fall of material/rolling rock, manual handling of material and mineral, falling in or from burning and scalding and death as result of exposure to dust, gas and fumes. The performance during August 2008 per region are listed below:

- **Gauteng region**  
Four (4) fatalities and 55 injuries were reported.
- **North West region**  
Five (5) fatalities and 62 injuries were reported.
- **Free State region**  
No fatalities and 38 injuries were reported.
- **Limpopo / Northern region**  
One (1) fatality and 15 injuries were reported.
- **Mpumalanga region**  
Two (2) fatalities and 30 injuries were reported.
- **Northern Cape region**  
No fatalities and six (6) injuries were reported.
- **KwaZulu-Natal region**

**On 30 September 2008, the Free State region stood at 68 fatality free days.**

No fatalities and one (1) injury was reported.

- **Western Cape region**  
No fatalities and no injuries were reported.
- **Eastern Cape region**  
No fatalities and one (1) injury was reported.

When these figures are compared to August 2007 there is an increase of 9% in fatal accidents and a decrease of 35 % in injuries.

*Anthony Coutinho*

## Mining Summit 2008: “Creating a conducive mining environment - pursuing the paradigm shift”

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implementers in the industry.

The motivation for the DME to organize this Summit was set by the imminence of the mid-term review of the Mining Charter, as a precursor to the review of the Charter in 2009.

The Summit focused on engaging different stakeholders on the crucial issues that are affecting the mining industry and collectively to find a basis for accelerating a sustainable environment for the South African mining industry and its stakeholders.

Issues under discussion, amongst other were:

- Infrastructure supporting the mining industry;
- Energy supply to the industry;
- Skills;
- Social Contract for sustainable mining development
- Community issues;
- Equity ownership;
- Early development funding;
- Taxation; and
- Other issues facing the mining industry.

The discussions on Tuesday, 9 September 2008 were attended by the Ministers of Minerals and Energy, Water Affairs and Forestry, Transport and Communications. It was also attended by Premiers, Director-Generals of other Government Departments, Chief Executive Officers of mining houses, the Chamber of

Mines and other affected companies as well as representatives from the mining industry.

Mr. Zokwane, President of the National Union of Mineworkers (NUM), Mr. Diliza, the Chief Executive Officer of the Chamber of Mines and Mr. Johnson, Chairman of SAMDA were the speakers at the first day addressing issues on labour and the mining industry.

The discussions on the second day were attended by General Managers, Mine Managers and lower ranking officials within the mining industry. During this session exactly the same issues were discussed as on the first day, but the level of discussion differed.

Electra Mining Africa is a biennial event and it is strongly supported by both the Departments of Minerals and Energy (DME) and Trade and Industry (DTI). This event is ranked as one of the most important and largest mining shows on the international calendar.

The DME participated in the Electra Mining Africa exhibition and the attendees of the Summit as well as the public could obtain the information on:

- Mining and mineral exploration
- Mine health and safety
- Mineral regulation
- Beneficiation; and
- Small-scale mining.

*Renée Joubert*

## Medical surveillance of contractors

The Policy Unit of the Mine Health and Safety Inspectorate (MHSI) conducted a study on medical surveillance of contractors recently. The aim of the study was to explore measures that the Department of Minerals and Energy (DME) could implement in order to facilitate the compliance of medical surveillance of contractors at the mines. A qualitative survey in the form of interviews and questionnaires were conducted amongst contractor co-ordinators, contractor managers and employee representatives from the National Union of Mine Workers (NUM), Occupational Medical Practitioners, and Occupational Health Inspectors of the Department.

The challenge of medical surveillance exists where the employees of contractors are employed at different mines, or even workplaces outside of the mines. The challenges include costly medical examinations repeated frequently, which expose employees to unnecessary x-rays.

Employees' contracts are terminated to contractors without employees being referred for exit medical examinations. Compliance with record keeping is failing due to logistical reasons to keep track of the contractor's employees.

The findings of the study were as follows:

- The South African mines comply with the medical surveillance of permanent

employees.

- These mines do not provide their contracted employees with the same services as permanent employees.
- The managers of contractor employees are held liable by the mines to arrange for medical surveillance of contracted employees and to bear the costs.
- However, contractors that often have small businesses cannot afford these costs. The difference in service delivery for permanent and contracted employees poses a challenge in cases of emergencies, as the mine casualty departments do not admit contractor employees without the contractor manager's authorisation.
- The Occupational Medical Practitioners employed by the mines do not readily accept baseline medical surveillances done at previous employment.
- Consequently, medical surveillances have to be repeated that are usually not risk-based and exposes employees to unnecessary x-rays.
- The exit medical examinations are not done.
- There is a problem with the enforcement agency as Occupational health inspectors rely on the integrity of employers with regard to

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# Hazardous Location Regulations

In February 2008 the "Hazardous Location" regulations were promulgated and were applicable to all hazardous locations. Hazardous locations are those areas that are defined in the regulations.

This article will not cover the actual wording of these regulations but will address issues that have been raised since these regulations have been promulgated.

All equipment used in a hazardous location must have an Inspection Authority (IA) certificate.

## 1. What is this IA certificate and where is it obtained?

The IA certificate is a certificate that is issued by an accredited test laboratory (ATL) that certifies

that the equipment mentioned on the certificate is compliant with a standard that ensures that the equipment is safe to use in a hazardous location.

## 2. Does an IA certificate cover the entire machine or must there be individual certificates for components?

There must be individual certificates for the different pieces of equipment but it is required that an overall certificate be issued for the complete machine. This ensures that the different components are connected in such a manner as to ensure that the complete unit is compliant with the required standards

## 3. What is the validity of an

## IA Certificate?

An IA certificate is valid for the entire time that the machine is in use. The validity will only expire if any alteration or change has been done to the equipment that affects the relevant certificate eg. If a flame proof light fitting is changed to another type this would invalidate the IA certificate. More information can be obtained from the following standards SANS 10108 "2004 (Edition 5), "The classification of hazardous locations and the selection of apparatus for use in such locations" and ARP 0108 "Regulatory requirements for explosion protected apparatus" Both of these Standards are listed in the regulations

## 4. What will happen to the old VM and D numbers that were issued by the Department of Minerals and Energy?

These certificates are still valid for equipment that is in use. Any new equipment supplied to the

mining industry, that had a VM or D number, will be required to be recertified by an accredited Test Laboratory. The period for recertification will be communicated to the mining industry in due course.

## 5. What is an Accredited Test Laboratory?

An accredited Test Laboratory is a laboratory that has been accredited by the South African National Accreditation System to conduct tests as specified on its schedule of accreditation.

## 6. What are the requirements when the flammable gas level exceeds 1.4% by volume?

The regulation requires the isolation of all electrical power if the percentage flammable gas in the general body of air exceeds 1.4% by volume unless the equipment has been certified as intrinsically safe (equipment and supply) supply or the equipment is certified as double protected.

*Anthony Coutinho*

# Medical surveillance of contractors

*From page 3*

reports about contracted employees.

- There are also problems with inspectors reporting systems. There is no prescribed form for keeping of service records of employees. The inspectors reporting systems are designed to provide statistics on occupational diseases and are not linked to the risks that employees are exposed to.

The study recommended that a linkage should be established between the medical surveillance

and occupational hygiene measures in the MHSI reporting systems. Furthermore, it recommended that a prescribed form for keeping service records and exit medical records should be developed.

The idea of centralising medical surveillance clinics should be explored.

Employers are reminded that the Mine Health and Safety Act, 1996 (act No 29 of 1996) does not regard contractor employees as separate from mine employees. Therefore they must be afforded the same treatment.

*Pessy Mnisi*

## Diarize the following:

### December 2008

- 19: Closing date for applications for remarks for Mine Surveyors.
- 24: Closing date for applications for remarks for Mine Managers.

### January 2009

- 09: Submission of remarks by moderators for Mine Surveyors.
- 10: Availability of the November 2008 results for Mine Engineers.
- 13: Closing date for applications for remarks for Mine Engineers.
- 16: Submission of remarks by moderators for Mine Managers.

### February 2009

- 08: Reviewing of examination scripts for Mine Engineers.

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