

## GOVERNMENT NOTICE

### DEPARTMENT OF MINERALS AND ENERGY

No. R. 904

2 July 2002

### REGULATIONS UNDER THE MINE HEALTH AND SAFETY ACT, 1996

(ACT NO 29 OF 1996)

In terms of section 98(1)(r) of the Mine Health and Safety Act, 1996 (Act No. 29 of 1996), I Phumzile Mlambo-Ngcuka, Minister of Minerals and Energy, hereby make the Regulations in the Schedule.

The Regulations in the Schedule will take effect on the date of publication hereof except-

- (a) Regulation 9.1(3) and 9.2(7), which take effect on 1 September 2002 .



MS P MLAMBO-NGCUKA

MINISTER OF MINERALS AND ENERGY

## SCHEDULE

### CHAPTER 5

#### FIRES AND EXPLOSIONS

##### Report to Employer

5.1(1) The *employer* must ensure that a competent person reports to the *employer*, at appropriate intervals determined in accordance with the *mine's risk* assessment, on –

- (a) the effectiveness of the precautionary measures taken to prevent or suppress explosions of coal dust or flammable gas; and
- (b) the adequacy of measures in place to prevent, detect and combat the start and spread of *mine* fires.

Reference is made to the following Guidelines issued by the Chief Inspector of Mines in terms of section 9(2) of this Act

- (i) Guideline for the Compilation of a Mandatory Code of Practice for the Prevention of Coal Dust and Flammable Gas Explosions: Ref.: DME 16/3/2/1-A1
- (ii) Guideline for the Compilation of a Mandatory Code of Practice for the Prevention of Flammable Gas Explosions in Mines Other than Coal DME 16/3/2/1-A2

## CHAPTER 9

### MINE ENVIRONMENTAL ENGINEERING AND OCCUPATIONAL HYGIENE

#### 9.1 Environmental Engineering

##### Use of Compressed Air

- 9.1(1) No person may use, or permit any person to use, compressed air:
- (a) in such a manner that it might endanger the *health* or *safety* of any person; or
  - (b) to clean the body of any person or clothes being worn by any person.

##### Early Warning Systems

- 9.1(2) Where the *risk* assessment at the *mine* indicates a significant *risk* of a fire and/or explosion and/or toxic release, that could lead to an irrespirable atmosphere or an atmosphere immediately dangerous to life or *health*, the *employer* must provide an early warning system or systems at all *working places*.

##### Ventilation Control Devices

- 9.1(3) The *employer* must ensure that polymer underground ventilation control devices or appliances, which have the potential for electrical static discharge-
- (a) comply with the SABS standard specifications 1287: Part I and Part II; and
  - (b) are of anti-static characteristics when used in *working places* where there is a *risk* of igniting gas, dust or vapour.

**Working places where work has ceased**

- 9.1(4) The *employer* must take *reasonably practicable* measures to ensure that no *employee* is exposed to any *health hazard* at, or emanating from, any *working place* where work has ceased, either temporarily or permanently.

**9.2 Occupational Hygiene****Occupational exposure to health hazards**

- 9.2(1) The *employer* must ensure that the occupational exposure to *health hazards* of *employees* is maintained below the limits set out in Schedule 22.9(2)(a) and (b).

**System of Occupational Hygiene Measurements**

- 9.2(2) The *employer* must establish and maintain a system of *occupational hygiene* measurements, as contemplated in section 12, of all *working places* where the following *hazard* limits prevail:
- (a) airborne pollutants
    - particulates  $\geq \frac{1}{10}$  of the occupational exposure limit;
    - gases and vapours  $\geq \frac{1}{2}$  of the occupational exposure limit;
  - (b) thermal stress
    - heat  $>25,0^{\circ}\text{C}$  wet bulb and/or  $>32,0^{\circ}\text{C}$  dry bulb and/or  $>32,0^{\circ}\text{C}$  mean radiant temperature;
    - cold  $<10^{\circ}\text{C}$  equivalent chill temperature; and
  - (c) noise
    - $\geq 82\text{dBL}_{\text{Aeq},8\text{h}}$ .

Reference is made to the following Guidelines issued by the Chief Inspector of Mines in terms of section 9(2) of this Act

- (i) Guideline for the Compilation of a Mandatory Code of Practice for an Occupational Health Programme on Personal Exposure to Airborne Pollutants: Ref. No. DME 16/3/2/4-A1
- (ii) Guideline for the Compilation of a Mandatory Code of Practice for an Occupational Health Programme on Personal Exposure to Thermal Stress Ref. No. DME 16/3/2/4-A2

### **Report to Employer**

9.2(3) The competent person engaged by the *employer* in terms of section 12(1) must, as part of the compliance with section 12(2)(b), report to the *employer* on –

- (a) the *occupational hygiene risk* assessment, with specific reference to planning, design, implementation and management of *occupational hygiene* at the *mine*;
- (b) the *occupational hygiene hazards* that may cause illness or adverse *health* effects to persons, assess the results in terms of the implementation of control systems and the management thereof, and recommend remedial actions to the *employer*.

### **Provision of potable and palatable water**

9.2(4) The *employer* must ensure that sufficient potable and palatable water, which comply with the requirements set out in Schedule 22.9(2)(c), is readily available to all *employees* and clearly identified as drinkable.

### **Provision and maintenance of ablution and change house facilities**

9.2(5) The *employer* must provide and maintain suitable and adequate:

- (a) change houses to enable *employees* who perform work involving *hazardous substances* to change into working clothes at the start of their shift and to wash themselves and change their clothes at the end of their shift;
- (b) facilities to enable *employees* who perform work involving *hazardous substances* to wash their hands and faces before eating any meals at work; and
- (c) readily available latrine facilities, within a reasonable distance from each *working place*.

**Working Clothes**

9.2(6) No *employee* may remove clothes referred to in *regulation 9.2(5)(a)* from the *mine* unless such clothes have been decontaminated.

**Report to Regional Principal Inspector**

9.2(7) The *employer* must annually submit to the regional ***principal inspector of mines***, on forms 21.9(2)(a); 21.9(2)(b); 21.9(2)(c) and 21.9(2)(d), *prescribed* in chapter 21, and within 30 days from the end of the relevant annual reporting period as indicated on each form, reports which contain quarterly information on the airborne pollutant, heat stress, cold stress and noise aspects of the system of *occupational hygiene* measurements, established and maintained in terms of *regulation 9.2(2)*, covering the immediately preceding 12 months.

**Respiratory Protective Equipment**

9.2(8) The *employer* must ensure that all respiratory protective equipment used at a *mine*, other than body-worn self-contained self rescuers, comply with the South African bureau of Standards Code of Practice, Homologation of Respiratory equipment SABS 0338.

**Illumination of Working Places**

9.2(9) The employer must ensure that the illumination at all working places is sufficient to enable employees, who have conformed with the requirements of the vision tests conducted in terms of the Guideline for the Minimum Standards of Fitness to Perform work at a Mine, to perform their work safely.

**Repeal**

The following regulations made under the Minerals Act, 1991 (Act 50 of 1991) in force in terms of Schedule 4 of the Mine Health and Safety Act, 1996 (Act 29 of 1996) are hereby repealed.

| CHAPTER<br>2 | CHAPTER<br>4 | CHAPTER<br>6 | CHAPTER<br>7 | CHAPTER<br>8 | CHAPTER<br>9 | CHAPTER 10 |          |         |         | CHAPTER<br>15 | CHAPTER<br>24 |
|--------------|--------------|--------------|--------------|--------------|--------------|------------|----------|---------|---------|---------------|---------------|
| 2.10.7       | 4.2          | 6.3.2.4      | 7.2.2        | 8.4.2(c)     | 9.29         | 10.1.1     | 10.6.1   | 10.10.1 | 10.19.2 | 15.5.3        | 24.14.6       |
| 2.10.8       | 4.3.1        |              | 7.3.1        | 8.5.1        |              | 10.1.2     | 10.6.2   | 10.10.2 | 10.19.3 | 15.2          | 24.20.4       |
| 2.10.9       | 4.3.2        |              |              | 8.5.2        |              | 10.2.1     | 10.6.3   | 10.10.3 | 10.20.1 | 15.2.1        |               |
| 2.10.10      | 4.3.3        |              |              | 8.9.3.1      |              | 10.2.2     | 10.6.4   | 10.10.4 | 10.20.2 | 15.2.2        |               |
| 2.10.7       | 4.3.4        |              |              | 8.9.4        |              | 10.2.3     | 10.6.5   | 10.10.5 | 10.20.3 | 15.3.1        |               |
| 2.16.1       | 4.8          |              |              | 8.9.5        |              | 10.2.4     | 10.6.6   | 10.10.6 | 10.21.1 |               |               |
| 2.16.2       | 4.9          |              |              | 8.9.8        |              | 10.2.5     | 10.6.7   | 10.11.2 | 10.21.2 |               |               |
| 2.16.3       |              |              |              | 8.9.9        |              | 10.2.6     | 10.7     | 10.16.1 | 10.21.3 |               |               |
|              |              |              |              | 8.9.10       |              | 10.3.1     | 10.8     | 10.16.2 | 10.21.4 |               |               |
|              |              |              |              | 8.10.12      |              | 10.3.2     | 10.9.1.1 | 10.16.3 | 10.21.5 |               |               |
|              |              |              |              | 8.10.13      |              | 10.3.3     | 10.9.1.2 | 10.16.4 | 10.22   |               |               |
|              |              |              |              | 8.10.41      |              | 10.3.4     | 10.9.2   | 10.17.1 | 10.23   |               |               |
|              |              |              |              | 8.10.42      |              | 10.3.5     | 10.9.3   | 10.17.2 | 10.25.2 |               |               |
|              |              |              |              | 8.10.43      |              | 10.3.6     | 10.9.4   | 10.17.3 | 10.25.3 |               |               |
|              |              |              |              |              |              | 10.4       | 10.9.5   | 10.17.4 | 10.25.4 |               |               |
|              |              |              |              |              |              | 10.5.1     | 10.9.6   | 10.19.1 | 10.25.5 |               |               |
|              |              |              |              |              |              | 10.5.2     | 10.10    |         | 10.25.8 |               |               |

## CHAPTER 16

### RESCUE, FIRST AID AND EMERGENCY PREPAREDNESS AND RESPONSE

#### Report to Employer Relating to Explosions, Fires and Flooding

- 16.1(1) The *employer* must ensure that a competent person reports to the *employer*, at appropriate intervals determined in accordance with the *mine's risk* assessment, on the adequacy of escape and rescue procedures at the *mine* relating to explosions, fires and flooding.



## Annual Heat Stress Exposure Report Form Report Form 21.9(2)(b).

In terms of regulation 9.2. (7)

**General:**

1. Risk assessment will determine the warmest quarter (Generally – January – March)
2. Quarterly Commodity Sampling Periods

| Commodity                          | Annual Reporting Period |
|------------------------------------|-------------------------|
| Gold; Diamond; Processed Minerals  | Oct - Sept              |
| Coal; Asbestos; Aggregate and Sand | Nov - Oct               |
| Platinum; Base Metals,             | Sept - Aug              |

2. Complete one form for each homogeneous exposure group
3. Codes to be used in this form are specified in the SAMOHP
4. Attach Operation Details – Report Form on an annual basis

Total Number of Pages of Complete Report .....

5. The results of samples taken from randomly selected occupations within a HEG must be assigned to that specific occupation code

|                         |  |
|-------------------------|--|
| Main Commodity Code:    |  |
| Measurement Area:       |  |
| Activity Area Code:     |  |
| Thermal Classification: |  |

DME Mine Code

Quarter Ending

[illegible]