



Mine Health and Safety Inspectorate

Annual Report | 2010/2011

Department of Mineral Resources
Private Bag X59
Arcadia
0007

T 012 444 3000
F 012 444 3160
www.dmr.gov.za
RP 109/2011
ISBN: 978-0-620-40150-9



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA



ACOSH	Advisory Council for Occupational Health and Safety	NIOH	National Institute of Occupational Health
AIDS	Acquired Immune Deficiency Syndrome	NMPS	National Minerals Promotion System
AQI	Air Quality Index	NOSHCON	National Occupational Safety and Health Conference
ASPASA	Aggregate and Sand Producers' Association of South Africa	NQF	National Qualifications Framework
CIOM	Chief Inspector of Mines	NSP	National Strategic Plan
COAD	Chronic Obstructive Airway Disease	NUM	National Union of Mineworkers
COP	Code of Practice	OEL	Occupational Exposure Limit
CSIR	Council for Scientific Industrial Research	OHS	Occupational Health and Safety
CSM	Cold Stress Management	OMP	Occupational Medical Practitioner
DG	Director-General	PGM	Platinum Group Metals
DME	Department of Minerals and Energy	PTB	Pulmonary Tuberculosis
EE	Employment Equity	RMDEC	Regional Mining Development and Environment Committee
EMP	Environmental Management Plan	SABS	South African Bureau of Standards
EMPR	Environmental Management Programme Report	SADC	Southern African Development Community
FIFA	Federation of International Football Associations	SAMINDEX	South African Minerals Information Database
GIS	Geographic Information Systems	SAMODD	South African Mines Occupational Diseases Database
GTT	Government Task Team on Mine Closure and Water Management	SAMRASS	South African Mines Reportable Accidents Statistical System
HDI	Historically Disadvantaged Individuals	SANAC	South African National Aids Council
HDSA	Historically Disadvantaged South Africans	SAPS	South African Police Service
HIV	Human Immune Virus	SAGA	South African Qualifications Authority
JIPSA	Joint Initiative for Priority Skills Acquisition	SDM	Systems Development and Maintenance Directorate
KRA	Key Responsibility Areas	SIMRAC	Safety in Mines Research Advisory Committee
LDC	Legal Drafting Committee	SMME	Small Micro and Medium Enterprises
MBOD	Medical Bureau of Occupational Diseases	STI	Sexually Transmitted Infections
MHSA	Mine Health and Safety Act, 1996	TB	Tuberculosis
MHSC	Mine Health and Safety Council	TRG	Technical Research Group
MHSI	Mine Health and Safety Inspectorate	TTG	Technical Task Group
MOHAC	Mine Occupational Health Advisory Committee	UASA	United Associations of South Africa
MPRDA	Mineral and Petroleum Resources Development Act, 2002		
MQA	Mining Qualification Authority		
NCMMA	Northern Cape Mine Managers' Association		
NIHL	Noise Induced Hearing Loss		

table of contents

1. GENERAL INFORMATION	2
1.1. Submission of the Annual Report to the Executing Authority	2
1.2. Chief Inspector of Mines' Overview / Executive Summary	3
1.3. Legislative Mandate	4
1.4. Mission Statement	4
2. PROGRAMME PERFORMANCE	5
2.1. Service Delivery Objectives and Indicators	6
2.2. Service Delivery Improvement Plan	16
3. STATE OF SAFETY AND HEALTH AT MINES	17
3.1. Occupational Safety	18
3.2. Occupational Health	22
4. ACTIVITIES OF THE INSPECTORATE	41
4.1. National Overview	42
4.2. Regional Operations – Coal	42
4.3. Regional Operations – Gold and Platinum	57
4.4. Regional Operations – Other Mines and Offshore	72
4.5. Chief Directorate: Technical Support	83
4.6. Chief Directorate: Occupational Health	86
4.7. Directorate: Support Services	86
4.8. Mine Health and Safety Legal Services	90
5. ANNEXURE A	91
6. ANNEXURE B	93
7. ANNEXURE C	97

preface

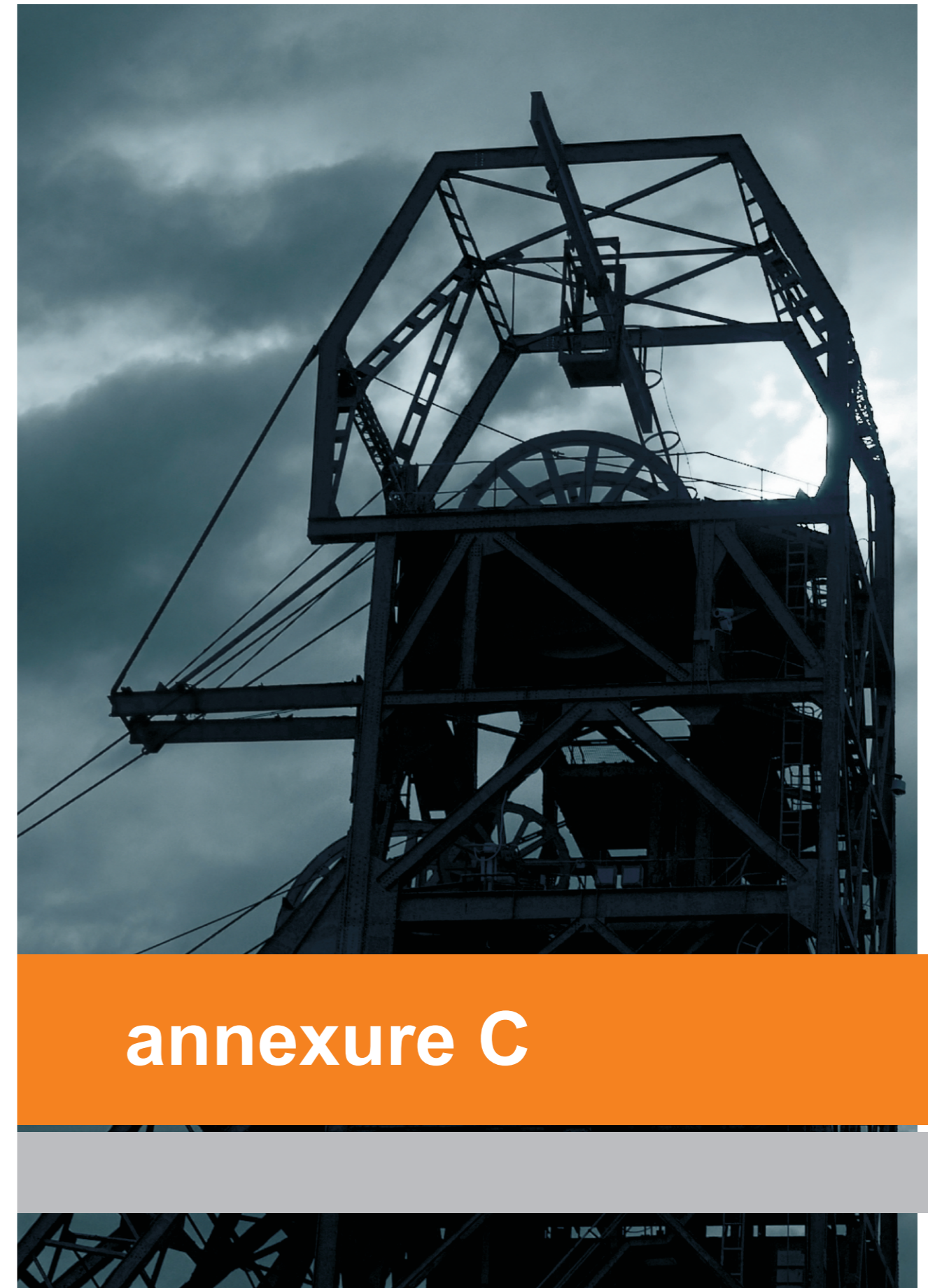
This document is a report by the Chief Inspector of Mines (CIOM) on health and safety at mines and the activities of the Mine Health and Safety Inspectorate, compiled as required by Section 49(1)(j) of the Mine Health and Safety Act (MHSA), 1996 (Act No. 29 of 1996).

The Mine Health and Safety Inspectorate (MHSI) established in terms of the MHSA, 1996 has the responsibility of protecting the health and safety of people working at mines or affected by mining activities.

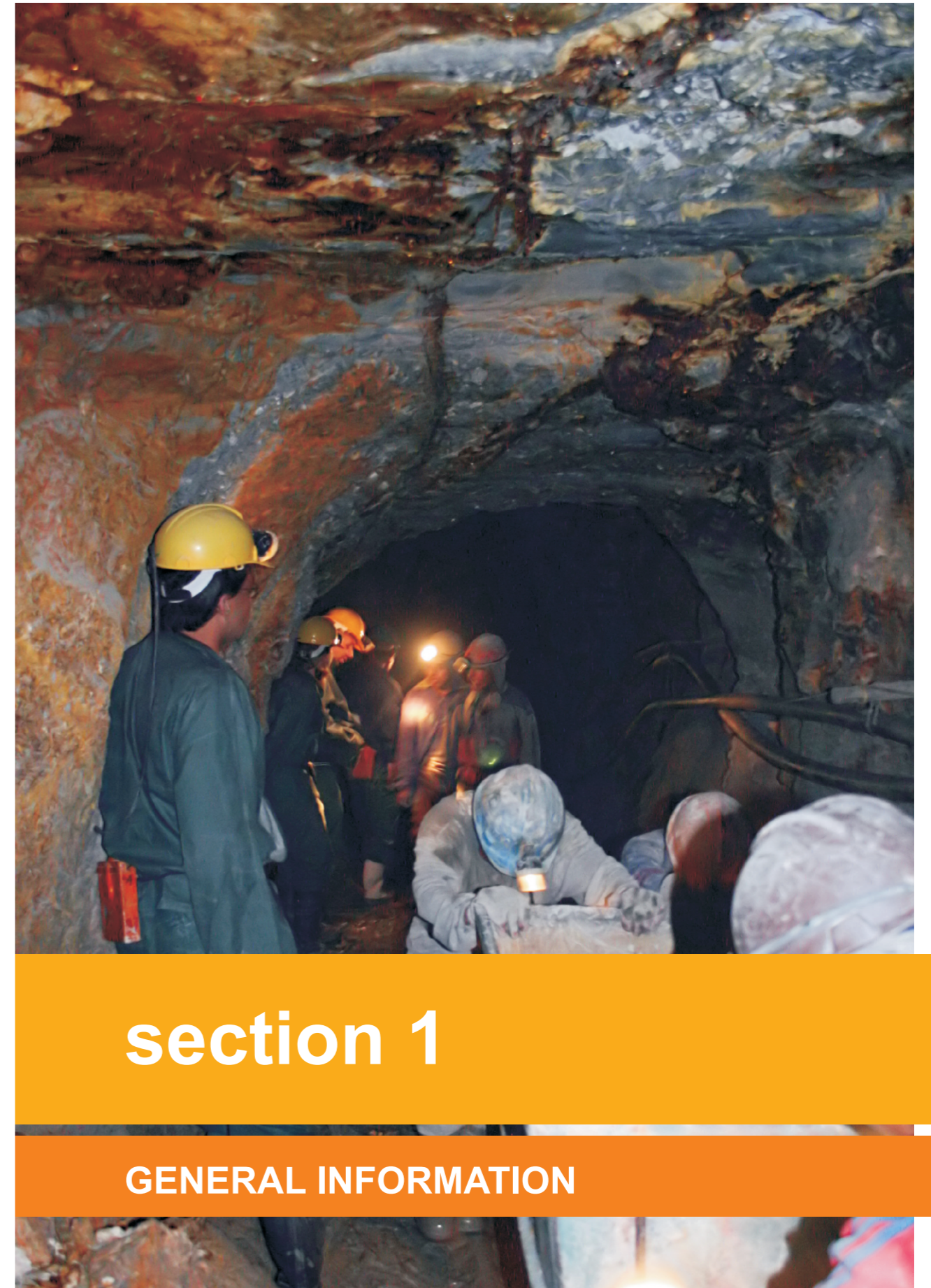
The CIOM also has the responsibility of leading the tripartite structures formed in terms of the MHSA as the chairperson of the Mine Health and Safety Council (MHSC) and the Mining Qualifications Authority (MQA).

The MHSC consists of representatives from the state, employee and employer organizations. The Council was established to advise the Minister on health and safety issues and promoting a healthier and safer culture in the mining industry.

The MQA is an education and training authority for the minerals and mining sector and is responsible for the education and training needs of the mining industry. The activities of the above-mentioned two bodies are intricately interlinked with that of the MHSI and their accounts are captured in their respective reports.



annexure C



section 1

GENERAL INFORMATION

I. general information

1.1 Submission of the Annual Report to the Executing Authority

The Honourable Susan Shabangu, MP
Minister: Department of Mineral Resources
Republic of South Africa

Dear Minister

I am pleased to present to you the annual report of the Mine Health and Safety Inspectorate for the 2010-2011 reporting period. This report is in accordance with the requirements of Section 49(1) (j) of the Mine Health and Safety Act, 1996 (Act No. 29 of 1996).

Yours sincerely



D Msiza
Acting Chief Inspector of Mines
Mine Health and Safety Inspectorate

POSITION	OFFICIAL	WORK TEL	WORK FAX	ADDRESS	EMAIL
Principal Inspector of Mines: Eastern Cape	Mr TM Doyle	041 396 3940	041 373 8171	Private Bag X6076 PORT ELIZABETH 6000	megan.singh@dmr.gov.za
Principal Inspector of Mines: Free State	Mr J Tsoeute	057 391 1371/3	057 352 2270	Private Bag 33 WELKOM 9460	jessica.erasmus@dmr.gov.za
Principal Inspector of Mines: Gauteng	Mr MN Madubane	011 358 9776	011 339 6910	Private Bag X5 BRAAMFONTEIN 2017	nokhaya.magudumana@dmr.gov.za
Principal Inspector of Mines: KwaZulu-Natal	Mr S Jivhuho	031 333 9626	031 305 5803	Private Bag X54307 DURBAN 4000	sindy.dlamini@dmr.gov.za
Principal Inspector of Mines: Limpopo	Mr NJ Phakathi	015 287 4705	015 287 4740	Private Bag X9467 POLOKWANE 0700	nancy.montana@dmr.gov.za
Principal Inspector of Mines: Mpumalanga	Mr LA Bezuidenhout	013 653 0500	013 690 2390	Private Bag X7279 WITBANK 1035	loraine.coetzee@dmr.gov.za
Principal Inspector of Mines: Northern Cape	Mrs GE Babuseng	053 807 1735	053 832 8527	Private Bag X6093 KIMBERLEY 8300	rosy.sereko@dmr.gov.za
Principal Inspector of Mines: North West	Mr T Ngwenya	018 487 9867	018 487 9836	Private Bag XA1 KLERKSDORP 2570	elizabeth.phali@dmr.gov.za
Principal Inspector of Mines: Western Cape	Mr HJOP Smith	021 427 1004	021 427 1047	Private Bag X9 ROGGE BAY 8012	ntombikayise.ntlenzi@dmr.gov.za
Mining Qualifications Authority: Chief Executive Officer	Mr S Seepei	011 630 3506	011 832 1044	Private Bag X118 MARSHALLTOWN 2017	heileneS@mqa.org.za
Mine Health and Safety Council: General Manager	Mr TE Gazi	011 656 1797	011 656 1796	Private Bag X63 BRAAMFONTEIN 2017	inyathi@mhsc.org.za

POSITION	OFFICIAL	WORK TEL	WORK FAX	ADDRESS	EMAIL
Chief Inspector of Mines	Vacant	012 444 3972	086 710 0910	Private Bag X59 ARCADIA 0007	ane.pieterse@dmr.gov.za
Regional Operations Manager: Coal	MR MMA Zondi	012 444 3663	012 341 2271	Private Bag X59 ARCADIA 0007	lindiwe.sekwati@dmr.gov.za
Regional Operations Manager: Gold and Platinum	Mr D Msiza	012 444 3662	012 341 2271	Private Bag X59 ARCADIA 0007	mokgadi.lesoka@dmr.gov.za
Regional Operations Manager: Other Mines	Mr TT Dube	012 444 3649	012 341 2271	Private Bag X59 ARCADIA 0007	freda.seeema@dmr.gov.za
Chief Director: Occupational Health	Vacant		012 341 2271	Private Bag X59 ARCADIA 0007	
Chief Director: Technical Support Unit	Mr X Mbonambi	012 444 3676	012 341 2271	Private Bag X59 ARCADIA 0007	arista.muller@dmr.gov.za
Director: Mine Safety	Mr A Coutinho	012 444 3611	012 341 2271	Private Bag X59 ARCADIA 0007	portia.sokhulu@dmr.gov.za
Medical Inspector	Dr D Mokoboto	012 444 3624	012 341 2271	Private Bag X59 ARCADIA 0007	pertunia.makhubela@dmr.gov.za
Director: Occupational Medicine	Vacant		012 341 2271	Private Bag X59 ARCADIA 0007	
Director: Occupational Hygiene	Vacant		012 341 2271	Private Bag X59 ARCADIA 0007	
Director: Mine Health and Safety Legal Services	Mr G Ndamse	012 444 3274	012 444 3131	Private Bag X59 ARCADIA 0007	mmasello.maimela@dmr.gov.za
Director: Mine Surveying	Mr D Rae	012 444 3791	012 444 3135	Private Bag X59 ARCADIA 0007	goitseman.sekwati@dmr.gov.za
Director: Support Services	Ms DVP Mathibeli	012 444 3547	086 710 1406	Private Bag X59 ARCADIA 0007	lydia.sekgobela@dmr.gov.za

1.2. Chief Inspector of Mines' Overview / Executive Summary

Introduction

It is with great honour and pleasure that I present this report on the state of health and safety in the South African mining industry and the activities of the MHSI for the 2010/11 financial year.

Staffing

The establishment of the Inspectorate provides for 297 posts of which 233 are currently filled and 64 posts are vacant. The demographics of the Inspectorate as on 31 March 2011 was as follows:

Gender	African	White	Asian	Coloured	Total
Male	98	49	0	1	148
Female	64	18	0	3	85

Human Resource Development

During the reporting period, the Inspectorate continued to develop the skills and knowledge base of its staff as follows:

- Eighty-three officials attended WITS training on the following modules:
- Inspection, audit and investigation methods
- Mine Health and Safety Act Legal Enforcement Part I
- Mine Health and Safety Act Legal Enforcement Part II
- Principles of Occupational Health and Hygiene Part I

This training will continue during the next financial year, with the training schedule as set-out for the rest of the year.

- Thirty four staff members attended other administrative and technical courses.

A total number of 19 Learner Inspectors are currently undergoing practical training at various regional offices of the Department. Objective of the Training programme was for the Learner Inspectors to obtain their Government Certificate of Competency.

Health and Safety Performance

The safety track record in the South African mining industry continues to be a matter of great concern to the Department although the mining industry has in the last year managed to record a 24% year-on-year reduction in fatalities due to mine accidents. A total of 168 mine employees died in 2009 when compared with 127 fatalities in 2010. Fall of Ground (FOG) accidents still remain the largest accident category and the predominant cause of fatalities followed by transportation and machinery categories respectively.

Occupational health impacts are not immediate and hence difficult to quantify. Silicosis remains a major cause of premature retirement and death at South African mines due to excessive dust exposure. On the other hand, tuberculosis (TB) continues to be a serious challenge for the mining industry and this is exacerbated by HIV and AIDS. Noise Induced Hearing Loss (NIHL) is also a significant health hazard due to exposures to high levels of noise in working places.

Disaster-type Accidents

An underground fire was detected at Harmony's, Phakisa Mine in the Free State and two proto teams were sent down to investigate. An explosion took place whereby three members of the proto teams were fatally injured and another two members subsequently died from their injuries. Another massive FOG was responsible for the death of five mineworkers at Aquarius, Marikana Mine near Rustenburg.

HIV/AIDS and Occupational Health

A new Chief Directorate was established within the Inspectorate to focus on occupational health since more people are dying from occupational diseases than from occupational injuries within the South African mining industry. Silicosis is still of major concern to the Inspectorate, especially in the gold mining sector. Research conducted through the Mine Health and Safety Council (MHSC) is focused on ways of reducing excessive exposure to silica dust to prevent silicosis. The milestone targets require that hearing conservation programmes should be implemented to prevent noise induced hearing loss, whereby there should not be hearing deterioration of 10% or more amongst occupationally exposed individuals.

Tuberculosis (TB) remains the main challenge within the South African mining industry and this picture has not changed over the years as this has been aggravated by HIV-infections. The Department has commissioned the National Institute of Occupational Health (NIOH) to conduct a study on HIV and TB in the mining industry in terms of prevalence and incidence. The final report has been completed and will be discussed during a HIV/TB Summit to be held during 2011.

Key Policy Development and Legislative Changes

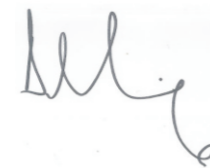
The Amendment of the Mine Health and Safety Act (Act 29 of 1996) (MHSA) is underway. Consultations with affected parties will be done during the 2011/2012 financial year and further

consultations will continue until 2012. It is envisaged that the amendments will be adopted and approved during the 2011/12 financial year.

The review of the Mine Health and Safety Act seeks:

- To strengthen enforcement provisions;
- To simplify the administrative system for the issuing of fines;
- To reinforce offences and penalties;
- To substitute or add to and thus endeavor to remove ambiguities in certain definitions and expressions; and
- To effect certain amendments necessary to ensure consistency with other laws, particularly the Mineral and Petroleum Resources Development Act, 2002 (MPRDA).

Both the Enforcement and Administrative Fine Guidelines have been reviewed and approved during the 2010/2011 financial year to assist in strengthening the enforcement function of the Mine Health and Safety Inspectorate.



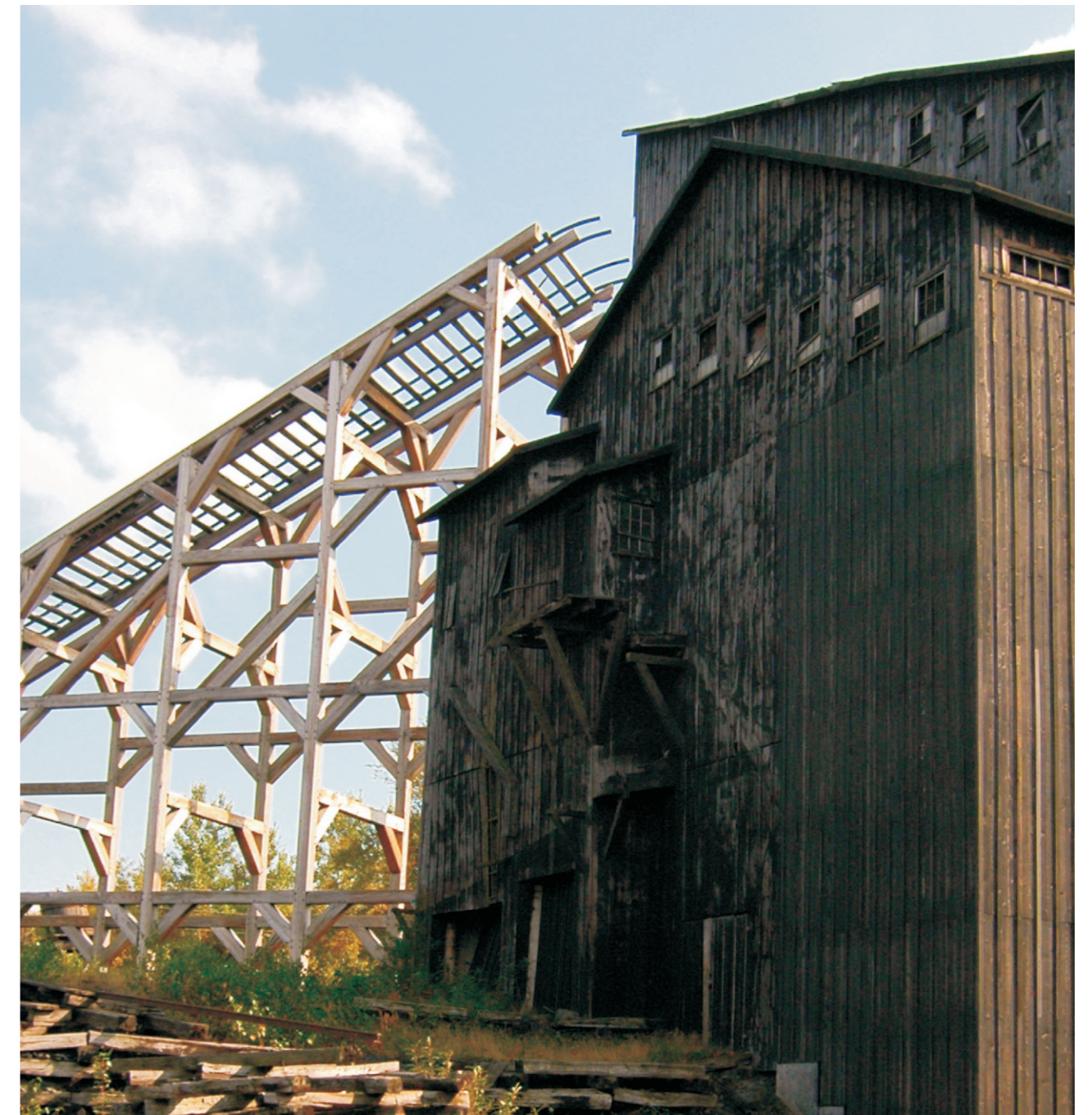
D MSIZA
ACTING CHIEF INSPECTOR OF MINES

1.3 Legislative Mandate

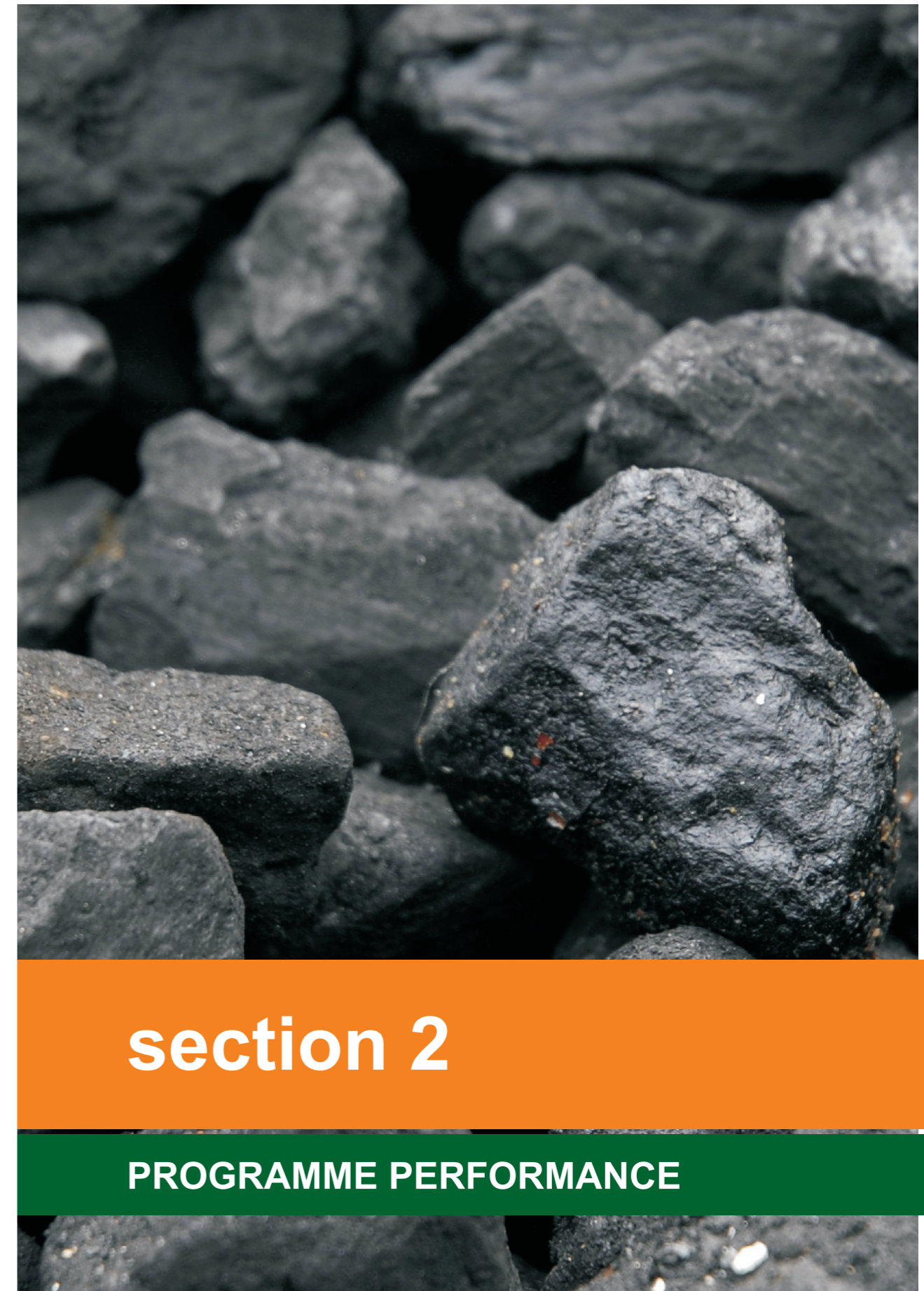
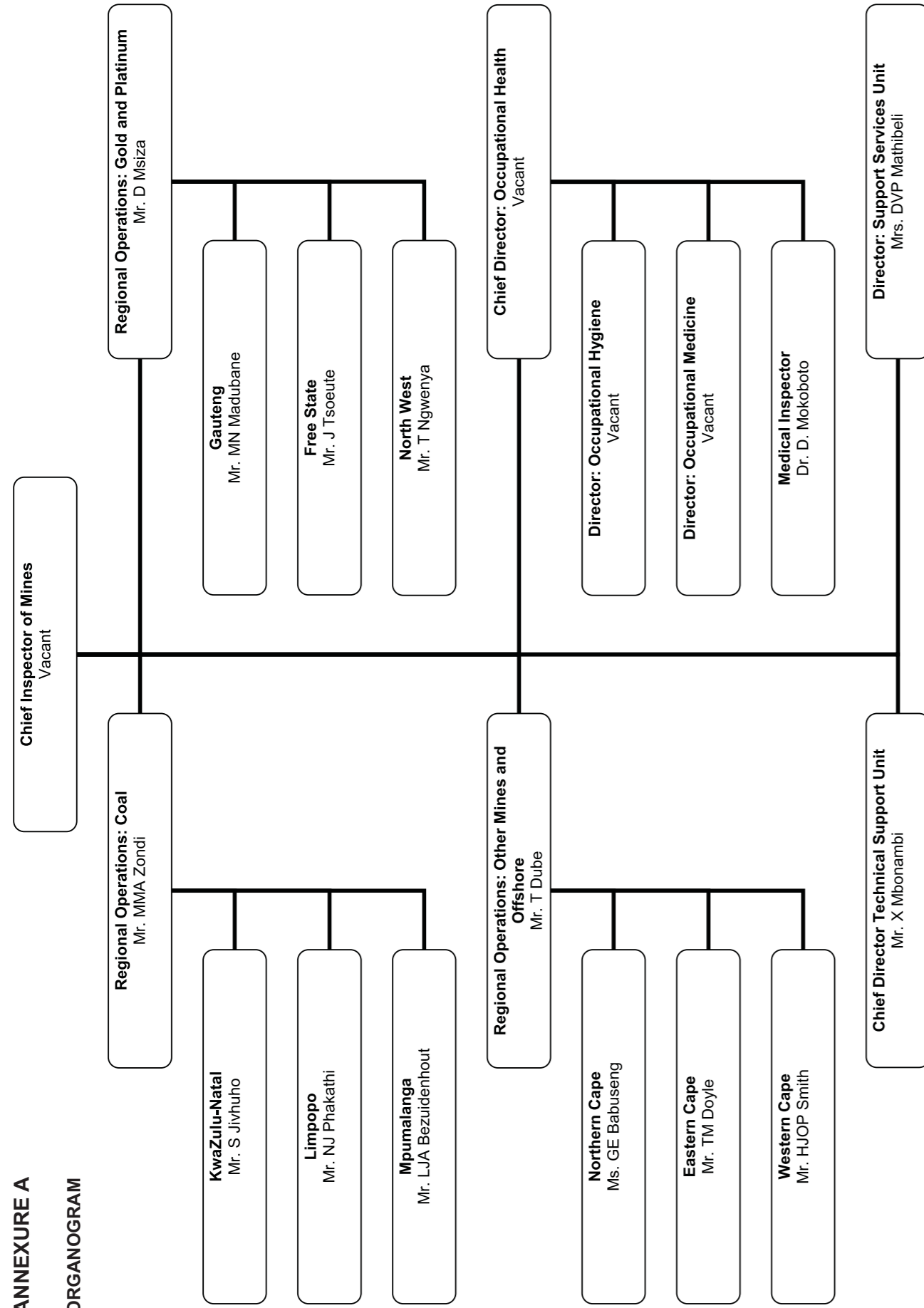
The Mine Health and Safety Inspectorate is established in terms of the Mine Health and Safety Act, 1996 (Act No. 29 of 1996), as amended, for the purpose of executing the statutory mandate of the DME to safeguard the health and safety of mine employees and communities affected by mining operations.

1.4 Mission Statement

The MHSI strives towards a safe and healthy mining industry. This is to be achieved by reducing mining related deaths, injuries and ill health through the formulation of national policy and legislation, the provision of advice, and the application of systems that monitor and enforce compliance with the law in the mining sector.



annexure B



section 2

PROGRAMME PERFORMANCE

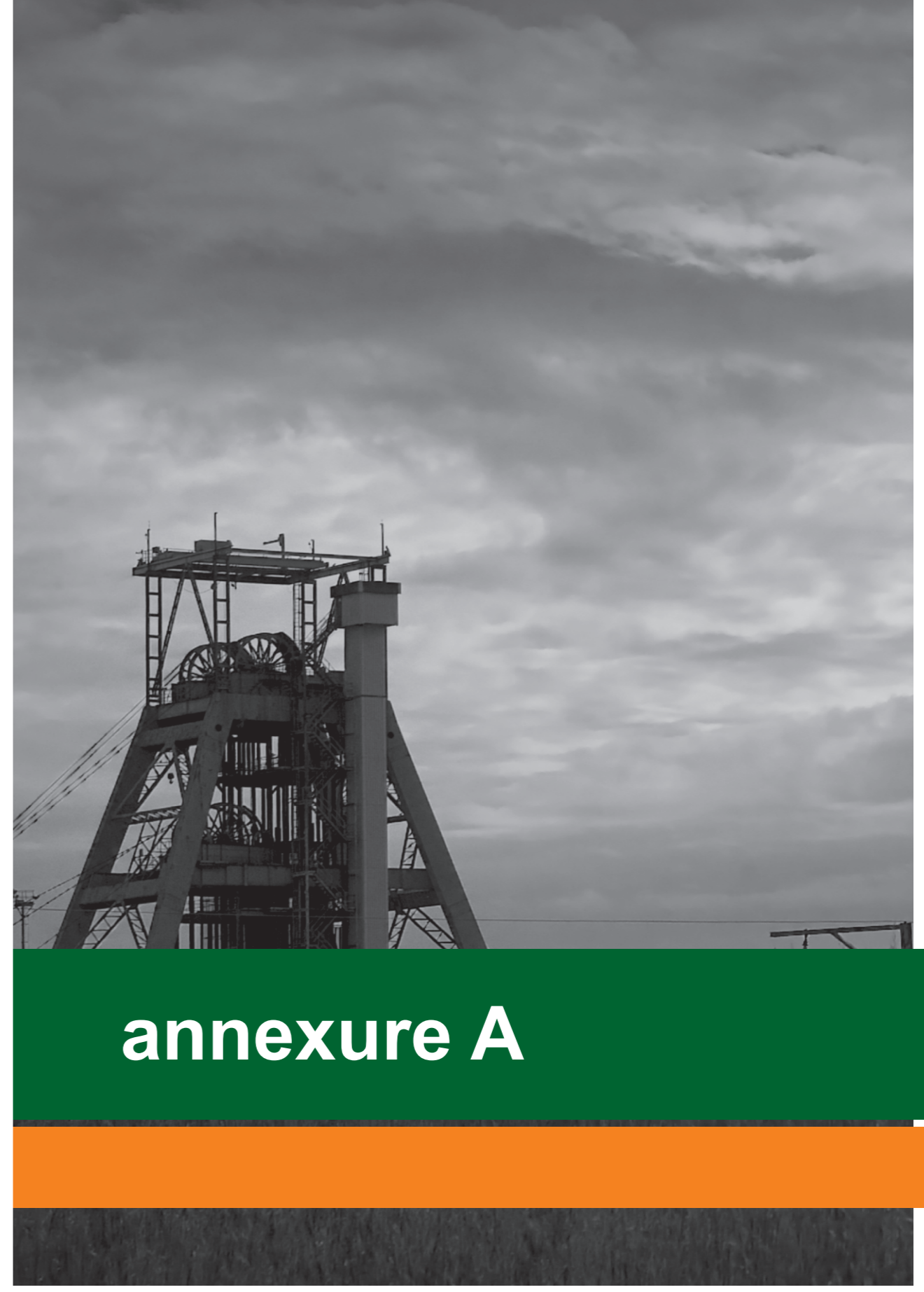
2. programme performance

2.1. Service Delivery Objectives and Indicators

The MHSI strategic plan and achievements during the reporting period are outlined in the table below. This is an account of progress achieved in the reporting period against the annual targets set for achieving the strategic objectives of the DMR.
PURPOSE: "Execute the Department's statutory mandate to protect the health and safety of the mine employees and people affected by mining activities."

CUSTOMER AND STAKEHOLDER

Stakeholder						
Contribute to Skills Development						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
Participation in MQA Structures	100	100	0	G	Verification source: Minutes and attendance registers of Board Meetings.	
Percentage of Applications for Certificates of Competencies Processed	100	100	0	G	Verification source: Examination records. A total of 3173 applications were received and all of them were processed	
Percentage of certificates of Competency issued	17	20	-3	Y	Not achieved: Poor preparation by candidates for the examinations	Engage with MQA and other stakeholder to ensure proper accreditation of service providers. Also will drafted and implementing Action Plan to improve pass rate during the 2011/12 financial year
Initiative	Description			Status	Performance Analysis	Recommendations
Examination Boards, Commissions, Invigilating examinations, Administer examinations						
Mine Managers, Mine Overseers etc						
Participation in chairing the Board and participation in board sub committees						



annexure A

• **Awareness and promotional activities**

The Promotions Sub-directorate participates in health and safety events to promote awareness within the mining industry and communities affected by mining activities.

During the reporting period, the Sub-directorate participated in the following events:

- a) International conferences and exhibitions (1)
- b) National exhibitions (0)
- c) Regional exhibitions (3)
- d) Mining technical exhibitions (8)

• **Publications**

The Inspectorate initiated a quarterly newsletter from April 2009. During the reporting period, four quarterly editions were published and distributed to internal and external stakeholders.

Three Mandatory Codes of Practices (COPs) have been approved and distributed to Regional Offices and stakeholders. These Mandatory COPs are:

- Design, Development/Construction, Safe Operation and Maintenance of Draw Points, Tipping Points, Rock Passes and Box Fronts
- Emergency Preparedness and Response
- Diving Operations Procedure Manual for Underwater Mining Operations

As part of promoting the Inspectorate, the Sub-directorate is responsible for the distribution of health and safety publications to stakeholders.

4.8 Directorate: Mine Health and Safety Legal Services

4.8.1 Overview

- Legal Services has in the past year dealt with appeals (11), legal advice and opinions (30) under the Mine Health and Safety Act, 1996 (MHSA).
- It has also dealt with application for exemptions under section 79 of the MHSA viz, Impala Platinum Mine, Sishen Iron Ore, Exxaro Resources Limited and Rustenburg Platinum.
- Legal Services has also participated in the development of administrative fines and enforcement guidelines.
- Legal Services has developed and managed agreements and service level agreements for Mine Rescue Service; Contract for Learner Inspectors; National Nuclear Regulator; and the Railway Safety Regulator, Mining Qualifications Authority and Goldfields.
- Legal Services regularly participate in the following tripartite meetings such as MHSC, MRAC and LDC
- Legal Services provides legal support in investigations and inquiries i.e. the Impala Platinum Inquiry, South Deep Investigation, Phakhisa Inquiry and the Aquarius Marikana Investigation.
- Legal Services was dealt with the following litigation matters: Bert Bricks, Two Rivers Mining (Pty) Ltd and Khuthala Colliery.
- Legal Services is also in the process of reviewing the Mine Health and Safety Act, 1996, as a whole.

4.8.2 Liaison with other stakeholders

- Legal Services had embarked on Regional Offices visits to popularise the administrative fines and enforcement guidelines.
- Legal Services participated in consultative meetings on the amendment of the Mine Health and Safety Act, 1996.

Enforce Compliance and Monitoring						Manage Health and Safety Risks							
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations	Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
Audit and Inspection monitoring Tools developed	100	100	0	G	Verification source: The following Audit and Inspection tools were developed: Blair Winder, Conveyor, Conveyor Man Riding, Couble Drum Winder, Hydraulic Lift, Incline Shaft, Koepe Winder, Pre-sink using a crane, Racklift, Rope lift, Single Drum Winder, Vertical Shaft, Board and Pillar.		Percentage Reduction in Occupational Non Casualties	1	10	-9	R	Not achieved: Non Casualties being reported 2009 = 392 and 2010 = 389 (389-392)/392*100 = 1%	Inspectorate will implement Strat Plan and Health and Safety to ensure that there is a reduction in the number of Non Casualties
Enforcement Guideline developed	100	100	0	G	The Mine Health and Safety Inspectorate Enforcement Guideline was drafted and training was completed.		Percentage Reduction in Occupational ill Health	0	10	-10	R	Ill Health cases being reported 2009=8134, 2010=8170 (8170-8134)/8134*100 = 0%	Inspectorate will implement Strat Plan and Health and Safety to ensure that there is a reduction in the number of Ill Health cases.
Reduction in complaints Relating to Procedural Inconsistencies	100	10	90	G	Verification source: Complaints Registers. There were no complaints received relating to Procedural Inconsistencies.		Percentage Reduction in Occupational injuries and fatalities	16	10	6	G	Verification source: SAMRASS. Occupational Injuries and Fatalities reported on calendar year. Fatalities 24% reduction and injuries 7% reduction. (24% + 7%)-2 = 16% * Provisional figures	
Initiative	Description					Status	Performance Analysis						Recommendations
Develop and Implement Guideline													
Develop complaints register Handle and record complaints and appeals in register													
Develop Inspection tool and Develop audit tool													
Develop policies													

4.7.4 Training Sub-directorate

4.7.4.1 Training

- **Implemented training**

During the reporting period, the MHSI developed the skills and knowledge base of its staff as follows:

- Eighty-three officials attended WITS training on the following modules:
- Inspection, audits investigation methods
- Mine Health and Safety and Act Legal Enforcement Part I
- Mine Health and Safety Act Legal Enforcement Part II
- Principles of Occupational Health and Hygiene Part I

This training will be on-going for the new financial year with the training schedule released for the rest of the year.

- Thirty four staff members attended other administrative and technical courses.

4.7.4.2 Training Interventions

- **Learner Inspector Programme**

A total number of 19 Learner Inspectors are currently undergoing practical training at various regional offices of the Department. This is in preparation of permanent appointment as Inspectors of Mines on acquisition of Government Certificate of Competency.

- **Bursary Scheme**

- The MHSI awarded bursaries to 18 students from 2007 and there were no bursaries awarded for the current academic year (2011).
- They were made up of seven females and 11 males. Seven of them (three females and four males) have completed their studies with three of them breaching their contracts by accepting private employment.
- The remaining students are at various stages towards completion of their studies and five of the students are likely to complete at the end of the current academic year.
- The students are pursuing the following mining related qualifications at different tertiary institutions:
 - Electrical Engineering (Heavy Current);
 - Mechanical Engineering;
 - Mine Engineering; and
 - Mine Surveying.

Initiative	Description	Status	Performance Analysis	Recommendations		
Annual overall report						
Develop and implement Strategy						
Draft Guideline						
Newsletters, Annual Report						
Provide Clear Policies and Regulatory Framework						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
% of Policies studies finalised	71	100	-29	Y	2 Policy studies were completed due to capacity constraints. % Policy studies finalised = Policy studies completed / Policy studies planned. $(57) * 100 = 71\%$	The review and implementation of standardised policies and procedures will enhance the execution of tasks timeously and the filling of vacant posts.
% Reduction in Identified Policy and Regulatory Gaps (ILO 176)	0	60	-60	R	Not achieved. 6 Policy gaps were identified and currently being addressed through the review and amendment of the Mine Health and Safety Act (MHSA) which commenced in September 2010. The Policy gaps will be reduced when the Act is approved by Cabinet	6 Policy Gaps identified are currently being addressed through the review and amendment of the Mine Health and Safety Act (MHSA) which commenced in September 2010.
Initiative					Performance Analysis	Recommendations
Conduct policy studies						
Identify, gaps and correct						
Provide Policies and Guidelines						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
Number of Guidelines Developed	0	100	-100	R	No new Guidelines were developed during the period under review	
Number of Guidelines Reviewed				G	Verification Source: Admin Fine and Enforcement Guideline Reviewed	
Number of Policies Developed				R	Not achieved. No new Policies were developed during the period under review.	

Number of Policies Reviewed					G	Verification Source: The Amendment of the Mine Health and Safety Act (Act 29 of 1996) (MHSA) is underway. Consultations with affected parties were done during the 2010/2011 financial year and further consultations will continue until 2012. It is envisaged that the amendments will be adopted and approved during the 2011/2012 financial year.	
Initiative	Description	Status	Performance Analysis	Recommendations			
Develop Guidelines							
Review guidelines / implement necessary changes							
Review policies / implement necessary changes							
Internal Processes							
Develop and Review Internal Processes							
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations	
Number of Internal Processes Developed	100	100	0	G	Verification source: Administrative Fine and Enforcement policy and procedures developed. Also, the prevention of Rock Fall accidents in the platinum Mine form developed.		
Number of Internal Processes Identified	100	100	0	G	Verification source: Administrative Fine and Enforcement policy and procedures developed. Also, prevention of Rock Fall accidents in the Platinum Mines Audit form identified.		
Number of Internal Processes Implemented	100	100	0	G	Verification source: Administrative Fine and Enforcement policy and procedures developed. Also, prevention of Rock Fall accidents in the Platinum Mines Audit form implemented		
Internal Processes							
Develop and Review Internal Processes							
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations	
Number of Internal Processes Developed	100	100	0	G	Verification source: Administrative Fine and Enforcement policy and procedures developed. Also, the prevention of Rock Fall accidents in the platinum Mine form developed.		

4.7.2 MIS Sub-directorate

- **Background**

The South African Mines Reportable Accident Statistics System (SAMRASS) has been in place since 1988. However, more databases have since been developed in order to address the data needs on, for example, health and equipment.

MIS is currently running the following databases:

- Annual Medical Reports
- Hygiene
- Mine Equipment
- SAMRASS
- South African Mines Occupational Diseases Database (SAMODD), though not yet regulated

As the years went by, the need for a more progressive and integrated information system was identified as a critical tool.

- **South African Mines Safety and Health Administration (SAMSHA)**

SAMSHA aims to integrate MIS in order to gain a good understanding of the functional behavior of all the current systems within the Inspectorate. The Inspectorate is currently implementing the system.

4.7.3 Administration Sub-directorate

- **Staffing of SSU**

The establishment of the Support Services Sub-directorate provides for 23 posts of which 22 are currently filled and one is vacant. The demographics of the staff as on 31 March 2011 was as follows:

Gender	African	White	Asian	Coloured	Total
Male	9	1	0	0	10
Female	8	4	0	0	12

- **Administrative Fines Account**

The Administrative Fines Account was established in terms of Section 55H(1) of the Mine Health and Safety Act, 1996, as amended.

All money received by the Principal Inspectors must be paid into the account and the funds must, with the agreement of the Minister, be utilised for the promotion of health and safety in the mining industry.

The Administrative Fines Account on 1 April 2010 reflected a credit balance of R2 283 860,43. Payments totalling R50 000,00 were received for fines issued by the Inspectorate during the reporting period.

Apart from the monthly banking costs, no funds were utilised during the reporting period and the account closed the financial year with a credit balance of R2 332 990,93.

4.6 Chief Directorate: Occupational Health

When the decision was taken by the President to split Department of Minerals and Energy into two departments, namely Department of Mineral Resources (DMR) and Department of Energy (DOE), it became imperative for an organizational restructure and a new Chief Directorate in Occupational Health was established. This was iterated by the Minister, Ms Susan Shabangu, in her budget speech of 2010/11 when she stated that: “The health capacity of the Inspectorate has been improved by establishing a new Chief Directorate for Occupational Health and the appointment of additional Occupational Health Inspectors in our regional offices.”

Occupational Health (Hygiene and Medicine) forms part of many tripartite forums addressing the challenges in the mining industry. Guidelines and guidance notes for mandatory Codes of Practice were implemented and some are currently under review. Continuous monitoring and evaluation regarding legislation compliance has become imperative and the Inspectorate is looking at ways to improve on reporting Occupational Health matters in the industry.

The functions of the Chief Directorate include the provision of a support mechanism and promotion of occupational health in the mining industry together with national and international benchmarking of the status of occupational health in the mining industry. The Chief Directorate will ensure the quality assurance of the Mine Health and Safety Inspectorate processes and outputs e.g. evaluation and monitoring, investigation and inquiries. It will furthermore assist with technical research and policy needs by practical observations, literature review, stakeholder interaction and analysis of data and the provision of information regarding the status of occupational health in the mining industry.

The Occupational Health Chief Directorate will aim to improve and promote occupational health in the industry, thereby ensuring good health to all employees.

4.7 Directorate: Support Services

4.7.1 Overview

The Support Services Sub-directorate (SSU) was established to provide support services to the MHSI through the following Sub-directorates:

- Management Information System (MIS) Sub-directorate provides management information services;
- Administration Sub-directorate provides administrative support services;
- Training Sub-directorate plans and co-ordinates training and development matters; and
- Promotions Sub-directorate promotes the health and safety of the Inspectorate.

Number of Internal Processes Identified	100	100	0	G	Verification source: Administrative Fine and Enforcement policy and procedures developed. Also, prevention of Rock Fall accidents in the Platinum Mines Audit form identified.	Recommendations
Number of Internal Processes Implemented	100	100	0	G	Verification source: Administrative Fine and Enforcement policy and procedures developed. Also, prevention of Rock Fall accidents in the Platinum Mines Audit form implemented	Recommendations
Initiative	Description			Status	Performance Analysis	Recommendations
Develop, Implement and monitor internal processes						
Identify and develop internal processes						
Identify Policies, procedures and gaps						
Implement Service Level Agreements						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
% Adherence to SLA's	100	100	0	G	Verification Source: Attendance Registers. 161 Inspectors attended Wits Training and 8 Bursary holders were placed at Goldfields.	
Number of SLA's Implemented	100	100	0	G	Verification Source: Goldfields and Wits SLA's.	
Initiative	Description			Status	Performance Analysis	Recommendations
Implement and monitor SLA's						
Monitor progress						
Improve Turnaround Time						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
% Adherence to Prescribed Time Frames (SLA's)	100	100	0	G	Verification Source Goldfields and Wits payments	
Initiative	Description			Status	Performance Analysis	Recommendations
Identify processes with prescribed time frames / SLA's						
Monitor performance against prescribed timeframes						

Culture, Systems & People						
Attract and Retain Staff						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
% implementation of HRD strategy	94	50	44	G	Verification source: HRD Implementation Plan. Attendance registers and Copies of Certificates. There are 8 areas and the MHSI attended to 7.5 areas. Note that bursaries are split into 2 areas e.g. internal and external bursaries where MHSI attended only to one side of it. $(7.5/8)*100 = 94\%$	
% implementation of Talent Management Strategy	0	20	-20	R	Could not implement the DMR Talent Management Strategy as it is still in a draft format.	DMR Talent Management Strategy to be sent for approval.
% reduction in vacancy rate	0	1	-1	R	Not achieved. There are more vacancies because of funding of some of the vacancies. 1st Quarter 16%, 2nd Quarter 13%, 3rd Quarter 15% and currently 17%	Fast tracking filling of positions.
% reduction Staff Turnover rate	15.9	1	14.9	R	Not achieved. Verification source. Pearsal report	No comparative figures from 2009/10 because the department was combined with Department of Energy. The department will continue to monitor the staff turnover rate
% Review HR Plan	100	100	0	G	Achieved: Verification source HR Plan	
Number of career / development initiatives (career opportunities, skills initiatives, etc.) implemented	6	6	0	G	Achieved: Verification source: Presentations on DMR careers, Attendance registers. Central University of Technology, North West University (Potchefstroom Campus), North West University (Mmabatho), University of Limpopo, Durban University of Technology, University of Kwazulu Natal (Durban)	
Initiative	Description			Status	Performance Analysis	Recommendations
Approved HR Plan						
Implement talent management plan						
Implementation of the HR Plan and retention strategy						
Implementation of the HR Plan and retention strategy						

The verification surveys of rehabilitation earthworks, carried out by contractors who are paid out of State funds, are normally conducted from time to time on a spot check basis during the life of the projects as time permits but to date no verification surveying requests were received by this Directorate during the past year. These are all reflected under the item Miscellaneous Tasks.

• Mapping Services

- Management of mine survey data

The Sub-directorate: Mapping and GIS, strives to maintain and promote a sustainable data management of the country's defunct and current mines, inter-alia, prescribed mine plans, maps and related spatial survey data for the lasting benefit of the nation, future land use applications and ensuing possibilities of arising mining activities which include indexing and storage of recently closed and current mine plans as an ongoing process.

- Scanning of defunct mine plans

Several mine plans have been scanned, including the cadastral maps showing the undermined areas. A project plan is to be developed to monitor different phases along the data capturing and other procurement processes involved.

• Technical Draughting

An ongoing mapping and technical draughting service of the sub-directorate includes modern Survey, Mapping and Geographic Information Systems (GIS) technology, which places great emphasis on survey data linkages, database management, spatial queries, data manipulation, specialized analysis and large format scanning and printing.

The sub-directorate has, in recent years, accomplished technological advancements on Mapping and GIS software (Arc view) and related equipments in producing the following maps and/or plans:

- Processing of mine dump models, volumetric calculations for earthworks, rehabilitation of the closed mines.
- Updating of undermined areas on topo-cadastral maps, which will later be integrated on NMPS.

4.5.2 Directorate: Surveying

The main functions of this Directorate are the continuous monitoring of mine surveying standards and practices in order to promote a culture of safety and health on mines, the safe utilisation of undermined land for development purposes, the safe and optimal exploitation of mineral resources as well as the rendering of mapping and draughting services. Additionally, the identification of hazards and risk control together with the training of new personnel are imperative functions.

4.5.2.1 Occupational Safety

• Surveying matters

The Directorate is rendering a continued service to the Regional offices, in particular with regard to the maintenance of surveying and mapping standards and the monitoring of compliance by mines with the relevant Health and Safety regulations in order to ensure a safe mining environment and the protection of surface structures and underground workings.

The Auditing of the departmental copies of mine plans in all regions is an ongoing function.

There was, however, a decrease in both the number of underground and opencast mine surveying inspections and physical checks carried out due to an acute staff shortage. Underground inspections and check measurements in restricted mining areas, where underground and surface structures are to be protected, were still given priority.

The following table shows a comparison of tasks completed during the year:

ACTIVITIES	2009/2010 Actual	2010/2011 Planned	2010/2011 Actual
Mine Survey audits (underground and surface mines)	498	455	575
Underground inspections (control measurements)	207	221	223
Surface utilisation files received and completed			
• Carried over from previous year	28		22
• Received during the year	594		433
• Completed during the year	572		427
• Carried over to next year	22		6
Miscellaneous tasks (Examinations, projects, etc.)	71		280
Permissions and Exemptions	88		148

Regional files include applications for exemptions and permissions, surface utilisation applications including applications for undermining of surface structures, land use applications (township establishments, roads, railways and other rights affected by past, present and future mining operations).

• Special surveys

The Directorate: Mine Surveying is constantly involved in practical surveying projects mostly to assist with any mining boundary disputes as well as verifying the accuracy of survey data submitted by candidates undertaking the trial survey part of the Mine Surveyors Certificate of Competency examination.

		Improve Leadership and Management				Promote Core Values							
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations	Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
Implementation of training programmes													
Marketing of DMR skills initiatives at educational institutions. Workshops													
% Management Completed the Leadership / Management courses	2.86	70	-67.14	R	A total of 2 MHSI officials attended the Advanced Management Development Programme (AMDP) out of 70 officials in the branch. 2/70*100 = 2.86%. The Executive Development Programme (EDP) commenced late in 2010/11 financial year. 10 MHSI managers attended the first session financial year.	Executive Development Programme (EDP) commenced in the last quarter of the 2010/11 financial year and overlaps into the 2011/12 financial year.	Number of Core Values Workshops Conducted	10	5	5	G	Verification Source: Attendance Registers. Workshops were conducted in Head Office and Regions (Gauteng, Western Cape, KZN, Eastern Cape, North West, Limpopo, Mpumalanga, Free State, Northern Cape).	
% return on investment on training and development	0	65	-65	R	Tool was not developed to calculate investment on training and development.	Training of Managers will take place in 2011/2012	Number of Service Delivery Improvement Plans Developed	1	1	0	G	Verification Source: DMR Strategic Plan	
Initiative													
Develop succession plans													
Implementation of the Management development training programme (tool 360 degree Assessments Completed)													
Implementation of monitoring and evaluation of training programmes													

Promote Core Values						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
Number of Core Values Workshops Conducted	10	5	5	G	Verification Source: Attendance Registers. Workshops were conducted in Head Office and Regions (Gauteng, Western Cape, KZN, Eastern Cape, North West, Limpopo, Mpumalanga, Free State, Northern Cape).	
Number of Service Delivery Improvement Plans Developed	1	1	0	G	Verification Source: DMR Strategic Plan	
Initiative	Description	Status	Performance Analysis	Recommendations		
Development and implementation of MHSI SDIPs						
Facilitated and conduct Core Values Workshops						
Financial Stewardship						
Align Budget to Strategy						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
% Budget Aligned to Strategy	100	95	5	G	Verification Source: Spending Plans	
Initiative	Description	Status	Performance Analysis	Recommendations		
Compile Spending Plans						
Cost all strategy initiatives						
Manage Costs effectively						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
% Variance on Allocated Budget for goods and services	18.9	5	13.9	R	Verification Source: Analysis of Budget and Expenditure Report. 18.9% Saving is due to vacancies. Budget = R25447 000, Spend = R29133 000, Overspent = R3686 000, R8494 926 for lease payment on behalf of Programme 1 Calculation: R3686 000 - R8494 926 = R4808 926 (saving) (4808 926 / 25447 000)*100 = 18.9% Underspending as a result of reduced S&T costs as a result of vacancies	The MHSI recently held interviews and are in the process of filling some of the vacant posts. 15 Posts to be filled. S&T cost will increase as vacant posts are filled.

4.5 Chief Directorate: Technical Support

4.5.1 General overview

The core business of the Technical Support Unit is to provide specialist and technical services to the Inspectorate with particular focus on the regional components and other Head Office Units.

Some of the key responsibilities of the Unit are:-

- Participate in specialist investigations and inquiries within regions when required;
- To marshal / mobilise specialist skills when required;
- To provide integrated professional advice and make recommendations from incidents, accidents and legislation to other Government Departments, the mining sector and other key stakeholders;
- Liaise with national and international key stakeholders in order to identify key research areas and influence key research agenda for research institutions and conduct literature research to maintain specialist knowledge;
- Ensure quality assurance of the performance of the inspectorate by providing mentorship, knowledge transfer and promotion of safety to the inspectorate;
- To develop technical and implementation guidance to the regional Inspectors in areas such as enforcement, administrative penalties;
- Identify technical training needs that exist in the MHSI and recommend appropriate action; and
- Liaise with other Governmental departments and other key stakeholders for the development of standards and specifications.

Achievements

The Technical Support Unit through the Mine Safety team; together with the Policy Unit has managed to develop Guidelines on Administrative Fines and Enforcement Policy. Furthermore, the Mine Safety team has revised and updated audit forms for board and pillar mining for metaliferous underground mines.

The team has further reviewed old directives that were issued based on previous legislations; and this was to ensure that the directives are still relevant and in line with the current legislation. The team is also spear-heading a monthly fatality report with the intention of updating the MHSI and the industry Stakeholders on fatalities occurring at the mines.

Challenges

The quality of Section 72 inquiry reports needs improvement in order for the Prosecuting Authorities to apply prosecution where necessary. The Technical Support Unit is, in conjunction with the internal Legal Support Unit, currently analyzing these reports with the aim of identifying any shortfalls and recommend an appropriate way forward in line with the Prosecuting Authority requirements.

Inspectors are currently attending training on investigations and inquiries to improve handling of investigation and inquiries and hence produce good quality reports.

Strategy to improve the status quo

There would be a continued visibility and communication with the regions and all industry stakeholders so as to improve relations and the promotion of legislation.

the time and the other industrial sites are the main source of the dust. The area is prone to very strong winds which does not assist either.

A monitoring committee with representatives from the mine, the smallholdings and the other industrial sites hold regular meetings.

	Received	Completed	Percentage
Township Developments	65	65	100%
Mining and Prospecting Rights	102	102	100%
Closure Certificated	12	12	100%
Environmental Management	82	82	100%
Complaints	2	2	100%

4.4.4.11 Strategies adopted for improving the status quo

The existing administrative systems have been continuously updated and improved and additional systems have been instituted in order to backup field work.

Future challenges for the Inspectorate are to influence mines to increase the quality and effectiveness of:

- Risk management;
- Training; and
- Safety based behaviour

Reduction in Wasteful, fruitless and irregular Expenditure	1073.7	60	1013.7	R	Verification Source: Fruitless, wasteful and irregular expenditure registers. R26886.31 (2010/11 financial year) / R2504 (2009/10 financial year) *100 = 1073.7% R2896.01 Irregular expenditure was due to additional attendance of 4 persons at the workshop held at the Premium Hotel. R18090.30 irregular expenditure was due to additional attendance of 4 persons at the workshop held at the Premier Hotel. R18090.30 irregular expenditure was due to longer than planned time period it took to take statements for the Impala Inquiry, which was beyond our control.	Recommendations
Initiative	Description			Status	Performance Analysis	Recommendations
Monitoring Actual expenditure to budget and take corrective action						
Take necessary corrective measures on identification of wasteful, fruitless and irregular expenditure						
Promote corporate governance						
Measure	Actual	Target	Variance	Status	Performance Analysis	Recommendations
Comply with PSA	100	100	0	G	The department is compliant with the relevant policies: Verification Source: HR Policies	
% execution of Fraud prevention and ERM implementation plans	100	100	0	R	Risk assessment were performed and risk management committee met during the year. Risk champion forum was constituted during the year.	Risk champions will actively address risk treatment action plans during 2011/12
Comply with PFMA	97.5	100	-2.5	Y	Achieved: Verification Source: Compliance Certificate February period: 100%+100%+100%+90%/4 = 97.5%	
Number of repeat findings on internal audit follow up report	0	0	0	G	Achieved: No reports of repeat findings were received during the period under review.	
Unqualified Audit Report	0	0	0	Y	Not achieved: Progress on unqualified audit report is pending AG report	Status of audit report will be reported at year end when AG has reported on the Audit
Initiative	Description			Status	Performance Analysis	Recommendations
Develop a monitoring mechanism for internal audit findings						

Implement compliance frameworks					
Implement Enterprise Risk Management and Fraud Prevention Strategies					
Implement management representation measures for all processes					
Monitor compliance and take corrective measures					
Monitor compliance and take corrective measures					

2.2 Service Delivery Improvement Plan

KEY SERVICE	SERVICE BENEFICIARY	CURRENT STANDARD (2010/11)	DESIRED STANDARD (2010/11)	PROGRESS AS AT 31 MARCH 2011
Address health and safety risks in mining through: <ul style="list-style-type: none"> Number of Audits conducted Number of Inspections conducted Number of Investigations conducted Number of Inquiries completed 	Mining Operations	100% of planned audits as per capacity 100% of planned inspection as per capacity 80% of planned investigations as per capacity 80% of planned inquiries as per capacity	Quantity 100% of planned audits as per capacity 100% of planned inspection as per capacity 100% of planned investigations as per capacity 100% of planned inquiries as per capacity	79% of planned audits as per capacity 68% of planned inspections as per capacity 96% of planned investigations as per capacity 101% of planned inquiries as per capacity
		Quality Implementation and compliance to standardised Policies and Procedures	Quality Implementation and compliance to standardised Policies and Procedures	Achieved
		Consultation Quarterly consultation with mining operations	Consultation Monthly consultation with mining operations	Achieved
		Open and transparency Policies and Procedures are public documents	Open and transparency Policies and Procedures are public documents	Achieved
Information Information is shared on a monthly basis with mines	Information Information is shared on a monthly basis with mines and an electronic management system would improve the availability of information	Information Information is shared on a monthly basis with mines and an electronic management system would improve the availability of information	Achieved	
Value for money Ensure the optimum utilisation of voted funds	Value for money Ensure the optimum utilisation of voted funds	Value for money Ensure the optimum utilisation of voted funds	Achieved	

4.4.4.6 Statutory notices

The majority of the Statutory Notices were necessitated due to inadequate guarding of machinery, training and risk management issues.

Section 54 Notices	Section 55 Notices
10	220

4.4.4.7 Administrative fines

No recommendations for the issue of Administrative fines were made.

4.4.4.8 Topical issues and matters of interest in area of responsibility

Over the last number of years the vast majority of the Great Karoo has been covered by prospecting right applications for uranium. These prospecting rights are now expiring and renewals are being applied for. However, not one of the rights has been converted into a mining right application and, contrary to most of the renewals submitted, there is very little evidence of any substantial prospecting having taken place.

Large tracts of land are now being applied for under exploration rights to search for shale gas. Interested and affected party input is however looming large as a show stopper, so much so that the one applicant has withdrawn their application.

During the year 23 mines closed and 29 new mines were registered.

4.4.4.9 Examinations

As there are no underground mines in this region no Mine Overseer, Underground Blasting, Onsetter and Lampsman examinations take place in this region.

Certificate	Exam Boards	No of Candidates	Certificates issued
Mine Overseers	0	0	0
Blasting	0	0	0
Onsetter	0	0	0
Lampsman	0	0	0

4.4.4.10 Land use applications and complaints

There is one ongoing complaint from a neighbour of a large stone quarry. It is centred around dust. The quarry and other industrial sites where cement bricks are manufactured and asphalt is produced border on a smallholding area. Some residents from the smallholdings experience a continuous problem with dust. Dust monitoring is done on a continuous basis. Results from the monitoring have indicated that the dust levels exceed the limits for a fraction of

Labour in the region is about 6099 and they work on 221 registered surface and opencast mines. There are no underground mines in this region.

The region experienced no fatal accidents for the year which is an improvement on the three for the previous year.

4.4.4.2 Inspections and audits

All mines in the region are inspected on an annual basis no matter how small they are. There are currently 215 operational mines. All mines have some form of a risk management programme in place. A matrix has been developed whereby mines are classified as small, medium or large according to their risk profile.

The regular inspection frequency is having the desired effect of ensuring mines are compliant in terms of physical conditions and making safety and health part of the operating culture. A register is kept of all new mining rights and mining permits issued and any new operation is registered upon commencement of activities at which time the full scope of the requirements of the Mine Health and Safety Act are discussed with the employer.

Category	Inspections	Audits
Planned	552	24
Actual	520	24
% Compliance	94%	100%

4.4.4.3 Total accidents reported

A total of 33 accidents were reported with the breakdown as illustrated below. "Caught between" and "struck by" continue to be the prevalent type of reportable accidents that occur in the Western Cape. Comparing 2010 with 2009 accident statistics there has been a 28% reduction in accidents.

Fatal Accidents	0
> 14 Day reportable accidents	13
1 to 13 Day reportable accidents	20

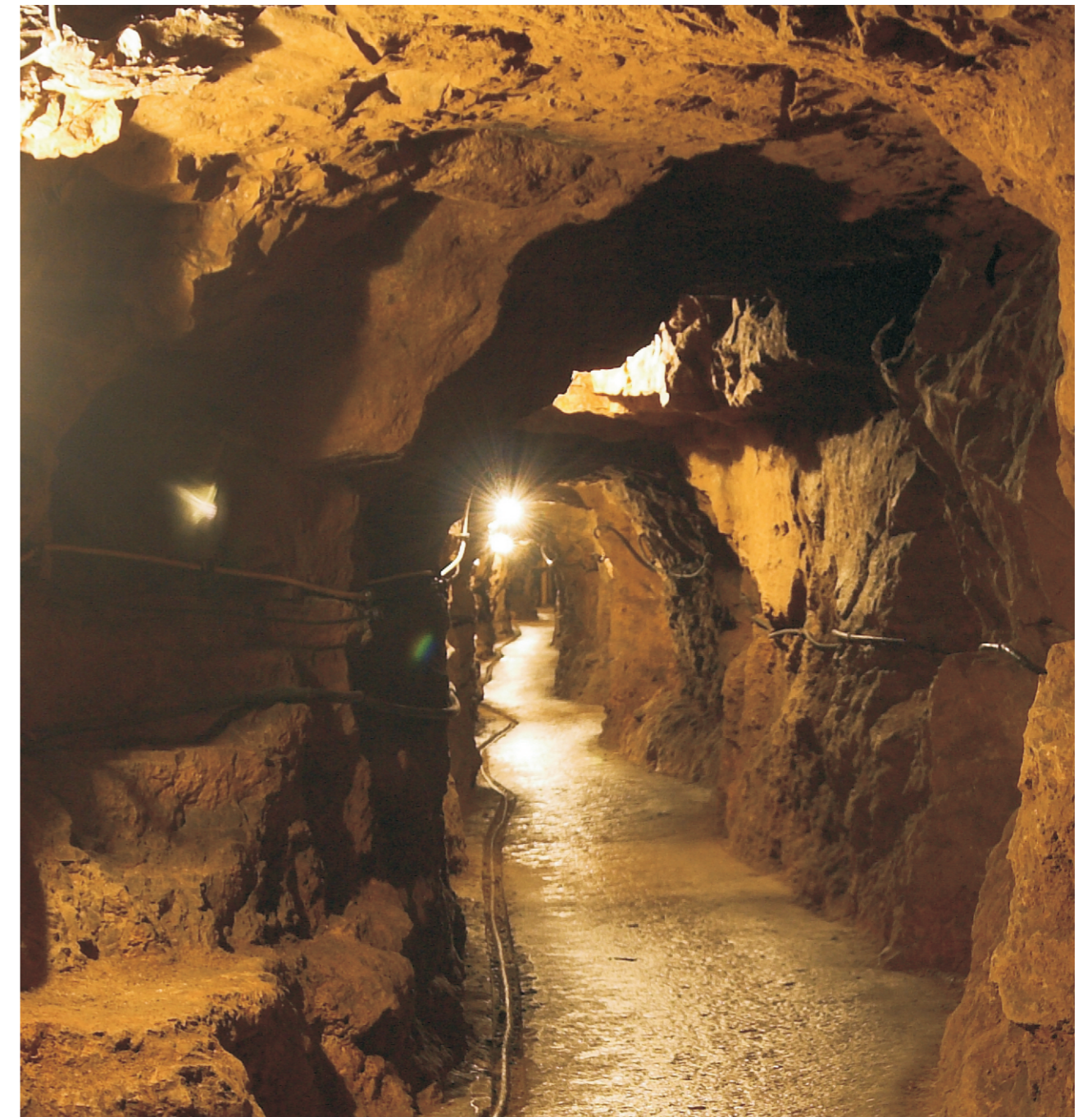
4.4.4.4 Investigations and inquiries

No statutory inquiries were necessary and injuries sustained in accidents during the year were of a minor nature and no investigations were done in terms of section 60 of the Mine Health and Safety Act.

	Investigations	Inquiries	Total
Initiated	0	0	0
Completed	0	0	0
% Completed	100%	100%	100%

4.4.4.5 Disaster-type accidents

No disaster type accidents occurred in the region during the reporting period.



section 3

STATE OF SAFETY AND HEALTH AT MINES

3. state of safety and health at mines

3.1 Occupational Safety

In terms of the requirements of the MHS Act, employers must report accidents and dangerous occurrences that occur at a mine to the regional Principal Inspector of Mines. The data is then captured onto the South African Mines Reportable Accidents Statistical System (SAMRASS) from which the information is analyzed.

Although there were 41 less fatalities (127) reported during 2010 than in 2009 (168), the provisional fatality rate per million hours worked was further decreased to 25% due to the slight reduction in the number of workers employed.

This reduction also resulted in a 7.58% decrease in the injury rate per million hours worked, although the number of reportable injuries actually increased by 286 year-on-year.

3.1.1 Accident Statistics

Fatalities and rates per region

	2009		2010*		Rates
	Fatalities	Fatality rates	Fatalities	Fatality rates	% change
All mines	168	0.16	127	0.12	-25.00
Western Cape	3	0.19	0	0	-100.00
Northern Cape	4	0.07	4	0.06	-14.29
Free State	22	0.23	22	0.27	17.39
Eastern Cape	0	0	0	0	00.00
Kwazulu Natal	9	0.36	3	0.12	-66.67
Mpumalanga	25	0.16	13	0.08	-50.00
Limpopo	5	0.05	11	0.11	120.00
Gauteng	44	0.20	29	0.14	-30.00
North West	56	0.14	45	0.12	-14.29

* Provisional figures; statistics may change due to the late reporting of accidents and subsequent deaths

In 2010 there were two regions that succeeded to have a fatal free year, namely Western Cape and Eastern Cape. Two other regions managed to maintain the same number of fatalities as the previous year namely Northern Cape and Free State. The Free State had an increase in fatality rates (17.39%) while Northern Cape had a reduction in the fatality rates (14.29%). This is related to the decrease in the labour at work in the Free State region while the Northern Cape has had an increase in the labour at work.

4.4.3.10 Land Use Applications

	Received	Completed	Percentage
Township Developments	2	2	100%
Mining and Prospecting Rights	277	261	94%
Closure Certificated	55	46	90%
Environmental Management	31	29	98%
Complaints	20	15	75%

MPRDA files were problematic especially prospecting and mining licence applications. Applicants must be sensitised to the requirements of the Mine Health and Safety Act early in the application process.

4.4.3.11 Strategy Adopted to improve the Status Quo

Following every audit, employers are given a written report against which each audited mine must submit a corrective action plan for all non-conformances identified during the audit. When a mine is halted the employer is instructed by Inspectors to prepare and make a presentation at the DMR office explaining their intended remedial measures to prevent further risk to employees. This strategy has increased safety and health awareness at mining operations.

Another strategy initiated is that of establishing and implementing a strong tripartism relationship between three stakeholders, namely the state, employers and organised labour. Tripartite forums are used to exchange initiatives to promote health and safety in mines in the region. This initiative is in its infancy and it is hoped that it will manifest positive outcomes.

4.4.4 Regional Report: Western Cape

4.4.4.1 Overview of the Region

The mining sector in the Western Cape, dominated by construction material producers, is still battling to recover from the economic slump and still finds itself on a negative growth projectory.

Hardest hit are brickfields which are the most labour intensive of all operations. Two brickfields in the Western Cape have closed down completely resulting in 145 people without a job.

It has become extremely onerous for new miners or entrepreneurs to enter the industry with the myriad of legislation that has to be complied with. Currently an application must be lodged with DMR, to local Government, and with DEADP for approval in terms of NEMA. Added to this are the numerous specialist studies, often considered unwarranted, that have to be submitted making it virtually impossible for private individuals to enter the industry.

Occupational Hygiene:

Hygiene measurements not being conducted,
Lack of first aid equipment at working faces,
Employers failing to appoint Occupational Hygienists,
Employers failing to comply with controlling airborne pollutants according to legislation,
Employers failing to develop relevant recommended mandatory codes of practice, and
Employers failing to conduct Health Risk assessments.

Occupational Medicine:

Failure of employers to compile and submit Annual Medical Reports,
Failure to compile and implement mandatory codes of practice,
Failing to conduct first aid training for the employees,
Failure to appoint OMP's, and
Employers failing to submit SAMODD forms and investigate the occurrence of ill health.

A total of **295** Section 54(1) notices were issued mainly for the mines failing to guard moving parts of machinery equipment, steep slopes, blasting operations, and lack of second outlets or escape routes.

Section 54 Notices	Section 55
295	147

4.4.3.7 Administrative Fines

There were no fines recommended or issued for the whole of the year.

4.4.3.8 Topical Issues and Matters of Interest

Illegal mining is still a serious problem in some opencast diamond mines in Namaqualand and the illegal mining of sugilite (wesselite) also continues in the Hotazel Manganese mines. These activities have resulted in unsafe working practices at the affected mines e.g. undermining and working of old pillars.

Mine access for inspection purposes in some parts of the areas remains a problem as roads are in poor condition and can only be reached with 4x4 driven vehicles.

The region has no staff who are qualified to inspect diving operations. Surface activity related to underwater mining operations are therefore only inspected.

4.4.3.9 Examinations

Certificate	Exam Boards	No of Candidates	Certificates issued
Mine Overseers	4	12	1
Blasting	0	0	5 (duplicates)
Onsetter	1	3	5 (1 duplicate and 1 exchange)
Lampsman	1	3	3

Blasting examinations are conducted by the MQA and no longer by DMR in the region. Mines allege that the MQA is not holding these examinations. Mine Overseer candidates submit application for examination and either perform poorly or simply absent themselves.

Fatality and rates per commodities

	2009		2010*		Rates
	Fatalities	Fatality rate	Fatalities	Fatality rate	% change 2008/2009
All mines	168	0.16	127	0.12	-25.00
Gold	81	0.25	62	0.20	-20.00
Platinum	41	0.11	34	0.09	-18.18
Coal	18	.012	12	0.08	-33.33
Diamonds	3	0.11	4	0.16	45.45
Copper	1	0.14	1	0.14	0.00
Chrome	3	0.13	3	0.10	-23.08
Iron Ore	3	0.10	3	0.07	-30.00
Manganese	1	0.09	1	0.08	-11.11
Other	17	0.15	7	0.07	-53.33

* Provisional figures; statistics may change due to the late reporting of accidents and subsequent deaths

There has been a decrease in the fatality rates for all commodities except for Diamonds that has increased by 45.45%

Injury and rates per region

	2009		2010*		Rates
	Injuries	Injury rates	Injuries	Injury rates	% change
All mines	3650	3.43	3361	3.17	-7.58
Western Cape	15	0.93	13	0.96	3.23
Northern Cape	56	0.94	63	0.92	-2.13
Free State	399	4.43	390	4.75	7.22
Eastern Cape	8	2.01	2	0.52	-74.13
Kwazulu Natal	54	2.18	27	1.06	-51.38
Mpumalanga	419	2.66	304	1.85	-30.45
Limpopo	202	1.98	253	2.42	22.22
Gauteng	760	3.52	613	2.87	-18.47
North West	1737	4.42	1696	4.43	0.23

* Provisional figures; statistics may change due to the late reporting of accidents and subsequent deaths

The injury rates show that there has been an increase in injuries in the Limpopo, North West, Western Cape and Free State Regions while all the other regions show a decrease.

Injury and rates per commodities

	2009		2010*		Rates
	Injuries	Injury rates	Injuries	Injury rates	% change 2008/2009
All mines	3650	3.43	3361	3.17	-7.58
Gold	1756	5.36	1383	4.37	-18.47
Platinum	1299	3.50	1444	3.89	11.14
Coal	295	1.97	271	1.72	-12.69
Diamonds	46	1.66	50	2.04	22.89
Copper	19	2.59	19	2.61	1.77
Chrome	60	2.00	77	2.55	27.50
Iron Ore	15	0.49	18	0.44	-10.20
Manganese	11	1.03	17	1.36	32.04
Other	149	1.30	82	0.83	-36.15

* Provisional figures; statistics may change due to the late reporting of accidents and subsequent deaths

The injury rates have also decreased but platinum, diamonds, copper, chrome and manganese have increased.

Labour statistics

The Mineral Economics Directorate of the DMR is responsible for the collecting and publishing of the labour figures for the South African Mining industry. The labour at work statistics reveals an overall decrease of labour force. There has been a decrease in Western Cape, Free State, Eastern Cape, Gauteng and North West Regions. The other regions have shown an increase. Limpopo region has increased due to the movement of mines from the Mpumalanga Region which resulted from a change in the provincial boundary.

Labour at work	2009	2010	% change
All mines	483212	481509	-0.35
Western Cape	7344	6166	-16.04
Northern Cape	27144	31293	15.29
Free State	40920	37324	-8.79
Eastern Cape	1805	1738	-3.71
Kwazulu Natal	11272	11550	2.47
Mpumalanga	71470	74699	4.52
Limpopo	46310	47546	2.67
Gauteng	98206	97159	-1.07
North West	178741	174034	-2.63

4.4.3.2 Audits and Inspections

Inspections were performed according to the annual plan and agreed targets of the Department. One Inspector of Mines transferred voluntarily to the North West Region (Klerksdorp) and one Occupational Hygienist also transferred voluntarily to the Northern Cape Region (Kimberley).

Category	Inspections	Audits
Planned	699	180
Actual	662	116
% Compliance	95%	64%

4.4.3.3 Accidents

Four fatal accidents occurred in the Northern Cape for the 2010 calendar year.

Fatal Accidents	4
> 14 Day reportable accidents	31
1 to 13 Day reportable accidents	69

4.4.3.4 Investigations and Inquiries

31 Reportable accident (> 14 day accidents) investigations were completed.

	Investigations	Inquiries (including investigation)	Total
Initiated	63	63 + 4 (inquiries)	67
Completed	54	54 + 4 (inquiries)	58
% Completed	91%	91%	91%

4.4.3.5 Disaster Type Accidents

No disaster type accidents were reported.

4.4.3.6 Statutory Notices

A total of 147 section 55 notices were issued to the mines and the common non-conformances were as follows for the different sections/disciplines:

Mining:

Common non-conformances in mining were a lack of legal appointments and failure to compile and implement relevant mandatory codes of practice.

Mine Equipment:

After the introduction of the new machinery regulations on conveyor belts and general machinery, many employers lack the compilation and implementation of mandatory codes of practice, failure to conduct risk assessments, and failure to train mobile equipment operators.

4.4.2.10 Land Use Applications

	Received	Completed	Percentage
Township Developments	20	18	90%
Mining and Prospecting Rights and Permits	145	136	94%
Mine Closures	14	13	93%
Environmental Management	34	29	85%
Complaints	5	5	100%

4.4.2.11 Strategy Adopted to improve the Status Quo

Audits conducted through the year continue to identify where employers need to focus attention and inspections are geared to follow up on problems identified during group audits. In order to improve the health and safety performance at mines the following aspects received more focused attention:

- Codes of Practice;
- Statutory appointments;
- Safety berms at quarry crests;
- Closure of old roadways;
- Medical surveillance;
- Illegal swimming at quarries by ensuring tighter security levels, engagement with communities, mandatory warning notices, and fencing; and
- Updating of Mine Plans

4.4.3 Regional Report: Northern Cape

4.4.3.1 Overview of the Region

The Northern Cape Region is situated in the central part of the country, with its boundaries formed by the following areas: Namibia situated north westerly; Botswana and North West Province situated north easterly; Free State Region situated in the East; Eastern Cape in the south east and the Western Cape forming the south boundary.

There are 174 operating mines in the Northern Cape employing over 23 683 employees in the low, medium and high risk operations.

Diamonds, base metals, iron ore, manganese, kieselghur, mica, rose quartz, gypsum, tiger's eye, granite and other minerals are all mined in the Northern Cape. There are also a number of brick works, sand works and stone quarries.

Fatalities by casualty classification

CLASSIFICATION	2009 Killed	2010 Killed	% change
FALL OF GROUND	65	49	-24.62
Rockburst	15	6	-60.00
Strainburst	2	4	100.00
Gravity	48	39	-18.75
MACHINERY	8	3	-62.50
Conveyer Belts	6	2	-66.67
Other Machinery	2	1	-50.00
TRANSPORTATION / MINING	47	37	-21.28
Locomotive	5	7	40.00
Locomotive drawn vehicle	10	7	-30.00
Rerailing	1		-100.00
Rocker arm shovel	1		-100.00
Scraper winch installation	4	2	-50.00
Tractor / Trailer	1	2	100.00
Mechanical loaders	3	5	66.67
Transporters	9	11	22.22
Motor vehicles	3	1	100.00
Lifting Machines	3	1	-66.67
Mobile drills	3	1	-66.67
Other	2		-100.00
GENERAL	32	20	-37.50
Fall of material / rolling rock	7	7	0.00
Manual handling of material	2	1	-50.00
Falling in / from	7	2	-71.43
Slipping or falling	2		-100.00
Burning and scalding	2		-100.00
Splinters		1	100.00
Dust / gas / fumes	10	3	-70.00
Inundation / drowning	2	4	100.00
Struck by any object manual handling		2	100.00
CONVEYANCE ACCIDENTS	2	1	-50.00
ELECTRICITY	5	3	-40.00
FIRES		5	100.00
EXPLOSIVES	4	5	100.00
HEAT SICKNESS	4	2	100.00
MISCELLANEOUS	1	3	100.00
TOTAL	168	128	-23.81

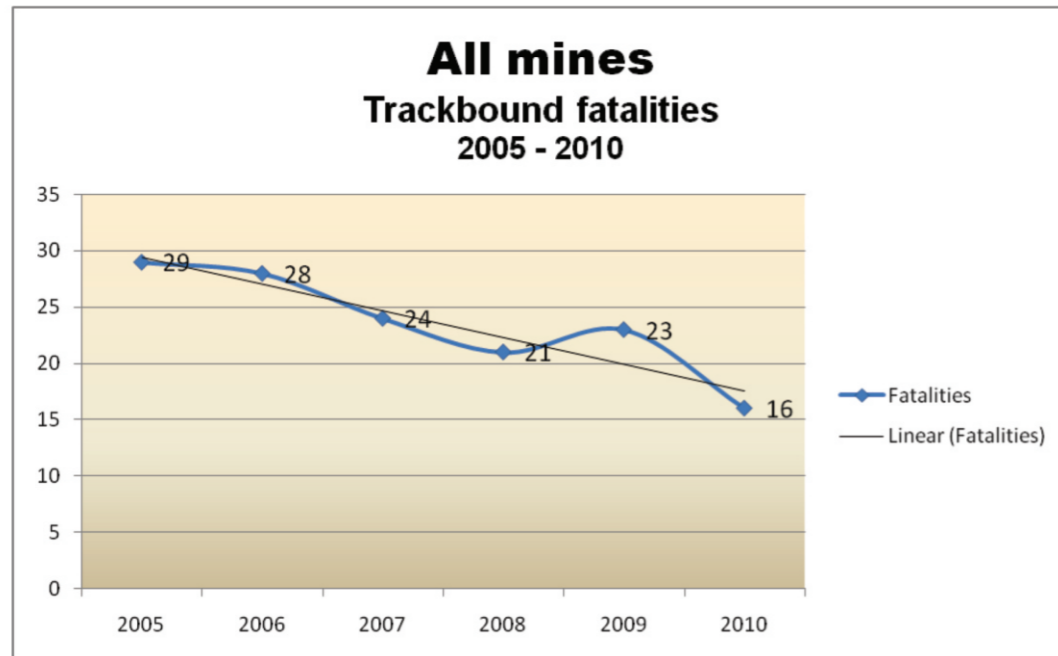
The fatalities that have occurred during 2010 have been in the following classifications and these classifications are as follows:

Fall of Ground

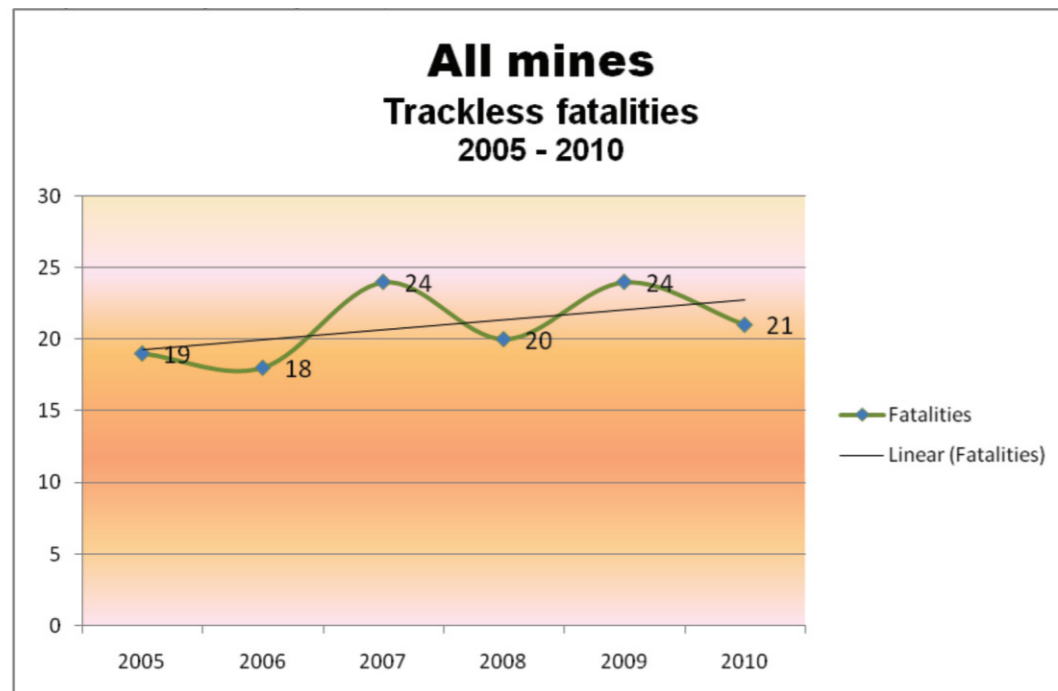
There were 65 fall of ground fatalities and of the causes were rock burst-6, strain burst-4 and gravity – 39. This is an indication that more attention has to be given to the areas where there is the possibility of gravity falls of ground. This is still the highest cause classification of fatal accidents that face the mining industry.

Transportation and mining

There were 47 transportation and mining fatal accidents that occurred in 2010. These accidents were caused by rail bound equipment striking either persons or other rail bound equipment that were in confined areas in close proximity to rail bound equipment and when rail bound equipment was being rerailed after a derailment.



The trend in the trackbound fatalities shows a downward trend since 2005 and all these accidents occurred in the underground haulages of gold and platinum mines.



The trackless fatalities are accidents that occur across all the mining commodities. These are found on gold, coal, platinum, diamonds and other mines. There has been technical advancement in the area of vehicle avoidance systems where some mines have successfully installed these systems with good results. The employers, via their MOSH initiatives, are compiling best practices to assist the industry in reducing these type of accidents.

4.4.2.8 Topical Issues and Matters of Interest

Elitheni Underground Coal Mine

It has previously been reported that Elitheni Coal had been granted a mining permit for surface mining as well as a Mining Right to mine underground. This mine is situated in the Indwe/ Lady Frere area in the Eastern Cape. During 2009 infrastructure development continued with blasting taking place in the Open Cast mining area.

Over the past year Elitheni Coal have conducted only two blasts in order to advance towards the high wall and create the space in the pit needed to process and stockpile coal.

The following is planned for the future:

1. July – August Site establishment
2. July – September Conclude opencast mining in area
3. November Commence underground mining
4. December 11 – June 12 Ramp up production to close on 100 000 tonnes/month
5. June 12 – June 13 Ramp up production to 250 000 tonnes/month

The first shipment of coal is planned to be loaded in June 2012, with 500 000 tonnes of coal scheduled to be shipped during the following twelve months. The balance of the coal, being 1.5 million tonnes, is scheduled to be shipped before the end of the calendar year 2014.

Illegal Mining Operations

It is noted with concern that the incidence of illegal mining is spreading within the region and that Inspectors are having to face the threat of violence from perpetrators. The Nquma Municipality have convened several inter-governmental department meetings in an attempt to strategize methods of eradicating this cancer. Authorities impound vehicles carrying mining material where it is found that those transporting this material do not have the necessary mining authorizations. Municipal authorities as well as properly licensed operators have requested the DMR for assistance in this regard.

At this time the DMR does not have the capacity to police these activities and has requested licensed operators to report illegal operations to their nearest SAPS for further attention.

4.4.2.9 Examinations

Certificate	Exam Boards	No of Candidates	Certificates issued
Mine Overseers	0	0	0
Blasting	0	0	0
Onsetter	0	0	0
Lampsman	0	0	0

4.4.2.3 Accidents

No fatal accidents occurred in the Eastern Cape for the 2010 calendar year.

Fatal Accidents	0
> 14 Day reportable accidents	2
1 to 13 Day reportable accidents	9

4.4.2.4 Investigations and Inquiries

The necessary investigations have been completed for the >14 day accidents.

	Investigations	Inquiries (including investigation)	Total
Initiated	2	2	2
Completed	2	2	2
% Completed	100%	100%	100%

4.4.2.5 Disaster Type Accidents

No disaster type accidents were reported.

4.4.2.6 Statutory Notices

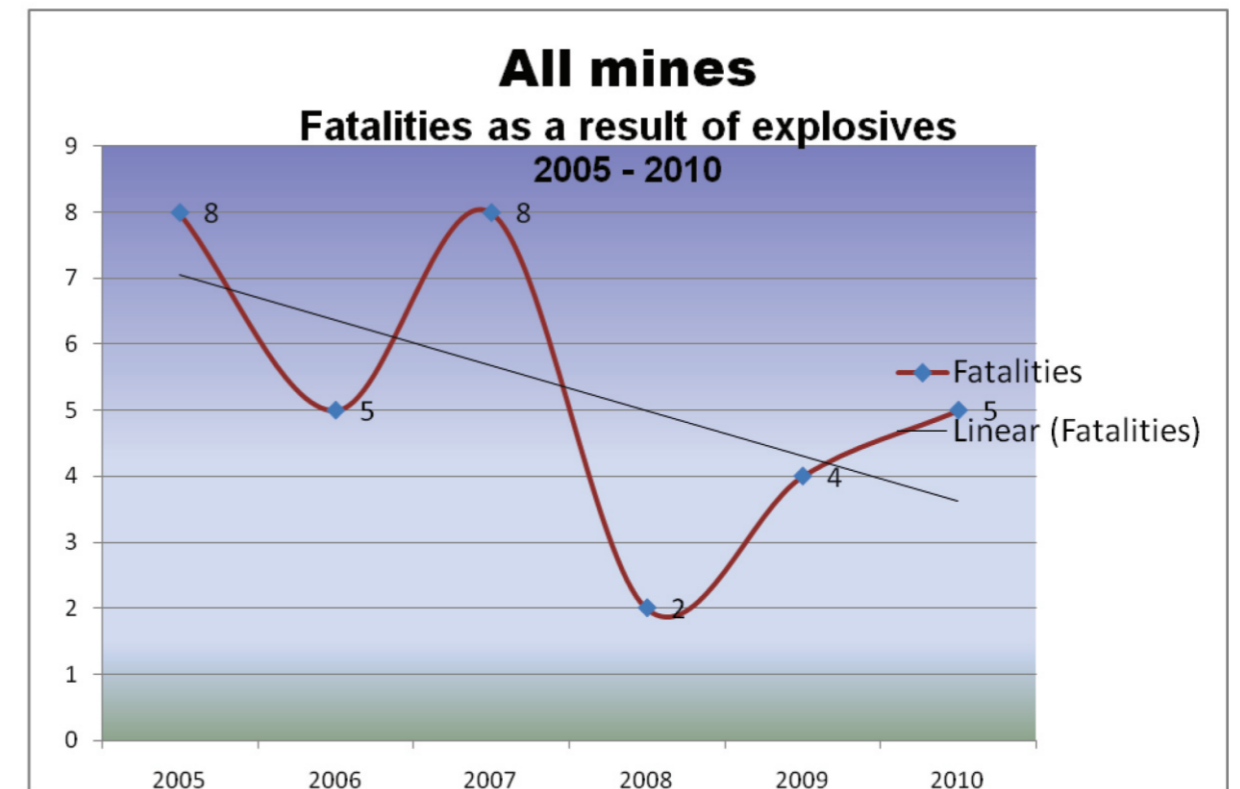
A total of 174 section 55 notices were given to mines. These were mainly due to the following non-compliances:
 Occupational Hygiene: dust control, PPE and lack of mandatory codes of practice;
 Occupational Medicine: with regard to medical surveillance, Annual Medical Reports and lack of mandatory codes of practice;
 Mine Equipment: lack of compliance to the new machinery regulations on conveyor belts and general machinery, lack of mandatory codes of practice, and risk assessment; and
 Mining: lack of mandatory codes of practice.

A total of 13 section 54 notices were issued mainly for guarding of moving machinery and mining closer than 100m to objects to be protected.

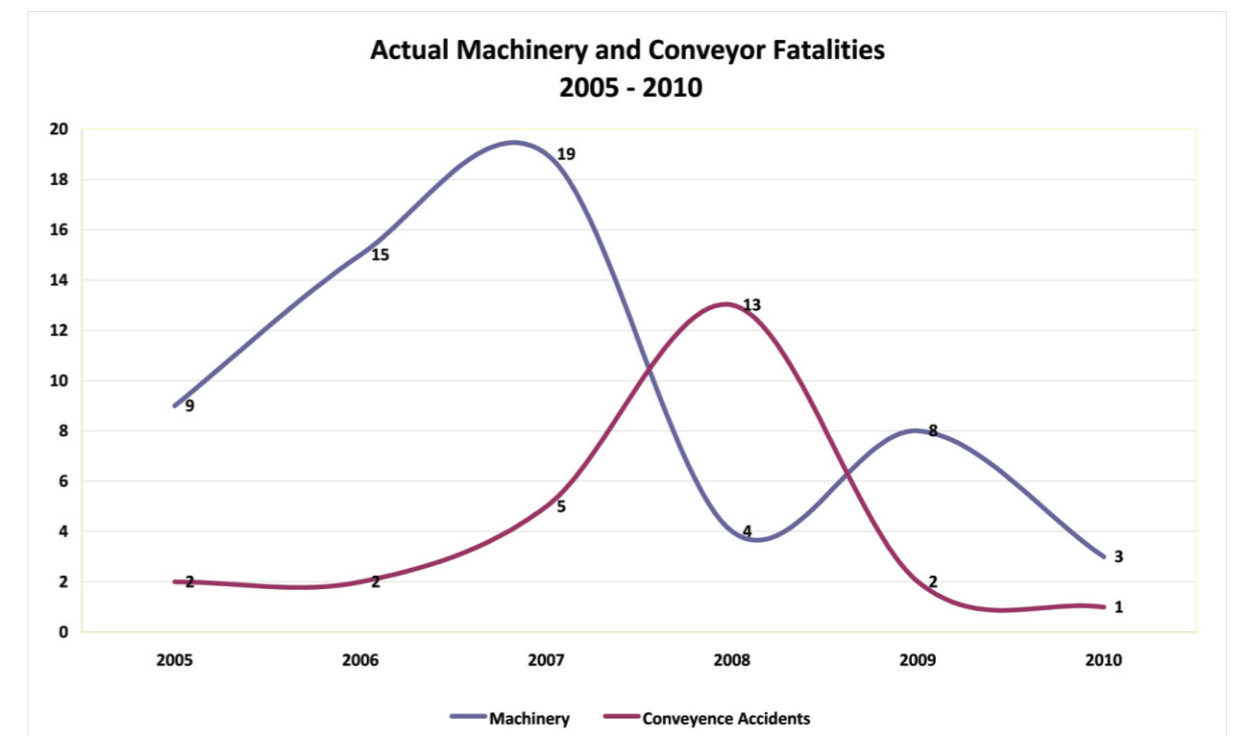
Section 54 Notice	Section 55
13	174

4.4.2.7 Administrative Fines

No of fines recommended by inspector	0
No set aside by Principal Inspector	0
No imposed by Principal Inspector	0
Value of fines imposed	R0
Appeals	0
Value of fines paid	0



With the change in legislation in 2008 the Miner is now called the Rock Breaker and concerns have been raised regarding the training and competency of these persons.



As can be seen there has been a reduction in machinery and conveyor fatalities.

Platinum Mines

The platinum mines fatalities have decreased and areas of concern can be seen in the table shown below.

Classification	2009 Killed	2010 Killed	% change
FALL OF GROUND	19	14	-26.32
MACHINERY		1	
TRANSPORTATION / MINING	13	9	-30.77
CONVEYANCE ACCIDENTS	1		-100.00
ELECTRICITY	1	1	0.00
EXPLOSIVES		2	100.00
Total	41	34	-17.07

Gold mine fatalities

Gold mines largest classification for fatal accidents is in the area of fall of ground and then transport and mining

Classification	2009 Killed	2010 Killed	% change
FALL OF GROUND	38	30	-21.05
MACHINERY	2		
TRANSPORTATION / MINING	18	13	-27.78
GENERAL	14	8	-42.86
CONVEYANCE ACCIDENTS	1		-100.00
ELECTRICITY	2		-100.00
FIRES		5	100.00
EXPLOSIVES	1	1	0.00
HEAT SICKNESS	4	2	-50.00
MISCELLANEOUS	1	3	200.00
Total	81	62	23.46

3.2 Occupational Health

3.2.1 Occupational Hygiene

One of the integral provisions of the Mine Health and Safety Act, Act 29 of 1996 is to protect the workers in the mining industry from the adverse health effects of being exposed to occupational health hazards such as dusts, fibres, chemicals, noise, thermal stresses and radiation.

Regulation 9.2(2) of the Mine Health and Safety Act, read with Section 12 of the MHSA, requires the employer to establish, maintain, and record occupational Hygiene Measurements.

The information below is collected to help assess the magnitude of the hygiene problems, so that corrective action can be planned and prioritised. This also sheds light on whether current interventions are bearing fruit. The information is further utilised as lead indicators for the industry silicosis and noise milestones.

4.4.1.4 Topical issues and matters of interest

As a consequence of a depressed global and local economy coal mining operations in the Eastern Cape area of Indwe have not progressed as expected. Underground mining operations are now expected to commence in November 2011.

Illegal mining operations have increased in all the Cape regions. Inspectorate staff have met with District Municipalities in order to strategise methods of addressing this serious matter. Where these operations are found it has been recommended that they be reported to the local SAPS as criminal offences.

4.4.1.5 Strategy to improve the status quo

A total of 318 and 541 section 54(1) and 55 notices respectively were issued during the period under review. Due to staff shortages, insufficient staff complements and long distances required to be travelled to perform follow-up inspections these are not always possible. Compliance to statutory orders given by Inspectors will be strengthened by the reintroduction of the revised Administrative Fine Guideline implemented on 1 April 2011. Non-payment of fines, under the amended MHSA can now be made an order of Court.

Regional staff continue to participate in structures established to deal with challenges relating to all mining issues as well as those related to training and capacity building in the mining industry.

4.4.2 Regional Report: Eastern Cape

4.4.2.1 Overview of the Region

The Eastern Cape is the second largest of South Africa's nine provinces in terms of area and third largest in terms of population. The province includes the former homelands of Transkei and Ciskei and is inhabited with almost seven million people who speak mainly Xhosa, Afrikaans and English.

There are approximately 240 mining operations in the Eastern Cape employing over 2000 people in the medium and high risk operations. Mining takes place in 57 hard rock quarries and many gravel and clay quarries to provide the necessary materials for the construction industry. Production levels at many operations were forced to decrease as a consequence of the depressed global economy affecting their operations. This has unfortunately led to widespread reduction in employment levels.

4.4.2.2 Audits and Inspections

Inspections were performed in accordance with the annual planning.

Category	Inspections	Audits
Planned	374	44
Actual	410	54
% Compliance	110%	123%

4.4 Regional Operations – Other Mines and Offshore

4.4.1 Regional Operations Manager's Overview

4.4.1.1 General

The Chief Directorate: Other Mines and Off-shore Operations is responsible for the Cape regions comprising of Eastern Cape, Western Cape and the Northern Cape effectively covering the largest percentage of the surface area of South Africa. These regions, compared to others, employ less labour and the Eastern and Western Cape regions are surface operations with the exception of a coal mining operation in the Indwe area of the Eastern Cape.

Mining activity occurs over a range of commodities which includes base metals, industrial minerals, diamonds, and petroleum products. Mining operations occur on surface, underground and off-shore.

4.4.1.2 Achievements

The Chief Directorate, through the regional offices, has conducted a total number of 194 audits, 1592 inspections 56 investigations and 4 inquiries against a target of 248 audits, 1625 inspections, 63 investigations and 4 inquiries respectively. This translates to an achievement of 78% audits, 98% inspections, 89% investigations and 100% inquiries.

The under-achievement relates to staffing and resource issues in the regional offices. With the exception of the Northern Cape, the Western and Eastern Cape regional offices operated with a full complement of staff for the majority of the period under review. The Northern Cape region experienced a serious shortage of Mine Equipment Inspectors. Existing vacant posts have recently been advertised and, providing the interest and skills are available, these vacancies should be filled early in the next financial year.

The Northern Cape region recorded 4 fatalities for both the current and previous reporting periods. The Western Cape recorded no fatalities for the current period against 3 fatalities for the previous year. The Eastern Cape recorded no fatalities for the third successive year.

4.4.1.3 Challenges

Resources remain a challenge in the areas of staff, finances as well as equipment. Regions battle to attract personnel with the requisite mining skills mainly due to uncompetitive salaries offered. As mentioned earlier the Cape regions cover, by far, the greatest geographical area in South Africa which requires Inspectors to be away from their permanent work stations for lengthy periods of time. Not having the necessary state-of-the-art portable equipment presents challenges in respect of communication and access to information. Insufficient budget also resulted in a slowdown of enforcement towards the end of the financial year.

The various offices of the National Prosecuting Authority are not consistent in the process of handling section 91 offences which must receive attention nationally in the next year.

Accurate, timeous and reliable data for both health and safety remains a challenge which complicates the effect that the Inspectorate is making in their enforcement strategies. A new management information system introduced to the Inspectorate during the year requires additional attention before significant progress can be reported.

The Cape regions lack sufficient training facilities and the Mining Qualification Authority has been requested to make itself more visible in the Cape regions.

3.2.1.1 Occupational Hygiene Measurements.

a. Airborne Pollutants Exposures

The milestone set by the Mine Health and Safety Council regarding the elimination of silicosis is that by:-

1. December 2008, 95% of all exposure measurement results will be below the occupational exposure limit for respirable crystalline silica of 0.10 mg/m³.
2. December 2013, with present diagnostic techniques, there will be no new cases of silicosis.

[Table 3.2.1.1(a)]: Exposure to Airborne Pollutants per Exposure Classification band per Commodity.

Commodity	Number of Persons Exposed to Airborne Pollutants per Exposure Classification Band				% Persons Exposed to Airborne Pollutants per Exposure Classification Band		
	A	B	C	Total	A	B	C
Regions							
GOLD	1820	14908	68852	85580	2.13	17.42	84.15
COAL	2457	18754	71591	92802	2.65	20.21	77.36
CHROME	24	333	4405	4762	0.5	699	92.5
COPPER	2252	618	3389	6259	35.98	9.87	54.15
DIAMONDS	437	2296	3326	6059	7.21	37.89	55.81
IRON-ORE	18	47	1148	1213	1.48	3.87	94.64
MANGANESE	29	23	34	86	33.72	26.74	43.03
PLATINUM GROUP METALS	1544	6287	356997	364828	0.42	1.72	99.14
OTHER	7022	10890	23679	41591	16.88	26.18	56.93
Total	15603	54156	533421	603180	2.59	8.98	88.43

Exposure Classification Bands

A = Exposures the OEL or mixture of exposures 1

B = Exposures 50% of the OEL and < OEL or mixtures of exposures 0.5 and < 1

C = Exposures 10% of the OEL and < 50% of the OEL or mixtures of exposures 0.1 and < 0.5

Please Note:

- The exposure classifications are based on the Air Quality Index (AQI) due to exposure to multiple pollutants in the mining environment.
- The AQI index of multiple pollutants is determined by dividing the dust concentration of each pollutant in the mixture by its Occupational Exposure Limit (OEL) and adding the results together. The sum should not be greater than Unit. The summation of pollutants concentration should be in excess of 10% of the OEL.
- The number of persons depicted on the table above is derived from the number of samples collected and does not reflect the actual number of people employed in the mining industry.

[Table 3.2.1.1(b)]: Exposure to Airborne Pollutants per Exposure Classification band per Region.

Commodity	Number of Persons Exposed to Airborne Pollutants per Exposure Classification Band				% Persons Exposed to Airborne Pollutants per Exposure Classification Band		
	A	B	C	Total	A	B	C
Regions							
WESTERN CAPE REGION	413	3325	11314	15052	5.37	48.07	46.56
NORTHERN CAPE REGION	1307	1690	10080	13077	49.45	17.85	30.23
FREE STATE REGION	1774	6477	18856	27107	9.72	31.86	50.85
KWAZULU/NATAL REGION	811	4062	15500	20373	6.54	29.03	63.45
MPUMALANGA REGION	1742	15904	68943	86589	2.05	19.29	78.44
NORTHERN REGION	1996	8144	32249	42389	5.73	21.72	72.27
GAUTENG REGION	4366	8578	19710	32654	19.14	33.37	47.36
NORTH-WEST (STH) REGION	913	2044	11898	14855	17.99	18.75	63.26
NORTH-WEST (NTH) REGION	2212	3601	343839	349652	0.6	0.68	97.58
EASTERN CAPE	69	331	1032	1432	4.5	21.6	73.9
TOTAL	15603	55156	533421	603180	2.59	8.98	88.43

Exposure Classification Bands

A= Exposures the OEL or mixture of exposures 1

B= Exposures 50% of the OEL and < OEL or mixtures of exposures 0.5 and < 1

C= Exposures 10% of the OEL and < 50% of the OEL or mixtures of exposures 0.1 and < 0.5

Table 3.2.1.1 (a) shows that the total number of employees exposed to airborne pollutants per commodity as per A and B classification bands was 15603(2.59%) and 54156(8.98%) respectively in 2010 as compared to 7809 (5.32%) and 25642 (17.46%) in 2009. There are 69759(11.56%) employees exposed to A and B classification of the total population of 603180 for the period under review

Tables 3.2.1.1 (b) shows that the total number of people exposed to airborne pollutants per region as per A and B classification bands was 15603(2.59%) and 54156(8.98%) respectively in 2010 as compared to 7915 (5.32%) and 26474 (17.79%) in 2009.

Table 3.2.1.1 (c) Achievements against the milestones for respirable crystalline silica.

Region	No <0.1 mg/m3	Region Total	Percentage
WESTERN CAPE REGION	24	70	34.29
NORTHERN CAPE REGION	49	54	90.74
FREE STATE REGION	80	116	68.97
KWAZULU/NATAL REGION	129	140	92.14
MPUMALANGA REGION	479	514	93.19
NORTHERN REGION	288	307	93.81
GAUTENG REGION	149	211	70.62
NORTH-WEST REGION	57	67	84.4
EASTERN CAPE	119	132	90.1
TOTAL	1312	1547	84.81

4.3.4.9 Examinations

Certificate	Exam Boards	No of Candidates	Certificates issued
Mine Overseers	36	363	31
Blasting	28	281	87
Onsetter	26	192	155
Lampsman	10	50	21

4.3.4.10 Land use applications and complaints

	Received	Completed	Percentage
Township Developments	38	38	100%
Mining and Prospecting Right	217	217	100%
Closure Certificate	66	59	89%
Environmental Management	69	68	98%
Complaints	13	13	100%

4.3.4.11 Strategy Adopted to Improve the Status Quo

The following are some of the strategies adopted by the region to improve the Status Quo:

In addition to the existing Rustenburg and Klerksdorp Health and Safety tripartite forums, the region established the following forums which meet on a quarterly basis:

- Rock Engineering Forum
- Lonmin
- Anglogoldashanti

Main contributors to accidents involving fatalities and reportable accidents were identified and increased inspections and audits are envisaged.

The continuous involvement of employee representatives (organised labour) in mine health and safety matters at mines is encouraged and promoted.

Statutory instructions to halt unsafe or unhealthy mining operations are issued to poor performing mines which consistently injure mineworkers.

Before any Section 54 instruction may be considered for withdrawal; the employer and organised labour must first make a presentation of remedial measures of system failures to the Principal Inspector of Mines or his delegated official. Verification visits before withdrawal of the instructions are conducted if recommended.

4.3.4.7 Administrative Fines

No of fines recommended by inspector	1
No set aside by Principal Inspector	1
No imposed by Principal Inspector	0
Value of fines imposed	R0
Appeals	0
Value of fines paid	0

4.3.4.8 Topical issues and Matters of Interest

Following the disaster at Aquarius Marikana 4 shaft, which was similar in nature to the one experienced at Impala 14 shaft in 2009, the Principal Inspector of the North West Region issued a directive to all mines who apply the Bord and Pillar mining method to reconsider the reduction of the Bord width to, at least, 6 metres.

There was a slight improvement in Fall of Ground fatalities from 50% in 2009/2010 to 42% in 2010/2011.

Some of the contributing factors to fatalities and injuries were identified as follows:

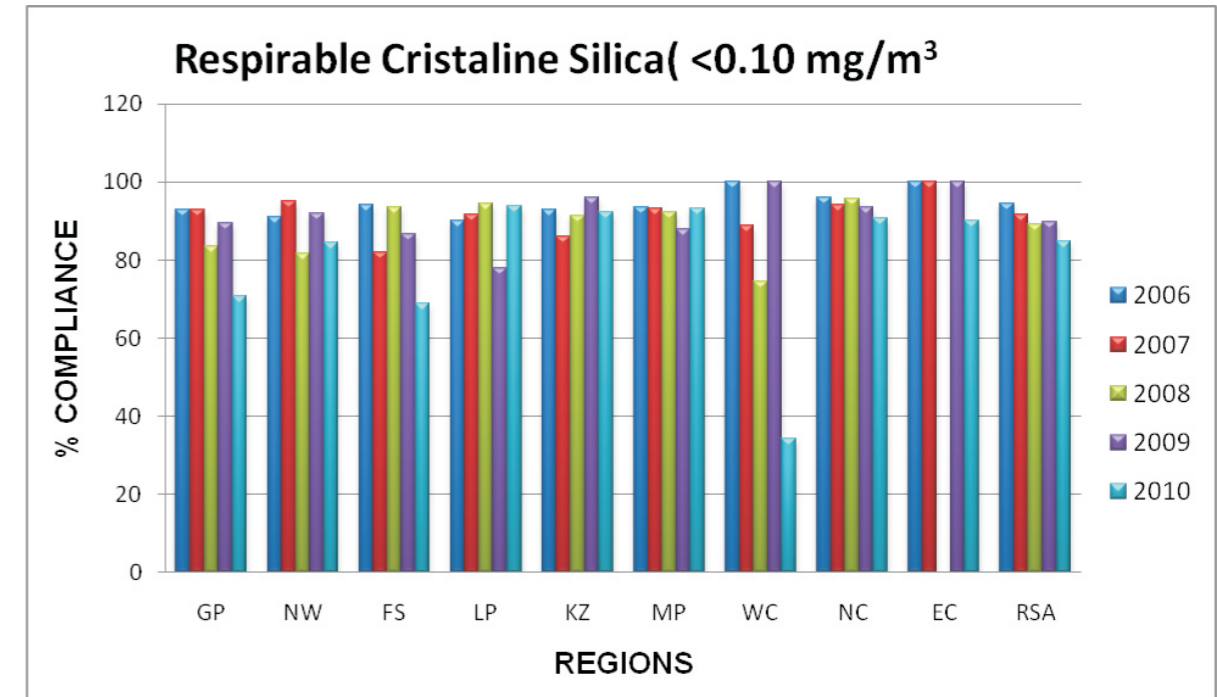
- Non-adherence to mine support standards;
- Mining unmineable ground;
- Inadequate mine and support design;
- Failure to adhere to Rock Engineer's recommendations;
- Denial of system failures resulting in recurring accidents;
- Poor early entry examination;
- Poor maintenance of equipment and rail tracks ; and
- Reluctance to adopt latest and proven technologies.

Cases of medical deaths at mines were also reported to the regional office, mainly as a result of heart attacks and chronic diseases. This unfortunate trend has once again indicated the need for mines to pay more focus on health matters.

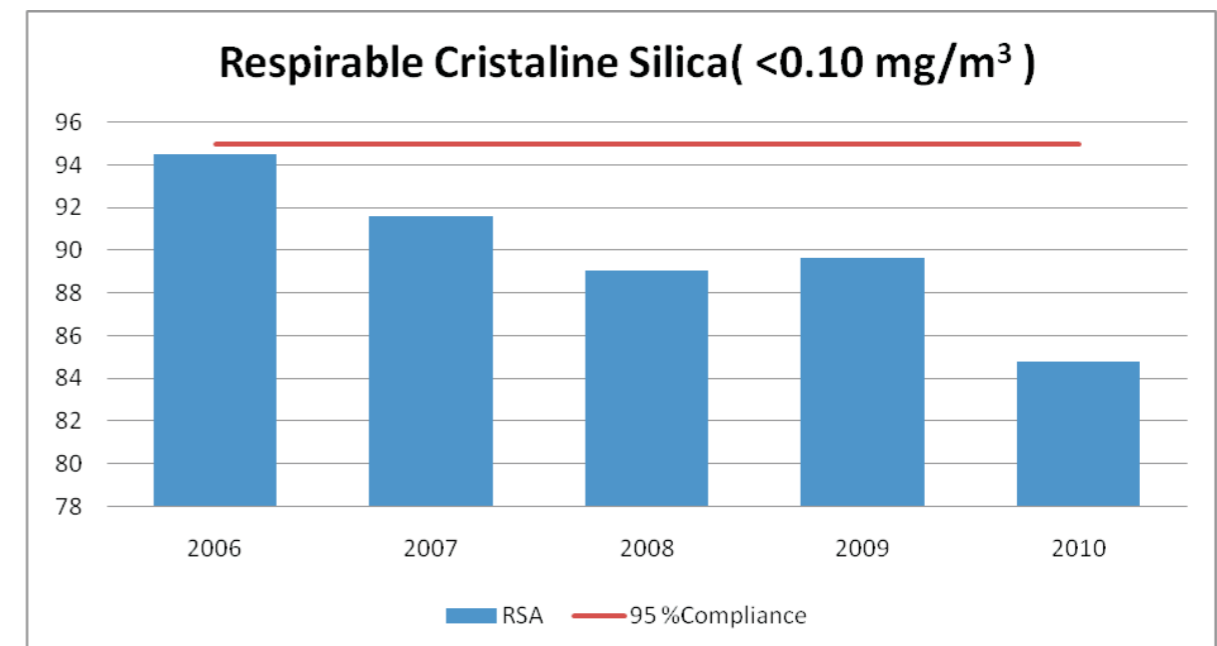
Due to the recovery of the mineral resource market and the improvement in the platinum price, the marginal mines are now increasing production and increasing labour turn-over by the employment of novices. It must be noted, however, that novices are more accident prone due to lack of experience.

The high turnover of Inspectors resigning from the region posed serious challenges in respect of conducting inspections at the mines thus compromising visibility.

[Graph 3.2.1.1(c)]: Achievements against the milestone for respirable crystalline silica.



[Graph 3.2.1.1(c)]: Achievements against the milestone for respirable crystalline silica nationally.



All the regions are striving towards the achievement of milestones as set by the Mine Health and Safety Council regarding the elimination of silicosis. Unfortunately, some of the regions have missed the December 2008 milestone and the results for 2009 were fluctuating. There is a severe downward trend from 2009 to 2010, which projects that the 2013 milestones might also not be achieved.

Noise Exposures

The MILESTONES towards meeting the target on the elimination of Noise Induced Hearing Loss are that:-

1. After December 2008, there must not be any deterioration in hearing of greater than 10% amongst occupationally exposed individuals.
2. By December 2013, the total noise emitted by all equipment installed in any workplace 110dB(A) at any location in that workplace

[Table: 3.2.1.2(a)]: Exposures to Noise per Classification band per commodity

Commodity	Number of Persons Exposed to Noise per Exposure Classification Band				% Persons Exposed to Noise per Exposure Classification Band		
	A	B	C	Total	A	B	C
GOLD	207	11563	12102	23872	0.87	48.44	50.28
COAL	0	10520	7658	18178	0	58.1	41.9
CHROME	344	3720	198	4262	8.07	87.28	4.65
COPPER	0	2320	479	2799	0	82.94	17.06
DIAMONDS	56	2535	2719	5310	1.05	47.74	51.21
IRON-ORE	0	499	68	567	0	88.01	11.99
MANGANESE	0	14	42	56	0	25	66.07
PLATINUM GROUP METALS	10869	107003	16897	134769	7.99	79.59	9.74
OTHER	306	9428	323	10057	2.4	73.9	23.7
Total	11782	147602	40486	199870	5.89	73.85	20.26

Exposure classification band:

A = Exposures 105 LAeq, 8h

B = Exposures 85 105dB LAeq, 8h

C = Exposures 82 LAeq, 8h and < 85dB LAeq, 8h

Please Note:

1. The Occupational Exposure Limit for Noise is 85 dB (A) based on an 8 hour exposure shift.
2. No special precautions are required except monitoring for the C classification Band.
3. The implementation of hearing conservation programme is required for A and B classification Band.
4. Persons in A and B classification bands are over-exposed.

Inspections and Audits were planned for the existing staff compliment, however, the planned target for inspections were not achieved due to resignations and increasing workload on individuals such as examination boards, accident inquiries and investigation, administrative work, land use applications and complaints. Some Inspectors attended an Inspectors course for a period of one month at the University of Witwatersrand. Planned audit targets were not achieved as a result of an instruction from the Deputy Chief Inspector of Mines to conduct more inspections on support after the disaster experienced in the region.

4.3.4.3 Total Accidents Reported

Fatal Accidents	43
> 14 Day Accidents	1631
1 to 13 day reportable accidents	686

A total of 45 mine employees died in 2010 in the North West Region as compared to 56 in 2009. This is a 23, 2% improvement when compared to the results achieved in 2009. The Fall of Ground accidents still remains the biggest contributor to the fatal accidents in the region, with the contribution of 42% of all fatalities. Transportation and machinery category was the second highest contributor with 27% contribution.

4.3.4.4 Investigations and Inquiries

	Investigations	Inquiries	Total
Initiated	322	69	391
Completed	310	59	369
% Completed	96%	86%	94%

The backlog of outstanding fatal inquiries from the previous years were also conducted and finalised during the period under review.

4.3.4.5 Disaster Type Accidents

Two massive Falls of Ground accidents at two different mines in the region claimed the lives of 8 mine workers in total. The one accident which occurred at Simmer and Jack, Buffelsfontein mine in May 2010, claimed 3 lives. The other accident occurred in July 2010 at Aquarius Marikana 4 shaft and claimed the lives of 5 mineworkers while a sixth one was critically injured.

4.3.4.6 Statutory Notices

Section 54 Notice	Section 55
250	152

Mine Health and Safety Act Section 54 instructions were issued for explosives control, substandard support, poor barring, poor ventilation conditions, substandard and broken rail switches and tracks, substandard lifting equipment, locomotive braking systems not complying with standards, lock-out procedures and systems not available. Most of the Section 54 instructions issued resulted in the stoppage of the workplace(s) or equipment until remedial measures are put in place and presented to the Principal Inspector of Mines.

4.3.2.11 Strategies to Improve the Status Quo

The following are some of the strategies that have been adopted to improve health and safety in the region:

- Focusing on certain areas or disciplines that have been identified as high risks:-
- Seismically active areas
- Enforcing preconditioning
- No persons permitted in the 'No Go' areas
- Fall of ground active areas
- Implementation of hanging-wall nets
- Occupational hygiene/medicine related issues.
- Engineering and shaft related issues.
- Hauling related issues
- Conveyors
- Concentrating on engineering out accidents (undesirable behaviour)
- Ensuring that mines plan safely and maintain daily planning.
- Behaviour based safety campaigns.
- Coercion of mine management to be more proactive in the prevention of dangerous situations and to initiate their own action measures following an accident.
- An increase in systems audits by inspectors with follow-up underground inspections.
- Increased interaction between inspectors, mine management and unions.
- Monitoring emergency preparedness and response at the mines.

4.3.4 Regional Report: North West

4.3.4.1 Overview of the Region

The North West Region which accounts for most of the mine employees in the country, is made up of two distinguishable mining areas, namely the Klerksdorp area where the main commodities mined are gold, uranium, alluvial diamonds along the Harts and Vaal Rivers and the Rustenburg area where Platinum Group Metals (PGMs) and Chrome are predominantly being mined.

A wide variety of other commodities like Iron Ore, Dimension Stone (Granite and Slate), Lime, Fluorspar, Vanadium, Fissure Diamonds and Clay that are also being mined. The Gold, Uranium, PGMs, Chrome and Fissure Diamond mines are predominantly made up of labour intensive underground operations. There are numerous slate and granite quarries with the rest being open pit operations.

4.3.4.2 Inspections and Audits

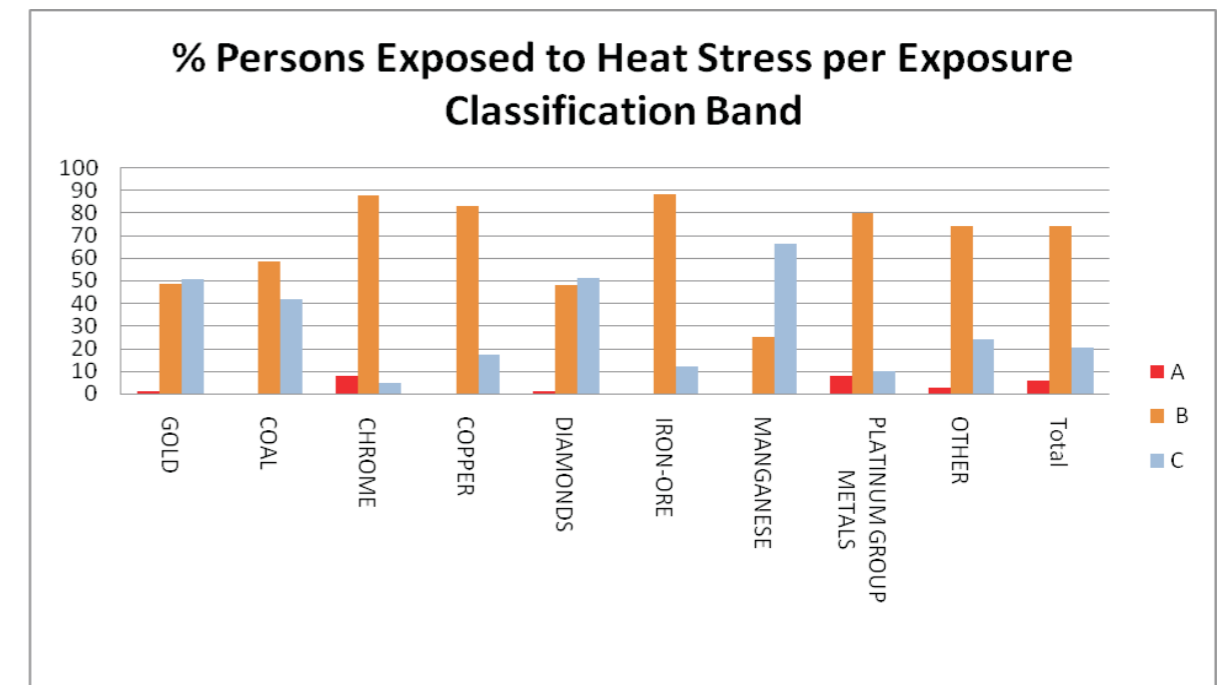
During the period under review, the following number of inspections and audits were conducted.

Category	Inspections	Audits
Planned (on staff strength)	948	43
Actual	700	37
% Compliance	74%	86%

[Table: 3.2.1.2(b)]: Exposures to Noise per Classification band per Region

Commodity	Number of Persons Exposed to Noise per Exposure Classification Band				% Persons Exposed to Noise per Exposure Classification Band		
	A	B	C	Total	A	B	C
Region							
WESTERN CAPE REGION	174	3957	1060	5191	6.62	54.26	31.89
NORTHERN CAPE REGION	747	3993	986	5726	0	93.3	6.7
FREE STATE REGION	452	9876	9665	19993	0	33.3	66.04
KWAZULU/NATAL REGION	285	4303	1694	6282	0	58.76	41.24
MPUMALANGA REGION	506	8955	6221	15682	1.35	58.21	40.41
NORTHERN REGION	342	18303	6696	25341	1.31	73.79	20.1
GAUTENG REGION	292	12340	998	13630	0	98.02	1.98
NORTH-WEST (STH) REGION	481	2277	978	3736	0	85.9	14.1
NORTH-WEST (NTH) REGION	8503	82230	12024	102757	8.36	79.83	9.3
EASTERN CAPE	0	1368	164	1532	0	89.3	10.7
TOTAL	11782	147602	40486	199870	5.8948	73.849	20.2562

[Graph 3.2.1.2(a)]: Exposures to Noise per Classification band per Commodity.



Exposure classification band:

- A = Exposures 105 dB LAeq, 8h
- B = Exposures 85 105dB LAeq, 8h
- C = Exposures 82 LAeq, 8h and 85dB LAeq, 8h

Please Note:

1. The Occupational Exposure Limit for Noise is 85 dB (A) based on an 8 hour exposure shift.
2. No special precautions are required except monitoring for the C classification Band.
3. The implementation of hearing conservation programme is required for A and B classification Band.
4. Persons in A and B classification bands are over-exposed.

Tables 3.2.1.2 Out of a total population of 199870, (78%) employees were exposed to A and B classification bands respectively in 2010.

6% of the employees were exposed to the noise level above 105 decibels as classified in the A band which it is almost equivalent to a fatal. 74% of the employees were exposed to the noise level above 85decibels as classified in the B band, which is most likely equivalent to a serious accident, in accordance to the “**Mine Safety risk classification matrix**”.

A concerted effort by all the mines needs to be made to reduce noise exposures, if the set milestones are to be achieved.

All the mines where employees are exposed to noise levels classified in A and B must implement hearing conservation and issue employees with the hearing protection devices.

c. Thermal stress Exposure.

[Table: 3.2.1.3(a)] Exposure to Heat per Exposure Classification band per commodity:

Commodity	Number of Persons Exposed to Heat Stress per Exposure Classification Band				% Persons Exposed to Heat Stress per Exposure Classification Band		
	A	B	C	Total	A	B	C
GOLD	207	11563	12102	23872	0.87	48.44	50.28
COAL	0	10520	7658	18178	0	58.1	41.9
CHROME	344	3720	198	4262	8.07	87.28	4.65
COPPER	0	2320	479	2799	0	82.94	17.06
DIAMONDS	56	2535	2719	5310	1.05	47.74	51.21
IRON-ORE	0	499	68	567	0	88.01	11.99
MANGANESE	0	14	42	56	0	25	66.07
PLATINUM GROUP METALS	10869	107003	16897	134769	7.99	79.59	9.74
OTHER	306	9428	323	10057	2.4	73.9	23.7
Total	11782	147602	40486	199870	5.89	73.85	20.26

Heat stress Exposure Classification Band:

A = WB > 32.5 O C or DB > 37 O C or Globe Temperature > 37 O C

B = 29.0 >WB 32.5 O C and DB 37 O C Globe Temperature as for DB

C = 27.5 >WB 29.0 O C and DB 37 O C Globe Temperature as for DB

D = 27.5 O C and DB 32.5 O C Globe Temperature

4.3.3.8 Examinations

As can be seen from the tabulation below, the success rate for candidates, especially for the Mine Overseers examination, is very poor. Candidates are generally poorly prepared for the examinations, which occupy much inspector time. Candidates absenting themselves from the examination remain a problem. There were 162 absentee candidates during the year. Blasting Certificate examinations were suspended on 30 June 2009 as per the Chief Inspector’s instruction. The Mining Qualification Authority is now issuing the equivalent qualification.

Certificate	Exam Boards	No of Candidates	Certificates issued
Mine Overseers	59	501	42
Blasting	0	0	0
Onsetter	21	207	104
Lampsman	7	10	6

4.3.3.9 Land Use Applications and Complaints

Much time is spent by the individual inspectors in processing applications for townships and new mining activities. An increasing number of complaints emanate from townships that are encroaching on established mining activities.

	Received	Completed	Percentage
Township Developments	62	62	100%
Mining and Prospecting Rights	100	91	91%
Closure Certificates	8	10	125%
Environmental Management	91	91	100%
Complaints	41	41	100%

4.3.3.10 Matters of Interest

Rising water in the Witwatersrand Compartments

As reported last year, pumping of water from the mine voids in the Central Basin, which extends from Roodepoort to Boksburg, has ceased. The water is now approximately 475 metres below surface at ERPM where pumping was last carried out and the water in the basin is rising at approximately 0,5 metres per day. No decision has yet been taken to determine where a new pump station is to be established to recommence pumping operations. Central Rand Gold has a mining right over much of the Central Rand and is planning mining to a depth of 300 metres below surface. A decision with regard to the pumping and treatment of the water and the apportionment of costs is needed as a matter of urgency.

Pamodzi Gold Mine (Grootvlei), which is in provisional liquidation, ceased mining operations during the year under review, but continued to pump a reduced volume from the No 3 Shaft pump station until it had to be abandoned because of the danger of the rising water flooding the pump station. All the pumps and motors and some of the electrical switchgear were removed to surface. Mine management submitted a proposal to the management company for the establishment of a new pump station approximately 150 metres further up the shaft, but no money has as yet been made available to realize this proposal. The water level in the basin is being measured at Sub Nigel Gold Mine where it is rising at 0,4 metres per day.

First Uranium (Randfontein Operations) was able to put measures in place to improve the quality of the water that is being discharged from the mine. However, as a result of the very wet summer that has been experienced the volumes currently discharging from underground cannot be fully treated and between 10 to 20 MI of untreated water is flowing into the Krugersdorp Game Reserve on a daily basis.

4.3.3. Total Accidents Reported

During the year 29 employees were fatally injured in 28 accidents in the mines in the region, 15 fewer employees than in 2009. This is a significant improvement on previous years. 613 employees were injured in accidents reported by the mines in the region, which is also an improvement on the achievements of 2009.

Nine employees were fatally injured in gravity induced fall of rock accidents and 1 employee in a seismically induced fall of rock accident. The improvement in the number of employees injured and fatally injured in seismically induced accidents is significant.

Fatalities as a result of accidents involving mobile machinery are, however, a major concern.

Fatalities	29
> 14 Day accidents	613
1 to 13 Day reportable accidents	333

4.3.3.4 Investigations and Inquiries

Mines are reporting accidents and incidents to the responsible inspectors on a daily basis. This allows for such occurrences to be investigated very soon after the event. Risk profiles of working areas are being carried out so that the "hot spot" areas can be identified and targeted. Specific types of accidents are being targeted in an attempt to improve matters.

	Investigations	Inquiries	Total
Initiated	172	29	201
Completed	172	23	195
% Completed	100%	79%	97%

4.3.3.5 Disaster Type Accidents

One gravity induced fall of rock accident at Rand Uranium resulted in the death of two employees.

4.3.3.6 Statutory Notices

During the year, Inspectors of the region issued 205 orders to stop unsafe and unhealthy practices (sect 54) and 1162 orders to comply with health and safety requirements (sect 55) to the employers of the mines.

Section 54 Notice	Section 55
205	1162

4.3.3.7 Administrative Fines

No administrative fine was recommended by the Inspectors of the region.

No of fines recommended by inspector	0
No set aside by Principal Inspector	0
No imposed by Principal Inspector	0
Value of fines imposed	0
Appeals	0
Value of fines paid	0

[Table: 3.2.1.3(b)] Exposure to Heat per Exposure Classification band per Region:

Commodity	Number of Persons Exposed to Heat Stress per Exposure Classification Band					% Persons Exposed to Heat Stress per Exposure Classification Band			
	A	B	C	D	Total	A	B	C	D
Regions									
WESTERN CAPE REGION	0	8	1164	1528	2700	0	0.3	43.11	56.59
NORTHERN CAPE REGION	0	1268	244	1872	3384	0	37.47	7.21	55.32
FREE STATE REGION	0	3052	6824	1292	11168	0	27.33	61.1	11.57
KWAZULU/NATAL REGION	0	60	86	438	584	0	10.27	14.73	75
MPUMALANGA REGION	0	3768	1840	2173	7781	0	48.43	23.65	27.93
NORTHERN REGION	389	144	2107	4579	7219	5.39	1.99	29.19	63.43
GAUTENG REGION	0	1301	4621	1538	7460	0	17.44	61.94	20.62
NORTH-WEST (STH) REGION	0	0	0	1	1	0	0	0	100
NORTH-WEST (NTH) REGION	226	4805	19930	36569	61530	0.37	7.81	32.39	59.43
EASTERN CAPE	0	0	1353	0	1353	0	0	100	0
TOTAL	615	14406	38169	49990	103180	0.60	13.96	36.99	48.45

Heat stress Exposure Classification Band:

A = WB > 32.5 O C or DB > 37 O C or Globe Temperature > 37 O C

B = 29.0 >WB 32.5 O C and DB 37 O C Globe Temperature as for DB

C = 27.5 >WB 29.0 O C and DB 37 O C Globe Temperature as for DB

D = 27.5 O C and DB 32.5 O C Globe Temperature: DB

Table 3.2.1.3 In 2010, 15021 (14.6%) employees out of the total population of 103180 were exposed to both A and B classification band heat stress. Of these, 615 employees were exposed to heat conditions above 32.5 degrees which is a stop work condition. 38169 employees were exposed to heat conditions above 29.5 degrees which is prone to heat related problems. All the mines where employees are exposed to heat stress conditions in classification A and B must implement heat stress management.

[Table: 3.2.1.3(c)] Exposure to Cold stress per Exposure Classification band per commodity:

Commodity	Number of Persons Exposed to Cold Stress per Exposure Classification Band				% Persons Exposed to Cold Stress per Exposure Classification Band		
	A	B	C	Total	A	B	C
GOLD	0	106	1125	1231	8.61	91.39	0
COAL	0	287	3120	3407	8.42	91.58	0
CHROME	0	105	0	105	100	0	0
DIAMONDS	0	0	405	405	0100	100	0
IRON-ORE	0	111	0	111	100	0	0
PLATINUM GROUP METALS	8	5715	12787	18510	30.9	58.13	10.96
OTHER	49	618	1156	1823	2.69	33.90	60.2
Total	57	6942	18593	25592	0.22	27.13	72.652

Cold Stress Exposure Classification Band:

A = Temperature -30.00 C

B = Temperature 5.0 O C, Temperature -30.00 C

C = Temperature $>5.00\text{ C}$

Please Note:

1. Temperature ranges are given in terms of equivalent chill temperature (ACGH).
2. CSM: Cold Stress Management.
3. Thermal environment in excess of 10.00 C Dry – Bulb must not be reported.
4. Generally for Cold Stress: Quarter –June to August.

[Table: 3.2.1.3(d)] Exposure to Cold Stress per Exposure Classification band per Region:

Commodity	Number of Persons Exposed to Cold Stress per Exposure Classification Band				% Persons Exposed to Cold Stress per Exposure Classification Band		
	A	B	C	Total	A	B	C
Region							
WESTERN CAPE REGION	0	618	662	1280	0	48.28	23.28
NORTHERN CAPE REGION	0	111	12	123	0	90.24	0
FREE STATE REGION	0	1	509	510	0	0.3	99.7
KWAZULU/NATAL REGION	0	0	311	311	0	0	100
MPUMALANGA REGION	0	330	4135	4465	0	5.94	93.84
NORTHERN REGION	49	0	1467	1516	3.23	0	96.64
GAUTENG REGION	0	62	167	229	0	27.07	72.93
NORTH-WEST (STH) REGION	0	0	0	0	0	0	0
NORTH-WEST (NTH) REGION	8	5820	11330	17158	0.19	49.95	49.86
EASTERN CAPE	0	0	0	0	0	0	0
TOTAL	57	6942	18593	25592	0.223	27.13	72.65

Table 3.2.1.3 (c) and (d), indicates that 57 employees (0.22%) were exposed to extremely cold conditions and 6942 (27.13%) employees were exposed to cold conditions in classification “B” for 2010.

General

1. There is still a challenge towards the achievement of the milestones on noise and silicosis. If stringent measures are not implemented to reduce personal exposures the milestones will not be achieved.
2. A multi-disciplinary approach towards the elimination of all occupational hygiene exposures needs to be encouraged and adopted.

Improved communication through Tri-partheid Forums and working groups

Falls of Ground

RBE

Silicosis

Noise

Explosives

Other initiatives that is ongoing includes:

1. Continuation of in-stope roof bolting.
2. Continuation of preconditioning for identified areas.
3. Participating in working groups to monitor and mitigate occupational diseases.
4. Developing close partnerships with other Government Departments, trade unions and other key stakeholders.
5. Audit / inspections of safety management systems and the implementation thereof.
6. Emergency preparedness and response.
7. Quarterly workshops on health and safety with key stakeholders. Review current status and find a way forward.
8. Stoppages of unsafe practices and workplaces.
9. Enforcing the requirements with regards to Rock Engineers

4.3.3 Regional Report: Gauteng

4.3.3.1 Overview of the Region

The major commodity mined in the region is gold, which is mined in the large, deep mines of the West and Far West Rand. Mining activity in the old mining areas of the Central and East Rand is waning, with ERPM having closed down and the Grootvlei Gold Mine, which is administered by Aurora Empowerment Solutions also having ceased operations. However, the Modder East operation of Gold One is in production and Central Rand Gold to the west of Johannesburg is close to reaching the production phase. Investigations by Gold One are in progress to evaluate the old mining areas of the Far East Rand with the intention of recommencing mining in selected areas by the newly established Goliath Gold. Diamond mining is carried out at the underground Petra Mine in Cullinan as well as numerous, small surface operations. Chrome and platinum is mined in the Brits district. In addition, there are a large number of hard rock quarries, clay quarries and sand mines. The labour force in the region is approximately 97100 persons.

4.3.3.2 Inspections and Audits

During the year under review, Inspectors of the region conducted 1565 inspections and 469 audits, which include group audits and audits of management safety systems, occupational health and medical systems.

Group audits are conducted on a weekly basis where mines are targeted to address specific problem areas. The shortage of inspectors impacted negatively on the total number of inspections but audits carried out met the planned target.

Even though the region is short staffed, every effort is made to increase inspector visibility on the mines. Audits of safety systems on the mines have revealed shortcomings at some mines.

Category	Inspections	Audits
Planned	2321	48
Actual	1986	48
% Compliance	82%	100%

4.3.2.9 Examinations

Certificate	Exam Boards	No of Candidates Called / Attended	Certificates issued
Mine Overseers	43	(514 Called) (380 Attended)	32
Blasting	0	0	0
Onsetter	20		96
Lampsman	4	4	4

The Blasting Board examinations were discontinued by the end of July 2009. Lots of time is, however, spent on conversions and issuing of duplicate certificates and inquiries regarding fraudulent certificates. This office still needs to issue 30 Fiery Mine Certificates as soon as the certificates are received.

The low pass rate figure in many of the mine overseer examinations remains a concern to the region. Many candidates from other regions choose to sit the examinations in the Free State and is a point of contention for the regional managers. It is then also difficult to give feedback to the relevant mines.

It is felt that the pass rate would only improve if formal classes are attended such as at a Technikon etc.

Two Mine Managers Certificate examinations and two Mine Surveyors Certificate examinations were also hosted during the year. Two candidates from this region obtained their Mine Manager's Certificate of Competency.

4.3.2.10 Land use applications and complaints

	Received	Completed	Percentage
Township Developments	31	29	94%
Mining and Prospecting Rights	137	127	93%
Closure Certificates	16	10	62%
Environmental Management	196	189	96%
Complaints	22	20	91%

A 103 work pieces ranging from Sunday Labour permissions to other permissions and approvals were received and is completed as it arrives.

Turn around time are well within 30 days.

4.3.2.11 Strategies Adopted for Improving the Status Quo

This region launched the following projects during the year in an effort to improve the status quo:

A well designed strategy to prevent recurring accidents

All mines stopped must make a presentation to the Principal Inspector of Mines as to why accidents or non compliance have occurred. Remedial action is presented in writing for easy follow-up.

3.2.2 Occupational Medicine

3.2.2.1 Annual Medical Report 2010

In terms of Section 16 of the Mine Health and Safety Act, Act 29 of 1996, and regulations, every Occupational Medical Practitioner at a mine must compile an Annual Medical Report covering employees' health based on their records of medical surveillance, and giving an analysis of the status of the mentioned employee's health, without disclosing the names of the employees. The new format of the report was released in 2010. Employers must make sure to use the new forms.

This Annual Medical report has to be given to the employer, who must in turn deliver a completed copy to the Medical Inspector via the office of the Regional Inspector: Occupational Medicine. The records are then captured at the regional offices and complete data forwarded to the Medical Inspector. This information assists the inspectorate to analyse disease trends in all the different commodities and assess the industry's achievements in relation to the milestones set in terms of eradicating silicosis and Noise Induced Hearing Loss by 2013.

For the purpose of this annual medical report, the list of important diseases that are commonly found in

the mining industry include pulmonary tuberculosis (PTB); silico-tuberculosis (SITB); asbestosis (ASB); pneumoconiosis (PN); noise induced hearing loss (NIHL); silicosis (SIL) as well as other diseases.

The number of annual medical reports submitted during the period under review has increased from 547 in 2009 to 564 in 2010. More and more mines are now complying with section 16 of the Mine Health and Safety Act and regulations.

Some mines still need to ensure that reports are submitted to the Medical Inspector within the stipulated timeframes. In terms of the Chief Inspector of Mines instruction OM-1-2009 the annual medical report must be submitted before the end of February of every year. In future mines will have to use the amended annual report as regulated. Administration fines will be given to mines which do not submit annual reports as per the requirements of the Act.

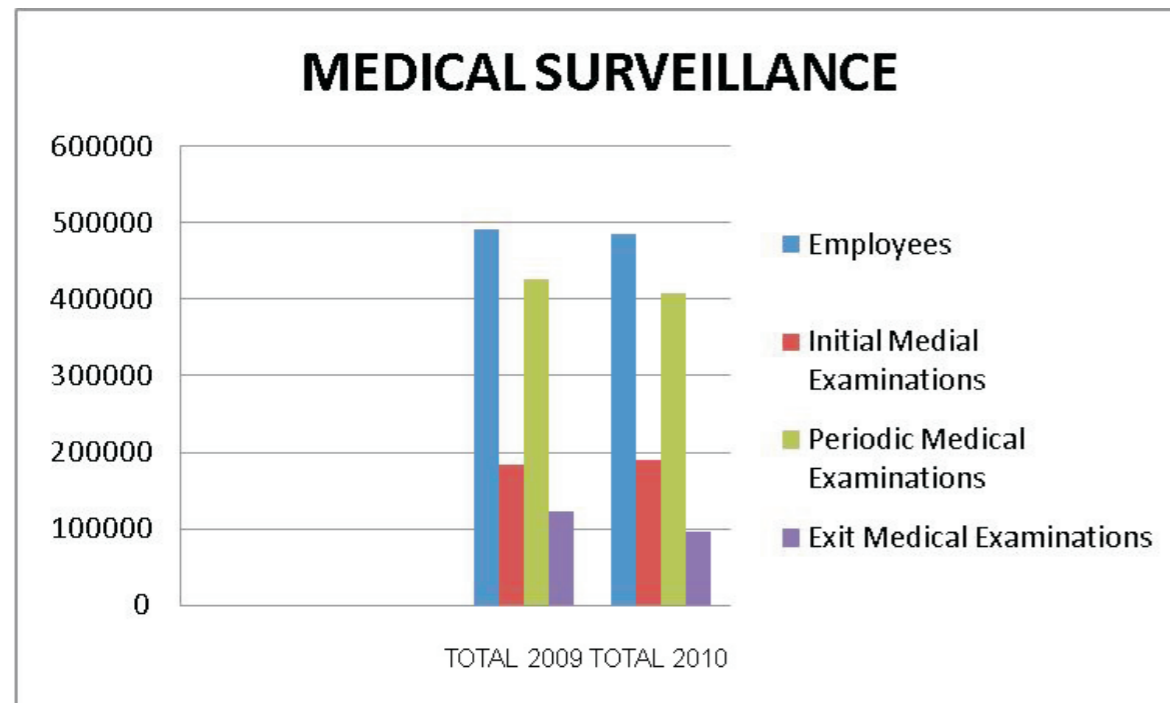
3.2.2.2 New Regulations on Occupational Health

Two new regulations pertaining to occupational health have been gazetted. They address amendments to the exit certificate, whereby a form on record of hazardous work has been added. The other regulation addresses health incident reporting and amendments to the annual medical report.

3.2.2.3 Medical Surveillance

The system of medical surveillance consists of initial, periodical and exit medical examination at appropriate intervals. In terms of Section 17 of the Mine Health and Safety Act, Act 29 of 1996, and regulations, an employee must undergo an exit medical examination when such an employee's service is terminated for any reason. The examination referred to must be held before or within 30 days of termination of employment. The certificate must be handed to the employee indicating all medical surveillance results, the presence or absence of any occupational disease as well as the record of hazardous work. A copy of the exit certificate must be kept in the employee's record of medical surveillance for 40 years.

DESCRIPTION	TOTAL
Employees	485174
Initial Medical Examinations	190545
Periodic Medical Examinations	407207
Exit Medical Examinations	96434
Occupation Changed due to Disease	663
Occupation Changed due to Accident	517
TOTAL 2010	194142
TOTAL 2009	221060



Medical surveillance 2010

Fewer employees have gone through medical surveillance for the reporting period of 2010. The number of employees going through initial medical surveillance has, however, increased slightly. This might be as a result of the recovering economic meltdown and mines are now beginning to hire new employees. The exit medicals show a decrease, indicating that fewer employees are leaving the mines either due to incapacitation or retrenchment. The periodicals are on a decrease and this may indicate that employees are not going through frequent examinations as a result of ill health, injury or change of occupation.

4.3.2.8 Topical Issues and Matters of Interest

Outcomes Based Legislation – misunderstood by Industry
 Minimalistic mind set by employers – repealed Minerals Act, 1991 Regulations
 Inadequate skills industry (Unable to utilise opportunities)
 Empowerment of employees especially to withdraw from dangerous places
 Improve communication with other stakeholders, SIMRAC, MOHAC, MRAC MQA
 Falls of ground accidents. Trimming accidents
 Poor quality of Section 11.5 investigations
 Unconventional Mining – Proper risk assessments – Issue based – Management of Change
 Doing the absolute minimum – living on the edge
 Involvement of Inspectors on Mines – responsible for Culture change – Management responsibility health and safety systems – Denial System failures
 Inadequate technical personnel on mines
 Inadequate skills Department (Succession)

Topical issues

1. Illegal Miners:

This region has experienced a serious challenge in dealing with the bodies of the deceased illegal miners, which are normally found in old gold plants on surface as well as being left at the stations underground. These types of accidents are normally very difficult and/or dangerous to investigate as it is not easy to establish where the scenes of the accidents were.

The region therefore held a workshop with other stakeholders, SAPS, different mining houses, SSA and NPA to draft and implement a protocol on how to deal with these accidents. It appears to be successful.

2. Medical:

During the reporting year, the region has experienced a high number of fatal accident in which employees collapsed while at work. This has necessitated the requirement for an additional Medical Inspector to deal with the work load.

The region has conducted a Medical Workshop to deal with the following:-

- (i) Overview of the Mine Health and Safety Performance
- (ii) HIV Management in the workplace
- (iii) Mine Health and Safety Act, 1996, Section 11.5 investigations for health.
- (iv) Rehabilitation on Functional Assessment Test Battery
- (v) ODMWA / COIDA
- (vi) Medico Legal issues and Protocols
- (vii) Post mortems
- (viii) Reporting of accidents

While leaving the 63 cross cut, there was another small blast that put the local team on edge. They, however, noticed that one of the back-up team members was injured and went to his assistance. On arrival they noticed another member of the team that was injured and on their way to rescue him, noticed the other 3 members that were deceased.

4.3.2.6 Statutory Notices

During the year under review the Inspectors of this region issued 368 Section 54 orders to stop unsafe and unhealthy practices and 225 Section 55 orders to comply with health and safety requirements to the employers of the mines. 47 Mines were stopped and 106 were partially stopped.

Section 54 Notice	Section 55 Notices
368	225

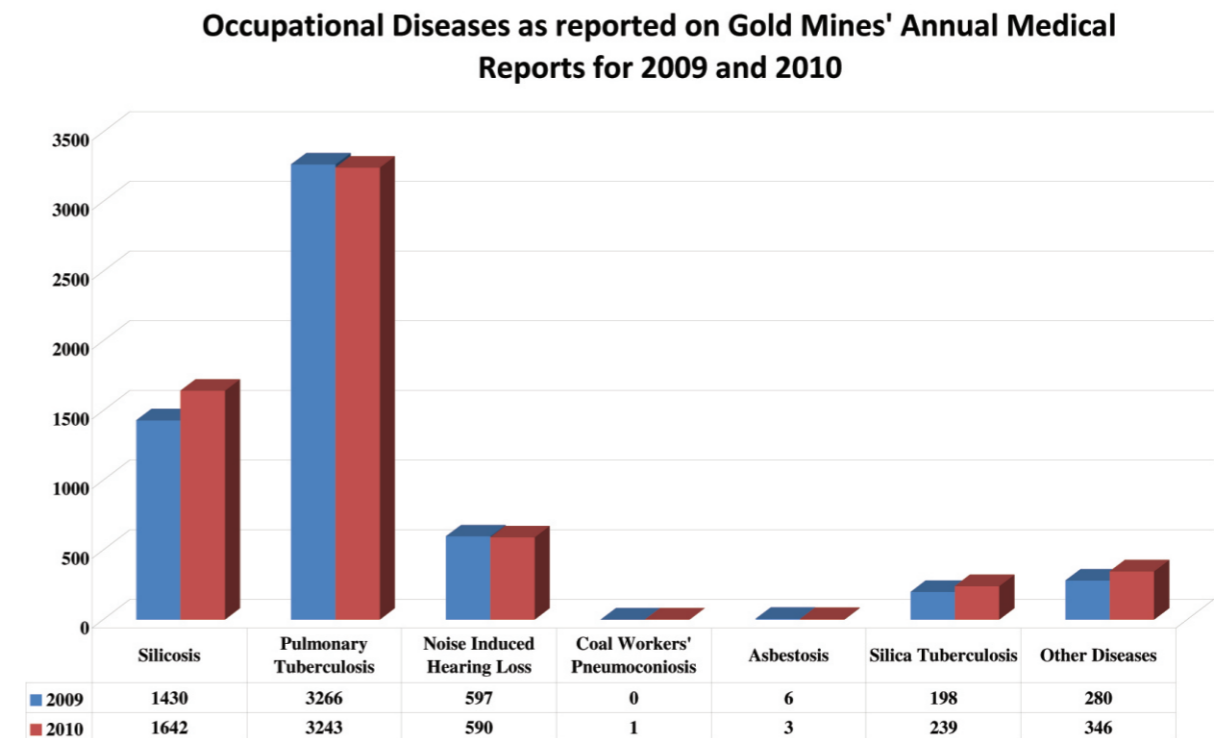
4.3.2.7 Administrative Fines

No Administrative penalties were imposed during the period under review as the directive from the Chief Inspector of Mines is awaited.

No of fines recommended by inspector	0
No set aside by Principal Inspector	0
No imposed by Principal Inspector	0
Value of fines imposed	R0
Appeals	None
Value of fines paid	R0

3.2.2.3 Analysis of occupational diseases submitted per commodity

GRAPH 3.2.2.3 [A]: Occupational diseases for gold mines



An increase in silicosis cases talks to previous exposure to high levels of silica dust, not current exposures. This implies that only when silica dust exposure levels are not exceeded, will silicosis be eliminated, thus achieving the milestones. It is for this reason that focus should be on dust control measures as per the Mine Health and Safety Council milestones which aim to eradicate silicosis. Ideally there should not be any new cases of silicosis by 2013 of employees recruited from 2008 who had never been exposed to silica dust before.

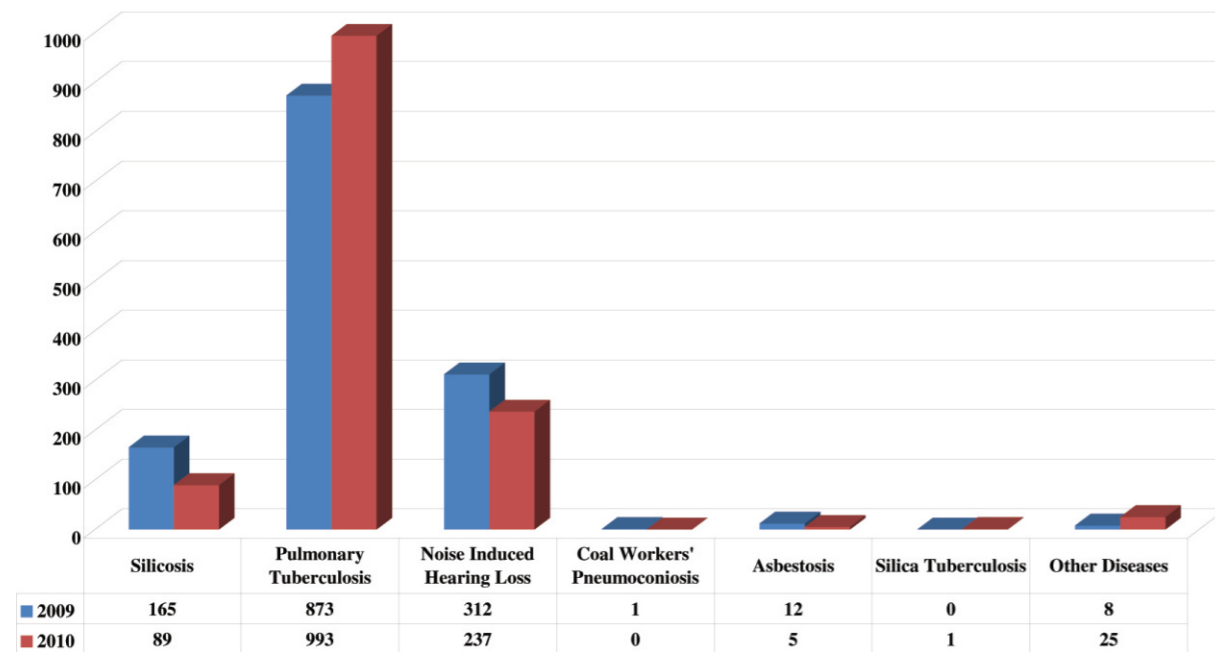
TB has overtaken silicosis in terms of the number of cases reported. This is in line with the national picture with regards TB infection. The mining industry has appeared to be the hardest hit considering the many risk factors encountered in the mining industry, such as silicosis, age and HIV co-infection and living conditions, amongst others. The graph above indicates that tuberculosis (TB) has slightly gone down though not significantly. This might not be a true reflection since some mines do not keep data for TB as they refer their employees to public facilities for further management.

There is no significant change with regards Noise Induced Hearing Loss (NIHL) as shown in the graph above. It is expected that the number of people diagnosed with NIHL should be decreasing in line with the milestones for noise, whereby the noise levels of machinery should not be above 110db by 2013, implying that less people would be exposed to high levels of occupational noise.

Silica - Tuberculosis and Other Occupational Disease have slightly increased in the sector as compared to the preceding reporting year.

GRAPH 3.2.2.3 [B]: Occupational diseases for platinum mines

Occupational Diseases as reported on Platinum Mines' Annual Medical Reports for 2009 and 2010



NIHL has decreased which is in line with what industry aims to achieve and the milestones set. Hearing conservation programmes are probably implemented or adhered to.

PTB is maintaining an upward trend in platinum mines but the numbers are much lower than in the gold mines. Silicosis is not a key health risk factor for TB in this case unless an employee was previously exposed at a gold mine. Other risk factors should be considered, like HIV infection and other risk factors already mentioned.

Silica-TB in the platinum mines could be misdiagnosed leading to under-reporting. Some cases may be submitted as ordinary TB hence the high numbers of TB shown in the graph.

There is an increase in the number of other occupational diseases submitted that would be reported and investigated in the coming year in terms of the new regulations.

3 accidents of 2008, by the late Senior Inspector of Mines, who suddenly passed away, were completed, 7 accidents of 2009 and 8 of 2010 were completed. Most of the inquiries for the remaining accidents were held. It is planned to complete the remaining and finalise the reports as soon as possible as it was part of a backlog. Accident investigations were referred back to Inspectors to improve the quality. Most Inspectors were also trained during the year in accident investigation and analysis.

4.3.2.5 Disaster Type Accidents

A disaster occurred at Harmony-Phakisa Mine on 26 June 2010 in which 5 Proto members lost their lives.

A Mines Rescue (Proto Team) Brigade Team Captain and two of his team members were fatally injured and another two members injured when they were struck by flying debris from an explosion during a fire fighting mission. The two members that were injured subsequently died as a result of the injuries that they sustained in the accident.

On the day of the accident at approximately 17:00 the neighbouring Tshepong Mine notified management of the mine that they detected smoke on 66 Level with their fire detection system. They investigated it on their side and it appeared that the fire was on 66 Level on Phakisa Mine. A control room was established at Phakisa Mine and the responsible Mine Overseer, Shift Boss and Miner were called out to the mine. The Department of Mineral Resources was also notified of the fire.

The night shift, Shift Boss on the level was sent to investigate and encountered smoke to the west of the double ventilation doors in the 66-62 Connecting Cross cut.

Two proto teams from the rescue brigade, each consisting of 6 members, were deployed to the area to do reconnaissance to detect and fight the fire. During the briefing of the proto teams the Miner, the Shift Boss and Mine Overseer were present and were questioned as to any hazards the proto teams must take cognisance of during their mission. They reported that there were no hazards. The Manager in charge of the control room as well as the proto teams were not informed about any explosives in the material bay, (timber bay) or that secondary blasting had occurred, which may have caused the fire.

The proto teams proceeded underground and before setting up the fresh air base in the 66-63 cross cut went to confirm the findings of the night shift Shift Boss of the smoke in the return airway beyond the double ventilation doors in the 62 connecting cross cut. They also noticed 4 material cars containing matt packs parked between the two ventilation doors in the connecting cross cut.

A fresh air base was established in the 63 cross cut and was manned by the Tshepong proto team that was involved in the accident. The local proto team was sent to search for the fire. The 66-61 stope situated on the intake side of the 66-63 stope was working normally and not affected by the fire.

The proto teams were reporting to the control room on surface at 10 minute intervals. The local team last communicated with the fresh air base informing them that they tried to use the compressed air and that black smoke was billowing from the pipe. Shortly thereafter, the local team heard a massive explosion and noticed the ventilation reversing and decided to withdraw. As they approached the fresh air base, they noticed that the force of the explosion was towards the stope and only found the one remaining member of the back-up team in the fresh air base in a state of shock. It would appear that the back-up team wanted to close the compressed air line or investigate some lamps in the haulage when the blast went off. They were struck by flying debris from the contents situated in the 62 connecting cross cut.

4.3.2.2 Inspections and Audits

During the year under review, Inspectors of this region conducted 591 underground, surface and statutory inspections. A total of 146 audits were done on various systems.

Category	Inspections	Audits
Planned	1089	108
Actual	581	146
% Compliance	53%	135%

The planned figures are based on the strength and calculated over 11 months. Audits are combined into Group Audits that are attended by most Inspectors at a time. The region was for most of the year understaffed by 5 Inspectors, after the complement was reduced by 2 mining posts. This accounted for 20% of the compliment. A new Principal Inspector of Mines resumed duty during 2010. The Senior Inspector of Mines post was not filled and one person was acting. This office has 3 Level 10 Inspectors in mining and 5 Level 9 Inspectors of Machinery studying towards their Government Certificates of Competency. The Senior Inspector Occupational Hygiene and a Level 11 Inspector resigned towards the end of the year. One Mining post was converted into another Occupational Medicine post which is also vacant. Two Occupational Hygiene posts are also vacant. 491 Inspectors days were spent on training and various workshops. Despite, the abovementioned, the region performed well.

4.3.2.3 Total accidents Reported

Fatal Accidents	22
>14 Day Accidents	386

22 persons were fatally injured in 16 separate accidents

The 14 day reportable accidents decreased from 405 in 2009 to 386 in 2010, a 5% improvement. Fatal accidents however did not improve at all as 22 fatal accidents were recorded for 2009 after there was a subsequent death and the same number of fatal accidents were recorded for 2010.

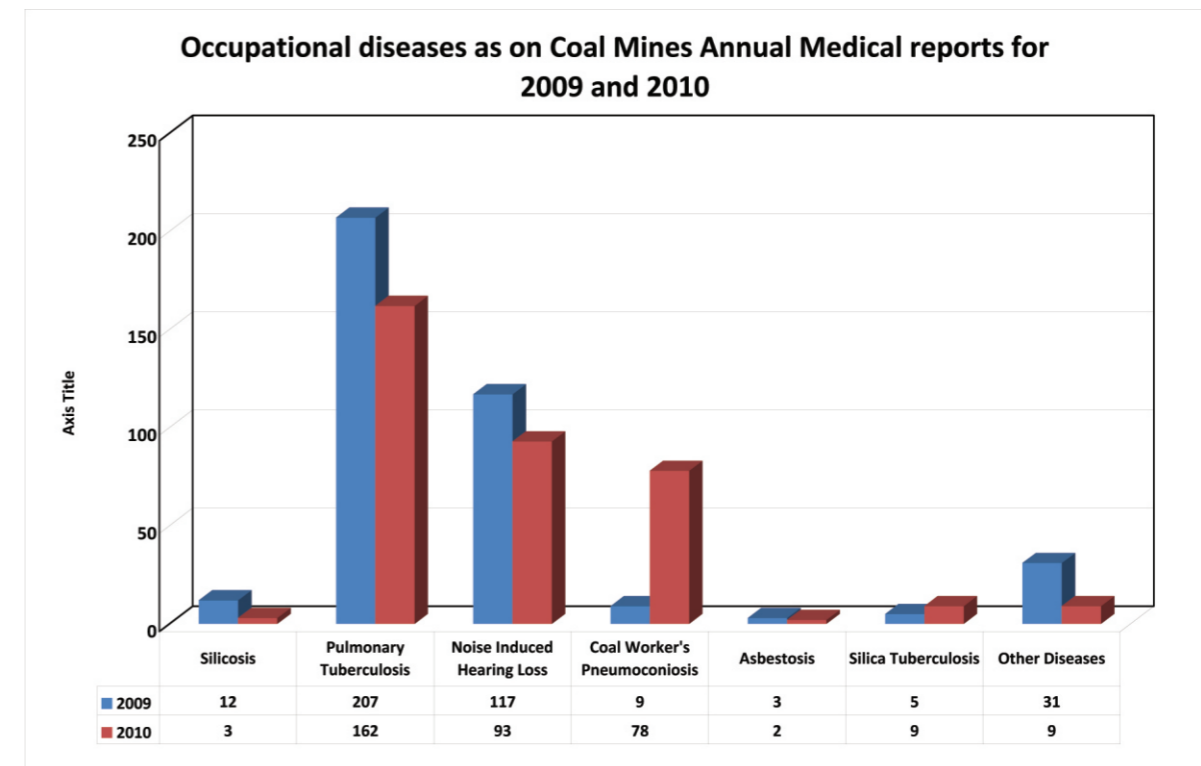
Falls of rock accidents accounted for 59% of the total accidents, an increase of 30% from 2009 while machinery related accidents accounted for 18% of the total figure showing a decrease of 6%.

4.3.2.4 Investigations and Inquiries

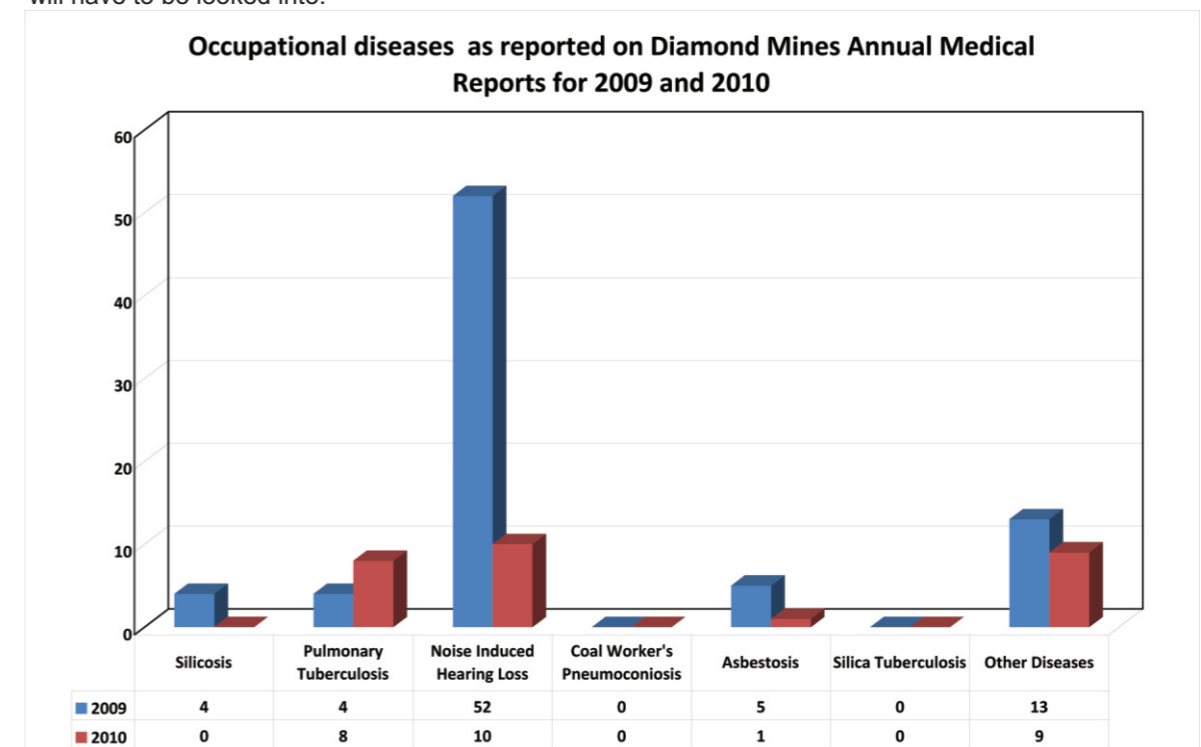
During the year under review the Inspectors of this region initiated 216 accident investigations and 17 accident inquiries.

	Investigations	Inquiries	Total
Initiated	216	17	233
Completed	108	18	126
% Completed	50%	105%	51%

GRAPH 3.2.2.3 [C]:Occupational diseases for coal mines



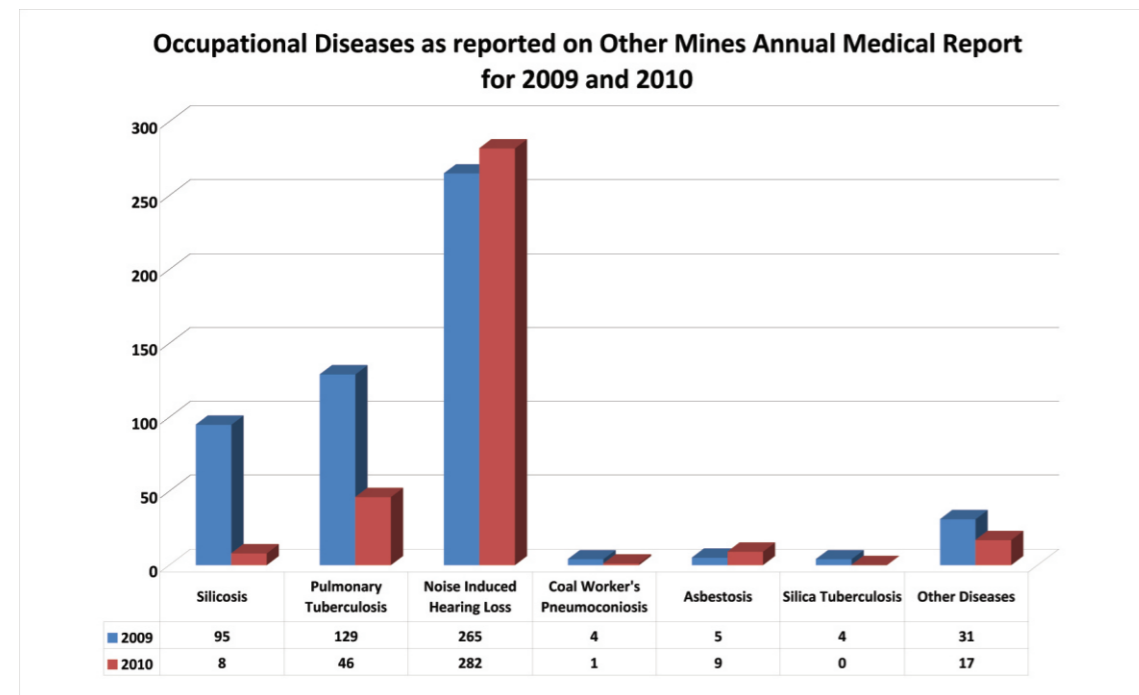
There is a significant increase in Coal Worker's Pneumoconiosis as compared to the preceding year which needs to be investigated in line with the regulations on health incident reporting. TB and NIHL show a downward trend. TB programmes and management seem to be achieving the desired effect of reducing cases of TB. Best practice will have to be looked into.



NIHL cases have decreased significantly as compared to the previous reporting year. This is encouraging in terms of achieving the milestones and it further indicates that the hearing conservation programmes are in place or adhered to.

Pulmonary Tuberculosis cases have slightly increased and the same contributory factors as in the platinum mines could apply.

GRAPH 3.2.2.3 [E]:Occupational diseases for other mines



The graph above shows that NIHL cases have increased as compared to last year which might indicate that hearing conservation programmes have not been implemented.

All other disease seems to be following a downward trend. TB management seems to be improving in the small mines; however employees at small mines with TB are usually referred to local clinics and most get lost to the system.

Tuberculosis and HIV Co-infections:

Even though the results in some commodities shows a downward and some and upward trend, it might actually not be a true reflection of the TB epidemic in the mines. A lot still needs to be done to reduce TB infection which is curable. The TB tool developed has been implemented by Chamber of Mines members to assess the effectiveness of TB programmes in their mines. Active case finding needs to be encouraged since most TB cases are missed leading to escalating numbers of TB cases. The industry would also benefit from implementing INH prophylaxis especially to people exposed to silicosis and HIV infection.

TB/HIV collaboration is the way to go in terms of management of TB. The programmes should not exist in isolation. The latest National Strategic Plan for HIV is currently under review and this will assist in terms of drafting relevant programmes.

More focus should be on the key health risk factor for TB and Section 11.5 investigations into these diseases will determine the root causes and will assist the industry to go back to the basics.

4.3.1.7 Strategies for improving the status quo

The Gold and Platinum Regional Operations will continue to maintain the following actions to ensure sustainable health and safety improvements:

- Engagements with the respective stakeholders to ensure that we are well informed on the health and safety challenges and that a common approach is adopted.
- The regional working groups and Forums have been formed and maintained by the Inspectorate to support and monitor progress made by the mines on the health and safety milestones.
- The discussions with CEOs and other stakeholder leadership to ensure that appropriate measures are put in place to enhance health and safety in mines.
- The implementation of the DMR and Inspectorate policies and procedures to ensure that a common approach is adopted by all the regions.
- The promotion of the Mine Health and Safety Council initiatives for enhancing health and safety.
- The involvement and support of the respective mines health and safety initiatives.
- The achievement of the DMR and Inspectorate Strategic Objectives.
- Proactive measures for capacity building within the Inspectorate and provide the necessary assistance to our staff to achieve that goal.
- Promotion and enforcement of the provisions of the Mine Health and Safety Amendment Act.
- The respective working places and mines are stopped where serious contraventions have been revealed during inspections and accident investigations.
- The Department will support the IMSC Task Team in ensuring that illegal mining is eliminated.
- Continuously commend and encourage mines health and safety achievements

4.3.2 Regional Report: Free State

4.3.2.1 Overview of the Region

For the year under review the Free State Region had 2 major gold mining companies operating with 26 Shafts of which 4 shafts had been closed towards the end of 2010, 10 diamond mines and approximately 246 registered mines. However, many prospecting permits are issued and we are expecting even more mines to be coming up. Commodities mined in the Free State includes Gold, Coal, Diamonds, Aggregates and Bentonite.

Labour Statistics

As per the Analytical Labour summary report for 2010, the MHS Labour for the Region are as follows:

Average people underground	: 36 580
Average people on surface	: 5 520
Total in service	: 43 000
Total at work	: 41 280

The engagement and cooperation of the Inspectorate, employers and unions on mine health and safety is continuously encouraged and promoted.

However, the Inspectors are also expected and encouraged to take critical actions where necessary to ensure compliance with the provisions of the Mine Health and Safety Act. The respective working places and mines have been stopped where serious contraventions have been revealed during inspections and accident investigations. The mines had to do a presentation giving details on the steps they will be taking to prevent recurrence.

4.3.1.4 Illegal Mining

Although illegal mining is still a concern a significant reduction in this practice has been realised. This realisation can be attributed to the measures put in place especially those instituted by the executive. These measures will need to be maintained until this practice is completely exterminated.

Illegal mining remains the biggest threat to the employee's health and safety at the mines. Appropriate measures including effective access control and eliminating corruption at the mines are continuously encouraged

4.3.1.5 Challenges

Although there has been positive milestones achieved on the way to zero harm of the employees, occupational health issues are still the main challenge facing the mining industry. Also, the fatalities and injuries are still high and the recurring fatal accidents at most of the mines is still of a great concern. A significant effort is still needed for achieving the Mine Health and Safety Summit milestones.

4.3.1.6 Achievements

A substantial number of mines celebrated their fatality free production shifts during the period under review. A change in attitude in the industry is generally been noticed and this encouragingly should result in the revived focus and commitment on health and safety matters.

The level of commitment and effort that has been demonstrated by all Gold and Platinum Regional Operations staff is encouraging and commendable. The Regional Operations Manager extends his gratitude to the staff for their hard work in the past for their contribution to the improved overall compliance with legal requirements at the mines.

3.2.2.5 Section 20: Medical Appeals

In terms of Section 20 of the Mine Health and Safety Act, Act 29 1996, (MHSA) employees may appeal to the Medical Inspector against a decision that the employee is unfit to perform any particular category of work; or any finding of an occupational medical practitioner contained in an exit certificate.

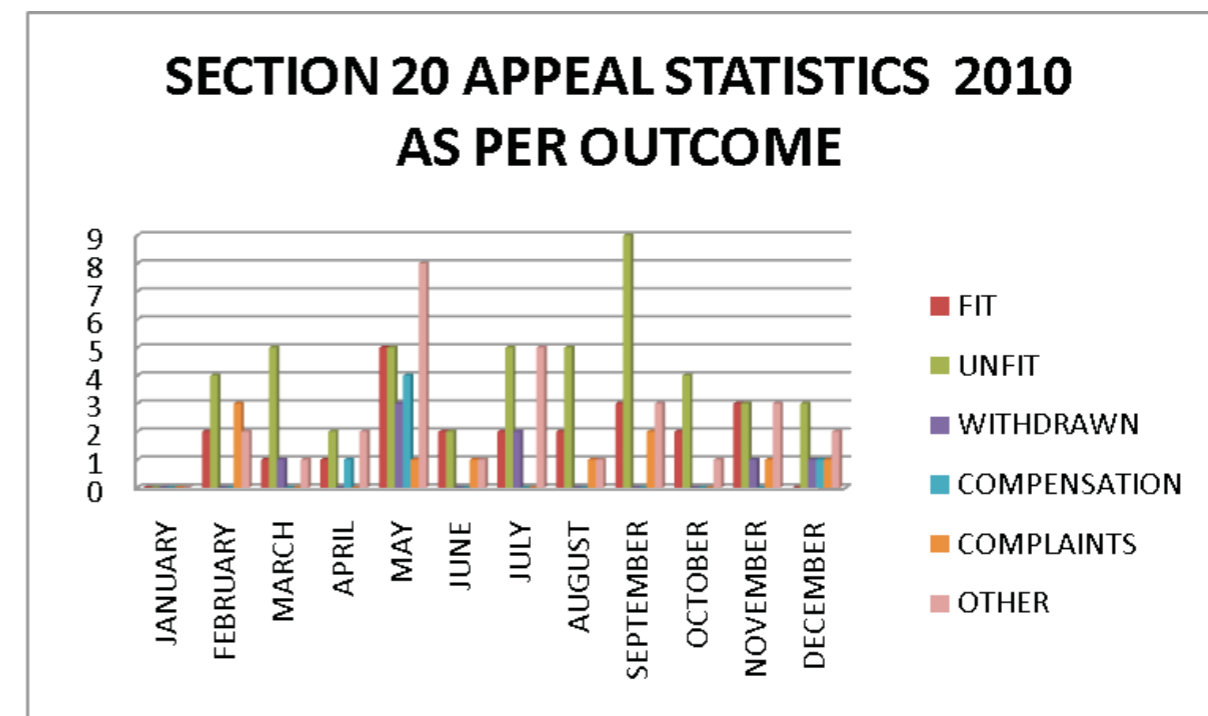
Since the amendment of the Act, 'an employee lodging an appeal under subsection (1) may not be dismissed on any grounds relating to unfitness to perform work, pending the outcome of the appeal.

An appeal must be lodged with the Medical Inspector within 30 days of the relevant decision or finding of an Occupational Medical Practitioner or such further period, with valid grounds for a late appeal, acceptable to the Medical Inspector

A total of 123 appeals were received for the reporting period of 2010 as compared to 97 in the last reporting year.

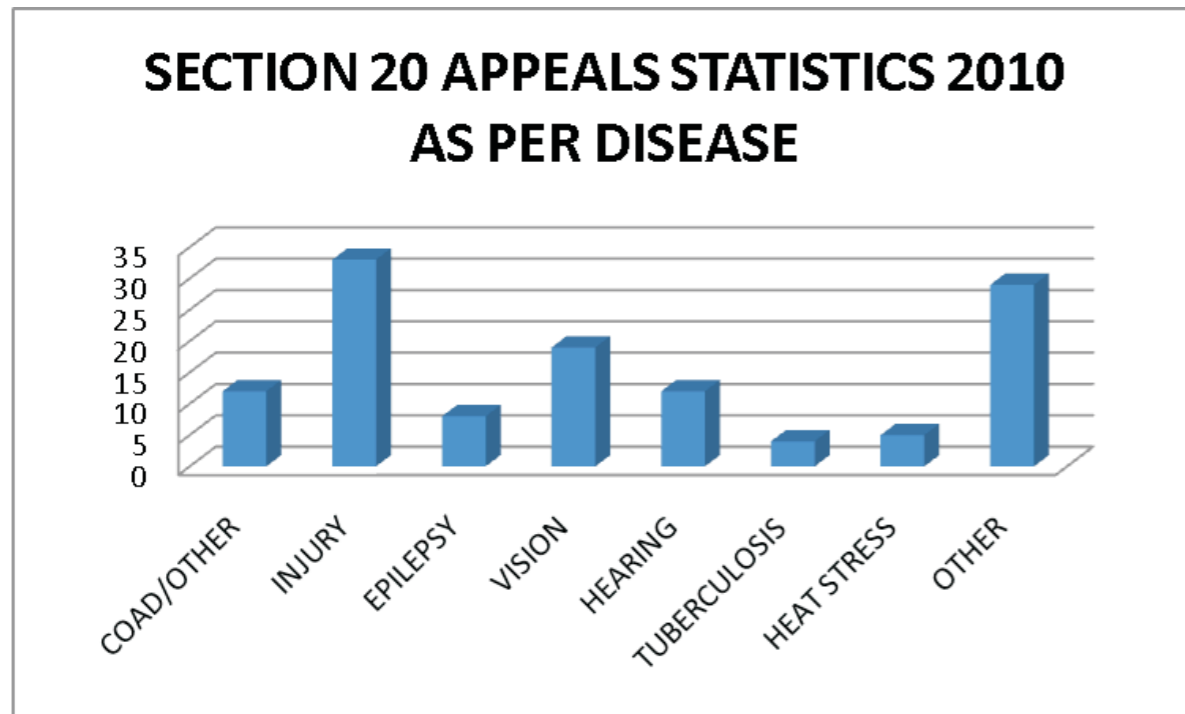
There are still some challenges with regard to turnaround times and the Section 20 appeal process will be popularised once again in 2011.

GRAPH 3.2.2.5.1: SECTION 20 APPEALS



Most employees still don't understand the requirements of section 20 as they still submit complaints as appeals as noted in the above graph.

GRAPH 3.2.2.5.1: Diseases



The most common diseases appealed against are injuries, vision, and hearing loss. Tuberculosis is the least reported disease in terms of appeals although it's the most common disease in the mining industry. Other diseases include hypertension, diabetes, and psychiatric illnesses.

Outcome of appeals

The final decision is based on background medical records, the working environment, the fitness status of the employee, second opinion results and not only on the assessment of the second opinion.

Due to the set time frames in which an appeal may be lodged, it is imperative that OMP's inform employees of their right to appeal as soon as they declare them unfit for work. The OMP's should also assist the employee to complete the correct documentation and to send the relevant medical reports to the Medical Inspector.

There are still employers using medical incapacity procedure for handling labour related issues of employees and this creates complications when the employee appeals. This will also be covered in the popularisation of Section 20.

4.3 Regional Operations - Gold and Platinum

4.3.1 Regional Operations Manager's Overview

4.3.1.1 Topical issues and matters of interest

The section is made up of the North West, Gauteng and Free State regions. A wide variety of minerals are mined in these regions with gold and platinum group metals being the main commodities. Due to diminishing ore resources some mines are already planning to go deeper to increase their life of mine. Other mines are exploring the benefits of extracting uranium. The Regional Operations: Gold and Platinum labour force is approximately 350 000 and represent about 70% of the mining industry's labour force in South Africa.

Jobs that were lost following the global financial turmoil in 2008 have not yet been gained despite the impressive commodity prices.

The North-West region is planned to be split into two new regions namely the Klerksdorp and the Rustenburg Regions. The combined labour of both regions is about 210 000 with about 140 000 labour in Rustenburg.

4.3.1.2 Occupational Health

There was a worrying trend in cases of medical or natural deaths at mines mainly as a result of heart attacks. TB and the effects of HIV and AIDS, silicosis and noise induced hearing loss are the main occupational health challenges faced by the mining industry. Although there is minimal improvement realised in dealing with occupational diseases, effort and level of success by these mines is commendable and all the mines are encouraged to develop and implement similar programmes.

Occupational health issues are still the main challenge facing the mining industry which will only take a collaborative and well-dedicated effort to overcome. The regional working groups have been formed and maintained by the Inspectorate to support and monitor progress made by the mines on the health milestones.

4.3.1.3 Occupational Safety

During the period under review the Regional Operations: Gold and Platinum experienced 96 fatalities compared to 122 in 2009. This is a 20% improvement as compared to the results achieved in 2009. The majority of these accidents are repeat, foreseeable and preventable.

Falls of ground and T&M still constitute the majority of accidents. Regrettably, two accidents claimed eight lives in the North-West Region i.e. 3 and 5 lives were lost at Simmer and Jack's Buffelsfontein and Aquarius Marikana mines respectively. Seismic related fatalities has been reduced significantly.

One seismic related fatality was recorded during the period under review.

The Gold and Platinum Regional Operations achieved about 17% reduction in the injuries compared to 2009.

When considering the major underground collapse that occurred in Chile and the catastrophic underground mine explosion that occurred in New Zealand during the period under review, the potential of similar risk in our mines cannot be overlooked. The mines are encouraged to have life saving emergency preparedness strategies in place and regularly reviewed.

4.2.4.9 Examinations

The Regional Inspectorate also conducts examinations for industry qualifications and the table below reflects the number of examination boards, candidates and certificates issued during the reporting period.

Qualification	Exam Boards	Number of Candidates	Certificates issued
Mine Overseer	38	481	39
Blasting *	1	20	3
Onsettler	3	10	2
Lampsman	8	10	9

*includes Scheduled and Opencast examinations

Candidates for examinations are often very poorly prepared, some fail to attend and bookings are cancelled at the last minute.

4.2.4.10 Land Use Applications and Complaints

	Received	Completed	Percentage
Township Developments	54	45	83%
Mining and Prospecting permits / rights	0	0	0
Closure Certificates	45	20	44%
Environmental Management	527	435	82%
Complaints	13	11	85%
Exemptions, permissions and approvals	734	753	102%

The work completed includes work received during the previous year and completed in 2010.

The complaints investigated by Inspectors in the Mpumalanga Region often relate to dust, noise and blasting on mines close to residences.

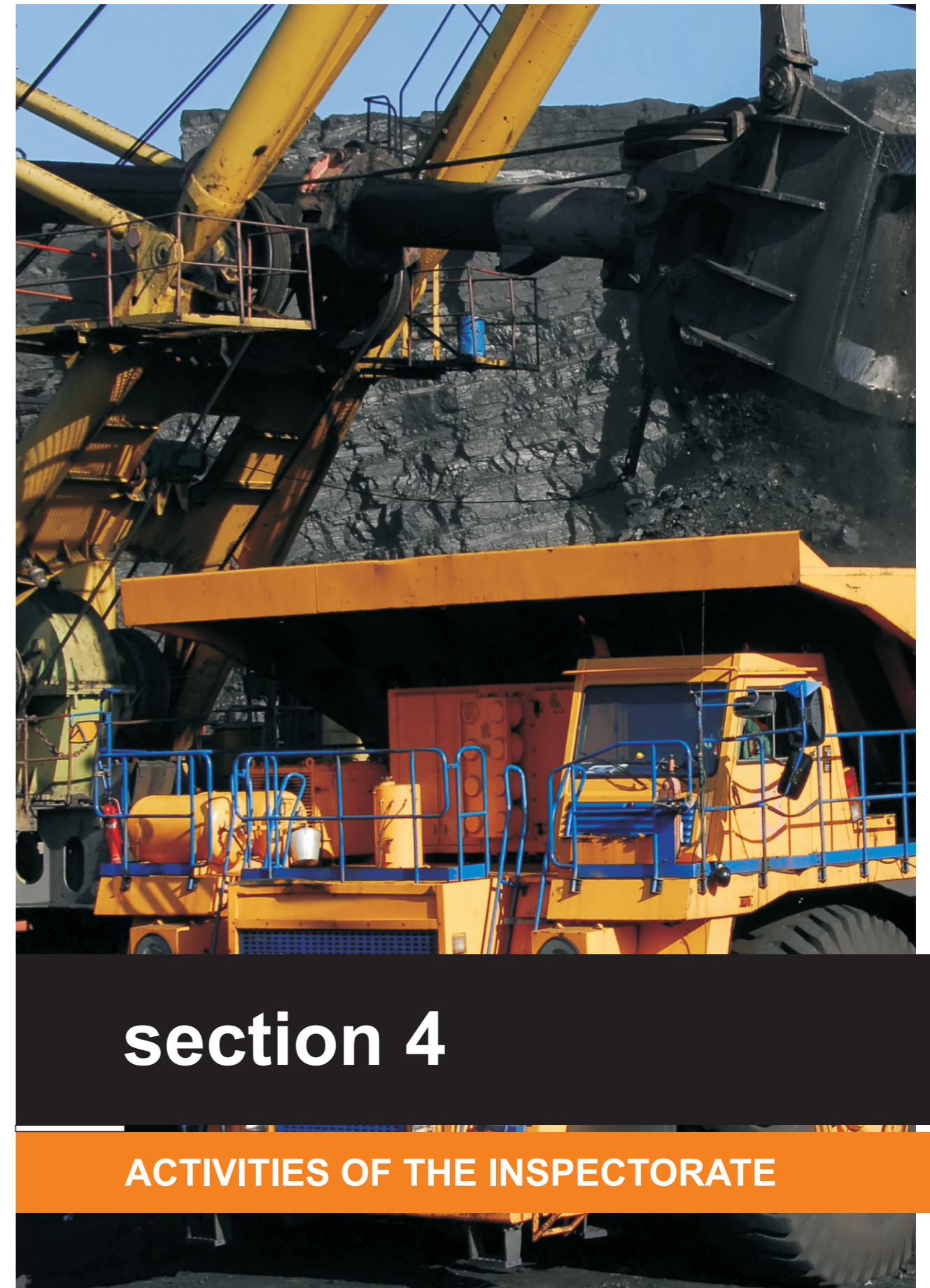
The Regional office strives to improve relationships between the mines and the complainants. Mines affected were advised to form complaints forums where all affected parties will lodge their complaints. International best practice with regards to ground vibrations, air blast intensity and dust fall out is enforced in the absence of legislation.

4.2.4.11 Strategy Adopted to Improve the Status Quo

The staff compliment is one of the major obstacles to performance of the region. In an effort to minimise the effects of understaffing the region is presently training five student inspectors to become Inspectors: Mine Equipment once they achieved their Government Certificate of Competency.

The regional priorities still remain the prevention of flammable gas explosions, falls of ground, transport in mining, fires and occupational health threatening conditions.

Groups of Inspectors from the regional office conduct health and safety system audits and methane and coal dust explosion audits on identified mines in the region.



section 4

ACTIVITIES OF THE INSPECTORATE

4. activities of the inspectorate

4.1 National Overview

The Inspectorate is responsible for regulating health and safety in the mining sector. Its activities entails the monitoring of operations by conducting audits and inspections, investigating accidents and health related occurrences, enforcing legal requirements, processing of land use applications and conducting examinations for industry qualifications. The Head Office component of the MHSI is responsible for the development of policy and legislation, offering specialist support to the regions, administrative and technical support and training.

Increased activity is experienced in the mining industry due to better commodity prices and the strategy of Government to open opportunities for new entrants amongst others. This requires the Inspectorate to increase its resources in order to deal with the new challenges adequately.

During the reporting period, the MHSI staff managed to achieve most of the targets that were set. With respect to the Head Office functions, the streamlining of activities is being improved through the restructuring of the MHSI. Retaining skills and attracting new recruits continues to be a problem. However, the DMR will consider possible interventions that might be implemented to improve the attraction and retention of Inspectors.

The Amendment of the Mine Health and Safety Act, Act No 29 of 1996 is currently underway to strengthen enforcement and remove ambiguities. It is envisaged that notable results with respect to policy and legislation matters, strategy implementation, employment equity and skills development will be realised in the future.

A national overview of the activities of the Inspectorate with respect to:

- Inspections and audits;
- Total accidents reported;
- Investigations and inquiries;
- Disaster-type accidents and outcomes of inquiries and investigations;
- Statutory notices and
- Administrative fines.

Exception reports by the various components with emphasis on challenges related to the statistics presented at sub-headings 3.1 and 3.2 above.

4.2 Regional Operations - Coal

4.2.1 Regional Operations Manager's Overview

4.2.1.1 General

The Chief Directorate consists of KwaZulu-Natal, Limpopo and Mpumalanga regions. The labour force for 2010 calendar year was about 134 000 compared to 129 000 in 2009. This equals to an increase of about 4%. The major commodities mined are coal, platinum, gold, industrial and base minerals and copper.

Milestone on Elimination of Noise Induced Hearing Loss:-

- After December 2008, the Hearing Conservation Programs implemented by industry must ensure that there is no deterioration in hearing greater than 10% among occupationally exposed individuals.
- By December 2013, the total noise emitted by all equipment installed in any workplace must not exceed a sound pressure level of 110dB (A) at any location in a workplace.

Quarterly reports received indicate that most employees work in the category classification band, that is 85 - 105 dB LAeq. Close to 48% of our employees in the region are in this category band, with 9.0% in the 'A' band, and ± 43% in the 'C' band. Different types of hearing protection, as part of a bigger hearing conservation program, are issued to employees at all mines in the region.

The 2013 milestone on equipment noise has, as per submitted reports, been attained in more than 99% of our mines including coal, gold and other mines. The 110dB maximum machinery noise level appears to have been set a little too high, as most machinery noise in the region is in the range of 92 to 98dB (A).

• Occupational medicine

The following reports of occupational diseases were submitted for possible compensation as per annual medical reports received:

DISEASE	2008	2009	2010
Tuberculosis	348	354	272
NIHL	199	179	153
Pneumoconiosis	49	61	77
Asbestosis	11	12	4
Silicosis	65	50	31
Silico-Tuberculosis			31

The following employees' occupations changed due to:

Accidents 36
Occupational diseases 53

It is clear that occupational diseases almost had double the impact on the change in health status of employees than injuries on duty, during 2010. Noise induced hearing loss cases reduced over the last three years, but not significantly. More effort is needed to identify early cases and reduce them. The new health regulations should have a positive impact on this.

The number of Pneumoconiosis cases increased. This can be due to employees being exposed for a long period and only diagnosed recently. Silicosis cases reduced. One gold mine closed and some shafts at another gold mine stopped producing, resulting in less employees under medical surveillance.

• Compliance notices in terms of Section 55 of the Mine Health and Safety Act.

- Instructions were issued:-
 - for pull stops to be installed along belt conveyors;
 - to install pre-start alarms on equipment in the plant;
 - to comply with the fall of ground code of practice;
 - to comply with the occupational hygiene codes of practice;
 - to ensure no persons are working without medical certificates of fitness;
 - to provide change house facilities;
 - to ensure adequate availability of trained first aiders and fully equipped first aid boxes.

4.2.4.7 Administrative Fines

No administrative fines were issued during the year. Alternative enforcement actions according to the enforcement guideline were used.

4.2.4.8 Topical issues and matter of interest

• Criminal mining

Criminal mining used to be prevalent in the Barberton Mines for a number of years. Deaths of criminal miners were reported to the office of the Department of Mineral Resources regularly. In the past year no deaths were reported and criminal mining is controlled mainly by the mining houses assisted by the Departments involved. A criminal mining forum has been established and convenes monthly.

• Occupational hygiene

Milestone on Elimination of Silicosis:-

- By December 2008, 95% of all exposure measurement results must be below the occupational exposure limit for respirable crystalline silica of 0.1 mg/m³.
- After December 2013, using present diagnostic techniques, no new cases of silicosis must occur among previously unexposed individuals.

The Mpumalanga region is predominantly a coal mining area. Statutory results received on a quarterly basis from mines and occasionally from laboratories providing services to mines, indicate that the majority of our work environments have an average silica content of 2.1%.

Air velocities, for dilution of this pollutant, are in almost all such workplaces in the region of one metre per second. Data obtained from mines indicates that the first milestones i.e (95% of all exposure results must be below 0.1mg/m³) has been attained by coal mines.

Some gold mines results appear suspect and submission is erratic. This issue has been discussed with mine management at various forums.

4.2.1.2 Topical issues and matters of interest

The regional offices conducted a total of 1 775 and 497, inspections and audits, respectively. As to the outcomes of audits and inspections, there was 267 section 54 instructions and 315 section 55 instructions issued. Some of the reasons for issuing section 54 and 55 instructions were:

- Inadequate barring and declaration of unsafe workplaces to be safe;
- Inadequate explosive control;
- Lack of TB and HIV/AIDS Policies;
- Failure to comply with the occupational hygiene codes of practice;
- Failure to comply with the falls of ground code of practice.

The regional offices completed 594 investigations and inquiries.

The regional offices had 27 fatalities compared to 39 in 2009, a significant decrease of 31%. Similarly, there were 584 reportable injuries compared to 675 in 2009. This corresponds to a reduction of 13%.

The Coal sector had 12 fatalities compared to 18 in 2009. The overall reduction was 3%. The accident analysis showed that 33% (14 fatalities) of fatalities in the coal sector were due to falls of ground. 43% (5 fatalities) were due to transportation systems and the balance was due to manual handling, drowning and struck by a pipe. Historically, falls of ground was the major cause of fatalities but now it is the transport systems.

The top 6 causes of injuries in the coal sector were: slipping and falling (38 cases), manual handling of material (36 cases), falls of ground (27 cases), transport and machinery (6 cases), general accidents (26 cases) and machinery (23 cases).

The Department granted Grootegeluk Colliery a section 79 exemption to allow ESKOM to build infrastructure to supply coal to the new Matimba Power Station in Lephelala. The mine will also produce coal for the metallurgical and thermal export markets.

4.2.1.3 Illegal Mining

The Chief Directorate chairs the Barberton Stakeholder Forum which consists of Government Departments namely: South Police Services, Directorate for Priority Crimes Investigation, State Security Agency, Crime Intelligence, National Intelligence Co-coordinating, Home Affairs, Justice and Constitutional Development, Umjindi Municipality, mining companies, Pan African Resources (Barberton Mines), Vantage Goldfields and Galaxy Gold Reefs Mining (Agnes Gold) organized labour and community leaders.

There has been a significant reduction in illegal mining underground and a reduction in cases reported to the SAPS. This was mainly due to the proactive action taken by the mining companies in improving the security measures. The court outcomes and sentences have also helped in getting the message across that illegal mining does not pay and anyone involved in such activities will end up in jail.

4.2.1.4 Achievements

The Department would like to congratulate all mines that have achieved safety awards - of significance are the following awards: Modikwa Platinum Mine, a joint venture between Anglo Platinum and African Rainbow Minerals, obtained the Safety Achievement Flag in the Shallow Gold and Platinum Mines category. Modikwa also achieved 7 000 000 FFS. Isibonelo Colliery of Anglo Thermal Coal was awarded the Safety Achievement Flag for Coal Mines and also 4 000 FFPS. Lastly, Venetia Mine, owned by De Beers, was awarded the Safety Achievement Flag in the category for Other Mines.

A further congratulation to all the mines that achieved a million fatality free shifts (FFS) and fatality free production shifts. This is a living example that mines can operate without fatalities and many other mines must aspire to achieve the same and even better results.

4.2.1.5 Strategies for improving the status-quo

The major cause of fatalities in the coal sector was due to transport systems. The mining companies must invest in technological solutions to solve the problem, especially in the form of vehicle avoidance systems and personnel detectors.

The golden rule is that no employee must be exposed to unsupported roof as too many employees are still being killed by falls of ground. All managers must constantly communicate and educate workers on the dangers of unsupported roof. By enforcing falls of ground and transportation system hazard awareness, the coal mining sector will go a long way in eliminating fatalities.

4.2.2 Regional Report: KwaZulu-Natal

4.2.2.1 Overview of the region

The year 2010 saw much improved results, with 3 fatalities being reported compared to 9 fatalities reported in 2009. Reportable injuries statistics were also commendable.

The region, through the successful implementation of the Strategic and the Business Plan, embarked on a change in health and safety attitude and mindset strategy to enforce compliance with health and safety measures.

The region continues to experience a shortage of qualified Rock Engineers and certificated Engineers. The high numbers both in transportation and mining-related accidents, and fall of ground-related accidents can be attributed to this shortage. Availability of certificated Inspectors is also a cause for concern taking into account the large proportion of these two types of accidents. The Inspectorate achievement of operational targets and focus on priority areas is limited by current staff complement and availability.

4.2.4.4 Investigations and Inquiries (from 2010-01-01 to 2010-12-31)

	Investigations	Inquiries	Total
Initiated	322	96	385
Completed	410	97 *	507
% Completed	127%	153%	131%

* includes accidents occurring in previous years

The inquiries include inquiries into fatal accidents and other serious accidents. Some of these accidents were not referred to the Senior Public Prosecutor for further action.

4.2.4.5 Disaster type of accidents:

The region had only one fatal accident where other persons were injured as well:

A fall of sidewall accident took place in a shaft sinking operation. One person was killed and two more persons were injured in the accident. The now deceased was bent over in the process of connecting hoses to the rock drill when a section of the sidewall, twelve metres above his position, dislodged and struck him on the lower part of his head just below his hard hat resulting in the fatal injury. A number of rock segments that dislodged struck the other two persons involved in the accident.

4.2.4.6 Statutory Notices

Section 54 Notices	Section 55 Notices
105	178

Notices were inter alia issued for the following:-

- **Improvement notices in terms of Section 54 of the Mine Health and Safety Act.**

- Instructions were given to ensure that:-
 - telemetric monitors operate correctly;
 - last through road air velocity improve;
 - continuous miner dust results improve;
 - continuous miners cannot reset automatically after detecting methane.

- **Stoppage notices in terms of Section 54 of the Mine Health and Safety Act.**

- Various machines were stopped for inadequate machine guarding;
- A plant was stopped for inadequate electrical protection;
- Underground machines were stopped for inadequate explosion protection (flameproofing);
- Blasting of air crossings was stopped until procedures were improved;
- Cutting with continuous miner was stopped until roof support procedures were improved;
- All production work at a mine was stopped until proper safety measures were taken after a methane explosion.

4.2.4.2 Inspections and Audits

During the period under review, the following number of inspections and audits were conducted:

Category	Inspections	Audits
3.2 Planned (Calculated on full complement)	1548	760
Actual	1007	363
% Compliance	65%	47%

Inspections and audits were planned for a full staff complement and the region managed to maintain an average staff complement of approximately 60% for the year. The following table indicates the performance against the figures planned monthly for the actual staff strength.

Category	Inspections	Audits
3.3 Planned (Calculated on staff strength)	1009	573
Actual	1007	363
% Compliance	99%	63%

4.2.4.3 Accidents reported (2010-01-01 – 2010-12-31)

Fatal Accidents	13
> 14 Day reportable accidents	293 (305 people injured)
1 to 13 Day reportable accidents	125
Non Casualties	78

The coal mining sector was responsible for ten fatal accidents and the gold mining sector for three fatal accidents.

The fatalities were caused by the following categories of accidents:-

- Fall of ground = 6
- Trackless mobile machines = 3
- Fall of material = 1
- Drowning = 1
- Fall in shaft = 1
- Struck by pipe = 1

4.2.2.2 Inspections and audits

Category	Inspections	Audits
Planned	394	90
Actual	252	43
% Compliance	64%	48%

The shortfall in inspections and audits is attributed to the Witwatersrand University and IRCA training, and also budget constraints. The Inspectorate's achievement of operational plans and also focusing on priority areas is limited by current staff complement and availability. An increase in staff complement will assist in ensuring achievement of the regional operational objectives.

4.2.2.3 Total accidents reported

Fatal Accidents	3
>14 Day Accidents	28
1 to 13 Day reportable Accidents	28

Late reporting of accidents and non-reporting of accidents remains a challenge and has a considerable influence on the quality and reliability of the statistics. The year 2010 showed commendable results, but regrettably 3 employees lost their lives in the line of duty. A brief description of the fatalities is presented below.

- A front end loader operator was busy loading aggregate stones into the truck. Whilst leveling the truck with the bucket, he reversed to continue loading another bucket of aggregate stones without realizing that there was an employee behind the truck, he reversed over him, fatally injuring him.
- A Water Truck Driver was run over by a Bell Truck. It was at the beginning of a morning shift and the two trucks were parked adjacent to each other. The Bell Truck driver moved his machine forward out of the parking bay to go and fill up diesel. He then decided against this on realizing that the fuel bowser was packed with vehicles in front of him. He reversed back to his original position, it was during this backward motion that he ran over the now deceased employee.
- A Protection Services Patrolman was fatally injured when he was struck / run over at the main gate by a coal haulage truck transporting products from the Coal Handling and Processing plant.

The '1 to 13 days' accidents are being under-reported and are thus a cause for concern. It is receiving attention.

4.2.2.4 Investigations and inquiries

	Investigations	Inquiries	Total
Initiated	35	9	44
Completed	20	7	27
% Completed	57%	78%	61%

Although 7 inquiries were completed, there were delays in holding these inquiries due to the availability of representations and the inspectorate not being adequately capacitated. With regards to investigations, mines are also encouraged to rather focus on system failures during accident investigations.

Outcomes of the inquiries have highlighted amongst others:

- TMM not equipped with personnel detection systems/ collision avoidance systems;
- Risk assessments done haphazardly or not done at all;
- Poor or inadequate training and the recording thereof;
- Poor supervision or no supervision;
- Deviation from standards and procedures;
- Lock-out procedure not properly communicated;
- Contractor management system not adequate.

4.2.2.5 Disaster-type accidents

No disaster type accidents were experienced during the reporting period.

4.2.2.6 Statutory notices

Section 54 Notice	Section 55
41	90

Section 54 and 55 instructions were issued on issues relating to:

- Appointments not in place
- HIRA and Health Risk Assessments not done
- First aid and emergency procedures and preparedness not adequate
- Change-house facilities not available
- Codes of Practice not reviewed
- Medical surveillance not done as required
- Brushing not maintained
- Inadequate dust suppression
- Sealing of back areas / abandoned areas
- TB and HIV/AIDS policies not in place.

4.2.3.11 Strategy adopted to improve the status quo

Inspectors are conducting follow-up audits and inspections to monitor progress of action plans at the mines where section 54 and 55 instructions were issued.

Two tripartite health and safety forums have been established between the Inspectorate in the region, employers and employee representatives to improve health and safety conditions on mines. One is focusing on the Surface mines and the other on the Opencast Mines. The objective of these forums is to share best practices so as to improve health and safety. It is also a forum where DMR can communicate legislation issues and any information that must be communicated to unions and management and communicate new technologies.

Inspectors are conducting system audits on mines beside the group audits to ensure compliance. When repetitive issues are found at certain mines, the CEO of that mine is summoned to the office to present a turn-around strategy to change the status quo. Unannounced visits will be made on an ad hoc bases to check on specific issues of non-compliance.

4.2.4 Regional Report: Mpumalanga

4.2.4.1 Introduction

A wide variety of minerals are mined in the region with coal being the main commodity. Gold, platinum and other base minerals are mined and there are a large number of brickworks, crushers and quarries in the region.

The escalating demand for energy as a result of the growing South African economy is also resulting in the significant growth in the number of small open pit collieries in the region. This growth was welcomed, but the health and safety challenges faced by the region increased correspondingly.

These include new operators, inexperienced employees, contractor management, management not familiarising themselves with legislation, lack of health and safety management systems and an increase in public complaints regarding mining activities.

The regional office of the Mine Health and Safety Inspectorate is dedicated to influence the attitude, culture and behaviour of employees and employers in matters of health and safety at their working places.

The table below shows the present number of operating mines in the region:-

Type of mine	2009	2010
Underground coal	39	53
Opencast coal	36	76
Gold	7	8
Platinum	2	2
Other	67	63
151Total	151	202

The number of employees increased from approximately 72000 to 76020. Not all mines are reporting the labour figures to the regional office but all efforts are made to rectify this.

4.2.3.7 Administrative fines

No administrative fines were recommended by the Inspectors.

4.2.3.8 Topical issues and matters of interest

Additional platinum and coal mines have opened up and these mines are using labour force from the local communities and outside communities. Modikwa Platinum mine has achieved 7 million fatality free shifts. The second power station, Medupi, in Lephalale is progressing well. Bokoni Platinum and Two Rivers Platinum mine achieved 2 million fatality free shifts.

Coal of Africa Vele Colliery situated near Mapungubwe, a World Heritage Site, started up and due to no water licence closed down. Once in operation Vele Colliery plans to produce 5 million tons of saleable coking coal per year.

A second coal mine is busy opening up in the Waterberg district, namely Sekoko / Firestone Energy Ltd Joint Venture, and will assist in supplying coal to Eskom.

The construction of De Hoop Dam on the Steelpoort River, part of the Oliphants River system, that lies between Burgersfort and Roossenekal, is progressing well and will be finalised during 2012. The De Hoop Dam having a catchment area of 2 865 square kilometres will have a capacity of approximately 347 million cubic metres of water. This will mainly feed the Nebo Plateau where about 800 000 people reside and will also assist with water for future mining development.

4.2.3.9 Examinations

Certificate	Exam Boards	No of Candidates	Certificates issued
Mine Overseers	25	165	7
Blasting	17	178	53
Onsetters	7	37	16
Lampsman	4	14	10

The low pass rate figures can be attributed to candidates that are unprepared for examinations and due to cancellations. The region did not have an Occupational Hygienist for 50% of the financial year and after receiving training he conducted 4 boards.

4.2.3.10 Land use applications and complaints

	Received	Completed	Percentage
Township Developments	54	45	83%
Mining and Prospecting permits / rights	0	0	0
Closure Certificates	45	20	44%
Environmental Management	527	435	82%
Complaints	13	11	85%

It must be noted that the percentage on the closure certificate is low due to borrow pits being visited once a month and RAL can only be available on that day.

4.2.2.7 Administrative fines

No of fines recommended by inspector	0
No set aside by Principal Inspector	0
No imposed by Principal Inspector	0
Value of fines imposed	0
Appeals	0
Value of fines paid	0

No administrative fines were issued during this period. In the interim, the office has resorted to the issuing of stoppage instructions of working places and shafts, which has a greater punitive affect.

4.2.2.8 Examinations

Certificate	Exam Boards	No of Candidates	Certificates issued
Mine Overseer	0	0	0
Blasting	0	0	0
Onsetter	0	0	0
Lampsman	1	2	2

Only two lampsman certificates were issued during the reporting period.

4.2.2.9 Land use applications and complaints

	Received	Completed	Percentage
Township Developments	54	46	85%
Mining and Prospecting Right	122	132	108%
Closure Certificate	2	0	0%
Environmental Management	156	188	121%
Complaints	1	0	0%

The increase in both the demand for residential land and mining permits and rights has a tremendous effect on the workload of the inspectorate.

Backlog was also addressed during the reporting period.

4.2.2.10 Topical issues and matters of interest

The use of conveyor belts, trackless mobile machinery and the general condition of mining equipment is a cause for concern. The appointment of engineers to be in charge of machinery and equipment is pertinent at some of the operations. Most of the operators have inadequate technical expertise and insufficient financial resources allocated for health and safety issues, which is negatively impacting on the health and safety of mine employees in the region.

4.2.2.11 Strategy adopted to improve status quo

One fatal is one too many. The region will continue to embark on a zero tolerance to non-compliance. Through our Code of Conduct, we will continue with our current practice, not limited to stopping working places, shaft, and mining operations and presentation to be done by management to rectify non-compliance and to prevent accidents, injuries and occupational diseases, before work commence. This strategy appears to be bearing fruit and is set to continue. The administrative fines will also be part of the enforcement strategy in the region.

Co-operation from mine employers, mine employees, communities affected by mining operations and the inspectorate will continue to be encouraged to ensure that there are effective and efficient ways and strategies in dealing with health and safety relating to mining operations in this region.

The inspectorate will continue to work towards eradicating these accidents. Our drive is to become pro-active in identifying weaknesses in management systems and implementing programmes and strategies that will improve the working conditions and eliminate risks.

The Strategic and Business Plan for 2011-2012 has been compiled. The analysis of accidents and health-related incidents has identified high risk operations, accident classifications and health risks. The document will be used to prioritize mines in relation to their level of risk, and more emphasis will be placed on them.

4.2.3 Regional Report: Limpopo

4.2.3.1 Overview of the region

The Limpopo Region is situated between the Gauteng Region in the south, Zimbabwe in the north, the Mozambique border in the east, Mpumalanga Region in the south east, Botswana border in the west and the North West Region in the South West.

A wide variety of minerals are mined in this region with platinum, coal and copper being the main commodities. Numerous base minerals are mined and there are a large number of crushers, quarries, brickworks and borrow pits in the region.

There are more than 200 mining operations which includes borrow pits in this region with a labour force of 44 000.

4.2.3.2 Inspections and audits

During the period under review, the following number of inspections and audits were conducted:

Category	Inspections	Audits
Planned	435	106
Actual	516	91
% Compliance	119%	86%

Inspections and audits were planned for the existing staff complement and the region managed to maintain staff complement of approximately 65% for the year.

4.2.3.3 Total accidents reported

Fatal Accidents	10
> 14 Day reportable accidents	301
1 to 13 Day reportable accidents	181

4.2.3.4 Investigations and inquiries

	Investigations	Inquiries	Total
Initiated	156	16	172
Completed	164	12	176
% Completed	105%	75%	102%

Due to under complement and shortage of engineering staff 10 section 72(1)(b) reports have been carried over from 2010.

4.2.3.5 Disaster-type accidents

No disaster type accidents occurred during the year under review.

4.2.3.6 Statutory notices

Section 54 Notices	Section 55 Notices
55	62

These statutory instructions were issued to various mines for the following:

- Substandard acts and conditions whilst working with scaffolding
- Substandard conditions at open pit area highwalls and overhang
- Substandard rigging conditions in winch sections
- Substandard act falling from heights
- Substandard conditions on conveyor belt
- Inadequate explosive control
- Inadequate lamp room controls
- Inadequate roof support
- Inadequate barring and safe making
- Non-compliance with Trackless mobile machine code of practice
- Inadequate ventilation controls
- Inadequate machine guarding