

ANNUAL REPORT TO STAKEHOLDERS ON HEALTH AND SAFETY FOR THE YEAR JUNE 2017 TO MAY 2018

Summary

- **OSHAS 18 001 re-certification audit completed 1 Feb 2018**
- **2 lost time accidents were reported during the year**
- **DIFR (Disabling Injury Frequency Rate) = 0.16 in 2016/17 to 0.36 in 2017/18**
- **Number of employees 516 Stable over 2017 levels**
- **Shifts worked 167283**
- **Shifts lost 84 in 2016 and 51 in 2017**
- **Man, hours worked 1126306**
- **Operating machines 225**

1. INTRODUCTION

The year under review represents the company's fifteenth year of operations in May 2018.

Although several machines were lost during the production year the drilled meters stayed fairly constant.

- **Harmony Gold:** Bambanani Mine, Tshepong Mine, Masimong Mine, Unisel Mine, Phakisa, Joel Mine.
- **AngloGold Ashanti:** Moab Khotsong and Kopanang.
- **ARM:** Two Rivers Mine and Marula
- **Anglo Platinum:** Townlands Mine, Turffontein (Khuseleka and Siphumelele Mines), Bathopele, Thembelani, Union Mine
- **Petra Diamonds:** Koffiefontein, Finch Mine and Kimberley Mine

Commentary

Lesedi drilling is in there 15 year of production, having started in May 2002 in the Free State.

The safety figures although not as good as the previous year, the trend is still on a downward curve and show improvement in safety behaviour.

Several new initiatives in in progress of which the biggest one is the development of an automated hydraulic face clamp; this technology will ensure that Lesedi can use the older Pneumatic drill`s and incorporate new and safer technology during rod handling. This will remove the employee from the danger area during rod handling.

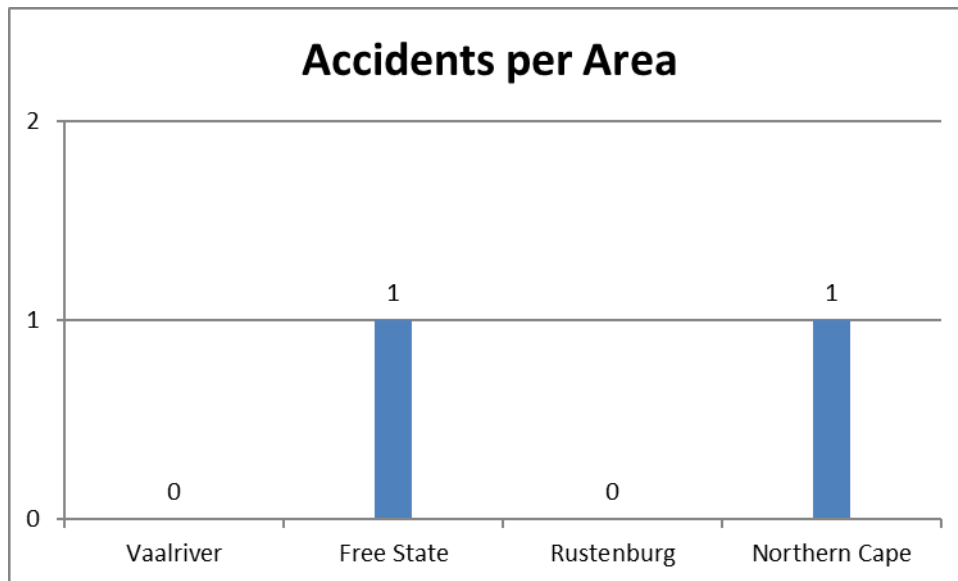
The introduction of the IMS system, make collecting of data faster and more accurate. Safety data namely Planned Task Observations, Deviations and Performance indicators are captured and the data is available on the system to ensure quick response to critical deviations.

The IMS brings the mid management close to the action and any supervision level can check his employee performance on the IMS and act accordingly not waiting for a month end report. The safety, health and wellbeing of our employees is paramount.

On site incident investigations showed a lack of safe behaviour, not following Mines health and Safety Act Sect 22 and 23. Also non-compliance to procedures and standards.

Zero harm can be achieved by sharing responsibility for problem solving and the implementation of effective solutions

Year June 2017 – May 2018 trends in health and safety at Lesedi



Accidents during operational year: 2017-2018

The accident frequency of the previous year could not be maintained and deteriorated to two accidents.

Name	Coy Number	Occupation	Description of injury	Site	Date of incident	Task	Description of incident	Work days lost
LN Mange	16100	Ass Operator	Laceration and contusion right hip	Phakisa	2017/04/30	Rod Handling up hole	Inserting rods into an up hole after replacing the bit	30
F Radebe	11222	A/o	Sprained ankle	Tshepong	2017/05/29	Slip and Fall whilst walking	Whilst travelling at waiting place employee stepped on a loose rock and sprained his ankle	0
IB Jack	14058	Ass Operator	Small laceration upper lip	Koffiefontein	2017/08/03	Rod Handling pulling	Whilst pulling rods and loosening the rod with a wrench the wrench slipped and struck him on his upper lip resulting in a small laceration	0
S Ubisse	6177	MO	no injury	Khuseleka	2017/08/05	Transport of core box under ground	Travelling with core box	0
D Pienaar	17027	Ass Operator	Hairline fracture right ankle	Finch Mine	2017/11/08	Slip and Fall whilst walking	Whilst traveling in site Mr Pienaar stepped on to a rock a fractured his ankle	21
P Akhosi	17020	Ass Operator	Small laceration right elbow	Joel	2017/11/28	Slip and Fall whilst assisting installing a hose.	Whilst fetching ladder Pheto slipped and fell with his elbow against the sidewall	0
WN van Rooyen	7066	Fitter	Laceration right hand ring finger	VRA	08-Jan-18	Struck by flame proof starter box lid	Whilst lifting the lid with an Allen key inserted in a bolt hole the Allen key slid out of the hole the moment Nico wanted to support the lid with his right hand	0

Table 1: Accidents 2017– 2018

REVIEW OF THE PERIOD: JUNE 2017–MAY 2018

It is important to classify the lost shift accidents. The table below documents the accidents 1st June 2017 to 31 May 2018

	Critical Activities	Freq of Incidents	Severity (lost shifts)
1	Gas Measuring	0	0
2	Start of Shift Procedure	0	0
3	Transport of equipment	0	0
4	Rigging of equipment	0	0
5	Beginning of hole operations	0	0
6	Drilling Operations	0	0
7	Pulling and Lowering rods	1	31
8	End of Shift Procedures	0	0
9	Slip and Fall	1	20
10	Grouting of hole	0	0
	Total	2	51

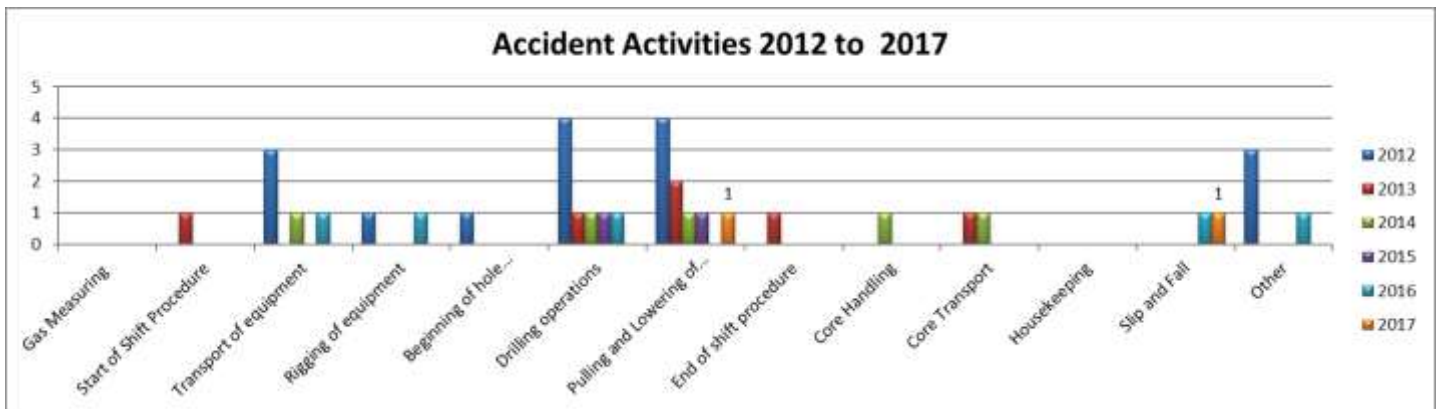
Table 2: Accidents June 2017–May 2018

There was an increase in slip and fall accidents and incidents recorded. This is a direct result of poor housekeeping which was identified through the IMS deviation system.

The co-operation between the Union and supervision levels can change the behaviour by “STOP AND FIX” attitude. Closer participation can be achieved through meetings and having the workers participate actively.

High risk activities as identified during the period

1. Slip and Fall
2. Rod Handling



Reviewing the above information, we learn that:

- Slip and Fall accidents is responsible for 67% of the accidents in period 2017 to 2018 followed by rod handling operation 16% and struck by 16%
- Although only one accident was recorded on Struck by but the nature of the incident can have severe consequences.
- The accident per quarter graphs indicates that the accidents occurred in the first and third quarter.
- Two lost time accidents were recorded against one for the previous year.

2. YEAR LOST SHIFT TRENDS (2013 – 2018)

The table below shows the trends in our safety failures over the last 5 years.

Shifts lost during this period show a decline.

Critical Activities	2013-2014		2014-2015		2015-2016		2016-2017		2017-2018	
	Freq	Severit y	Freq	Severit y	Freq	Severit y	Freq	Severit y	Freq	Severit y
		(Lost shifts)		(Lost Shifts)		(Lost Shifts)		(Lost Shifts)		(Lost Shifts)
Gas Measuring	0	0	0	0	0	0	0	0	0	0
Start of Shift Procedure	1	165	0	0	0	0	1	64	0	0
Transport of equipment	0	0	1	54	0	0	0	0	0	0
Rigging of equipment									0	
Beginning of hole operations									0	
Drilling operations	2	40	1	10	0	0	0	0	0	0
Pulling and Lowering of rods	2	60	1	8	1	92	0	0	1	31
End of shift procedure	1	64							0	
Core Handling			1	78	0	0	0	0	0	0
Core Transport	1	9	1	79	0	0	0	0	0	0

Slip and fall									1	20
Housekeeping									0	
Other									0	
Total	7	338	5	229	1	92	1	64	2	51

Table 3: Lost Shift Trends 2017– 2018

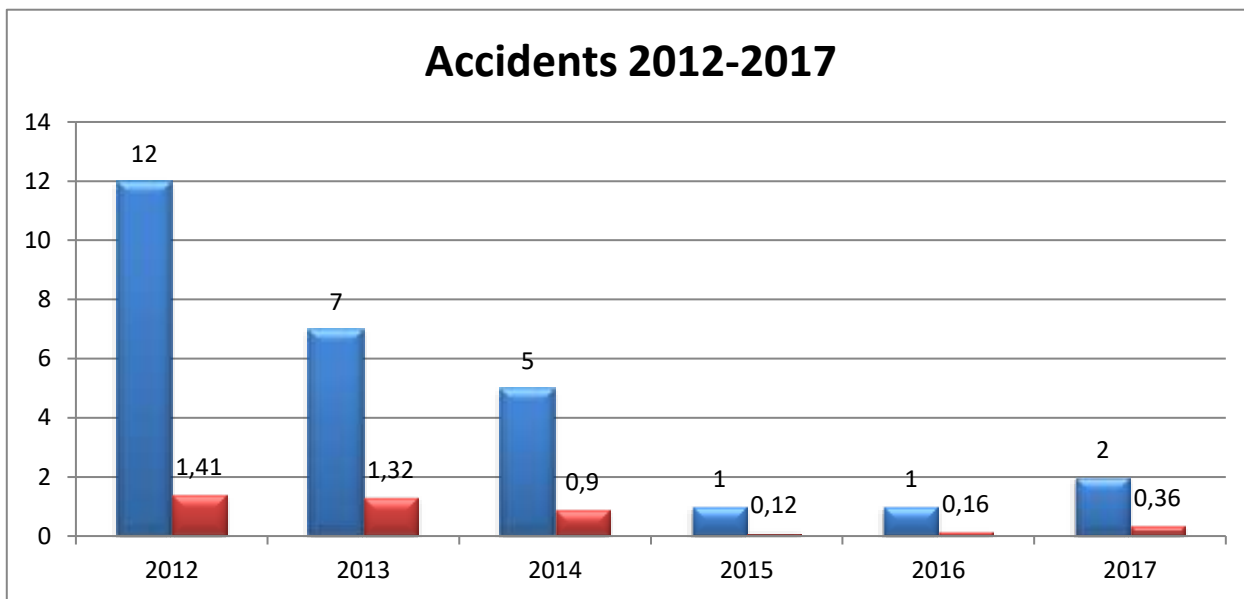


Table 3: DIFR Trends 2017– 2018

The objective of a DIFR 0.0 was not achieved and the year ended on a DIFR 0.36

Although this was disappointing not to improve on the previous year`s achievement, an attitude of taking failure and turn it into success need to be adopted.

3. ANALYSIS OF CRITICAL PLANNED TASK OBSERVATIONS 2017-2018

Activity	Conducted	Failed	% Failure
1 - LAMP ROOM GAS DETECTION	403	14	3,5%
2 - GAS TESTING	531	20	3,8%
3 - START OF SHIFT DRILL SITE INSPECTION	613	54	8,8%
4 - MATERIAL LOADING AND OFF LOADING	413	27	6,5%
5 - RIGGING THE MACHINE AIR KEMPE AND METRE EATER	353	8	2,3%
8 – CASING INSTALLATION	474	14	3,0%
9 – DRILLING & CHUCKING (CONVENTIONAL)	290	16	5,5%
11 – RE-CHUCKING PROCEDURE	213	12	5,6%

12 – INSTALLING WEDGE BOLTS, EYE BOLTS & FACE CLAMPS	234	14	6,0%
13 – END OF SHIFT PROCEDURE	412	7	1,7%
14 – CORE HANDLING (UNDERGROUND)	404	23	5,7%
15 – RIGGING DOWN	177	6	3,4%
60 - LOWERING OF RODS ON A DOWN HOLE(Pneumatic)	32	0	0,0%
60 B – PUSHING RODS INTO AN UP HOLE(Pneumatic)	250	18	7,2%
60A - LOWERING OF RODS ON A UP HOLE(Pneumatic)	153	11	7,2%
61 - COLLARING OF A HOLE	156	15	9,6%

In line with the Company’s Occupational Health and Safety Management System, compliance with Standard Operating Procedures is monitored through a Planned Task Observation (PTO). The results of the P.T. O’s conducted are analysed and stored in a data base in the IMS System. This give management the tool to measure the knowledge of the employee, the trend of the employees training and the training needs.

Deduced from the above table:

Collaring of a hole PTO’s had a 9.6 % failure rate. This was followed with Start of shift with a failure rate of 8.8% and one lost time accident and 3 non-lost time incidents occurred. Supervisors to conduct more early shifts and apply stop and fix.

This is also the area that show poor housekeeping, managers to ensure compliance and insist on good housekeeping to prevent incidents.

Rod handling pushing and pulling rods resulted in a 7.2% failure and resulted in one lost time

This shows that there is a direct relation between the failure rates on PTO conducted.

By using the IMS data on the daily reports will identify the employees that need coaching and training.

4. RISK MAP: PNEUMATIC DIAMOND DRILLING

A risk map has been included (below) so that an interested reader can gauge the severity of the risk for any given work activity.

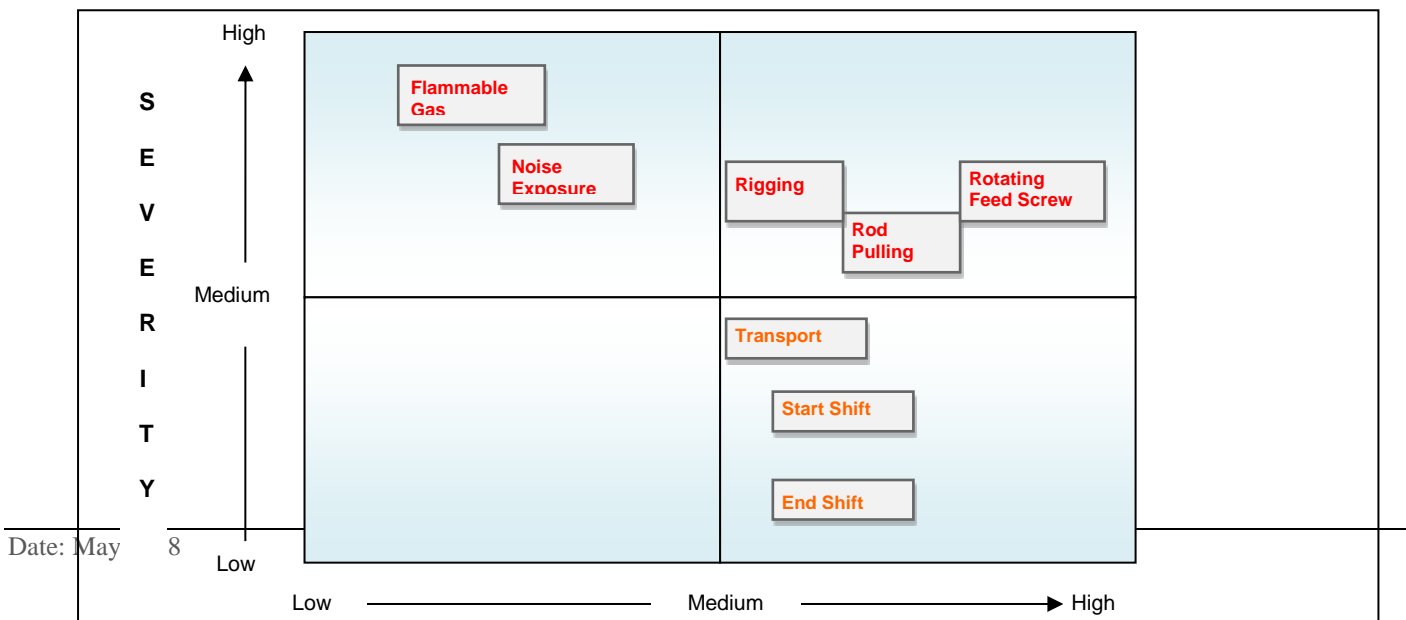


Figure 3: Risk Map

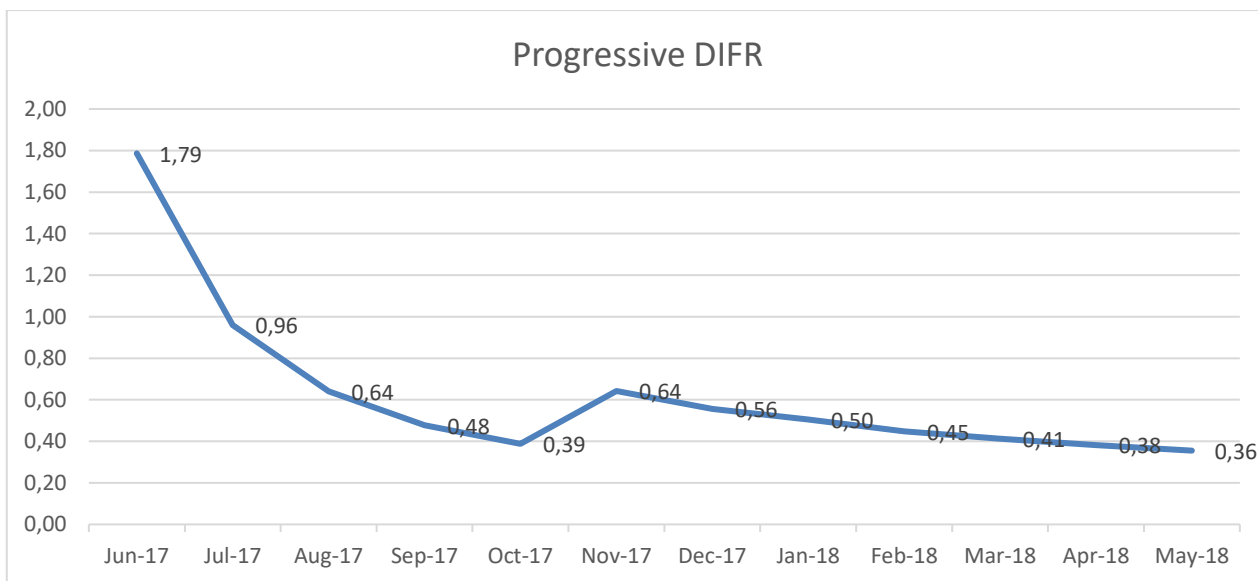
5. DIFR

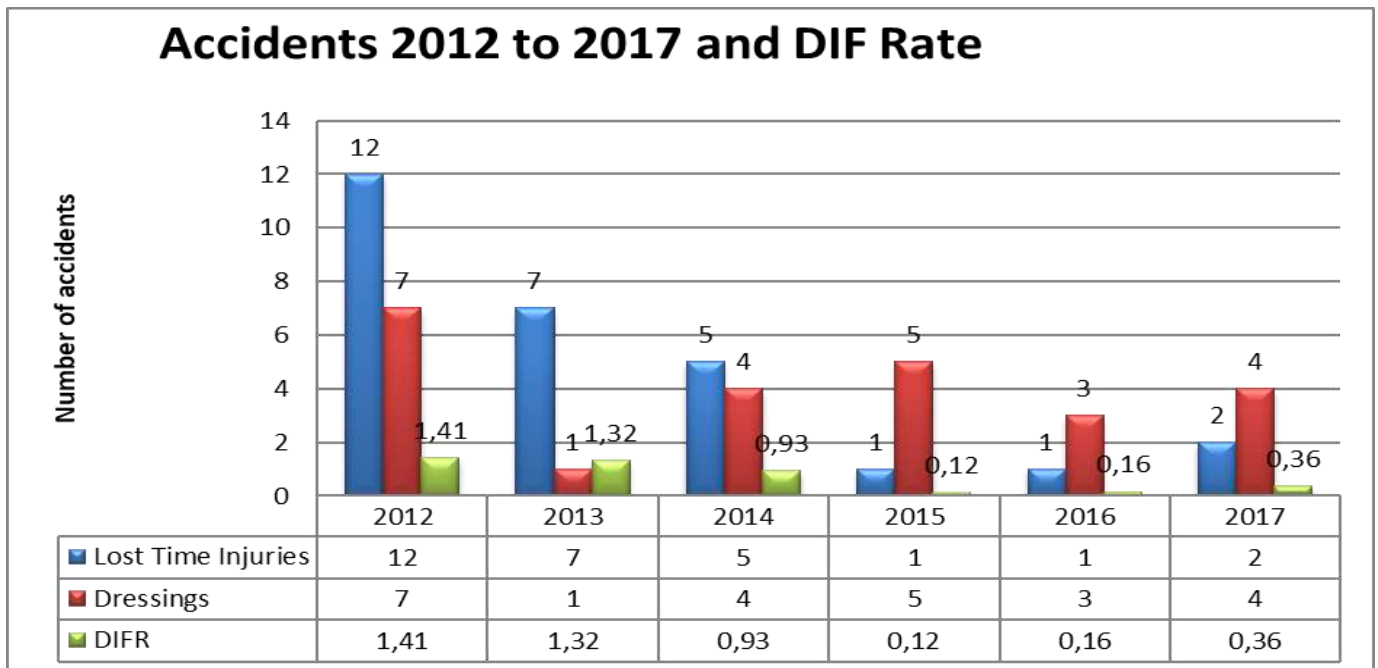
The **DIFR** (disabling injury frequency rate) for 2017 – 2018 is: 0.36

The calculation is performed thus: Lost Time Injuries X 200 000/Total Manhours

$$2 \times 200000 / 1126306$$

$$= 0.36$$





The Company response to accidents and incidents during the year.

1. Exco meetings are formally introduced in all areas and is used to discuss safety results and production results.
2. PTO and deviation data are logged on the IMS and is reflected in the daily reports per area.
3. All accidents are fully investigated to determine the causes of the accident, remedial actions are logged on the Lesedi information system and can only be signed off by the manager once all remedial actions were implemented.
4. Performance of employees are conducted to measure the employee's safety and production results.
5. The Performance Management System was introduced to pre-determine at risk behaviour of employees. Employees identified are being sent for re-training and can only return to the site when management is satisfied of the employee's competency level. This result is also displayed in the office through the quadrant system and used to motivate the employee`s.
6. Development of a new hydraulic face clamp is in progress and will remove the employee away from the strike zone at the face clamp.
7. It will also make pulling of rods safer as the operator will control the descent of the rod string.

6. HEALTH

i. Exposure to Noise

As indicated in Figure 3: Risk Map, noise exposure is a high risk in the underground drilling industry. Lesedi participate in his clients noised induced prevention programmes and compliance to procedures are measured by issuing and conducting Planned Task Observations, also yearly medical testing is conducted as per Health and Safety Act. Newly developed technology is also introduced by means of electrically operated drilling machines.

ii. HIV

The Company Induction training programme addresses the HIV issues on a yearly basis during, refresher training.

7. ACHIEVEMENT OF OBJECTIVES FOR THE 2017-2018 YEAR

Objective 01: Maintaining a DIFR of Less than 0.0

The objective of 0.0 was not met during 2018 however Lesedi management and employees are committed to improve the current results and achieve the objective

Objective 02: Improvement of Employee Skills & Competence

Lesedi employee's skill training is conducted by skilled and competent training instructors, the employee's competency is measured by planned task observation conducted.

Lesedi also use out sourced training facilities to improve the employee's skills and comply with legislation.

Process of interviewing people to fill the instructor post in the Free State.

Objective 03: Implement Effective Performance Measurement of all Employees

The system is implemented company wide and used during the weekly KPI sessions

Employees KPI's is addressed during the monthly exco meetings

Training needs is addressed by the instructors when required

Objective 04: Develop and implement an effective, easy to use safety system that is accessible, user friendly, capturing data

The Lesedi mobile system is in operation and is capturing safety data on the go, supervisors can use either a computer or mobile device to up load data quick and easily.

Data is also available on the daily report thus manager can identify deviations and problem areas immediately and act.

Objective 05: Obtain OHSAS 18001 re-certification by the end of Feb 2018

OHSAS 18001 Certification obtained

S Malema
Chief Executive Officer
May 2018