Occupational Health and Safety Report: February 2017

1. **OVERALL FATALITIES PER MONTH**

   During the month of February 2017, **nine (9)** fatalities were reported whilst during the same period in 2016 a total of **four (4)** mine workers were fatally injured. This translates to an increase in fatalities of 23% year on year.

![Graph showing fatalities per month](image)

2. **STATISTICS OF FATALITIES BY REGION**

   The table below illustrates the progressive performance of each region with regard to fatalities. During the month of February 2017, **four (4)** of the **ten (10)** regions managed to mine without a fatality. The Northern Cape, Eastern Cape, Kwa-Zulu Natal and North West (Klerksdorp) regions last reported a fatality on 09/11/2016, 11/10/2015, 05/02/2015 and 25/07/2016 respectively.

<table>
<thead>
<tr>
<th></th>
<th>WC</th>
<th>NC</th>
<th>FS</th>
<th>EC</th>
<th>KZN</th>
<th>MPU</th>
<th>LP</th>
<th>GP</th>
<th>NW-KD</th>
<th>NW-RB</th>
<th>TOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Feb</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>10</td>
<td>16</td>
</tr>
</tbody>
</table>

3. **ANALYSIS OF FATALITIES BY COMMODITY**

   For the purpose of the analysis, commodities are grouped into gold (AU), platinum (PT), coal (CL) and other mines (i.e. chrome, manganese, diamonds, stone, sand, brickworks, etc.).
3.1 The comparison of fatalities year to date for February 2016 and 2017 are reflected on the graph below and shows an increase in fatalities in the gold and coal sectors of 60% and 100% respectively, while the platinum sector shows a decrease in fatalities of 17% and the other mines sector shows no change.

![All mines](chart1)

### All mines
### Actual fatalities per commodity

- **AU**: 5 (2016) vs. 8 (2017)
- **CL**: 0 (2016) vs. 1 (2017)
- **PT**: 6 (2016) vs. 5 (2017)
- **Other**: 2 (2016) vs. 2 (2017)

3.2 In February 2017, the gold and platinum sectors reported **six (6)** and **three (3)** fatalities respectively.

![All mines](chart2)

### All mines
### Actual fatalities per commodity

- **AU**: 2 (Feb-2016) vs. 6 (Feb-2017)
- **CL**: 0 (Feb-2016) vs. 0 (Feb-2017)
- **PT**: 1 (Feb-2016) vs. 3 (Feb-2017)
- **Other**: 1 (Feb-2016) vs. 0 (Feb-2017)
4. ANALYSIS OF FATALITIES BY CLASSIFICATION

4.1 General (Struck by) (19%)

There were three (3) fatalities reported in this category this year. Two (2) were reported in February 2017, both at gold mines. In the first accident, the now deceased an employee was fatally injured after being struck by a pipe that had dislodged in the shaft. In the second accident, the now deceased a Locomotive Driver was fatally injured by a piece of a drill steel while attempting to close a hopper door which did not close after tipping.

4.2 FOG (Fall of Ground) (19%)

There were three (3) fatalities reported in this category this year. Two (2) were reported in February 2017, one at a platinum mine and another at a gold mine. In the first accident, the now deceased an employee was fatally injured by the rock that fell down from the sidewall whilst busy barring it at the tip area in the centre gully. In the second accident, the now deceased a Scraper Winch Operator was fatally injured in a fall of ground accident during cleaning operations for face preparation.
4.3 **General (Overcome by gas) (12%)**

There were **two (2)** fatalities reported in this category this year, both at a refinery. None were reported in February 2017.

4.4 **Transportation and Mining (RBE (Rail Bound Equipment)) (13%)**

There were **two (2)** fatalities reported in this category this year at a gold mine and a platinum mine each. None were reported in February 2017.

4.5 **Transportation and Mining (Winch) (13%)**

There were **two (2)** fatalities reported in this category this year at a gold mine and a platinum mine each. None were reported in February 2017.

4.6 **General (Fell in) (6%)**

There was **one (1)** fatality reported in this category this year in February 2017 at a gold mine. The now deceased a Rock Drill Operator was fatally injured when he fell down an orepass. He was drilling for roofbolts in the centre gully at the raise line.

4.7 **Machinery (Conveyors) (6%)**

There was **one (1)** fatality reported in this category this year in January at a colliery. None were reported in February 2017.

4.8 **Explosives (6%)**

There was **one (1)** fatality reported in this category this year in February 2017 at a platinum mine. The now deceased a Rock Drill Operator was fatally injured following drilling into a suspected misfire.

4.9 **Trackless Mobile Machinery (TMM) (6%)**

There was **one (1)** fatality reported in this category this year in February 2017 at a gold mine. The now deceased a Security Officer was fatally injured as a result of being run over by a trackless mobile machine whilst he was running away from violent community members who were chasing away all the employees from the plant.

4.10 **Women Employees**

The number of women employees has steadily increased in the South African mining industry and the graph below shows a classification of injuries to women employees across all commodities from 2000 to February 2017:
The graph below shows the number of injuries and fatalities to women employees across all commodities since 2000 to February 2017:
The graph below shows the comparison of injuries to women employees across all commodities in February 2016 and February 2017:

### 5. FATALITIES AND INJURIES

#### 5.1 FATALITIES

<table>
<thead>
<tr>
<th>Location</th>
<th>Jan-Feb 2016</th>
<th>Jan-Feb 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Mines</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Sibanye Gold</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Beatrix 3 MU1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Cooke 3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Ezulwini</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Rand Uranium</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Gold Fields</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>South Deep: Twin Shaft</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Harmony</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Masimong</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Bambanani</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other Gold Mines</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Evander Gold Mine</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>DRD Gold: Ergo Mining</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Platinum Mines</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Impala</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>20 Shaft</td>
<td>0</td>
<td>1</td>
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</table>
### 5.2 MINE INJURIES

The table below reflects the number of injury accidents that were reported for January to February 2016 per the classification of the accident.

<table>
<thead>
<tr>
<th>INJURIES</th>
<th>Jan-Feb 2016</th>
<th>Jan-Feb 2017</th>
<th>%change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL OF GROUND</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rockburst</td>
<td>13</td>
<td>8</td>
<td>-38</td>
</tr>
<tr>
<td>Strainburst</td>
<td>6</td>
<td>4</td>
<td>-33</td>
</tr>
<tr>
<td>Gravity</td>
<td>48</td>
<td>34</td>
<td>-29</td>
</tr>
<tr>
<td><strong>MACHINERY</strong></td>
<td>25</td>
<td>27</td>
<td>8</td>
</tr>
<tr>
<td>Conveyor belts</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Drives, belts, chains</td>
<td>3</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>Portable power tools</td>
<td>12</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td><strong>TRACKBOUND TRANSPORT</strong></td>
<td>30</td>
<td>19</td>
<td>-37</td>
</tr>
<tr>
<td>Locomotive</td>
<td>11</td>
<td>2</td>
<td>-400</td>
</tr>
<tr>
<td>Locomotive drawn vehicle</td>
<td>4</td>
<td>7</td>
<td>75</td>
</tr>
<tr>
<td>Rerailing</td>
<td>2</td>
<td>0</td>
<td>-200</td>
</tr>
<tr>
<td>Coupling/uncoupling</td>
<td>5</td>
<td>3</td>
<td>-40</td>
</tr>
<tr>
<td>Rocker arm shovel</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Personnel transport</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Hand trammed</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Other Transport</td>
<td>1</td>
<td>0</td>
<td>-100</td>
</tr>
</tbody>
</table>
### WINCHES

<table>
<thead>
<tr>
<th></th>
<th>Jan-Feb 2016</th>
<th>Jan-Feb 2017</th>
<th>%change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scraper Winch</td>
<td>12</td>
<td>18</td>
<td>50</td>
</tr>
<tr>
<td>Installation</td>
<td>8</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>Single drum winch</td>
<td>0</td>
<td>3</td>
<td>300</td>
</tr>
<tr>
<td>Double drum winch</td>
<td>3</td>
<td>1</td>
<td>-67</td>
</tr>
<tr>
<td>Mono rope/rail</td>
<td>1</td>
<td>2</td>
<td>100</td>
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</table>

### TRACKLESS MOBILE MACHINES

<table>
<thead>
<tr>
<th></th>
<th>Jan-Feb 2016</th>
<th>Jan-Feb 2017</th>
<th>%change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical loaders</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Tractor/trailer</td>
<td>1</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Coal mining machines</td>
<td>1</td>
<td>0</td>
<td>-100</td>
</tr>
<tr>
<td>Transporters</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>T&amp;M lifting machines</td>
<td>7</td>
<td>3</td>
<td>-57</td>
</tr>
<tr>
<td>T&amp;M mobile drilling machines</td>
<td>2</td>
<td>1</td>
<td>-50</td>
</tr>
<tr>
<td>Other TMM</td>
<td>1</td>
<td>0</td>
<td>-100</td>
</tr>
</tbody>
</table>

### GENERAL

<table>
<thead>
<tr>
<th></th>
<th>Jan-Feb 2016</th>
<th>Jan-Feb 2017</th>
<th>%change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall of material/rolling rock</td>
<td>32</td>
<td>34</td>
<td>6</td>
</tr>
<tr>
<td>Manual handling of material</td>
<td>74</td>
<td>63</td>
<td>-15</td>
</tr>
<tr>
<td>Manual handling of mineral</td>
<td>8</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Falling in/from mineral</td>
<td>8</td>
<td>5</td>
<td>-38</td>
</tr>
<tr>
<td>Slipping and falling</td>
<td>73</td>
<td>40</td>
<td>-45</td>
</tr>
<tr>
<td>Burning and scalding</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Splinters</td>
<td>6</td>
<td>3</td>
<td>-50</td>
</tr>
<tr>
<td>Dust, gas and fumes</td>
<td>2</td>
<td>11</td>
<td>450</td>
</tr>
<tr>
<td>Struck by ventilation door</td>
<td>1</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Struck by any object manual handling</td>
<td>23</td>
<td>12</td>
<td>-48</td>
</tr>
<tr>
<td>Conveyance accidents (shaft/winze)</td>
<td>7</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Electricity (Not causing fires)</td>
<td>4</td>
<td>1</td>
<td>-75</td>
</tr>
<tr>
<td>Fires</td>
<td>1</td>
<td>0</td>
<td>-100</td>
</tr>
<tr>
<td>Explosives</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Occupational Disease</td>
<td>1</td>
<td>0</td>
<td>-100</td>
</tr>
<tr>
<td>Heat sickness</td>
<td>0</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>0</td>
<td>11</td>
<td>1100</td>
</tr>
</tbody>
</table>

**TOTAL** | **402** | **330** | **-18**
6. SECTION 54 TRANSGRESSIONS REPORTED DURING THE MONTH

6.1 Poor Supervision (22%)

This category of transgressions accounted for most of the section 54 transgressions observed in February 2017 and the areas covered were:

- the mine was not registered on SAMRASS (South African Mines Reportable Accidents Statistics System), there were no legal appointments available, there were no Codes of Practice available, there were no Standard Operating Procedures available, there were no reports submitted in terms of the Act and there were no surface survey plans available;
- persons working (cleaning, maintaining and operating) around conveyor belt were not authorised and the mine was advised from the previous inspection;
- there was no control over the issuing and receiving of lifting equipment;
- items were not signed in and out from the issuing register book;
- repaired equipment were not tagged and were mixed with new lifting equipment;
• employees were conducting work on the jaw crusher and plant operation without locking out and not all employees were provided with pad locks against the mine Code of Practice;
• persons were operating lifting equipment without authorisation;
• the mine had no Competent Person to carry out duties as contemplated in regulation 2.13.4.1;
• the mine had no means to prevent persons under the influence of alcohol from entering the mine working areas;
• the Foreman and the Engineers had signed the lifting equipment documents without checking them;
• employees conducting cold belt splicing were not trained;
• both teams conducting work at the substation and belt splicing were not trained on HIRA (Hazard Identification and Risk Assessment);
• Fireman’s Report was not filled in properly, some information was incorrect and the supervisors did not understand some of the items in the Fireman’s Report;
• the current changed cutting sequence did not have a validity date and was not signed by the VOHE (Ventilation and Occupational Hygiene Engineering) Officer;
• the rock engineering personnel had verbally instructed the crew not to drill and blast until all the temporary support in the back areas were replaced but a fatal fall of ground happened while the employees were drilling the face in preparation for blasting;
• the whirling hygrometer of the Team Leader was found damaged when the Team Leader attempted to use it when requested to verify ventilation flow in the panel;
• crew was permitted to install support in the incident area (massive fall of ground) without the Inspector’s permission;
• deviations identified by the Inspector previously were not rectified and the recommendations were not carried out;
• the mine had failed to comply with the requirements of the new Guideline for Thermal Stress which was effected in July 2016;
• the mine was working on Sundays without permission;
• there was no control over issuing and receiving of lifting equipment;
• poor entry examination was observed, where a team member had left the crew during entry examination, the crew was using an undesignated waiting place that was not barred down and a crew member had fallen on the ASG (Advanced Strike Fully) to a moving winch, losing eight fingers in the process, while other crew members were still busy with early examination;
• the Inspector of Mines had been misled to believing that there was a secondary waiting place in the stope when crew members could not be found at the haulage waiting place;
• the employer was found falsifying documents that were not in place during the in-loco investigation underground, when the Inspector of Mines got back to surface;
• employees were found working in excess of the permitted working hours;
• the employer has failed to take reasonable practicable measures to prevent persons from being injured as a result of incorrect design, incorrect installation and poor maintenance of metal plates installed on the shaft bank level edge;
• the line supervision had failed to identify the recirculating system; and
• the checklist of a haul truck operating with worn tyres was not signed by the supervisor.
6.2 General (15%)

The areas covered in this category of transgressions were:

- unsafe working practices were observed;
- lifting equipment storage was found mixed, not safe for use and discarded equipment was found inside;
- there was no water management control system in place;
- travelling way along the rails was obstructed and pedestrians had to walk on top of the obstruction or between the rails;
- smoking was being carried out undesignated places;
- low dust results were observed in a report on the section waiting place; and
- the employees had failed to identify the poor ground conditions as the rock that fell out was making a wedge with the vertical joints and low dipping joints with a weak infilling (visible rock separation);
- incorrect cutting cycle was observed in R2;
- a fall of roof of unknown size was not reported to the control room and management;
- there was no fire suppression system in the MCC (Motor Control Centre) substation;
- there was a lot of dust generated at the pit and plant;
- a pump was running but there was excessive water accumulation in the roadway;
- excessive water was observed in the travelling way;
- barring was not conducted in the section and barring was not done adequately in another section;
- working places were chocked with ore in two sections;
- water was observed in the ore pass;
- vehicles coming in and out of the mine were poorly managed;
- a number of bolts used for securing the metal plates were damaged, loose and some were missing;
- lock-out procedure was not adhered to, where a lock was hanged on the door latch; and
- poor communication was observed during shift interchange, where the Shiftboss was not informed about the unsupported area that later fell.

6.3 TMM (Trackless Mobile Machinery) (14%)

The areas covered in this category of transgressions were:

- vehicles at the mine were not fitted with Proximity Detection System (PDS) and were working at high risk areas, interacting with pedestrians;
- haul trucks were observed in operation with worn tyres, against the mine procedure;
- no means was provided for TMMs working in high risk areas to detect other TMMs and pedestrians working in close proximity;
- substandard TMMs were observed, where the air conditioner was not in operation, speedometer was not in operation, PDS was not in operation, tyres were worn and engine was leaking oil;
- the Skid Steer's PDS was malfunctioning;
- PDS on a TMM was observed not working;
• a LDV (Light Delivery Vehicle) had failed the brake test, in that the Operator tested the park brakes on the test ramp and the vehicle rolled down. The maintenance records for the LDV were requested and were not available;
• a Manitou was being used even though three of its tyres were worn out and damaged;
• travelling/reverse alarm for the Light Delivery Vehicle were not functioning;
• ignition of a TMM was not working;
• TMM Operator was operating without the reverse hooter;
• a TMM was not tested for the illumination survey and operating at night;
• TMM Operator was operating without the reverse hooter;
• the machine was not tested for the illumination survey and operating at night;
• the injured's hand was caught by a pitot clamp that inadvertently moved during roofbolts installation and the Roofbolter Operator was not familiar with some of the items on the pre-use checklist;
• unroadworthy man-carrier was observed with damaged door, door covers, handles, door rubber seals, seats and ignition system;
• an excavator was observed with defective lights and wipers while a dozer was observed with defective fire extinguisher and left hand wiper;
• a truck was observed with no air conditioner and it was not listed in the TMM COP (Code of Practice);
• the Continuous Miner water sprays on the cutter head were blocked and the venturi sprays were not in place on top of the flight chain, system not complying to Kloppersbos recommendation;
• there was no indication that the scrubber fan and screen were cleaned, the Continuous Miner Operator was even unable to remove the pin; and
• the checklist of a haul truck operating with worn tyres was not signed by the supervisor.

6.4 Conveyors (7%)

The areas covered in this category of transgressions were:

• substandard conveyor belts were observed;
• the conveyor belt audible alarm, 10 second delay was not functional;
• the weekly conveyor belt examination was last conducted two weeks ago, in contravention to regulation 8.9(8)(a);
• an open guard was found on a running conveyor belt;
• the conveyor belts were not inspected by the Mine Health and Safety Act Section 2.13.1 appointee as per the mine procedure;
• different conveyor belts were operated for almost four months with a faulty pre-start alarm;
• different belts were operated with damaged guards and no action was taken;
• inspections and tests done by Artisans around conveyors were incomplete; and
• poor maintenance and control of conveyor belt system in the plant were observed.

6.5 Machinery (6%)

The areas covered in this category of transgressions were:
there was no proper guarding in place;
lifting equipment that were not safe for use were also tagged with colour coding for the month;
some of the guards at the plant were open and some pulley shafts were protruding; and
load tests were apparently being conducted every month but no load test certificates were issued;
inspection of the lifting equipment was not a true reflection, where the tagged were without documents or documents were without the equipment;
there was no inspection on most of the lifting equipment for the slings;
poor control, storage and maintenance of lifting equipment was observed; and
damaged and uninspected metal sling was used.

6.6 Ventilation (6%)
The areas covered in this category of transgressions were:

• a fan with ducting, ventilating a split where the Continuous Miner was cutting was positioned incorrectly;
• the section did not have enough ventilation, where average was less than 1.0 m/s; and
• the installation of ventilation controls was sub-standard;
• the 45 kW force fan was found recirculating due to wrong positioning and inadequate through ventilation air quantity;
• a fan at the crosscut waiting place was observed recirculating;
• a fan at another crosscut waiting place was found recirculating;
• a crosscut flat end was ventilated with the tight circuit force system and the whole system was found to be recirculating, which was affecting adjacent crosscuts; and
• in-stope ventilation control or curtain was not installed and the panels were drilled and charged with explosives.

6.7 Explosives (5%)
The areas covered in this category of transgressions were:

• the employer had failed to put in place precautionary measures before initiating explosive charges which resulted in an injury; and
• an old explosives box with undetonated fuses was observed not locked and the management had alleged that the box contained the Miner's tools, not explosives;
• the mine had contravened the Mine Health and Safety Act Regulations Chapter 4 (explosives);
• raise 2 Miner did not have the implemented explosives control book for the last two shifts. This resulted in poor explosives control / record in his area of responsibility and was confirmed when the contents in the explosives drums were verified;
• explosives cars were left unattended;
• inadequate access control of explosives was observed; and
• two boxes full of explosives were found hidden in the worked out area behind ventilation curtains.
6.8 Support (5%)

The areas covered in this category of transgressions were:

- numerous roofbolts adjacent to each other were found to be damaged;
- two sticks in the back area were 10.2m from the face and were spaced 1.8m apart instead of 1m;
- a support jack with a stone placed underneath as a wedge was observed;
- the nets were observed being supported at weak points with the jacks, at one corner it was observed that the net gave way at the weak point where the jack was supporting it;
- last line of roofbolts measured 1.6m and 1.3m to the face against a standard of 0.5m before a blast;
- back area was observed not barricaded off at raise 2, panel 2 and in the back area there were missing support sticks;
- stick support elements were not pre-stressed; and
- fall of ground had occurred, where the roof was left unsupported for approximately 12 hours, which was estimated 6.9m x 14.6m x 0.12m.

6.9 Winches (4%)

The areas covered in this category of transgressions were:

- unsafe winches and rigging were observed;
- the centre line winch had no operating pull wire, the tip area was found with big rocks and the grizzly was damaged, the electrical terminal box was found not secured, holding down bolt was not tightened, there was no safety snatch block installed on the RSJ (Rolled Steel Joist) return rig, the dead man triangle was not visible and accumulation of ore was observed in the centre gully;
- the face winch had no code of signals displayed, winch rope was worn out with loose wires, loose nut was observed on the holding down bolts, electrical terminal box was not secured and the dead man triangle was not visible;
- a winch was not locked and bell wires were not installed along the entire length of the scraper paths and not installed on both sides of the gullies; and
- a winch was not locked, leaking grease, signalling wire not covering the entire length of the rope and the cable joint was close to the motor.

6.10 Electrical (3%)

The areas covered in this category of transgressions were:

- the electrical DB (Distribution Box) and panels were not locked, exposing live wires; and
- electrical substation was not locked and doors of electrical panels were open;
- main substation low and medium voltage cables were not properly suspended and were connected without cable shroud; and
- medium voltage cable sheath was removed, exposing armouring of the cable.
6.11 Railbound (3%)  
The areas covered in this category of transgressions were:

- poor rail maintenance on three levels was observed;
- a caboose had derailed and hit a Loco Guard whilst busy pulling ore from the box;
- excessive mud and water were observed in the crosscut, submerging rails; and
- rails were submerged in ore spillage, water and mud in the crosscut; and newly installed slippers were loose, from battery bay to haulage lay-by.

6.12 Safe Declaration (3%)  
The areas covered in this category of transgressions were:

- the Team Leader and Miner did not have all needed equipment to measure support and ventilation but declared the working places safe;
- safe declaration was not signed, socket plugs were not used, the panel was marked before safe declaration was completed and poor barring was observed;
- measures were not put in place to prevent employees from entering the standoff area from the highwall when declaring the area safe; and
- temperatures at were found to be above the occupational exposure limits but the working place was found declared safe by the Miner and Team Leader.

6.13 Emergency Preparedness (2%)  
The areas covered in this category of transgressions were:

- lifeline was tied with big cable ties next to the waiting place and the escape route was full of water along the road to the refuge bay; and
- no air whistle was installed in the refuge bay, compressed air valve was positioned too high, refuge bay location or number and capacity were not displayed on the outside wall and the compressed air discharge silencer was not installed 2m from the back wall.

6.14 Blasting (2%)  
The areas covered in this category of transgressions were:

- blasting operations were taking place within 500m of surface structures without permission; and
- raise 2 panels and raise 3 development faces were found charged with explosives but the places were not barricaded off to ensure unauthorised entry.

6.15 Risk Assessment (1%)  
The area covered in this category of transgressions was that the metal plates had been installed without a risk assessment and approval of a competent person.
6.16 Conveyance (1%)

The area covered in this category of transgressions was that the cage door was damaged/bent which rendered the door limit switch ineffective.

7. OCCUPATIONAL MEDICINE

7.1 Overall occupational diseases/illness per month

During February 2017, the regions reported a total of 291 occupational diseases/illness from Health Incident Reports (HIRs), when compared to a total of 456 cases reported during the same period in 2016.

7.2 Analysis of occupational disease trends by region

There is an overall decrease of 36% in the total occupational diseases/illness reported by eight regions during February 2017 when compared to the total of cases reported by nine regions during the same period in 2016.

The table and graph below illustrate the progressive performance of each region with regards to the number of occupational diseases/illness reported on HIRs. In February 2017, North West Rustenburg reported most cases, followed by Free State, Gauteng, North West Klerksdorp, Mpumalanga, Northern Cape, KwaZulu Natal, Western Cape and Limpopo regions. In February 2016, Gauteng reported most cases followed by North West Rustenburg, Free State, North West Klerksdorp, Mpumalanga, Northern Cape, KwaZulu-Natal, Limpopo and Western Cape regions. Eastern Cape region did not report any occupational diseases/ during the same period for both years.

7.3 Analysis of Health Incident Reports per common disease group

7.3.1 Pulmonary tuberculosis (PTB)

Pulmonary tuberculosis (PTB) cases have decreased by 22.3% (22%) when compared to the same period during the previous year.

7.3.2 Silicosis

Silicosis cases reported have decreased by 55.84% (56%) when compared to the same period during the previous year.
7.3.3 Noise-induced hearing loss (NIHL)

Noise-induced hearing loss (NIHL) cases have decreased by 43.75% (44%) when compared to the same period during the previous year.

7.4 Conclusion

The analysis of occupational disease trends from the health incident reports show an overall decrease on occupational disease reported when compared to the same period of the previous year. It must also be noted that reported occupational diseases/illness are based on the system of medical surveillance which is not conducted at the same time on mines.

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Verification source: Health Incident Reports submitted by regions: February 2016 & 2017

Table 7.2.1 Occupational diseases/illness reported on Health Incident Reports (HiRs) per region:
February 2016 and February 2017
Graph 7.3.1 Occupational diseases/illness reported on Health Incident Reports (HIRs) per region: February 2016 and 2017

Verification source: Health Incident Reports submitted by regions: February 2016 and 2017
8. STATUS REPORT ON THE MINE HEALTH AND SAFETY COUNCIL (MHSC) AWARD SCHEME 2017

Table 8.1 Mines that have achieved the safety awards:

<table>
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<tr>
<th>No</th>
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<th>Last fatality</th>
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<td>Million (1)</td>
<td>24/02/2017</td>
<td>23/01/2016</td>
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</tbody>
</table>

No  | Mine                      | Award    | Date recorded | Last fatality |
    |                           |          |               |               |
    |                           | Million (1) | 24/02/2017   | 23/01/2016    |