

## **MINE HEALTH AND SAFETY ACT**

Act 29 of 1996.

### **AMENDMENT OF REGULATIONS**

[Updated to 24 April 2015]

#### **MINES AND WORKS ACT, 1956 (ACT 27 OF 1956)**

GoN R992, G. 2741 (c.i.o 26 June 1970),  
GoN R303, G. 3397 (corrected by GoN R2103, G. 4498) (c.i.o 1 March 1972),  
GoN R304, G. 3397 (c.i.o 1 March 1972),  
GoN R305, G. 3397 (corrected by GoN R2103, G. 4498) (c.i.o 1 March 1972),  
GoN R1346, G. 3625 (corrected by GoN R2103, G. 4498) (c.i.o 4 August 1972),  
GoN R2101, G. 4498 (c.i.o 15 November 1974),  
GoN R2102, G. 4498 (c.i.o 15 November 1974),  
GoN R2103 G. 4498 (c.i.o 15 November 1974),  
GoN R513, G. 5488 (c.i.o 1 April 1977),  
GoN R1189, G. 6489 (c.i.o 8 June 1979),  
GoN R537, G. 6892 (c.i.o 21 March 1980),  
GoN R1885, G. 7219 (c.i.o 12 September 1980) Duplicated by GoN R2228, G. 7283,  
GoN R2227, G. 7284 (c.i.o 31 October 1980),  
GoN R2703, G. 7953 (c.i.o 11 December 1981),  
GoN R2264, G. 10502 (c.i.o 31 October 1986),  
GoN R367, G. 10621 (c.i.o 27 February 1987),  
GoN R2566, G. 11037 (c.i.o 20 November 1987),  
GoN R1352, G. 11397 (c.i.o 8 July 1988),  
GoN R1889, G. 11504 (c.i.o 16 September 1988),  
GoN R1130, G. 11905 (c.i.o 2 June 1989),  
GoN R1339, G. 12542 (c.i.o 22 June 1990),  
GoN R1664, G. 12610 (c.i.o 13 July 1990),  
GoN R2706, G. 12858 (c.i.o 23 November 1990),  
GoN R2923, G. 12904 (c.i.o 10 December 1990),  
GoN 160, G. 13002 (c.i.o 1 February 1991),  
GoN R398, G. 13038 (c.i.o 1 March 1991),  
GoN R1263, G. 13288 (c.i.o 7 June 1991),  
GoN R2062, G. 13473 (c.i.o 23 August 1991).

#### **MINERALS ACT (ACT 50 OF 1991)**

GoN R3083, G. 13684 (c.i.o 20 December 1991),  
GoN R814, G. 13811 (c.i.o 13 March 1992),

GoN R1110, G. 13927 (c.i.o 16 April 1992),  
GoN R2223, G. 14192 (c.i.o 7 August 1992),  
GoN R1556, G. 15067 (c.i.o 20 August 1993),  
GoN R2449, G. 15362 (c.i.o 24 December 1993),  
GoN R31, G. 16214 (c.i.o 13 January 1995),  
GoN R530, G. 16363 (c.i.o 13 April 1995),  
GoN R94, G. 17725 (c.i.o 15 January 1997),  
GoN R847, G. 18078 (c.i.o 21 June 1997),  
GoN R802, G. 18992 (c.i.o 26 June 1998),  
GoN R801, G. 20219 (c.i.o 25 June 1999).

#### MINE HEALTH AND SAFETY ACT (ACT 29 OF 1996)

GoN R1324, G. 20606 (c.i.o 12 November 1999),  
GoN R1325, G. 20606 (c.i.o 12 November 1999),  
GoN R788, G. 23498 (c.i.o 14 June 2002),  
GoN R904, G. 23583 (c.i.o 2 July 2002),  
GoN R918, G. 23585 (c.i.o 2 July 2002),  
GoN R569, G. 23410 (c.i.o 1 September 2002),  
GoN R 905, G. 23584 (c.i.o 1 September 2002),  
GoN R1572, G. 24168 (corrected by GoN R905) (c.i.o 13 December 2002),  
GoN R1574, G. 24168 (corrected by GoN R918) (c.i.o 13 December 2002),  
GoN R1578, G. 24168 (c.i.o 1 January 2003),  
GoN R959, G. 23615 (c.i.o 1 January 2003),  
GoN R528, G. 24734 (corrected by GoN R904) (c.i.o 17 April 2003),  
GoN R1237, G. 25404 (c.i.o 29 August 2003),  
GoN R583, G. 26333 (c.i.o 14 May 2004),  
GoN R584, G. 26333 (c.i.o 14 May 2004),  
GoN R1305, G. 26963 (c.i.o 12 November 2004),  
GoN R1323, G. 26963 (c.i.o 12 December 2004),  
GoN R1224, G. 28333 (c.i.o 15 December 2005),  
GoN R1225, G. 28333 (c.i.o 15 December 2005),  
GoN 846, G. 29144 (c.i.o 18 August 2006),  
GoN 911, G. 29214 (c.i.o 8 September 2006),  
GoN 1278, G. 29457 (c.i.o 1 July 2007),  
GoN R88, G. 30698 (c.i.o 1 February 2008),  
GoN R91, G. 30698 (c.i.o 1 February 2008 unless otherwise indicated),  
GoN R331, G. 38708 (c.i.o 24 April 2015).

The State President has, under the powers vested in him by section 12 of the Mines and Works Act, 1956 (Act 27 of 1956), made the following regulations in substitution of the regulations published in Government Notice R. 1609, dated 28 September 1962, as amended by Government Notices R. 2058 of 14 December

1962, R. 462 of 29 March 1963, R. 808 of 29 May 1964, R. 1987 of 4 December 1964, R. 1988 of 4 December 1964, R. 261 of 26 February 1965, R. 262 of 26 February 1965, R. 329 of 12 March 1965, R. 334 of 12 March 1965, R. 576 of 30 April 1965, R. 1069 of 16 July 1965, R. 1127 of 30 July 1965, R. 1483 of 1 October 1965 and R. 228 of 18 February 1966.

## **ARRANGEMENT OF REGULATIONS**

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## CHAPTER 1 DEFINITIONS

In these Regulations or any amendment thereof, unless the context otherwise indicates—

- (1A) **“automatic winding plant”** means any hoist or other appliance for the conveyance of persons, material or mineral by means of a cage, skip or other means of conveyance in any shaft or winze where the driving machinery is normally operated automatically, without a driver in attendance, but shall not include any lifting machine, elevator, chairlift, endless rope haulage or scraper winch installation;

[“automatic winding plant” ins by reg 2(a) of GoN R2703 in G. 7953.]

- (1) **“banksman”** means a person stationed at the shaft top, who shall be the holder of an onsetter’s certificate, appointed by the manager to supervise the loading and unloading of persons in the cage, skip, or other means of conveyance and to give the necessary signals;

[“banksman” am by reg 2(a) of GoN R1352 in G. 11397.]

- (2) **“blasting material”** see **“explosives”**—

- (2A) **“boiler”** means—

- (a) any apparatus adapted to convert continuously any liquid into steam, vapor or gas at a pressure higher than that due to the atmosphere, where the heat is derived from a source other than steam or the ambient temperature of the atmosphere, including any superheater or economiser comprising an integral part thereof; or
- (b) any economiser or separately fired super-heater not comprising an integral part of such apparatus,

and includes every fitting and appurtenance pertaining to any such apparatus, economiser or super-heater: Provided that if any apparatus consists of a combination of two or more parts each of which is capable of adaption for use as a separate boiler by the closing of one or more stop valves or stop cocks, each of the said parts shall be deemed to be a boiler: Provided further that—

- (i) a steam generator fitted with a standpipe or riser which is vented directly to the atmosphere and the vent of which is of such dimensions as to prevent the development of any pressure exceeding 35 kPa within the vessel, and provided that no valve or other obstruction is inserted in the standpipe or riser to prevent the vessel from freely venting to the atmosphere; or

- (ii) any apparatus of which the product of the manufacturer's intended maximum working pressure in kilopascal and the volume in cubic metres does not exceed the figure 10,

shall not be deemed to be a boiler;

["boiler" ins by reg 2(a) of GoN R2449 in G. 15362.]

- (3) "**car**" means any car, cage, cradle or other conveyance in an elevator hatchway;

- (4) "**certificated**" ...

["certificated" subs by reg 2(b) of GeN 160 in G. 13002; rep by reg 2(a) of GoN R3083 in G. 13684.]

- (4A) "**chair lift**" means any appliance or combination of appliances used or intended to be used for the conveyance of persons or material by means of chairs or other means of conveyances suspended from an endless hauling rope or with chairs or conveyances running on a rope or in or on a rail circuit and provided with a hauling rope or chain;

["chairlift" ins by reg 2(c) of GoN R1885 in G. 7219; rep by reg 2(b) of GoN R3083 in G. 13684; ins by reg 2(b) of GoN R2449 in G. 15362.]

- (4B) "**Competent person**" means a person who—

(a)

- (i) is qualified by virtue of his knowledge, training, skills and experience to organise the work and its performance;
- (ii) is familiar with the provisions of the Act and the regulations which apply to the work to be performed; and
- (iii) has been trained to recognise any potential or actual danger to health or safety in the performance of the work; or

- (b) is in possession of the appropriate certificate of competency where such certificate is required by these Regulations;

["competent person" ins by reg 2(c) of GoN R1352 in G. 11397.]

- (5) "**controlled mine**" or "**controlled works**" means a mine or a works which is controlled under the Occupational Diseases in Mines and Works Act, 1973 (Act 78 of 1973);

["controlled mine" subs by reg 1 of GoN R537 in G. 6892.]

- (5A) "**Council**" means the Mine Health and Safety Council established in terms of section 41 of the Mine Health and Safety Act, 29 of 1996;

["Council" ins by reg 1 of GoN R918 in G. 23585; corrected and subs by GoN R1574 in G. 24168.]

- (6) **“elevator”** means any installation used or intended to be used for the conveyance of persons, material, explosives or mineral by means of a car fitted with safety catches running in a hatchway on fixed solid guides and serving defined landing levels, where the control system of the driving machinery is not normally operated manually from the motor or engine room;  
[“elevator” rep by reg 2(c) of GoN R3083 in G. 13684; ins by reg 2(c) of GoN R2449 in G. 15362.]
- (6A) **“emergency”** means an emergency which may endanger life or health;  
[“emergency” ins by reg 1 of GoN R513 in G. 5488.]
- (6AA) **“employer”** means an employer as defined in section 102 of the Mine Health and Safety Act, 1996 (Act 29 of 1996);  
[“employer” ins by reg 2 of GoN R802 in G. 18992.]
- (6B) **“engineer”** means a person who is the holder of an appropriate mechanical or electrical engineer’s certificate of competency appointed in terms of these Regulations;  
[“engineer” ins by reg 2(d) of GeN 160 in G. 13002.]
- (7) **“explosives”** or **“blasting material”** shall have the same meaning as is assigned to that term in the Explosives Act, 1956 (Act 26 of 1956);
- (8) **“fiery mine”** means a mine which is for the time being a fiery mine in terms of a declaration made under these Regulations by the Principal Inspector of Mines;  
[“fiery mine” am by reg 26(h) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]
- (8A) **“flammable gas warning device”** means a device designed to give a clearly audible or a clearly visible warning, or both a clearly audible and a clearly visible warning, should it be placed in an atmosphere containing more than one comma four parts per hundred by volume of flammable gas, and which complies with the South African Bureau of Standards specification SABS 1515;  
[“flammable gas warning device” ins by reg 2(a) of GoN R367 in G. 10621; subs by reg 2(a) of GoN R2062 in G. 13473.]
- (8B) **“flammable gas measuring instrument”** means an instrument designed to determine the concentration of flammable gas present in the atmosphere in parts per hundred by volume, and which complies with the South African Bureau of Standards specification SABS 1515;  
[“flammable gas measuring instrument” ins by reg 2(b) of GoN R2062 in G. 13473.]
- (9) **“ganger”** or **“miner”** means a person in charge of workmen;  
[“ganger” or “miner” am by reg 2(a) of GoN R1352 in G. 11397.]
- (10) **“gauge pressure”** means the pressure in excess of that of the atmosphere;

(11) “**hatchway**” means any well, compartment of a shaft or winze or any vertical or inclined way in which a car or counterpoise is operated;

["hatchway" subs by reg 2(d) of GoN R2449 in G. 15362.]

(11A) “**hazardous area**” means—

(i) in respect of a coal-mine—

(aa) a return airway; or

(bb) an area within 180 metres of any working face; or

(ii) any area in or at a mine or at a works in addition to an area referred to in regulation 1(11A)(i) where there may be a risk of igniting gas, dust, vapor or any other explosive material;

["hazardous area" ins by reg 2(g) of GeN 160 in G. 13002.]

(12) “**landing**” means any floor, platform or station which is an authorised stopping place for the elevator car;

(13) “**lifting machine**” means any crane, crab, winch, pulley block, chain block, fork-lift or similar appliance;

(14) “**lifting tackle**” means any chain sling, rope sling, ring, hook, shackle, swivel, spreader, shear-legs, derrick or similar appliance;

(14A) “**light metal**” means—

(i) aluminium;

(ii) magnesium;

(iii) titanium; or

(iv) an alloy containing more than—

(a) 15 per cent aluminium by mass of the alloy;

(b) 15 per cent aluminium, magnesium and / or titanium, taken together, by mass of the alloy;  
or

(c) six per cent magnesium and / or titanium, taken together or separately, by mass of the alloy;

["light metal" ins by reg 2(i) of GeN 160 in G. 13002.]

- (15) **"manager"** means the person appointed to be responsible for the control, management and direction of a mine or a works and includes the term "general manager";

["manager" am by reg 2(a) of GoN R1352 in G. 11397.]

- (16) **"material"** means whatever may be conveyed by means of a winding plant, elevator or self-propelled mobile machine excluding persons, mineral and explosives;

["material" subs by reg 2(a) of GoN R1885 in G. 7219, reg 2(j) of GeN 160 in G. 13002.]

- (17) **"metalliferous mine"** means and includes any mine other than a coal mine or a diamond mine;

- (17A) **"methanometer"** ...

["methanometer" ins by reg 2(b) of GoN R367 in G. 10621; rep by reg 2(c) of GoN R2062 in G. 13473.]

- (18) **"miner"** see "ganger";

- (19) **"misfired hole"** means a shot hole or part of a shot hole in which any explosive or any portion thereof has failed to explode;

- (20) **"non-fiery mine"** means a mine which is for the time being not a fiery mine in terms of a declaration made under these Regulations by the Principal Inspector of Mines;

["non-fiery mine" am by reg 26(h) of GoN R3083 in G. 13684; reg 2(b) of GoN R94 in G. 17725.]

- (21) **"onsetter"** means a person who shall be the holder of an onsetter's certificate issued by the Principal Inspector of mines or who has been assessed competent against a skills program recognised by the Mining Qualifications Authority for this purpose, appointed by the manager to be in charge of a cage, skip or other means of conveyance underground in which persons are being raised or lowered and to give the necessary signals;

["onsetter" am by reg 2(a) of GoN R1352 in G. 11397; subs by reg 1 of GoN R88 in G. 30698.]

- (21B) **"prescribed permit"** means a permit prescribed by regulation 34.1;

["prescribed permit" ins by reg 2(e) of GoN R2449 in G. 15362.]

- (22) **"pressure vessel"** means any vessel in the interior or jacket of which a pressure of more than 40 kilopascals gauge pressure may occur, but shall not include any—

(a) boiler;

(b) vessel in which the pressure is exerted by a liquid harmless to the vessel, the temperature of which does not exceed the boiling point of the liquid at atmospheric pressure: Provided that a cushion of gas or vapor cannot form above the liquid;



- (c) working cylinder or chamber of a steam, heat or air engine, nor any transmitting column or pipeline;
- (d) portable gas container;
- (e) vessel in which the maximum working gauge pressure exceeds 40 kilopascals, but in which the product of the working gauge pressure in kilopascals and the capacity in cubic metres does not exceed 10;
- (f) cylindrical vessel with an internal diameter of less than 150 millimetres; and
- (g) inflatable apparatus;

["pressure vessel" am by GoN R303 in G. 3397, GoN R2102 in G. 4498; subs by reg 2(b) of GoN R2703 in G. 7953, reg 2(l) of GeN 160 in G. 13002.]

- (23) **"raise"** means any tunnel having an inclination above the horizontal in the direction of working of more than 5 degrees and not included under the definition of "shaft";
- (24) **"reef"**, except in the case of coal or diamondiferous formations, means a vein, bed or deposit, other than a surface alluvial deposit, containing minerals;
- (25) **"safety pillar"** means every portion of a reef, mineral deposit or ground left *in situ* for the support and protection of the surface, objects thereon or underground workings;
- (26) **"scheduled mine"** means a gold mine where more than 1 000 persons are employed underground at any time or any other mine declared as such by the Chief Inspector: Provided that the Chief Inspector, in the case of a gold mine, may declare such mine not to be a scheduled mine by virtue of the district in which it is situated, by giving notice in writing to the manager;  
 ["scheduled mine" subs by reg 2 of GoN R537 in G. 6892; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]
- (27) **"scheduled person"** ...  
 ["scheduled person" rep by reg 2(b) of GoN R1352 in G. 11397.]
- (27A) **"self-propelled mobile machine"** means any machine which is self-propelled, requires a driver and is used for the purpose of performing mining operations or for performing similar operations at a works;  
 ["self-propelled mobile machine" ins by reg 2(b) of GoN R1885 in G. 7219; subs by reg 2(m) of GeN 160 in G. 13002.]
- (28) **"shaft"** means any tunnel having a cross-sectional dimension of 3,7 metres or over and—

(a) having an inclination to the horizontal of 15 degrees or over; or

(b) having an inclination to the horizontal of less than 15 degrees but more than 10 degrees where the speed of traction may exceed two metres per second.

["shaft" am by GoN R303 in G. 3397.]

(28A) "**shaft station**" means the area surrounding the shaft at every station level and identified and demarcated as the shaft station by the employer in terms of regulation 16.61.1;

["shaft station" ins by reg 3 of GoN R802 in G. 18992.]

(29) "**shot hole**" means any drill hole charged with or intended to be charged with explosives;

(30) "**skilled person**" ...

["skilled person" rep by reg 2(d) of GoN R3083 in G. 13684.]

(31) "**socket**" means any shot hole, or part of any shot hole, known not to be a misfired hole, which remains after having been charged with explosives and blasted or which, for any other reason, may be suspected of having contained explosives at any time and includes any shot hole, or part of any shot hole, from which all explosives have been extracted in accordance with the procedure prescribed by these Regulations;

(31A) "**standard**" means a standard as defined in section 102 of the Mine Health and Safety Act, 1996 (Act 29 of 1996);

["standard" ins by reg 4 of GoN R802 in G. 18992.]

(31AA) "**station level**" means the bank and any level in a shaft, at which conveyances stop for the loading or unloading of persons, equipment, material, minerals or explosives;

["station level" ins by reg 4 of GoN R802 in G. 18992.]

(32) "**steeply inclined**" in connection with shafts or other underground excavations means an inclination to the horizontal of more than 35 degrees;

(33) "**stope**" means an underground excavation made in the removal of any ground or mineral other than coal, but does not apply to excavations made for engine rooms and pump chambers or for development purposes such as shafts, drives, winzes and raises;

(34) "**the Act**" means the Minerals Act, 1991 (Act 50 of 1991);

["the Act" subs by reg 2(f) of GoN R3083 in G. 13684.]

(35) "**ventilating district**" means such part of a mine as has an independent intake commencing from a main intake air-course and an independent return air-way terminating at a main return air-course;

(35A) “**winding-engine driver**” means a person who is the holder of a winding-engine driver certificate issued by the Chief Inspector of Mines or who has been assessed competent against a qualification recognised by the Mining Qualifications Authority for this purpose;

[“winding-engine driver” ins by reg 2 of GoN R88 in G. 30698.]

(36) “**water blast**” ...

[“water blast rep by reg 2(d) of GoN R2062 in G. 13473.]

(37) “**winding plant**” means any hoist or other appliance used or intended to be used for the conveyance of persons, material, explosives or mineral by means of a cage, skip or other means of conveyance in any shaft or winze where the control system of the driving machinery can normally be operated manually from the motor or engine room, but excluding any elevator, lifting machine, endless rope haulage and scraper winch installation;

[“winding plant” am by reg 2(c) of GoN R2703 in G. 7953; rep by reg 2(e) of GoN R3083 in G. 13684; ins by reg 2(f) of GoN R2449 in G. 15362.]

(38) “**winze**” means any tunnel having an inclination below the horizontal in the direction of working of more than five degrees and not included in the definition of “shaft”;

In connection with electricity, the following definitions shall apply—

(38A) “**armouring**” means a metallic covering of an electric cable, in the form of tape, wire or tube enclosing one or more conductors to provide adequate mechanical protection;

[“armouring” ins by reg 2(a) of GeN 160 in G. 13002.]

(39) “**circuit**” means an electrical circuit forming a system or branch of a system;

(39A) “**collectively screened**” means having a conductive covering enclosing all power conductors as well as all control conductors within the protective outer sheath of a cable;

[“collectively screened” ins by reg 2(c) of GeN 160 in G. 13002.]

(40) “**conductor**” means an electrical conductor arranged to be electrically connected to a system;

(41) “**covered with insulating material**” means adequately covered with insulating material of such quality and thickness that there is no danger;

(42) “**dead**” means at or about zero potential and disconnected from any live system;

(43) “**earthed**” means connected to the general mass of earth in such manner as will ensure at all times an immediate discharge of electrical energy without danger;

- (44) “**electric apparatus**” means all apparatus, machines and fittings in which conductors are used, or of which they form a part;
- (44A) “**explosion protected apparatus**” means any apparatus designed for use in a hazardous area and includes flameproof apparatus, intrinsically safe apparatus and increased safety apparatus;  
[“explosion protected apparatus” ins by reg 2(e) of GeN 160 in G. 13002.]
- (45) “**extra high pressure**” means a pressure normally exceeding 3 000 volts;
- (45A) “**flameproof apparatus**” means apparatus of which the enclosure will withstand, without damage, any explosion of any flammable gas or vapour that may occur within it under practical conditions of operation within the designed rating of the apparatus (and recognised overloads, if any, associated with the rating) and will prevent the transmission of flame such as will ignite any flammable gas or vapour which may be present in the surrounding atmosphere;  
[“flameproof apparatus” ins by reg 2(f) of GeN 160 in G. 13002.]
- (45B) “**flexible cable**” means a cable having flexible insulated conductors and earthing conductors within a protective sheath, but shall not include signalling cable, telephone cable, blasting cable or flexible electric cord used with electric apparatus at a voltage not exceeding 250 volts alternating current on a single-phase system;  
[“flexible cable” ins by reg 2(f) of GeN 160 in G. 13002.]
- (46) “**high pressure**” means a pressure normally above 650 volts, but not exceeding 3 000 volts;
- (46A) “**increased safety apparatus**” means apparatus in which special precautions have been taken to prevent sparking, arcing and the occurrence of temperatures high enough to ignite flammable gas;  
[“increased safety apparatus” ins by reg 2(h) of GeN 160 in G. 13002.]
- (46B) “**individually screened**” means having a conductive covering enclosing power conductors individually within the protective outer sheath of a cable;  
[“individually screened” ins by reg 2(h) of GeN 160 in G. 13002.]
- (46C) “**intrinsically safe apparatus**” means electric apparatus constructed in such a manner that, when connected and used, any sparking that may occur under any service or fault condition (either in the apparatus or in the circuit associated with the apparatus) is not capable of igniting flammable gas;  
[“intrinsically safe apparatus” ins by reg 2(h) of GeN 160 in G. 13002.]
- (47) “**live**” means electrically charged;
- (48) “**low pressure**” means a pressure normally not exceeding 250 volts;
- (49) “**medium pressure**” means a pressure above 250 volts, but not exceeding 650 volts;

- (50) “**metallic covering**” means iron or steel armouring, with or without a lead or other metallic sheath as the conditions of the case may require, or an iron or steel pipe surrounding two or more conductors;
- (50A) “**movable electric apparatus**” means apparatus which does not fall within the definitions of “self-propelled mobile machine” or “portable electric apparatus” and which is not installed on permanent foundations and is intended to be moved from place to place when it is in use;  
[“movable electric apparatus” ins by reg 2(k) of GeN 160 in G. 13002.]
- (50B) “**portable electric apparatus**” means electric apparatus which is designed to be carried by hand and which may require electric power while it is being carried during use;  
[“portable electric apparatus” ins by reg 2(k) of GeN 160 in G. 13002.]
- (51) “**pressure**” means the difference of electrical potential between any two conductors, or between a conductor and earth;
- (52) “**system**” means an electrical system in which all the conductors and apparatus are electrically connected to a common source of electro-motive force.
- (53) “**trailing cable**” means a flexible cable used to supply power to any mobile machine and which is dragged across the ground;  
[“trailing cable” ins by reg 2(m) of GeN 160 in G. 13002.]
- (53)\* “**workings**” means any excavation of a mine made or being made for the purpose of searching for or winning minerals.  
[“workings” ins by reg 2(d) of GoN R814 in G. 13811.]

[**Editor Note:** Numbering as per the original *Gazette*.]

## **CHAPTER 2**

### **RESPONSIBILITY**

- 2.1 ...  
[Reg 2.1 am by reg 3 of GoN R537 in G. 6892; rep by reg 3(a) of GoN R3083 in G. 13684.]
- 2.2 ...  
[Reg 2.2 am by reg 4 of GoN R537 in G. 6892; rep by reg 3(a) of GoN R3083 in G. 13684.]
- 2.3.1 The owner of a mine or works who may be temporarily or permanently absent from the Republic, shall appoint some person resident in the Republic to be his agent or representative.

2.3.2 Such owner shall give notice in writing to the Principal Inspector of Mines, as the case may be, of the name and address, and of any change in the name and address, of such agent or representative.

[Reg 2.3.2 am by reg 5 of GoN R537 in G. 6892, reg 26(e) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.3.3 Such agent or representative shall be deemed to be owner for the purposes of these Regulations.

2.3.4 In the absence of any such notice as aforesaid, the person acting as manager of such mine or works shall be deemed to be owner for the purposes of these Regulations.

[Reg 2.3.4 am by reg 1 of GoN R1189 in G. 6489.]

2.4 ...

[Reg 2.4 rep by reg 3(a) of GoN R3083 in G. 13684.]

2.5.1 ...

[Reg 2.5.1 rep by reg 3(a) of GoN R3083 in G. 13684.]

2.5.2.1 In the case of a mine in which more than 50 persons are at any one time employed underground, the manager shall appoint a person who is the holder of a mine manager's certificate valid for the class of mine to which the mine belongs and issued in accordance with these Regulations, unless the manager himself is the holder of such a certificate. The person so appointed, or the manager who is the holder of such a certificate himself, as the case may be, shall be responsible for the fulfilment and implementation of these Regulations in respect of the underground workings of the mine.

[Reg 2.5.2.1 subs by reg 2 of GoN R1189 in G. 6489.]

2.5.2.2 In the case of any mine where the manager thereof is himself not the holder of a mine manager's certificate, or in the case of a works, the regional director may, by notice in writing served on the owner of such mine or works, require the appointment of a person who is the holder of a mine manager's certificate issued in accordance with these Regulations.

[Reg 2.5.2.2 subs by reg 3 of GoN R1189 in G. 6489, reg 3(b) of GoN R3083 in G. 13684.]

2.5.3.1 A mine where the appointment is required of a person who is the holder of a mine manager's certificate may be worked without the services of such certificate holder for a period of not more than 60 days in any period of six consecutive months. The owner shall in these circumstances appoint a competent person, as required by regulation 2.5.3.2 or 2.5.3.3, as the case may be, to act in the place of such certificate holder during such period of 60 days or portion thereof and such competent person shall for the duration of his appointment have all the duties and responsibilities of the certificate holder under the regulations: Provided that the appointment of such competent person shall not be taken to relieve the certificate holder referred to of any personal responsibility under the regulations.

[Reg 2.5.3.1 subs by reg 4 of GoN R1189 in G. 6489; am by reg 3(a) of GoN R2703 in G. 7953, reg 3(a) of GoN R1352 in G. 11397.]

- 2.5.3.2 Where the number of persons employed underground at any one time exceeds 300 no such competent person shall be appointed to act in the place of the holder of a mine manager's certificate unless he is the holder of a mine overseer's certificate valid for the class of mine to which the mine belongs and issued in accordance with these Regulations.

[Reg 2.5.3.2 am by reg 5 of GoN R1189 in G. 6489.]

- 2.5.3.3 Where the number of persons employed underground at any one time is 300 or less no such competent person shall be appointed unless he is the holder of a permanent blasting certificate valid for the class of mine to which the mine belongs and issued in accordance with these Regulations.

- 2.5.4 The manager of a mine or works shall not in addition be appointed or hold office as manager of any other mine or works, except with the written permission of the Principal Inspector of Mines.

[Reg 2.5.4 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 2.5.5 No owner or tributor operating a mine or works on his own account or in partnership with any other person or persons shall manage such mine or works except with the written permission of the Principal Inspector of Mines.

[Reg 2.5.5 am by reg 6 of GoN R1189 in G. 6489, reg 26(f) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 2.5.6 Any appointment under regulation 2.5.2.1 shall be made in writing by the manager and shall within three days after the date of appointment be reported in writing to the Principal Inspector of Mines, accompanied by a copy of the letter of appointment.

[Reg 2.5.6 subs by reg 7 of GoN R1189 in G. 6489, reg 3(c) of GoN R3083 in G. 13684; am by reg 3 of GoN R814 in G. 13811, reg 2(b) of GoN R94 in G. 17725.]

- 2.6.1 The manager may appoint one or more competent persons as subordinate managers to assist him in the control, management and direction of the mine or of the works, and every such person shall, to an extent to be clearly defined in his letter of appointment, have the same responsibilities under the regulations as the manager: Provided that the appointment of such persons shall not be taken to relieve the manager of any personal responsibility under the regulations.

[Reg 2.6.1 am by reg 3(a) of GoN R1352 in G. 11397.]

- 2.6.2 The regional director may require the appointment of one or more subordinate managers at any mine or any works when in his opinion this is necessary.

[Reg 2.6.2 am by reg 26(b) of GoN R3083 in G. 13684.]

2.6.3 No such person shall be appointed as a subordinate manager of any underground workings of a mine where the appointment is required of a person who is the holder of a mine manager's certificate, unless he is the holder of a mine manager's certificate valid for the class of mine to which the mine belongs and issued in accordance with these Regulations: Provided that for not more than 60 days in any period of six consecutive months the post of such subordinate manager may be filled by the appointment of a person who is the holder of a mine overseer's certificate valid for the class of mine to which the mine belongs and issued in accordance with these Regulations.

[Reg 2.6.3 am by reg 1 of GoN R305 in G. 3397; subs by reg 8 of GoN R1189 in G. 6489; am by reg 3(a) of GoN R2703 in G. 7953.]

2.6.4 Any appointment made under regulation 2.6.1 shall within three days thereof be reported in writing to the Principal Inspector of Mines, and such report shall be accompanied by a copy of the letter of appointment.

[Reg 2.6.4 am by reg 9 of GoN R1189 in G. 6489, reg 26(f) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.7 Where in any of these Regulations no particular person is referred to as being responsible for compliance with the requirements thereof, and no person has been made so responsible under the provisions of section 13 of the Act, the manager, or any person appointed in writing to act as manager, shall, subject to the provisions of regulation 3.11 be deemed to be so responsible.

2.8 In the case of a fiery mine the manager, if he is the holder of a mine manager's certificate valid for the class of mine to which the mine belongs and issued in accordance with these Regulations, or a person appointed under regulation 2.5.2.1, or a subordinate manager who is the holder of such a certificate, shall reside on the mining property or at some other place in the immediate neighbourhood of the mine. Such manager, person or, subordinate manager, shall not reside at a greater distance than 15 kilometres from the mine and he shall not have any commitment which will necessitate his frequent or prolonged absence from the mine.

[Reg 2.8 am by GoN R303 in G. 3397; subs by reg 10 of GoN R1189 in G. 6489.]

2.9 The manager shall—

2.9.1 ...

[Reg 2.9.1 rep by reg 3(a) of GoN R3083 in G. 13684.]

2.9.2 appoint such persons as may be necessary to assist him in enforcing such observations of the regulations;

2.9.3 ...

[Reg 2.9.3 rep by reg 3(a) of GoN R3083 in G. 13684.]



2.9.4 as soon as practicable after the occurrence of a breach of any provision of these Regulations report such breach to the Principal Inspector of Mines or take such other disciplinary steps as such Principal Inspector of Mines may have directed or approved of and enter the particulars of such breach and the disciplinary steps taken in a register.

[Reg 2.9.4 am by reg 11 of G. R1189 in G. 6489; subs by reg 3(d) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

2.10 The manager shall further—

2.10.1 on taking over a mine or works acquaint himself with such notices as may have been issued to his predecessor or predecessors by a Principal Inspector of Mines, who shall on request supply copies of such notices;

[Reg 2.10.1 am by reg 12 of GoN R1189 in G. 6489, reg 26(e) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.10.2 not permit any incompetent or inexperienced workman to be employed on dangerous work, or work upon the proper performance of which the safety of persons depends;

2.10.3.1 not allow any ganger or miner to be placed in charge of a gang or gangs of workmen which regard being had to the number of persons therein or to the nature or position of their working places, such ganger or miner is unable to supervise efficiently in accordance with the requirements of these Regulations;

2.10.3.2 in no case allow the ganger or miner to have charge of workmen scattered over more places than can be generally inspected without undue exertion within the course of 40 minutes;

2.10.3.3 not allow any ganger or miner to have charge of more working places or machine drills or persons than may be determined or approved by the Principal Inspector of Mines at any mine or section of a mine where such determination or approval is in the opinion of the Principal Inspector of Mines necessary in the interests of safety or health: Provided that in an emergency he may allow a ganger to take charge of the workmen of one other ganger for not more than three consecutive shifts;

[Reg 2.10.3.3 am by reg 2 of GoN R305 in G. 3397, reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.10.4 provide that when any person employed in or about the mine or works receives injury by accident or otherwise, the same shall be reported to him without delay;

2.10.5 cause all plant, material and other things necessary for compliance with the requirements of these Regulations to be provided and maintained in good order and repair;

2.10.6 provide or cause to be provided underground such waiting places necessary for the use of persons prior to entering the working places, and shall by the means approved in writing by the Principal Inspector of Mines prevent such persons from proceeding to the working places until they have been instructed to do so by the ganger or miner who is responsible for the safety of the working places when they enter them, and shall further satisfy himself by weekly reports from the shift bosses that this regulation is being strictly observed;

[Reg 2.10.6 subs by reg 3(b) of GoN R1352 in G. 11397; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.10.7 ...

[Reg 2.10.7 rep by GoN R904 in G. 23583.]

2.10.8 ...

[Reg 2.10.8 rep by GoN R904 in G. 23583.]

2.10.9 ...

[Reg 2.10.9 rep by GoN R904 in G. 23583.]

2.10.10 ...

[Reg 2.10.10 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

2.10.11.1...

[Reg 2.10.11.1 rep by GoN 1278 in G. 29457.]

2.10.11.2...

[Reg 2.10.11 subs by reg 3 of GoN R305 in G. 3397; rep by GoN 1278 in G. 29457.]

2.10.12 provide that adequate watch be kept on all reasonably accessible sources of danger from flooding of the mine or works, and that he or his representative be immediately informed of any possibility of such danger;

2.10.13 provide for adequate watch to be kept on all artificial constructions at his mine or works for conserving water or which may cause water to converge or accumulate, and give notice without delay to the manager, or his representative, of all mines or works situated below such constructions of any possibility of flooding by reason of such constructions;

2.10.14 ...

[Reg 2.10.14 am by GoN R303 in G. 3397, GoN R2102 in G. 4498; subs by reg 3(a) of GeN 160 in G. 13002; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R91 in G. 30698.]

2.10.15 ensure that in the construction of any dump or any slimes dam in the neighbourhood of any building, thoroughfare or other public road, railway or public place, no danger to life or limb or damage to property can result therefrom;

2.10.16 cause in a stamp mill or treatment building all amalgamating plates, extractor boxes, and launders in which amalgam can collect to be covered with screens or other devices approved by a Principal Inspector of Mines, and ensure that such screens or devices are kept under double lock and such plates or boxes and launders are not uncovered for any purpose whatsoever except in the presence of at least two reliable persons each of whom he shall cause to be in possession of one of the keys;

[Reg 2.10.16 am by reg 3(c) of GoN R1352 in G. 11397, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.10.17 cause or permit unwrought precious metal in the form of bullion, retorted gold, amalgam, zinc gold slimes or shavings, lead strips or bars, untreated black sands, matte, or any other rich by-products only to be handled in the presence and under the direct supervision of at least two reliable persons;

[Reg 2.10.17 am by reg 3(a) of GoN R367 in G. 10621, reg 3(c) of GoN R1352 in G. 11397.]

2.10.18 cause amalgam, untreated black sands, scrapings, retorted gold bullion and zinc gold slimes after removal from the filter press if and when stored to be forthwith deposited in a safe, strong room, or other receptacle which he shall cause to be kept under double lock and shall not cause or permit such safe, strongroom, or other receptacle to be opened for any purpose whatsoever except in the presence of at least two reliable persons, each of whom he shall cause to be in possession of one of the keys; and

[Reg 2.10.18 am by reg 3(c) of GoN R1352 in G. 11397.]

2.10.19 whenever considered necessary or desirable by him, cause any person employed on reduction works or a refinery to be searched by any person whom he has authorised in writing to do so.

[Reg 2.10.19 am by reg 3(b) and (c) of GoN R367 in G. 10621.]

2.11 When the operations at any mine or works, or portion of any mine or works, are discontinued and such mine or works, or portion of such mine or works, are abandoned the owner or the person acting as manager of such mine or works at the time of such discontinuance or abandonment shall continue to be responsible for compliance with the provisions of the Regulations until the Director: Mineral Development, in consultation with the Director-General of the Department of Water Affairs, has issued to him a certificate that such provisions have been complied with.

[Reg 2.11 subs by reg 2(a) of GoN R1339 in G. 12542; am by reg 26(f) of GoN R3083 in G. 13684, reg 2(d) of GoN R94 in G. 17725.]

2.12.1 At every mine where more than 200 persons are employed in the workings, the mine surveying shall, except as is provided for in regulations 2.12.5 and 2.12.6, be under the general charge of a certificated mine surveyor who shall be appointed in writing by the manager.

[Reg 2.12.1 corrected by GoN R304 in G. 3397.]

**[Editor Note:** Reg 2.12.1 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.2 At every mine where 200 persons or less are employed in the workings, the mine surveying shall be under the charge of a certificated mine surveyor or a competent who shall be appointed in writing by the manager. In the absence of such a certificated mine surveyor or competent person the manager may take charge for a period not exceeding 60 days in any period of six consecutive months.

[Reg 2.12.2 subs by reg 2(a) of GoN R2706 in G. 12858.]

**[Editor Note:** Reg 2.12.2 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.3 The manager of a mine shall not appoint himself in terms of regulation 2.12.1, 2.12.5 or 2.12.7 except with the written permission of the Principal Inspector of Mines.

[Reg 2.12.3 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

**[Editor Note:** Reg 2.12.2 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.4 A mine where the appointment of a certificated mine surveyor is required in terms of regulation 2.12.1, 2.12.5 or 2.12.7 may be worked without such surveyor for not more than 60 days in any period of six consecutive months. The manager shall appoint in writing a competent person to act as mine surveyor during such period of 60 days or portion thereof as the case may be.

[Reg 2.12.4 am by reg 3(b) of GoN R2703 in G. 7953.]

**[Editor Note:** Reg 2.12.4 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.5 The Principal Inspector of Mines may require the appointment of a certificated mine surveyor or more than one certificated mine surveyor, or, a certificated mine surveyor with additional training and experience at any mine where, in his opinion, such appointment is necessary.

[Reg 2.12.5 subs by reg 2(b) of GoN R2706 in G. 12858; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

**[Editor Note:** Reg 2.12.5 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.6 The certificated mine surveyor or competent person appointed in terms of regulation 2.12.1, 2.12.2, 2.12.4, 2.12.5 or 2.12.7 at any mine shall not in addition be appointed as mine surveyor at any other mine, except with the written permission of the Principal Inspector of Mines.  
[Reg 2.12.6 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

[**Editor Note:** Reg 2.12.6 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.7 To assist the mine surveyor referred to in regulation 2.12.1, the manager may appoint one or more persons who shall, except as is provided for in regulation 2.12.4, be certificated mine surveyors. Every such person appointed shall, to an extent which shall be clearly defined in his letter of appointment, have the same responsibility under the regulations as the mine surveyors appointed in terms of regulation 2.12.1: Provided that the appointment of such person or persons shall not be taken to relieve the mine surveyor in general charge of any personal responsibility under the regulations.

[**Editor Note:** Reg 2.12.7 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.8 Every person appointed in terms of regulations 2.12.1, 2.12.2, 2.12.4, 2.12.5 or 2.12.6 shall be responsible for the due observance of regulations 5.3.6.1, 5.3.6.2, 5.3.6.3, 5.3.6.4, 5.3.6.5, 5.3.6.6, 5.3.6.7, 7.10.2, 7.10.4, 7.10.5(b), 7.10.6, 10.18, 13.1.2, 13.2.1, 13.2.2, 13.2.3, 13.2.4.1, 13.2.4.2, 13.2.5, 13.3.1, 13.3.2, 13.3.3, 13.4.4, 13.5.2 and 13.5.3 and of the regulations contained in Chapter 12 with the exception of regulations 12.10, 12.10.1, 12.11, 12.12, 12.14 and 12.16. Such person shall sign every plan prescribed in Chapter 12 and every copy referred to in regulation 12.10 when they are first made and on each occasion when they are brought up to date.

[Reg 2.12.8 corrected by GoN R304 in G. 3397; subs by reg 2(c) of GoN R2706 in G. 12858.]

[**Editor Note:** Reg 2.12.8 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.9 The competent person appointed in terms of regulation 2.12.4 shall have all the duties and responsibilities referred to in regulation 2.12.8: Provided that the appointment of such person shall not be taken to relieve any certificated mine surveyor previously in charge of any personal responsibility under the regulations.

[Reg 2.12.9 corrected by GoN R304 in G. 3397.]

[**Editor Note:** Reg 2.12.9 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.10 ...

[Reg 2.12.10 rep by reg 3(d) of GoN R1352 in G. 11397.]

2.12.11 Any appointment made under regulations 2.12.1, 2.12.2, 2.12.4, 2.12.5 or 2.12.7 shall, within three days of the date thereof, be reported in writing by the manager to the Principal Inspector of Mines, and such report shall be accompanied by a copy of the letter of appointment. In the case of the appointment of a person who is not a certificated mine surveyor, the report shall contain a record of the qualifications, experience and training of such person.

[Reg 2.12.11 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

**[Editor Note:** Reg 2.12.11 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.12.12 Any person appointed in terms of regulation 2.12.1, 2.12.2, 2.12.4, 2.12.5 or 2.12.7 shall not be responsible for the accuracy of the surveying done before his appointment.

**[Editor Note:** Reg 2.12.12 to be repealed by GN R446 of 2011 with effect from the date relevant new regulations are published in the *Government Gazette*.]

2.13.1 At any mine or works where—

(a) the designed rating of machinery used in the generation of power, together with the power supplied from outside sources, exceeds the equivalent of 2 500 kilowatts; or

(b) any winding plant intended for conveying persons is installed,

all machinery shall, subject to regulation 2.13.6.1, be under the general charge of an engineer who shall be appointed in writing by the manager.

[Reg 2.13.1 am by GoN R303 in G. 3397, reg 3(c) of GoN R2703 in G. 7953, reg 3(a) of GoN R1352 in G. 11397; subs by reg 3(b) of GeN 160 in G. 13002; am by reg 3(e) of GoN R3083 in G. 13684.]

2.13.2 At every mine or works where the designed power rating of machinery used in the generation of power, together with the power supplied from outside sources, do not exceed the equivalent of 2 500 kilowatts, all machinery shall be under the charge of a competent person or persons, who shall be appointed in writing by the manager, to the extent defined in every such person's letter of appointment: Provided that an engineer may be appointed in terms of this regulation to be in general charge of such machinery.

[Reg 2.13.2 am by GoN R303 in G. 3397; corrected by GoN R304 in G. 3397; subs by reg 3(d) of GoN R2703 in G. 7953, reg 3(c) of GeN 160 in G. 13002, reg 3(f) of GoN R3083 in G. 13684.]

2.13.3.1 To assist the engineer referred to in regulation 2.13.1 the manager may appoint one or more subordinate engineers, who shall—

(a) subject to regulation 2.13.6.1, be a certificated engineer;

- (b) be responsible, either directly or through a subordinate engineer appointed in terms of regulation 2.13.3.2, to the engineer in general charge;
- (c) carry the responsibility assigned to him in his letter of appointment; and
- (d) not relieve the engineer referred to in regulations 2.13.1 and 2.13.3.2 of any responsibilities assigned to him in terms of these Regulations;

[Reg 2.13.3 subs by reg 3(d) of GoN R2703 in G. 7953; am by reg 3(a) of GoN R1352 in G. 11397;  
subs for reg 2.13.3 by reg 3(d) of GeN 160 in G. 13002.]

2.13.3.2 The manager may appoint one or more subordinate engineers to assist the engineer appointed in terms of regulation 2.13.1 in the direction and control of subordinate engineers appointed in terms of regulation 2.13.3.1 and such—

- (a) engineer shall at all times be a certificated engineer;
- (b) appointment shall not relieve the engineer appointed in terms of regulation 2.13.1 or 2.13.3.1 of any personal responsibility under the regulations.

[Reg 2.13.3.2 ins by reg 3(d) of GeN 160 in G. 13002.]

2.13.4.1 The engineer or competent person appointed in terms of regulation 2.13.2 shall—

- (a) subject to regulation 2.13.12, be responsible for the safe installation and the proper operation, running and maintenance of all machinery;
- (b) be responsible for the safe erection and proper maintenance of all buildings, structures and tanks;
- (c) take all reasonable measures to ensure that—
  - (i) all safety appliances, mechanisms and guards are maintained in good condition;
  - (ii) the provisions of the regulations relating to machinery are fully complied with; and
  - (iii) the working of any apparatus or machine, the using of which may constitute a danger to any person, is stopped.

[Reg 2.13.4.1 subs for reg 2.13.4 by reg 3(d) of GoN R2703 in G. 7953, reg 3(e) of GeN 160 in G. 13002.]

2.13.4.2 Where, in terms of these Regulations, a certificated engineer or competent person is required to be placed in charge of machinery, the appointment of such person shall not relieve the manager of any personal responsibility.

[Reg 2.13.4.2 subs for reg 2.13.4 by reg 3(d) of GoN R2703 in G. 7953.]

2.13.5 The Principal Inspector of Mines may require the appointment of an engineer, additional engineers or additional competent persons in charge of machinery where in his opinion the responsibilities relating to machinery at the mine or works render such appointment necessary.

[Reg 2.13.5 subs by reg 3(f) of GeN 160 in G. 13002; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.13.6.1 At a mine or works where an engineer is appointed or should be appointed in terms of regulations 2.13.1 and 2.13.3.1, work may be continued without such engineer for not more than 60 days in any period of six consecutive months: Provided a competent person is appointed in writing by the manager to be in general charge of machinery during such period or part thereof.

2.13.6.2 The appointment of a competent person appointed in terms of regulation 2.13.6.1 may not result in an engineer being responsible either—

(a) directly to such person; or

(b) through such person to any other person.

[Regs 2.13.6.1 and 2.13.6.2 subs as reg 2.13.6 by reg 3(e) of GoN R2703 in G. 7953, am by reg 3(a) of GoN R1352 in G. 11397; subs as reg 2.13.6.1 and 2.13.6.2 by reg 3(g) of GeN 160 in G. 13002.]

2.13.7.1 A competent person appointed in terms of regulation 2.13.6.1 shall have all the duties and responsibilities of an engineer appointed under these Regulations.

2.13.7.2 The appointment of such competent person shall not relieve the engineer who preceded him of any personal responsibility under these Regulations for the period during which he was in charge.

[Reg 2.13.7 am by reg 3(e) of GoN R1352 in G. 11397; subs as reg 2.13.7.1 and 2.13.7.2 by reg 3(h) of GeN 160 in G. 13002.]

2.13.8 Any appointment of an engineer or competent person appointed under regulations 2.13.1 or 2.13.2, respectively, shall, within three days of the date thereof, be reported in writing by the manager to the Principal Inspector of Mines.

[Reg 2.13.8 am by reg 13 of GoN R1189 in G. 6489; subs by reg 3(i) of GeN 160 in G. 13002; am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.13.9 The certificated engineer or the competent person in charge of the machinery at a mine or at a works shall not in addition be appointed in charge of any other machinery except with the written permission of the Principal Inspector of Mines.

[Reg 2.13.9 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.13.10 The manager of a mine or a works shall not appoint himself as engineer or competent person in charge of machinery except with the written permission of the Principal Inspector of Mines.



[Reg 2.13.10 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.13.11 ...

[Reg 2.13.11 am by reg 14 of GoN R1189 in G. 6489; rep by reg 3(f) of GoN R1352 in G. 11397.]

2.13.12 Notwithstanding other provisions in these Regulations, any person or class of persons may be permitted in writing by the Principal Inspector of Mines, subject to such conditions as he may specify, to exercise control over—

(a) the proper operation and running of machinery; and

(b) the erection, re-erection, moving or removal of machinery not used for the conveyance of persons.

[Reg 2.13.12 subs by reg 3(f) of GoN R2703 in G. 7953; am by reg 3(a) of GoN R1352 in G. 11397; subs by reg 3(j) of GeN 160 in G. 13002; am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.14.1 At every mine where the number of persons employed in the underground workings exceeds 300, the manager shall appoint one or more competent persons as mine overseers to assist him in the control, management and direction of the underground workings of the mine.

[Reg 2.14.1 subs by reg 6 of GoN R537 in G. 6892; am by reg 3(a) of GoN R1352 in G. 11397.]

2.14.2 No such person shall be appointed unless he is the holder of a mine manager's or a mine overseer's certificate valid for the class of mine to which the mine belongs and issued in accordance with these Regulations.

2.14.3 Every such mine overseer shall have all the duties and responsibilities of the manager so far as all workings of the mine or portion of the mine assigned to him are concerned: Provided that the appointment of such mine overseer or mine overseers shall not be taken to relieve the manager of any personal responsibility under the regulations.

[Reg 2.14.3.2 am by reg 14 of GoN R1189 in G. 6489; regs 2.14.3.1 and 2.14.3.2 subs as reg 2.14.3 by reg 3(g) of GoN R2703 in G. 7953.]

2.14.4 The workings of a mine or portion of a mine where a mine overseer has been, or is required to be, appointed in terms of regulation 2.14.1 may be worked without such mine overseer for a period of not more than 60 days in any period of six consecutive months. The manager shall appoint a competent person to act as mine overseer during such period of 60 days or portion thereof as the case may be. Such competent person shall be the holder of a permanent blasting certificate and shall have had not less than two years' practical experience in the workings of a mine.

[Reg 2.14.4 am by reg 3(b) of GoN R2703 in G. 7953, reg 3(a) of GoN R1352 in G. 11397.]

2.14.5 Such competent person shall have all the duties and responsibilities of a mine overseer under the regulations: Provided that the appointment of such person shall not be taken to relieve the mine overseer in charge before him of any personal responsibility under the regulations.

2.14.6 Any appointment under these Regulations shall be made in writing and shall clearly define the portion of the mine assigned to the person so appointed and the extent of the control to be exercised by him in terms of regulation 2.13.12. A copy of the letter of appointment shall be immediately forwarded to the Principal Inspector of Mines.

[Reg 2.14.6 am by reg 3(h) of GoN R2703 in G. 7953, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.15.1 The manager or subordinate manager of a mine may appoint one or more competent persons as shift bosses. Each shift boss shall during a shift be in charge of a section of the workings of the mine. The section to which each shift boss is appointed shall be clearly defined in writing in a book termed the Shift Boss' Logbook, provided for the purpose by the manager and kept in a place appointed by the manager. Where the number of persons employed in the workings exceeds 300, the appointment of a shift boss or shift bosses during each working shift shall be compulsory: Provided that the Principal Inspector of Mines may require the appointment of additional shift bosses if he considers it necessary in the interests of safety or health: Provided further that the Principal Inspector of Mines may, where the number of persons employed in the workings is 300 or less, require the appointment of a shift boss or shift bosses if he considers that the conditions prevailing make such appointment necessary.

[Reg 2.15.1 subs by reg 1 of GoN R1346 in G. 3625 (corrected by GoN R2103 in G. 4498); am by reg 7 of GoN R537 in G. 6892, am by reg 3(a) of GoN R1352 in G. 11397, am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.15.2 No person shall be appointed as a shift boss unless he is the holder of a permanent blasting certificate valid for the class of mine to which the mine belongs and issued in accordance with these Regulations or any amendments thereof.

[Reg 2.15.2 subs by reg 1 of GoN R1346 in G. 3625.]

2.15.3 In no case shall a shift boss be placed in control of a section larger than he is able to control efficiently in accordance with the requirements of the regulations. The manager shall not impose such additional duties on a shift boss as will prevent him from carrying out his statutory duties efficiently.

[Reg 2.15.3 subs by reg 1 of GoN R1346 in G. 3625, reg 2 of GoN R513 in G. 5488.]

2.15.4 Each shift boss shall take reasonable precautions to ensure proper observance of the regulations and compliance with any lawful order given in the interests of safety or health, by every person employed in his section and shall as soon as practicable report to the manager or mine overseer any contravention thereof.

[Reg 2.15.4 subs by reg 1 of GoN R1346 in G. 3625.]

2.15.5 Each shift boss shall inspect all workings in his section as frequently as he may deem necessary in the interest of safety and health: Provided that—

- (a) he shall inspect every working face in his section which has been blasted and in which persons are working within two working days of each blast therein;

[Reg 2.15.5(a) subs by reg 8(a) of GoN R537 in G. 6892.]

- (b) he shall inspect all other workings at least once every week at intervals not exceeding 10 days; and

- (c) he shall daily during his shift—

- (i) inspect at least one working of each ganger or miner under his charge who is directly concerned with current blasting operations; and

- (ii) satisfy himself by consultation with each such ganger or miner, or by personal inspection, that work is proceeding safely and in accordance with the regulations in every working of such ganger or miner. Each such consultation shall take place within the area for which the ganger or miner is responsible;

- (iii) in every coal mine, unless exempted in writing by the Principal Inspector of Mines, carry out a test for inflammable gas similar to the test required in terms of regulation 8.9.9, of every part of every ganger's or miner's section in which workmen work or travel or may be required to work or travel during that shift. The shift boss shall record a report on each such test at the end of his shift in the logbook referred to in regulation 2.15.6.

[Reg 2.15.5(c)(iii) am by reg 2(b) of GoN R94 in G. 17725.]

For the purpose of this regulation “blasting operations” also means the actual breaking of mineral or rock on the previous working shift by means of explosives and includes the removal of such broken mineral or rock and the operation of making safe.

[Reg 2.15.5 subs by reg 1 of GoN R1346 in G. 3625, reg 3 of GoN R513 in G. 5488; am by reg 8(b) of GoN R537 in G. 6892, am by reg 26(h) of GoN R3083 in G. 13684.]

2.15.6 Each shift boss shall, during or at the conclusion of his shift, record in ink in his logbook—

- (a) the designation of every working place and other workings inspected by him during his shift;
- (b) particulars of any unsatisfactory condition of working places, travelling ways or other workings in his section as found by him or reported to him by a ganger or miner or any other person, especially as regards ventilation and dust, the presence of harmful gases, the state

of hanging wall, footwall and sides, sanitation and generally so far as the safety and health of persons are concerned;

- (c) such breaches of regulations and non-compliance with instructions given in the interest of safety or health of which he has become aware during his shift; and
- (d) any instruction given by him for securing the safety and health of workmen or for the proper observance of the regulations.

[Reg 2.15.6 subs by reg 1 of GoN R1346 in G. 3625 (corrected by GoN R2103 in G. 4498).]

- 2.15.7 Such records shall be examined and countersigned by the manager or by the mine overseer at least once every day and shall be open to inspection at all reasonable hours by any person employed in the workings of the said mine.

[Reg 2.15.7 subs by reg 1 of GoN R1346 in G. 3625.]

- 2.15.8 A shift boss shall not take charge of a gang of workmen in addition to his normal duties, except temporarily in case of necessity.

For the purposes of this regulation 'case of necessity' means a condition of circumstances of a temporary nature in the interest of safety.

[Reg 2.15.8 subs by reg 1 of GoN R1346 in G. 3625; am by reg 4 of GoN R513 in G. 5488.]

- 2.15.9 Where blasting takes place at the end of the shift, a shift boss or other official of at least equal rank shall be present underground or on the surface at each main travelling shaft or main travelling adit at blasting time and he shall report daily in the logbook on the compliance with regulation 2.10.9 and whether any person was exposed to dust and fumes from blasting.

[Reg 2.15.9 subs by reg 1 of GoN R1346 in G. 3625.]

- 2.15.10 The appointment of any shift boss shall not be taken to relieve the manager, the subordinate manager or the mine overseer of any personal responsibility under these Regulations.

[Reg 2.15.10 ins by reg 1 of GoN R1346 in G. 3625.]

- 2.15.11 The manager, the subordinate manager or the mine overseer shall not assume the duties of a shift boss except with the written permission of the Inspector of Mines.

[Reg 2.15.11 ins by reg 1 of GoN R1346 in G. 3625.]

### ***Environmental Control Officers to be appointed***

- 2.16.1 ...

[Reg 2.16.1 subs by reg 3(d) of GoN R367 in G. 10621; am by reg 2(b) of GoN R1339 in G. 12542, reg 3(a) of GoN R2062 in G. 13473, reg 26(c) of GoN R3083 in G. 13684; subs by reg 2 of GoN R530 in G. 16363; am by reg 2(a) and (b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

2.16.2.1 ...

2.16.2.2 ...

2.16.2.3 ...

2.16.2.4 ...

2.16.2.5 ...

[Reg 2.16.2 subs by reg 9 of GoN R537 in G. 6892, reg 3(d) of GoN R367 in G. 10621; am by reg 2(c) of GoN R1339 in G. 12542, reg 26(a) of GoN R3083 in G. 13684; subs by reg 2 of GoN R530 in G. 16363; rep by GoN R904 in G. 23583.]

2.16.3 ...

[Reg 2.16.3 ins by reg 10 of GoN R537 in G. 6892; subs by reg 3(d) of GoN R367 in G. 10621; am by reg 2(d) of GoN R1339 in G. 12542; subs by reg 2 of GoN R530 in G. 16363; rep by GoN R904 in G. 23583.]

2.16.4 ...

[Reg 2.16.4 ins by reg 3(e) of GoN R367 in G. 10621; am by reg 2(e) of GoN R1339 in G. 12542; effectively rep by reg 2 of GoN R530 in G. 16363.]

2.17.1 The manager of a mine or works may in writing appoint one or more persons as safety officers for the mine or works: Provided that—

- (a) if the number of employees at a mine or works exceed 300, the manager of that mine or works shall so appoint at least one person as a safety officer for that mine or works; and
- (b) if the Principal Inspector of Mines considers it necessary in the interest of safety and health at any mine or works, he may in writing direct the manager of that mine or works to appoint a safety officer or additional safety officers at that mine or works:

[Reg 2.17.1(b) am by reg 26(b) of GoN R3083 in G. 13684, reg 2.17.1(b) am by reg 2(b) of GoN R94 in G. 17725.]

Provided further that such safety officer devotes all his time to the functions assigned to a safety officer by or under these Regulations.

[Reg 2.17.1 ins by reg 2 of GoN R1889 in G. 11504.]

2.17.2 No person shall be appointed as a safety officer unless he is—

- (a) by virtue of his training, knowledge and experience, able to identify any threat or potential threat to the safety or health of persons employed in or at the mine or works in question; and

- (b) conversant with the applicable requirements relating to the safety and health of employees, whether or not those requirements have the force of law.

[Reg 2.17.2 ins by reg 2 of GoN R1889 in G. 11504.]

2.17.3 The manager of a mine or works shall within five days after the date of appointment of any person as a safety officer notify the Principal Inspector of Mines, in writing of the appointment, and the notice shall be accompanied by—

- (a) a copy of the letter of appointment of the safety officer; and
- (b) particulars regarding the training, knowledge and experience or qualifications of the safety officer.

[Reg 2.17.3 ins by reg 2 of GoN R1889 in G. 11504; am by reg 26(f) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

2.17.4 When—

- (a) two or more safety officers have been appointed at a mine or works, the manager of the mine or works shall designate at least one of those safety officers as chief safety officer; or
- (b) only one safety officer has been appointed at a mine or works, that safety officer shall, in addition to the functions which he is required or permitted to perform as a safety officer by or under these Regulations, be invested and charged with the functions assigned to a chief safety officer by or under these Regulations.

[Reg 2.17.4 ins by reg 2 of GoN R1889 in G. 11504.]

2.17.5 The appointment of a safety officer or the designation of a chief safety officer shall not relieve any other person of any personal responsibility in terms of the regulations.

[Reg 2.17.5 ins by reg 2 of GoN R1889 in G. 11504.]

2.17.6 Operations at a mine or works where a safety officer has been appointed in terms of regulation 2.17.1 may be continued without such safety officer for a period of not more than 60 days in any period of six consecutive months providing that the manager shall appoint in writing a competent person to act as safety officer during such period of 60 days or portion thereof.

[Reg 2.17.6 ins by reg 3(b) of GoN R2062 in G. 13473.]

2.17.7 The competent person referred to in regulation 2.17.6 shall have all the duties and responsibilities of a safety officer under the regulations: Provided that the appointment of such person shall not be taken to relieve the safety officer appointed in terms of regulation 2.17.1 of any responsibility under the regulations.

[Reg 2.17.7 ins by reg 3(b) of GoN R2062 in G. 13473.]

2.18.1 The manager of a mine or works shall in respect of each working place or group of working places, determined by him for the purpose of these Regulations, appoint in writing one or more employees who are acquainted with the conditions at such working place or group of working places as safety representative for such period as may be determined by him.

[Reg 2.18.1 ins by reg 2 of GoN R1889 in G. 11504.]

2.18.2 For the purpose of regulation 2.18.1, working places may be grouped together only when the number of persons employed in or at a group of working places does not exceed 50.

[Reg 2.18.2 ins by reg 2 of GoN R1889 in G. 11504.]

2.18.3 A safety representative shall have training in and knowledge and experience of the application of the safety and health requirements applicable to, and be conversant with the conditions at, the working place or group of working places where he is to be appointed.

[Reg 2.18.3 ins by reg 2 of GoN R1889 in G. 11504.]

2.19.1 Every safety officer shall—

- (a) at intervals prescribed by these Regulations or at such intervals as the chief safety officer, Principal Inspector of Mines may determine, inspect working places or machinery for which he has been appointed in or at the mine or works or part thereof in question;

[Reg 2.19.1(a) am by reg 26(e) of GoN R3083 in G. 13684, reg 2(b) of GoN R94  
in G. 17725.]

- (b) in the course of any such inspection satisfy himself in particular that—

- (i) all reasonable safety and health measures have been taken in respect of the use or handling of machinery and the performance of other work;
- (ii) safety equipment is maintained in good condition and properly utilised;
- (iii) the applicable requirements relating to the safety and health of employees, whether or not those requirements have the force of law, have been or are being complied with;  
and
- (iv) all employees have been properly trained or possess the necessary qualifications for the safe execution of their work;

- (c) report any threat or potential threat to the safety or health of any employee to the person in immediate charge of the working place or machinery in question;

- (d) if the person in immediate charge is not readily available, take the necessary steps to avert any such immediate threat and report such matter as soon as practicable, but not later than the end of his shift, to an official responsible for that working place or machinery;
- (e) at the end of his shift enter in ink in a book provided by the manager for that purpose and kept at a place designated by the manager—
  - (i) a description of the working places or machinery inspected by him during the shift in question;
  - (ii) the conditions or circumstances at such working places or machinery, including any failure to comply with the requirements referred to in paragraph (b);
  - (iii) any report made by him in terms of paragraph (c) or (d) including the name of the person to whom such report was made; and
  - (iv) any steps which have already been taken or which in his opinion ought to be taken in order to avert any threat or potential threat to the safety or health of any employee;
- (f) subject to the provisions of Chapter 25 of the Regulations, investigate and report in writing to the chief safety officer on any accident or occurrence mentioned in regulation 25.1(c), (d) and (e) or regulation 25.6 and directed to him by the chief safety officer for investigation; and
- (g) investigate and report in writing to the chief safety officer on any other accident or occurrence not mentioned in regulation 25.1 or regulation 25.6, for which an investigation is deemed necessary by the chief safety officer, and directed to him by the chief safety officer for investigation.

[Reg 2.19.1 ins by reg 2 of GoN R1889 in G. 11504.]

#### 2.19.2 Any safety officer may—

- (a) hold meetings with the safety representatives of the mine or works or part thereof for which he has been appointed at such times and places as he may arrange with the manager of the mine or works: Provided that such meetings shall be held at least once in every three months;
- (b) after he has conducted an investigation referred to in paragraph (f) of regulation 2.19.1, submit to the manager for transmission to the Principal Inspector of Mines, a copy of his report; and

[Reg 2.19.2(b) am by reg2(b) of GoN R94 in G. 17725.]



- (c) make recommendations for submission by the manager to the Principal Inspector of Mines, regarding any matter relating to the safety or health of persons employed in or at the mine or works in question.

[Reg 2.19.2 ins by reg 2 of GoN R1889 in G. 11504; am by reg 26(f) of GoN R3083 in G. 13684;  
reg 2.19.2(c) am by reg 2(b) of GoN R94 in G. 17725.]

2.19.3 A chief safety officer shall—

- (a) as soon as may be practicable, direct every accident or occurrence mentioned in regulation 25.1(c), (d) and (e) or regulation 25.6 to a safety officer for investigation;
- (b) within three days after the date on which an investigation has been conducted in terms of paragraph (f) of regulation 2.19.1, transmit a copy of the report on the relevant accident or occurrence to the manager;

- (c) if the Principal Inspector of Mines so requests, furnish any such copy to him;

[Reg 2.19.3(c) subs by reg 3(g) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94  
in G. 17725.]

- (d) record every accident in which any employee has been injured or has become ill to such a degree that it resulted in the loss of at least one shift;
- (e) identify working places and machinery which in his opinion may represent critical areas regarding safety and health;

- (f) satisfy himself—

- (i) that the applicable requirements relating to the safety and health of employees, whether or not those requirements have the force of law, also provide sufficient protection to employees in or at working places or machinery referred to in paragraph (e); and

- (ii) that all employees are properly trained regarding the applicable requirements;

- (g) ensure that a safety officer—

- (i) inspects working places and machinery referred to in paragraph (e) at such interval as the chief safety officer or Principal Inspector of Mines may determine, which interval shall not exceed 30 days;

[Reg 2.19.3(g)(i) subs by reg 3(h) of GoN R3083 in G. 13684.]

- (ii) inspects at intervals not exceeding 45 days any underground working place in which mineral production takes place and machinery which is used underground for mineral production, other than a working place or machinery referred to in subparagraph (i); and
- (iii) inspects any working place and machinery, other than a working place or machinery referred to in subparagraph (i) or (ii), at intervals not exceeding 90 days;  
[Reg 2.19.3(g) am by reg 2(b) of GoN R94 in G. 17725.]
- (h) examine and countersign the entries made in the book referred to in paragraph(e) of regulation 2.19.1 not later than the first working day following the day on which such entries were made;
- (i) report forthwith to the mine overseer, engineer or other person in charge of the working place or machinery in question any matter contained in such book and requiring in his opinion the immediate attention of such mine overseer, engineer or person;
- (j) within 15 days after the end of each month transmit a written report to the manager specifying—
  - (i) the number of accidents and occurrences which took place during the month in question;
  - (ii) the basic causes of such accidents and occurrences;
  - (iii) any failure to comply with the applicable requirements referred to in paragraph (f);
  - (iv) any threat or potential threat to the safety or health of persons employed in or at the mine or works in question; and
  - (v) any steps which have already been taken or which in his opinion ought to be taken in order to avert any such threat or potential threat; and
- (k) hold a meeting with all safety officers under his control at least once every three months: Provided that the Principal Inspector of Mines may direct the manager in writing to instruct the chief safety officer to hold a meeting within a period specified by the Principal Inspector of Mines, and such meeting may be with all the safety officers under his control or those safety officers specified by such Principal Inspector of Mines.

[Reg 2.19.3 ins by reg 2 of GoN R1889 in G. 11504; reg 2.19.3(k) subs by reg 3(i) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

2.19.4 Any chief safety officer may perform any function assigned to a safety officer by or under these Regulations.

[Reg 2.19.4 ins by reg 2 of GoN R1889 in G. 11504.]

2.19.5 A safety representative shall forthwith report to the person in control of the working place or machinery in respect of which the safety representative has been appointed any threat or potential threat to the safety or health of any employee at that working place or machinery which has been identified by him or reported to him.

[Reg 2.19.5 ins by reg 2 of GoN R1889 in G. 11504.]

2.19.6.1 When a safety officer inspects a working place or machinery in respect of which a safety representative has been appointed, the safety representative may accompany him.

[Reg 2.19.6.1 ins by reg 2 of GoN R1889 in G. 11504.]

2.19.6.2 If a safety representative accompanies a safety officer, he shall bring to the attention of the safety officer any threat or potential threat to the safety or health of any employee at the working place or machinery in question which has been identified by him or reported to him,

[Reg 2.19.6.2 ins by reg 2 of GoN R1889 in G. 11504.]

2.19.7 A safety representative shall perform the functions assigned to him by these Regulations during his ordinary working hours, and any time reasonably spent by him in the performance of the said functions shall for all purposes be deemed to be time spent by him in the carrying out of his duties as an employee.

[Reg 2.19.7 ins by reg 2 of GoN R1889 in G. 11504.]

### **CHAPTER 3**

#### **GENERAL PROVISIONS**

3.1.1 No unauthorised person shall enter a mine or works or any shaft or place or building where machinery has been erected.

3.1.2 Notice to the effect that no unauthorised person shall enter a mine or works or any shaft or place or building where machinery has been erected shall be posted up by the manager at all entrances to such places.

3.2 For the purpose of making known the provisions of these Regulations to all persons employed in and about a mine or works, an abstract, authorised by the Chief Inspector, of the portions of these Regulations, directly concerning the workmen, shall be posted up in suitable places at the mine or the works, where it can be conveniently read, and a correct copy of these Regulations or of such abstract shall be supplied at cost price to every employee, except to the illiterate persons contemplated in regulation 3.9, when engaged by the manager or his representative unless he is already in possession of the same.

Every abstract posted up shall be in both official languages and in such other language as the Chief Inspector may prescribe.

[Reg 3.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 3.3 Every permission or a copy thereof granted by the Chief Inspector under section 9 of the Act shall be posted up in a suitable place at the mine or works.

[Reg 3.3 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 3.4 Every regulation relating to the prevention of a compensatable disease as defined in section 1(1) of the Occupational Diseases in Mines and Works Act, 1973 (Act 78 of 1973), shall, in so far as it concerns persons not proficient in any one of the official languages, be translated into such other language as the manager may determine and kept posted up at suitable places at the mine or works.

[Reg 3.4 am by reg 11 of GoN R537 in G. 6892; subs by reg 4(a) of GoN R1352 in G. 11397.]

- 3.5 One or more notices on which are legibly printed simple directions setting forth the approved procedure for the immediate treatment of cases of "gassing", "heatstroke", "heat exhaustion", "drowning" and "electric shock", shall be posted up in a conspicuous place in every change-house and accident emergency station.

- 3.6 Notices shall be exhibited at suitable places within every electric generating station and sub-station—

- (a) prohibiting any unauthorised person from handling or interfering with electrical apparatus,
- (b) giving directions as to the procedure in the case of fire, and
- (c) giving directions as to the treatment of persons suffering from effects of electric shock.

- 3.7 A notice shall be kept posted up at each shafthead showing the times within which shifts are lowered or raised at such shafthead, as well as the times of blasting in the various sections of the mine. A clock showing the time to be observed on the mine shall be installed at each main entrance to the workings.

- 3.8.1 So often as any posted notice or copy thereof becomes defaced, obliterated or destroyed it shall be renewed with all reasonable despatch.

- 3.8.2 No unauthorised person shall remove or deface any of the beforementioned notices or copies thereof.

- 3.9 Where any workman is unable to read the regulations, the person in charge shall see that such workman is made acquainted with the regulations concerning him or appertaining to his particular occupation and duties.

[Reg 3.9 am by reg 4(b) of GoN R1352 in G. 11397.]

- 3.10 No person shall be precluded by any agreement from doing, or be liable under any contract in damages for doing, such acts as may be necessary in order to comply with the provisions of these Regulations.
- 3.11 Any persons through whose neglect, wrongful act or omission a contravention of any regulation shall occur or who permits, incites, instigates, commands or procures any person to contravene any regulation shall be deemed to be guilty of such contravention, without prejudice to any responsibility or liability on the part of the manager or of any other person.
- 3.12 Any person who fails to obey any order given to him in accordance with or for the proper observance of the requirements of these Regulations, or any order whatsoever given in the interests of safety or health, by any person lawfully authorised to give such order, shall be guilty of a contravention of these Regulations.
- 3.13 No person shall depute any other person to do his work without the sanction of his official superior; nor shall any person, without such sanction, cease to supervise persons under his charge.

***Safety precautions or measures relating to the management of the environment not to be damaged  
or removed***

[Section heading subs by reg 2(a) of GoN R31 in G. 16214.]

- 3.14 No person shall—
- (a) interfere with or render ineffective anything which has been provided for the protection, safety or health of persons; or
  - (b) alter, remove or in any way interfere with or render ineffective or disregard any arrangement provided for the purposes referred to in paragraph (a) unless duly authorised thereto in writing by the manager, mine overseer or engineer: Provided that in the case of a mine which is closed down, such authorisation shall be obtained from the Principal Inspector of Mines; or
  - (c) alter, remove or in any way interfere with or render ineffective or disregard any measure relating to rehabilitation or to the management of the environment at a mine, unless duly authorised thereto in writing by the holder of the prospecting permit or mining authorisation or the owner or manager of that mine: Provided that in the case of a mine which is closed down, such authorisation shall be obtained in writing from the Principal Inspector of Mines.

[Reg 3.14 subs by reg 4(a) of GeN 160 in G. 13002; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) and (c) of GoN R31 in G. 16214, reg 2(b) of GoN R94 in G. 17725.]

- 3.15.1 When the circumstances at mines and works in general or at any specific mine or works are such that any provision of any regulation cannot be applied or is unduly onerous to a mine or works or whenever it is necessary for the purpose of carrying out any experiment or tests as to the expediency of any regulation or proposed regulation, the Chief Inspector and any Principal Inspector of Mines may grant exemption from any provision of any regulation administered by him under such conditions as he may determine: Provided that any exemption from any regulation in respect of safety, health and related matters at any mine or works shall be granted after consultation with and under the direction of the Deputy Chief Inspector referred to in section 2 (2) of the Act.

[Reg 3.15.1 am by reg 15 of GoN R1189 in G. 6489; subs by reg 4(a) of GoN R3083 in G. 13684; am by reg 2(a) of GoN R94 in G. 17725, reg 2(b) of GoN R94 in G. 17725.]

- 3.15.1.1 Any application for exemption shall be properly substantiated and submitted in writing by the manager to the Inspector of Mines or Inspector of Machinery, as the case may be.

[Reg 3.15.1.1 ins by reg 4(b) of GeN 160 in G. 13002.]

- 3.15.2 The Chief Inspector or any Principal Inspector of Mines may withdraw such exemption if considered necessary in the interests of safety and health.

[Reg 3.15.2 am by reg 15 of GoN R1189 in G. 6489; subs by reg 4(a) of GoN R3083 in G. 13684; am by reg 2(a) of GoN R94 in G. 17725, reg 2(b) of GoN R94 in G. 17725.]

- 3.16.1 The Principal Inspector of Mines may direct that any regulation applicable to any mine or to any particular class of mine shall be applied to any other mine or any works or to any part thereof by giving written notice to that effect to the manager, with specific reference to the regulation concerned, whereafter such regulation shall apply to such mine or works or part thereof.

[Reg 3.16.1 subs for reg 3.16 by reg 4(b) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

- 3.16.2 The manager shall keep legible copies of the notice in both official languages posted up at suitable places at the mine or works where they can be conveniently read by the workmen.

[Reg 3.16 am by reg 4 of GoN R367 in G. 10621, reg 3.16 am by reg 3(a) of GoN R1339 in G. 12542; reg 3.16.2 subs for reg 3.16 by reg 4(b) of GoN R3083 in G. 13684.]

- 3.17 The Principal Inspector of Mines may direct that any regulation applicable to a shaft shall be applied to a winze, by giving written notice to that effect to the manager, with specific reference to the regulation concerned whereafter such regulation shall apply to such winze.

[Reg 3.17 am by reg 4(c) of GeN 160 in G. 13002; subs by reg 4(c) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

3.18.1 The Principal Inspector of Mines may declare any mine to be a fiery mine by reason of the danger from inflammable gas in the mine. Such declaration shall be by written notice to the manager.  
[Reg 3.18.1 am by reg 26(h) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

3.18.2 ...

[Reg 3.18.2 rep by reg 3(b) of GoN R1339 in G. 12542.]

3.19 ...

[Reg 3.19 subs by reg 4(d) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725; rep by GoN 1278 in G. 29457.]

3.20 ...

[Reg 3.20 rep by reg 3(b) of GoN R1339 in G. 12542.]

3.21 When the Director-General or the regional director is empowered to grant exemption from the provisions of these Regulations or to grant permission and approval in terms of any regulation, he may impose such conditions as he may deem necessary.

[Reg 3.21 am by reg 15 of GoN R1189 in G. 6489; subs by reg 4(d) of GeN 160 in G. 13002; subs by reg 4(e) of GoN R3083 in G. 13684.]

3.22 ...

[Reg 3.22 rep by reg 4(c) of GoN R1352 in G. 11397.]

## **CHAPTER 4**

### **WORKMEN**

4.1.1 At the end of the shift, every person on that shift shall be brought to the surface as soon as possible, and shall not be kept waiting unnecessarily at the shaft stations or elsewhere.

4.1.2 The manager, mine overseer, shift boss or other person appointed by the manager for the purpose, shall take all reasonable steps to satisfy himself that no unauthorised person remains underground after the hoisting or return to the surface of persons employed on that shift is concluded and shall record in a book to be provided by the manager the name or other means of identification of any such person so remaining underground and the time when such person reached the surface of the mine.

4.2 ...

[Reg 4.2 rep by GoN R904 in G. 23583.]

4.3.1 ...

[Reg 4.3.1 subs by reg 5(a) of GoN R1352 in G. 11397, reg 2(a) of GoN R1263 in G. 13288; rep by GoN R904 in G. 23583.]

- 4.3.2 ...  
[Reg 4.3.2 subs by reg 5(b) of GoN R1352 in G. 11397; rep by GoN R904 in G. 23583.]
- 4.3.3 ...  
[Reg 4.3.3 ins by reg 5(c) of GoN R1352 in G. 11397; rep by GoN R904 in G. 23583.]
- 4.3.4 ...  
[Reg 4.3.4 ins by reg 5(c) of GoN R1352 in G. 11397; rep by GoN R904 in G. 23583.]
- 4.4.1 The manager shall provide a record book at each changehouse in which somebody may enter a complaint in connection with safety or health and such record book shall be inspected and initialled daily by a competent person appointed by the manager for this purpose, and at least once a month by the manager or his delegate: Provided that such delegate shall be somebody appointed in terms of regulations 2.6.1, 2.13.1, 2.13.2 and 2.13.3.  
[Reg 4.4.1 am by reg 5(d) of GoN R1352 in G. 11397; subs by reg 4(a) of GoN R2062  
in G. 13473.]
- 4.4.2 Any defect in the water service or dust allaying devices or in any appliances provided for the health or safety of persons at the mine or works shall be recorded in the record book by the employee having knowledge of such defect immediately on coming off shift.
- 4.4.3 Any person who has knowledge of dust or fumes at the mine or works during working hours or of defective ventilation or of any other condition prejudicial to health or safety shall similarly record the matter without delay in the record book.
- 4.4.4 A verbal report of any such defect or defective condition shall be made to a shift boss or other official as soon as possible and especially in case of immediate necessity. Such verbal report shall not be deemed sufficient notice of such defect or such condition but shall be recorded in the record book.
- 4.4.5 No person shall tamper with or damage the record book.
- 4.4.6 A legible copy of regulations 4.4.1, 4.4.2, 4.4.3, 4.4.4 and 4.4.5 in both official languages shall be kept posted in a place near where the record book is kept.
- 4.5.1 ...  
[Reg 4.5.1 rep by reg 5(e) of GoN R1352 in G. 11397.]
- 4.5.2 ...  
[Reg 4.5.2 rep by reg 5(e) of GoN R1352 in G. 11397.]



4.5 The manager shall provide and maintain a system whereby the attendance of all workmen is recorded daily.

[Reg 4.5 subs for reg 4.5.3 by reg 5(f) of GoN R1352 in G. 11397.]

4.6 No wages shall be paid at or within any hotel, bar, canteen, or place where spirituous or fermented liquor is sold, to any person employed in or about a mine or works.

4.7.1 No person in a state of intoxication or in any other condition which may render or be likely to render him incapable of taking care of himself or of persons under his charge, shall be allowed to enter the workings of a mine or be in the proximity of any working place or near any machinery on the surface of a mine or at a works, and any person who may have entered the workings of a mine or who is found in the proximity of any workings or near any machinery on the surface of a mine or at any works in a state of intoxication may be arrested immediately by the manager or some person duly appointed by him and immediately handed over to the police, and shall be deemed to be guilty of an offence under these Regulations.

4.7.2 No intoxicating liquor shall be taken by any person into the workings of any mine or to any place of work on the surface of a mine or at a works unless with the special permission of the manager, and no workman shall have intoxicating liquor in his possession while at work or at any place of work.

4.8 ...

[Reg 4.8 subs by reg 5(g) of GoN R1352 in G. 11397, subs by reg 2(b) of GoN R1263 in G. 13288; rep by GoN R904 in G. 23583.]

4.8.1 ...

[Reg 4.8.1 rep by reg 5(h) of GoN R1352 in G. 11397.]

4.8.2 ...

[Reg 4.8.2 rep by reg 5(h) of GoN R1352 in G. 11397.]

4.9 ...

[Reg 4.9 rep by GoN R904 in G. 23583.]

4.9.1 ...

[Reg 4.9.1 subs by reg 5(i) of GoN R1352 in G. 11397; am by reg 2(c) of GoN R1263 in G. 13288, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

4.9.2 ...

[Reg 4.9.2 subs by reg 5(j) of GoN R1352 in G. 11397; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

4.9.3 ...

[Reg 4.9.3 rep by reg 5(k) of GoN R1352 in G. 11397.]

4.9.4 ...

[Reg 4.9.4 rep by reg 5(k) of GoN R1352 in G. 11397.]

4.9.5 ...

[Reg 4.9.5 rep by reg 5(k) of GoN R1352 in G. 11397.]

4.9.6 ...

[Reg 4.9.6 rep by reg 5(k) of GoN R1352 in G. 11397.]

4.9.7 ...

[Reg 4.9.7 rep by reg 5(k) of GoN R1352 in G. 11397.]

4.9.8 ...

[Reg 4.9.8 rep by reg 5(k) of GoN R1352 in G. 11397.]

4.9.9 ...

[Reg 4.9.9 rep by reg 5(k) of GoN R1352 in G. 11397.]

4.10 Every waiting place required in terms of regulation 2.10.6 shall be adequately disinfected and kept in a clean condition.

4.11 No person shall pollute the workings with faeces or urine, nor wantonly misuse or foul any latrine.

4.12 No effluent from any sewerage system shall contain any injurious matter in suspension or solution.

4.13 ...

[Reg 4.13 rep by reg 5(k) of GoN R1352 in G. 11397.]

4.14.1 Except as is provided for in regulation 4.14.2 no employee shall work, or be caused or permitted to work, in or at a mine for more than 48 hours in any consecutive seven days, exclusive of the time taken in getting to and from the place where the work is performed: Provided that any time taken in excess of 60 minutes by persons employed underground in order to cover the distance from the shafthead or other entrance to the mine to their working place and back again, shall for the purposes of this regulation, be deemed to be time worked.

[Reg 4.14.1 subs by reg 4 of GoN R305 in G. 3397; am by reg 5(l) of GoN R1352 in G. 11397.]

4.14.2 The provisions of regulation 4.14.1 shall not apply—

(a) to work necessitated by accident or other emergency; or

- (b) to work, other than risk work, as defined in the Occupational Diseases in Mines and Works Act, 1973 (Act 78 of 1973); or

[Reg 4.14.2(b) subs by reg 13 of GoN R537 in G. 6892.]

- (c) to risk work on surface, as defined in the Occupational Diseases in Mines and Works Act, 1973, permitted by the Principal Inspector of Mines; or

[Reg 4.14.2(c) subs by reg 14 of GoN R537 in G. 6892; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- (d) to the work of any class of employee exempted therefrom by the Principal Inspector of Mines for the reason that such work is performed for the purpose of maintaining safety or health or of transporting persons to or from their working places underground in the mine.

[Reg 4.14.2 subs by reg 5 of GoN R305 in G. 3397; reg 4.14.2(d) am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 4.14.3 No employee or class of employee whose work has been exempted under paragraph (b), (c) or (d) of regulation 4.14.2 shall work for a period exceeding in the aggregate 12 hours in any consecutive seven days in addition to the hours specified in regulation 4.14.1, except in special cases of emergency permitted by the Principal Inspector of Mines.

[Reg 4.14.3 subs by reg 6 of GoN R305 in G. 3397; am by reg 5 of GoN R367 in G. 10621, reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 4.14.4 Every application for permission or exemption under regulation 4.14.2 or 4.14.3 shall be submitted by the manager to the regional director, which regional director may impose such restrictions and conditions as he may deem necessary.

[Reg 4.14.4 ins by reg 6 of GoN R305 in G. 3397; subs by reg 5 of GoN R3083 in G. 13684.]

- 4.15 No employee shall work, or be caused or permitted to work, two or more shifts at any mine during any continuous period of 24 hours: Provided that this restriction shall not apply—

- (a) to work necessitated by accident or other emergency; or
- (b) to such repair work to equipment or such service as cannot be delayed without causing serious interruption to the operation of the mine; or
- (c) to a shiftworker when he changes over shift times or where the shiftworker for the succeeding shift fails to arrive and a replacement is not immediately available; or
- (d) in other cases of necessity permitted by the Principal Inspector of Mines and specified in writing to the manager of the mine.

[Reg 4.15 ins by reg 6 of GoN R305 in G. 3397; am by reg 26(h) of GoN R3083 in G. 13684;

reg 4.15(d) am by reg 2(b) of GoN R94 in G. 17725.]

4.16.1 At every mine the manager shall at all times keep a record, in a form acceptable to the Principal Inspector of Mines, showing in respect of each employee—

(a) name and residential address;

[Reg 4.16.1(a) am by reg 5(m) of GoN R1352 in G. 11397.]

(b) occupation;

(c) total number of ordinary hours and overtime worked each day and each month;

(d) the normal rate of remuneration and the actual remuneration paid from time to time and the date of every such payment; and

(e) such other particulars as may be prescribed by the Principal Inspector of Mines:

Provided that the requirements of paragraphs (c) and (d) shall not apply to any official appointed as such in writing by the manager.

[Reg 4.16.1 ins by GoN R305 in G. 3397; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

4.16.2 The manager shall retain any record made in terms of this regulation for a period of one year subsequent to the date of the record and shall on demand by the Principal Inspector of Mines made at any time during the said period of one year produce such record for inspection.

[Reg 4.16.2 ins by GoN R305 in G. 3397; am by reg 26(e) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

4.16.3 Every person employed in or at a mine or works shall furnish the manager with his residential address and shall forthwith notify the manager of any change in such address.

[Reg 4.16.3 ins by reg 5(n) of GoN R1352 in G. 11397.]

4.17.1 When the equivalent noise exposure, as defined in the South African Bureau of Standards' Code of Practice for the Measurement and Assessment of Occupational Noise for Hearing Conservation Purposes, SABS 083 as amended, in any place at or in any mine or works where persons may travel or work, exceeds 85 dB (A), the Manager shall take the necessary steps to reduce the noise to below this level.

[Reg 4.17.1 ins by reg 2 of GoN R1130 in G. 11905.]

4.17.2 Where compliance with regulation 4.17.1 is not possible, the manager shall implement a hearing conservation programme which complies with the recommendations given in the said SABS 083.

(Reg 4.17.2 ins by reg 2 of GoN R1130 in G. 11905.)

4.17.3 Any personal protective equipment that may be necessary in terms of a hearing conservation programme, as contemplated in regulation 4.17.2, shall be supplied free of charge by the manager.

[Reg 4.17.3 ins by reg 2 of GoN R1130 in G. 11905.]

4.17.4 No persons shall damage, discard, or render ineffective any equipment provided to him in terms of regulation 4.17.3.

[Reg 4.17.4 ins by reg 2 of GoN R1130 in G. 11905.]

## **CHAPTER 5**

### **SURFACE PROTECTION, THE MAKING SAFE OF UNDERMINED GROUND AND THE PREVENTION AND COMBATING OF POLLUTION**

[Heading subs by reg 2(a) of GoN R2923 in G. 12904.]

5.1.1 ...

[Reg 5.1.1 rep by GoN R1323 in G. 26963.]

5.1.2 ...

[Reg 5.1.2 rep by GoN R1323 in G. 26963.]

5.2 ...

[Reg 5.2 rep by GoN R1323 in G. 26963.]

5.3.1 ...

[Reg 5.3.1 am by GoN R303 in G. 3397, reg 26(c) of GoN R3083 in G. 13684,  
reg 2(b) of GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

5.3.2 ...

[Reg 5.3.2 subs by reg 6(a) of GoN R3083 in G. 13684, am by reg 2(b) of GoN R94 in G. 17725;  
rep by GoN R1305 in G. 26963.]

5.3.3 ...

[Reg 5.3.3 subs by reg 6(a) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725;  
rep by GoN R1323 in G. 26963.]

5.3.4 ...

[Reg 5.3.4 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1323  
in G. 26963.]

5.3.5 ...

[Reg 5.3.5 am by GoN R303 in G. 3397; subs by reg 6(a) of GoN R3083 in G. 13684; am by reg 2(b)  
of GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

### ***Subsidence levelling stations and levelling control***

5.3.6.1 ...

[Reg 5.3.6.1 ins by reg 3 of GoN R2706 in G. 12858; rep by GoN R1305 in G. 26963.]

5.3.6.2 ...

[Reg 5.3.6.2 ins by reg 3 of GoN R2706 in G. 12858; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

5.3.6.3 ...

[Reg 5.3.6.3 ins by reg 3 of GoN R2706 in G. 12858; rep by GoN R1305 in G. 26963.]

5.3.6.4 ...

[Reg 5.3.6.4 ins by reg 3 of GoN R2706 in G. 12858; rep by GoN R1305 in G. 26963.]

5.3.6.5 ...

[Reg 5.3.6.5 ins by reg 3 of GoN R2706 in G. 12858; rep by GoN R1305 in G. 26963.]

5.3.6.6 ...

[Reg 5.3.6.6 ins by reg 3 of GoN R2706 in G. 12858; am by reg 26(b) and (c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

5.3.6.7 ...

[Reg 5.3.6.7 ins by reg 3 of GoN R2706 in G. 12858; am by reg 4 of GoN R814 in G. 13811; rep by GoN R1305 in G. 26963.]

5.4 At coal mines, in addition to all other provisions contained in these Regulations, the following shall be observed—

5.4.1 Coal debris shall not be allowed to accumulate on any ground where there exist, or where there are likely to occur, surface fissures or cavities, the result of underground operations.

5.4.2 No working of coal or any such like mineral beyond the necessary development drives may be carried on beneath any accumulation of unburnt, burning or smouldering coal or other similar debris except as is provided for in the next succeeding regulation.

5.4.3 The Principal Inspector of Mines may, on written application, permit the extraction of coal or other mineral beneath coal debris or any other similar debris heap, if he is satisfied that such may be done without danger to that or any adjacent property: Provided that any person who extracts such mineral shall be liable for any damage that may result from such extraction.

[Reg 5.4.3 subs by reg 6(b) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

5.4.4 Broken ground which has finally subsided may be filled up with earth and then used as a site for depositing coal and other debris, provided the consent of the Principal Inspector of Mines has first been obtained.

[Reg 5.4.4 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

5.4.5 ...

[Reg 5.4.5 rep by GoN R1237 in G. 25404, GoN R1323 in G. 26963.]

5.4.6 ...

[Reg 5.4.6 rep by GoN R1323 in G. 26963.]

5.5 ...

[Reg 5.5 rep by GoN R1323 in G. 26963.]

5.6.1 ...

[Reg 5.6.1 subs by reg 2 of GoN R2101 in G. 4498, reg 2(b) of GoN R2923 in G. 12904; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1237 in G. 25404, GoN R1323 in G. 26963.]

5.6.2 ...

[Reg 5.6.2 subs by reg 2 of GoN R2101 in G. 4498, reg 2(b) of GoN R2923 in G. 12904; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1323 in G. 26963.]

5.6.3 ...

[Reg 5.6.3 ins by reg 2 of GoN R2101 in G. 4498; subs by reg 2(b) of GoN R2923 in G. 12904; rep by GoN R1323 in G. 26963.]

5.7 ...

[Reg 5.7 rep by GoN R1323 in G. 26963.]

5.8.1 At any mine or works no person shall work, or cause or permit any other person to work, in any position from which the falling or slipping of such person may result in injury unless such person is, where practicable, secured by a life-line or otherwise suitably safeguarded.

[Reg 5.8.1 subs for reg 5.8 by reg 4 of GoN R2703 in G. 7953.]

5.8.2 No person shall enter, or cause or permit any other person to enter any accumulation of water or mud other than an accumulation known to be insignificant unless such person is secured by a life-line or otherwise suitably safeguarded.

[Reg 5.8.2 subs for reg 5.8 by reg 4 of GoN R2703 in G. 7953.]

5.8.3 No person shall work or be present at or near or cause or permit any other person to work or be present at or near any place where there may be danger of falling mineral or material unless he or

such other person wears a hard hat in good condition and of a type approved by the Chief Inspector.

[Reg 5.8.3 subs for reg 5.8 by reg 4 of GoN R2703 in G. 7953; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

5.9.1 Water containing poisonous or injurious matter in suspension or solution must be effectually fenced off to prevent inadvertent access to it, and notice boards shall be put up in suitable places to warn persons from making use of such water.

5.9.2 In no case may water containing any injurious matter in suspension or solution be permitted to escape without having been previously rendered innocuous.

5.10 ...

[Reg 5.10 subs by reg 6(a) of GoN R367 in G. 10621; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1323 in G. 26963.]

5.11 For the purpose of this Chapter of the regulations—

(a) “bank”—

(i) in the case of a stream or a river, means the ground bordering upon and within the high flood zone of the stream or river, or 100 metres from either side of the channel referred to in paragraph (d) of this regulation, whichever area is the wider; and

(ii) in the case of a dam, pan or lake, means the ground bordering upon the high-water mark of the dam, pan or lake and all ground within 100 metres of such high-water mark in an outward direction;

(b) “oil” means any kind of mineral oil and includes spirit produced from oil and a mixture of such oil and water or any other substance which contains not less than one hundred parts of oil in a million parts of the mixture;

(c) “opencast mine” means a mine, including prospecting operations and any hole, trench or other excavation made in the course of prospecting operations, where a mineral deposit is or has been worked at or from the surface of the earth after removal of the overburden;

(d) “stream” or “river” means a natural stream of water which flows in a defined channel, whether or not such channel is dry during any period of a year and whether or not its conformation has been changed by artificial means;

(e) “topsoil” means all cultivable soil material that can be removed mechanically to a depth of one metre without blasting.



[Reg 5.11 ins by reg 16 of GoN R537 in G. 6892.]

5.12.1 ...

[Reg 5.12.1 ins by reg 16 of GoN R537 in G. 6892; rep by reg 6(c) of GoN R3083 in G. 13684.]

5.12.2 ...

[Reg 5.12.2 ins by reg 16 of GoN R537 in G. 6892; rep by reg 6(c) of GoN R3083 in G. 13684.]

5.12.2.1 ...

[Reg 5.12.2.1 ins by reg 2(a) of GoN R398 in G. 13038 wef 1 March 1991;  
rep by reg 6(c) of GoN R3083 in G. 13684.]

5.12.3 Unless exemption is granted in writing by the Director: Mineral Development, all topsoil removed at any opencast mine for the purpose of exposing, working or searching a mineral deposit, shall be deposited at a specially selected site for replacement as topsoil during rehabilitation of the disturbed surface: Provided that where rehabilitation of the surface is carried out concurrently with prospecting, mining or operations incidental thereto, the topsoil may be replaced directly.

[Reg 5.12.3 ins by reg 16 of GoN R537 in G. 6892; am by reg 26(h) of GoN R3083 in G. 13684,  
reg 2 of GoN R847 in G. 18078.]

5.12.4 ...

[Reg 5.12.4 ins by reg 16 of GoN R537 in G. 6892; rep by reg 6(b) of GoN R367 in G. 10621.]

5.12.5 When the rehabilitation of the surface of a mine or any portion of a mine has been done to the satisfaction of the Director: Mineral Development he may, in consultation with the Director-General of the Department of Water Affairs issue a certificate to the manager to the effect that the provisions of these Regulations, in so far as the rehabilitation of the surface is concerned, have been complied with.

[Reg 5.12.5 ins by reg 4 of GoN R1339 in G. 12542; subs by reg 6(d) of GoN R3083 in G. 13684; am  
by reg 2(d) of GoN R94 in G. 17725.]

5.12.6 When a certificate contemplated in regulation 5.12.5 is issued to the manager in respect of a portion of a mine, such portion shall be clearly indicated on the mine plan concerned with a reference to the certificate concerned.

[Reg 5.12.6 ins by reg 4 of GoN R1339 in G. 12542.]

5.13 ...

[Reg 5.13 ins by reg 16 of GoN R537 in G. 6892; rep by reg 6(e) of GoN R3083 in G. 13684.]

5.13.1 No dumping or impounding of rubble, litter, garbage, rubbish or discards of any description, whether solid or liquid, shall take place elsewhere than at the site or sites demarcated for the purpose by the manager with the approval of the Director: Mineral Development. Every such site

shall be limited to a minimum and every dump or dam shall be so controlled to ensure that the environment is, as far as is practicable, not polluted.

[Reg 5.13.1 ins by reg 16 of GoN R537 in G. 6892; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(d) of GoN R94 in G. 17725.]

- 5.13.2 In every case where vegetation, including trees, shrubs or grasses, are disturbed in making access roads, clearing sites for stockpiles and erecting plant or other installations, such vegetation shall be re-established to the satisfaction of the Director: Mineral Development which Director: Mineral Development may introduce a programme according to which rehabilitation shall be done.

[Reg 5.13.2 ins by reg 16 of GoN R537 in G. 6892; subs by reg 6(f) of GoN R3083 in G. 13684; am by reg 2(d) of GoN R94 in G. 17725.]

- 5.13.3 ...

[Reg 5.13.3 ins by reg 16 of GoN R537 in G. 6892; rep by reg 6(g) of GoN R3083 in G. 13684.]

- 5.13.4 Wherever practicable, waste material from reduction works, beneficiation plants, coal preparation plants, screening and washing installations and generating stations at a mine shall be disposed of in the workings of such mine: Provided that such disposal shall only be carried out under written authority from the Director: Mineral Development, who shall consult the Department of Water Affairs beforehand.

[Reg 5.13.4 ins by reg 16 of GoN R537 in G. 6892; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(d) of GoN R94 in G. 17725.]

- 5.14 No sand shall be extracted from the bank of any stream, river, dam, pan or lake, except with the written permission of the Director: Mineral Development and upon such conditions as he may prescribe.

[Reg 5.14 ins by reg 16 of GoN R537 in G. 6892; subs by reg 6(h) of GoN R3083 in G. 13684; am by reg 2(d) of GoN R94 in G. 17725.]

- 5.14.1 Sand may be extracted from the channel of a stream or river as well as from a dam, pan or lake: Provided that—

- (a) adequate precautions are taken to ensure that the stability of the banks is not affected by such operations;
- (b) adequate precautions are taken to prevent the scouring and erosion of the banks which may result from such operations or work incidental thereto; and
- (c) effluent produced from such operations shall not be returned to any stream, river, dam, pan or lake unless such effluent conforms to the purity standards laid down by the Department of Water Affairs.

[Reg 5.14.1 ins by reg 16 of GoN R537 in G. 6892.]

5.14.2 In any case where damage to the bank of a stream, river, dam, pan or lake is or has been caused, such bank shall be restored to a condition acceptable to the Director: Mineral Development at the expense of the owner or manager.

[Reg 5.14.2 ins by reg 16 of GoN R537 in G. 6892; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(d) of GoN R94 in G. 17725.]

5.14.3 No sand dump or slimes dam shall be established on the bank of any stream, river, dam, pan or lake without the written permission of the Director: Mineral Development and upon such conditions as he may prescribe.

[Reg 5.14.3 ins by reg 16 of GoN R537 in G. 6892; subs by reg 6(i) of GoN R3083 in G. 13684; am by reg 2(d) of GoN R94 in G. 17725.]

5.14.4 The regulations in this Chapter shall not apply to land referred to in section 160 of the Mining Rights Act, 1967 (Act 20 of 1967), and shall not derogate from any other Act or regulation framed in terms of any Act governing the removal of sand or other mineral from any stream, river, dam, pan or lake.

[Reg 5.14.4 ins by reg 16 of GoN R537 in G. 6892.]

5.15 During prospecting for or recovery of oil, all reasonable measures shall be taken, to the satisfaction of the Director: Mineral Development, to prevent the escape of oil to the surroundings, either on land or in the sea.

[Reg 5.15 ins by reg 16 of GoN R537 in G. 6892; am by reg 26(b) of GoN R3083 in G. 13684, reg 2 of GoN R847 in G. 18078.]

#### ***Pecuniary provision***

5.16.1 The holder of a prospecting permit or mining authorisation shall demonstrate in his environmental management programme that he has the financial means and has made sufficient and acceptable pecuniary provision to the satisfaction of the Director: Mineral Development to carry out such programme.

[Reg 5.16.1 ins by reg 2(b) of GoN R398 in G. 13038 wef 1 March 1991; am by reg 4 of GoN R814 in G. 13811; subs by reg 3(a) of GoN R31 in G. 16214; am by reg 2(d) of GoN R94 in G. 17725.]

5.16.2 Where the holder of a prospecting permit or mining authorisation is not required to have an environmental management programme, the Director: Mineral Development may order such holder to make, to his satisfaction, provision for—

(a) the rehabilitation of the surface of the mining area;

(b) the prevention of pollution of the atmosphere;

(c) the prevention of pollution of water and the soil; and

(d) the final closure of the mine.

[Reg 5.16.2 ins by reg 2(b) of GoN R398 in G. 13038 wef 1 March 1991;  
am by reg 4 of GoN R814 in G. 13811; subs by reg 3(a) of GoN R31 in G. 16214; am by reg 2(d)  
of GoN R94 in G. 17725.]

5.16.3 The holder of a prospecting permit or mining authorisation shall annually, to the satisfaction of the Director: Mineral Development and in consultation with an expert, determine the quantum of pecuniary provision which is required of him in terms of regulations 5.16.1 or 5.16.2.

[Reg 5.16.3 ins by reg 2(b) of GoN R398 in G. 13038 wef 1 March 1991;  
am by reg 4 of GoN R814 in G. 13811; subs by reg 3(a) of GoN R31 in G. 16214;  
am by reg 2(d) of GoN R94 in G. 17725.]

5.16.4 The pecuniary provision referred to in regulations 5.16.1 and 5.16.2 shall only be used for the purposes of the said regulations.

[Reg 5.16.4 ins by reg 3(a) of GoN R31 in G. 16214.]

### ***Performance assessment and monitoring of environmental management programme***

#### ***Definitions***

5.17 For the purpose of regulations 5.18 to 5.18.11—

(a) **“environmental management programme”** means an environmental management programme approved in terms of section 39(1) of the Act, unless specifically otherwise indicated herein;

(b) **“independent team”** means a person or a team of persons with appropriate expertise in environmental assessment and management, who—

(i) has not been involved with the operational management of the mining or prospecting operation in question; or

(ii) has previously not been involved in the particular performance assessment of the environmental management programme being considered;

(c) **“monitoring”** means the use of quantitative and qualitative data gathering techniques in order to—

- (i) ascertain whether the requirements of an environmental management programme are being complied with; and
  - (ii) supply supporting information for the performance assessment of the environmental management programme;
- (d) **“performance assessment”** means a systematic, periodic, objective and documented evaluation of—
- (i) the compliance with an environmental management programme; and
  - (ii) the continued appropriateness and adequacy of the environmental management programme;
- (e) **“report”** means the report referred to in regulation 5.18(c).

[Reg 5.17 ins by reg 1 of GoN R801 in G. 20219.]

### ***Compliance with environmental management programme***

5.18 In order to ensure compliance with an environmental management programme and to access the continued appropriateness and adequacy of the environmental management programme, the holder of a prospecting permit or mining authorisation shall—

- (a) conduct the monitoring of the environmental management programme on an ongoing basis;
- (b) conduct the performance assessments of the environmental management programme in accordance with regulations 5.18.1, 5.18.2, 5.18.3 and 5.18.4;
- (c) compile and submit to the Director: Mineral Development a report on the performance assessment of the environmental management programme in which compliance with regulation 5.18(b) is demonstrated.

### ***Assessment and report***

5.18.1 In order to comply with the provisions of regulations 5.18 (b) and (c), the holder of a prospecting permit or mining authorisation shall conduct the performance assessment of the relevant environmental management programme and compile and submit the report to the satisfaction of the Director: Mineral Development—

- (a) in accordance with the requirements of the relevant environmental management programme;
- or

- (b) if the environmental management programme does not provide therefor, as agreed to in writing by the Director: Mineral Development.

***No approved programme and exemption***

5.18.2 If—

- (a) an environmental management programme has not been approved in terms of section 39 (1) of the Act; and
- (b) exemption has not been granted in terms of section 39 (2) (a) of the Act from the requirement to obtain such approval,

the holder of the prospecting permit or mining authorisation in question shall make arrangements for the conducting of performance assessments of an environmental management programme and the compiling and submitting of reports as agreed to in writing by the Director: Mineral Development.

***Internationally recognised standards for environmental management systems***

5.18.3 The holder of a prospecting permit or mining authorisation whose prospecting and mining operations have been certified in terms of internationally recognised standards for environmental management systems may, on application to the Director: Mineral Development and provided that proof of such certification and compliance thereto is furnished, be exempted from the provisions of regulation 5.18 (b), but reports shall be compiled and submitted in accordance with regulation 5.18.4 to demonstrate that performance assessments of the relevant environmental management programme are being conducted to the satisfaction of the Director: Mineral Development.

***Frequency of assessments and reports***

5.18.4 The frequency of conducting performance assessments of an environmental management programme and the compiling and submitting of reports shall be in accordance with the period—

- (a) specified in the environmental management programme; or
- (b) if such period is not so specified—
  - (i) as agreed to in writing by the Director: Mineral Development; or
  - (ii) every two years from the date of approval of that environmental management programme.

### ***Content and copies of report***

5.18.5.1 The report shall contain the following—

- (a) A clear indication of the period that applies to the performance assessment of the environmental management programme;
- (b) the scope of that assessment;
- (c) the procedure used for that assessment;
- (d) the interpreted information gained from the monitoring of the environmental management programme;
- (e) the evaluation criteria used during that assessment;
- (f) the results of that assessment; and
- (g) recommendations on how and when identified deficiencies and non-compliance of requirements will be rectified.

5.18.5.2 The holder of the prospecting permit or mining authorisation in question shall submit to the Director: Mineral Development such number of copies of the report as that Director determines.

### ***Appointment of persons with appropriate expertise***

5.18.6 The holder of a prospecting permit or mining authorisation may appoint persons with appropriate expertise to conduct the performance assessment of the environmental management programme and compile the report, provided that such appointment shall not relieve the holder of his or her responsibilities in terms of these Regulations.

### ***Report to be made available***

5.18.7 The report submitted to the Director: Mineral Development shall be made available by him or her to—

- (a) other departments which have been involved in the approval of the environmental management programme; and
- (b) other parties on written request.

### ***Assessment of report unacceptable***

5.18.8 If the Director: Mineral Development finds that—

- (a) the performance assessment of the environmental management programme conducted by the holder of a prospecting permit or mining authorisation is not satisfactory; or
- (b) the report submitted by that holder is not acceptable, that holder may, at his cost, be required to do any or all of the following—
  - (i) Repeat the whole or relevant parts of that assessment and revise and resubmit the report;
  - (ii) submit relevant supporting information;
  - (iii) appoint an independent team to conduct the whole or part of that assessment and to compile the report.

***Response to report***

5.18.9 The Director: Mineral Development shall respond in writing to the holder of the prospecting permit or mining authorisation on the performance assessment of the environmental management programme within four months after the date of receiving the report, unless otherwise agreed to in writing between the Director and the holder.

***Appointment of independent team by Director-General***

5.18.10.1 If there is reason to believe that the performance of assessment of the environmental management programme cannot be conducted satisfactorily by the holder of the prospecting permit or mining authorisation, the Director-General may appoint an independent team to conduct that assessment.

5.18.10.2 The cost of the appointment of the independent team in terms of regulation 5.18.10.1 and the conducting of the performance assessment of the environmental management programme shall be for the account of the holder in question.

***Final performance assessment of environmental management programme***

5.18.11.1 When the holder of a prospecting permit or mining authorisation intends terminating his or her prospecting or mining operations and intends obtaining a certificate contemplated in section 12 of the Act, a final performance assessment of the environmental management programme shall be conducted and a report to the satisfaction of the Director: Mineral Development shall be submitted to indicate that—



- (a) the requirements of the relevant legislation have been complied with;
- (b) the objectives as described in the environmental management programme have been met;  
and
- (c) all residual and latent environmental impacts resulting from the prospecting and mining operations of that holder have been identified and the risks thereof have been identified and quantified and arrangements for the management of those risks have been finalised.

5.18.11.2 The conducting of the final performance assessment of the environmental management programme and the submission of the report referred to in regulation 5.18.11.1 shall precede or accompany the application for a certificate contemplated in section 12 of the Act.

[Reg 5.18 ins by reg 1 of GoN R801 in G. 20219.]

## **CHAPTER 6**

### **OUTLETS, LADDERWAYS AND TRAVELLINGWAYS**

6.1.1 ...

[Reg 6.1.1 rep by GoN R1224 in G. 28333.]

6.1.2 ...

[Reg 6.1.2 am by GoN R303 in G. 3397; rep by GoN R1224 in G. 28333.]

6.1.3 ...

[Reg 6.1.3 am by GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R1224 in G. 28333.]

6.2.1 ...

[Reg 6.2.1 rep by GoN R1224 in G. 28333.]

6.2.2 ...

[Reg 6.2.2 rep by GoN R1224 in G. 28333.]

6.2.3 ...

[Reg 6.2.3 am by GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R1224 in G. 28333.]

6.2.4 ...

[Reg 6.2.4 rep by GoN R1224 in G. 28333.]

6.2.5 ...

[Reg 6.2.5 subs by reg 7 of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725;  
rep by GoN R1224 in G. 28333.]

6.3.1 ...

[Reg 6.3.1 am by GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R1224 in G. 28333.]

6.3.2 ...

[Reg 6.3.2 rep by GoN R1224 in G. 28333.]

6.3.2.1 ...

[Reg 6.3.2.1 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725;  
rep by GoN R1224 in G. 28333.]

6.3.2.2 If electricity or compressed air for operating winding, ventilating or pumping machinery is purchased, the manager of the mine shall notify the supplier of such power of the importance of ensuring that interruptions of supply shall be as infrequent and of as short a duration as possible.

6.3.2.3 ...

[Reg 6.3.2.3 rep by GoN R1237 in G. 25404.]

6.3.2.4 ...

[Reg 6.3.2.4 subs by reg 7 of GoN R367 in G. 10621, reg 5 of GoN R2062 in G. 13473; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

6.3.2.5 ...

[Reg 6.3.2.5 am by reg 6 of GoN R1352 in G. 11397, reg 26(c) of GoN R3083 in G. 13684,  
reg 2(b) of GoN R94 in G. 17725; rep by GoN 1278 in G. 29457.]

6.3.2.6 ...

[Reg 6.3.2.6 rep by GoN R1224 in G. 28333.]

6.3.2.7 ...

[Reg 6.3.2.7 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1224 in G. 28333.]

6.3.2.8 ...

[Reg 6.3.2.8 rep by GoN R1224 in G. 28333.]

6.3.2.9 ...

[Reg 6.3.2.9 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725;  
rep by GoN 1278 in G. 29457.]

6.3.2.10 ...

[Reg 6.3.2.10 rep by GoN R91 in G. 30698 wef 1 August 2008.]

6.3.2.11 First-aid equipment and an adequate supply of disinfectant shall be kept at points underground not more than 1 000 metres from any place where mining operations are being conducted.

[Reg 6.3.2.11 am by GoN R303 in G. 3397.]

6.3.2.12 ...

[Reg 6.3.2.12 rep by GoN R1224 in G. 28333.]

6.3.3.1 ...

[Reg 6.3.3.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R1224 in G. 28333.]

6.3.3.2 ...

[Reg 6.3.3.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoNo R1224 in G. 28333.]

6.3.3.3 ...

[Reg 6.3.3.3 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R1224 in G. 28333.]

6.3.3.4 ...

[Reg 6.3.3.4 am by reg 26(b) of GoN R3083 in G. 13684, reg 5 of GoN R814 in G. 13811, reg 2(a) of GoN R94 in G. 17725; rep by GoN R1224 in G. 28333.]

6.3.3.5 ...

[Reg 6.3.3.5 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R1224 in G. 28333.]

6.3.3.6 ...

[Reg 6.3.3.6 rep by GoN R1224 in G. 28333.]

6.4 Hoisting arrangements shall be provided for every person who has to ascend in a vertical or inclined shaft, winze or other working, when the height to be ascended exceeds 150 metres measured vertically.

[Reg 6.4 am by GoN R303 in G. 3397.]

6.5.1 Except as is permitted in terms of regulation 6.5.2.1 a proper ladderway shall be provided when the inclination from the horizontal exceeds 20 degrees—

- (a) in a shaft or outlet to surface if, according to the provisions of regulation 6.3.1, such shaft or outlet is allowed to afford the only means of egress to the surface for persons employed in underground workings,

- (b) in a connection, or part thereof, from any part of the underground workings to a shaft or outlet to surface if such connection, or part thereof, affords the only means of egress to a shaft or outlet to surface for persons employed in any working place, and
- (c) in a shaft or winze in the course of sinking. In this case the ladderway shall be provided to within such distance from the bottom of the said shaft or winze as is the minimum necessary to secure the ladderway from damage during blasting. From the lower end of such ladderway to the bottom of the shaft or winze there shall be provided—
  - (i) chains, chain ladders or wire rope ladders where the inclination is more than 35 degrees and less than 70 degrees,
  - (ii) chain ladders or wire rope ladders where the inclination is 70 degrees or more.

6.5.2.1 The provisions of regulation 6.5.1 shall not apply if at least two winding plants of adequate capacity are kept available for immediate use to convey persons and if adequate power for winding purposes from at least two independent sources is provided at the winding plants so that in the event of failure of the power supply from one source the supply from the others will be readily available. When the winding plants are operated by electric power obtained from a sub-station by way of a complete ring circuit or duplicate supply lines and the sub-station is fed from a main power system through a complete ring circuit or duplicate supply lines, such an arrangement of circuits shall be deemed to constitute two independent sources of supply.

6.5.2.2 If there are only two winding plants and one of these is a standby plant, the standby plant shall be tested once daily with at least the load equivalent to the total mass permitted for persons by running the conveyance or the conveyances for a complete trip down and up the winding compartment or compartments. In the event of such standby winding plant depending for its operation on power generated at the mine, sufficient fuel and essential stores for the generation of power for the operation of the winding plant shall be kept at the mine.

[Reg 6.5.2.2 am by GoN R303 in G. 3397.]

6.6. The following provisions shall apply to every ladder or stairway in or on a mine or at a works:

[Reg 6.6 am by reg 5(a) of GeN 160 in G. 13002.]

6.6.1 Where the inclination from the horizontal is more than 20 degrees and less than 70 degrees the ladder shall not be continuous over a greater distance than 16 metres.

[Reg 6.6.1 am by GoN R303 in G. 3397, reg 5(b) of GeN 160 in G. 13002.]

6.6.2 Where the inclination from the horizontal is 70 degrees or more each section of any stairway or ladder shall be—

- (a) not more than 10 metres in length without a break;

- (b) provided with resting places or resting platforms at the breaks; and
- (c) installed in such a manner that the bottom end is not aligned with a hatchway in a resting place or resting platform.

[Reg 6.6.2 am by GoN R303 in G. 3397; subs by reg 5(c) of GeN 160 in G. 13002.]

6.6.3 Where the inclination from the horizontal is more than 35 degrees the ladder shall project at least one metre above the mouth of the shaft, winze or other excavation and above every resting place, except when a strong handrail is fixed at such mouth or resting place.

[Reg 6.6.3 am by GoN R303 in G. 3397.]

6.6.4 Every permanent ladder or stairway with—

- (a) an inclination of 75 degrees or more from the horizontal; and
- (b) a total height exceeding 5 metres,

shall be enclosed by a cage provided with a backrest which shall—

- (i) at no point be more than 700 millimetres from the rungs of the ladder; and
- (ii) extend from a point two metres or less from the base of the ladder to a point at least 900 millimetres beyond the resting place or resting platform at the top of the stairway or ladder.

[Reg 6.6.4 subs by reg 5(d) of GeN 160 in G. 13002.]

6.6.5 No ladder shall be fixed in an overhanging position.

6.6.6 Every ladder shall be—

- (a) of strong construction,
- (b) securely fastened to the timbering or wall of the shaft, winze or other excavation, and
- (c) maintained in good repair.

6.7 A wire rope or a strand of wire rope shall not be allowed to be used for climbing purposes in a mine if the rope or strand is kinked, knotted or contains broken or projecting wires.

6.8 In every vertical shaft and in every shaft having an inclination from the horizontal of 45 degrees or more any compartment regularly used as a foot travelling way shall be securely bratticed off from

any other compartment. Where the inclination is more than 10 degrees and less than 45 degrees such compartment shall be securely bratticed off to a height of at least 1,5 metres above the ladder measured normal to the dip: Provided that any such shaft may be exempted from the provisions of this regulation by the Principal Inspector of Mines if it is not used for winding purposes.

[Reg 6.8 am by GoN R303 in G. 3397, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

6.9 ...

[Reg 6.9 rep by GoN R1224 in G. 28333.]

6.10 Every main travelling road in a mine shall be maintained at a height of at least 1,8 metres or at such lesser height as the Principal Inspector of Mines may in writing permit. For the purpose of this regulation "main travelling road" shall mean a road used by the main body of any shift employed in the mine for travelling to and from their working places and, where the mine is divided into sections or districts, the road used by the main body of the men employed in such section or district.

[Reg 6.10 am by GoN R303 in G. 3397, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

6.11 ...

[Reg 6.11 rep by GoN R1224 in G. 28333.]

## **CHAPTER 7**

### **PROTECTION IN WORKINGS**

7.1 ...

[Reg 7.1 rep by GoN R959 in G. 23615.]

7.2.1 At the bottom of every shaft in the course of being sunk there shall be present at all times a competent person when workmen are present thereat.

[Reg 7.2.1 am by reg 7(a) of GoN R1352 in G. 11397.]

7.2.2 ...

[Reg 7.2.2 rep by GoN R904 in G. 23583, GoN R959 in G. 23615.]

7.3.1 ...

[Reg 7.3.1 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725;  
rep by GoN R904 in G. 23583.]

7.3.2 Every entrance to every vertical or steeply inclined shaft, winze, sump, rockpass or other dangerous excavation shall be kept properly closed by a fence, barrier, door or gate, or shall be kept adequately covered, so as to prevent persons having unintentional access to, or accidentally slipping or falling into, such excavation.

7.3.3 No person other than the manager, mine overseer or shiftboss shall cross or open any fence, barrier, gate, wall, door or cover provided for protection in workings until he has received definite instructions or permission to do so from the ganger or miner or other responsible person in charge.

7.3.4 The ganger or miner or other responsible person in charge shall not cross or open, or cause or permit any other person to cross or open, any fence, barrier, gate, wall, door or cover provided for protection in workings except for the purpose of conducting repairs or other necessary operations and then only if effective precautions for the safety of persons are taken.

7.4.1 If the roof, hanging or sidewalls in the workings of any mine or part of a mine are in the opinion of the Principal Inspector of Mines of a nature requiring systematic support he may give notice to that effect to the manager who shall, after consultation with any regional mining engineer (mining), specify the support to be provided and the system according to which it shall be placed.

[Reg 7.4.1 subs by reg 8 of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

7.4.2 The manager shall ensure that all persons concerned are made aware of such system and that notices setting out its specifications are posted up at suitable places where they can conveniently be read.

7.4.3 Any person who fails to comply with the specifications of such system shall be guilty of an offence.

7.4.4 If, in the opinion of the Principal Inspector of Mines, the method of supporting the roof, hanging and sidewalls in the workings of any mine or part of a mine is unsafe either by reason of the distances between supports being excessive or for any other reason, he may by notice in writing require the manager to modify the method.

[Reg 7.4.4 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

7.4.5 ...

[Reg 7.4.5 rep by GoN R959 in G. 23615.]

7.5.1 No timber, rock, tools or other articles shall be placed or allowed to remain where they accidentally can fall or be caused to fall down any vertical or steeply inclined excavation and thereby endanger the safety of persons.

7.5.2 No person shall carry or be permitted to carry any drill, tool or any loose material on a ladderway in a vertical or steeply inclined shaft or winze except so far as may be necessary in executing repairs.

7.5.3 Every opening from a vertical or steeply inclined excavation into a travelling way or working place situated on the lower or dip side of such excavation shall be kept barricaded so that persons travelling or working below or near such opening are effectively protected against danger from the falling or rolling of timber, stones, tools or other articles.

7.6 Every stull in or above every place where any person works or travels shall be examined at least once a week and maintained in a safe condition and adequately loaded.

7.7.1 No person shall enter or remain in, or cause or permit any other person to enter or remain in, the underground workings of a mine unless he or such other person wears a hard hat in good condition and of a type approved by the Chief Inspector.

[Reg 7.7.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

7.7.2 In opencast workings no person shall enter or remain at or near, or cause or permit any other person to enter or remain at or near, any vertical or steeply inclined face or sidewall which exceeds a vertical height of three metres unless he or such other person wears a hard hat in good condition and of a type approved by the Chief Inspector.

[Reg 7.7.2 am by GoN R303 in G. 3397, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

7.7.3 The hard hat required in terms of regulations 7.7.1 and 7.7.2 shall be provided free of charge by the manager.

[Reg 7.7.3 subs by reg 7(b) of GoN R1352 in G. 11397.]

7.8.1 No person shall work, or cause or permit any other person to work, in or near any part of the workings of a mine where inadvertent slipping or overbalancing may result in his sliding or falling down any slope that has an inclination from the horizontal of 45 degrees or more, or in his falling vertically, unless he is secured by a life-line or otherwise safeguarded.

7.8.2 The use of life-lines in terms of regulation 7.8.1 shall not be compulsory in the case of persons who are engaged in installing or repairing equipment in a vertical shaft or in a vertical winze provided the manager or mine overseer has given permission thereto after having satisfied himself that—

- (a) the use of life-lines by the persons concerned would impede such persons in the safe performance of such work,
- (b) such persons have had the training and experience necessary to carry out such work safely, and
- (c) any such person when engaged in such work and not secured by a life-line is under the immediate supervision of a competent person.

[Reg 7.8.2(c) am by reg 7(c) of GoN R1352 in G. 11397.]

7.8.3 No person shall enter, or cause or permit any other person to enter, an accumulation of water in the workings of a mine, other than an accumulation known to be insignificant, unless he or such other person is secured by a life-line or wears a life-belt or life-jacket.



7.9.1 In open face working and when digging trenches, pits or excavations in sand, soil, gravel, clay, tailings, slimes, ash, debris or similar ground or deposit and when removing any such ground or deposit from any dump, dam or heap-

- (a) no person shall undercut the face or sidewall or any portion of a dump, dam or heap consisting of such ground or deposit unless permitted by the Principal Inspector of Mines and under such conditions as he may prescribe, and

[Reg 7.9.1(a) am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- (b) except as permitted in regulation 7.9.1(a), the face or sidewall above the level where persons may work or travel shall be sloped or terraced back at a safe angle or adequately supported where the vertical height of such face or sidewall is—

- (i) three metres or more, or

[Reg 7.9.1(b)(i) am by GoN R303 in G. 3397.]

- (ii) less than three metres but more than 1,5 metres if the width of the adjacent working or travelling space is less than the vertical height of the face or sidewall.

[Reg 7.9.1(b)(i) am by GoN R303 in G. 3397.]

7.9.2 At any open face workings or quarry all debris and other loose material and stones on the surface shall be cleared to a distance of at least three metres from the edge of such open face workings or quarry.

[Reg 7.9.2 am by GoN R303 in G. 3397.]

7.10.1 ...

[Reg 7.10.1 rep by GoN R1305 in G. 26963.]

7.10.2 ...

[Reg 7.10.2 am by GoN R303 in G. 3397; subs by reg 4(a) of GoN R2706 in G. 12858; rep by GoN R1305 in G. 26963.]

7.10.3 ...

[Reg 7.10.3 am by reg 5 of GoN R1339 in G. 12542; regs 7.10.3.1 and 7.10.3.2 subs for reg 7.10.3 by reg 4(b) of GoN R2706 in G. 12858; reg 7.10.3 rep by GoN R1305 in G. 26963.]

7.10.4 ...

[Reg 7.10.4 am by GoN R303 in G. 3397, reg 5 of GoN R1339 in G. 12542; rep by GoN R1305 in G. 26963.]

7.10.5 ...

[Reg 7.10.5 am by GoN R303 in G. 3397, GoN R1339 in G. 12542, GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

7.10.6 ...

[Reg 7.10.6 am by GoN R303 in G. 3397; rep by GoN R1305 in G. 26963.]

7.10.7 ...

[Reg 7.10.7 rep by GoN R1305 in G. 26963.]

7.10.8 ...

[Reg 7.10.8 rep by GoN R1305 in G. 26963.]

7.10.9 ...

[Reg 7.10.9 ins by reg 17 of GoN R537 in G. 6892; rep by GoN R1305 in G. 26963.]

7.11.1 ...

[Reg 7.11.1 ins by reg 2 of GoN R1346 in G. 3625; rep by GoN R91 in G. 30698.]

7.11.2 ...

[New reg 7.11.2 ins by reg 2 of GoN R1346 in G. 3625; rep by GoN R91 in G. 30698.]

7.11.3 ...

[New Reg 7.11.3 ins by reg 2 of GoN R1346 in G. 3625; rep by GoN R91 in G. 30698.]

7.11.4 ...

[New reg 7.11.4 ins by reg 2 of GoN R1346 in G. 3625; rep by GoN R91 in G. 30698.]

7.11.5 ...

[Reg 7.11.5 ins by reg 2 of GoN R1346 in G. 3625; rep by GoN R91 in G. 30698.]

7.12.1 ...

[Reg 7.11.1 am by GoN R303 in G. 3397; reg 7.11.1 renumbered as 7.12.1 by reg 2 of GoN R1346 in G. 3625; reg 7.12.1 rep by GoN R1305 in G. 26963.]

7.12.2 ...

[Reg 7.11.2 corrected by GoN R304 in G. 3397, reg 7.11.2 renumbered as 7.12.2 by reg 2 and subs by reg 3 of GoN R1346 in G. 3625; reg 7.12.2 rep by GoN R1305 in G. 26963.]

7.12.3 ...

[Reg 7.11.3 renumbered as 7.12.3 by reg 2 of GoN R1346 in G. 3625; reg 7.12.3 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

7.12.4 ...

[Reg 7.11.4 renumbered as 7.12.4 by reg 2 of GoN R1346 in G. 3625; reg 7.12.4 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

## **CHAPTER 8**

### **RESPONSIBILITY IN WORKINGS**

8.1 At any mine—

8.1.1 ...

[Reg 8.1.1 rep by GoN R959 in G. 23615.]

8.1.2 ...

[Reg 8.1.2 rep by GoN R959 in G. 23615.]

8.1.3 ...

[Reg 8.1.3 subs by reg 8(a) of GoN R367 in G. 10621; rep by GoN R959 in G. 23615.]

8.1.4 in any working place the ganger or miner in charge shall take all reasonable precautions against injury to any person from the falling or rolling of timber, rock, tools or other articles;

8.1.5 ...

[Reg 8.1.5 rep by GoN R959 in G. 23615.]

8.1.6 ...

[Reg 8.1.6 rep by GoN R959 in G. 23615.]

8.2 ...

[Reg 8.2 rep by GoN R959 in G. 23615.]

8.3 At any mine—

8.3.1 ...

[Reg 8.3.1 rep by GoN R959 in G. 23615.]

8.3.2 ...

[Reg 8.3.2(a) am by reg 8(a) of GoN R1352 in G. 11397; reg 8.3.2 rep by GoN R959 in G. 23615.]

8.3.3 no ganger or miner in charge of workmen employed in a vertical shaft or vertical winze being sunk, or in a main development drive in a fiery mine, or on the extraction of pillars in a coal mine, shall at any time leave his working place or section, unless he—

(a) has withdrawn all workmen from it; or

(b) is relieved by another ganger or miner;

[Reg 8.3.3 subs by reg 6(a) of GoN R2062 in G. 13473.]

8.3.4 a competent person shall be present when workmen are present at the bottom of an incline shaft in the course of being sunk.

[Reg 8.3.4 ins by reg 6(b) of GoN R2062 in G. 13473.]

8.4 At any coal mine, in addition to the requirements of regulation 8.3—

8.4.1 the ganger or miner shall at the end of his shift withdraw all workmen from the section for which he is responsible;

8.4.2 except as is provided for in regulation 8.3.3, workmen may remain in or enter or be permitted to remain in or enter inbye of the waiting place required in accordance with regulation 2.10.6 for the purpose of carrying out specific work authorised by the manager or mine overseer, provided that—

(a) ...

[Reg 8.4.2(a) rep by GoN R959 in G. 23615.]

(b) ...

[Reg 8.4.2(b) rep by GoN R959 in G. 23615.]

(c) ...

[Reg 8.4.2(c) rep by GoN R904 in G. 23583.]

(d) ...

[Reg 8.4.2(d) rep by GoN R959 in G. 23615.]

8.4.3 ...

[Reg 8.4.3 am by GoN R303 in G. 3397; rep by GoN R959 in G. 23615.]

8.4.4.1 ...

[Reg 8.4.4.1 rep by GoN R959 in G. 23615.]

8.4.4.2 ...

[Reg 8.4.4.2 am by GoN R303 in G. 3397, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R959 in G. 23615.]

8.4.4.3 ...

[Reg 8.4.4.3 rep by GoN R959 in G. 23615.]

8.4.5 ...

[Reg 8.4.5 rep by GoN R959 in G. 23615.]

8.4.6 ...

[Reg 8.4.6 rep by GoN R1237 in G. 25404.]

8.4.7 ...

[Reg 8.4.7 rep by GoN R1237 in G. 25404.]

8.5.1 ...

[Reg 8.5.1 am by GoN R303 in G. 3397; subs by reg 8(b) of GoN R367 in G. 10621, reg 6(a) of GoN R1339 in G. 12542; am by reg 6(c) of GoN R2062 in G. 13473; rep by GoN R904 in G. 23583, GoN R1237 in G. 25404.]

8.5.2 ...

[Reg 8.5.2 am by GoN R303 in G. 3397; subs by reg 8(c) of GoN R367 in G. 10621, reg 6(b) of GoN R1339 in G. 12542; rep by GoN R904 in G. 23583, GoN R1237 in G. 25404.]

8.6.1 ...

[Reg 8.6 subs by reg 8(d) of GoN R367 in G. 10621, reg 8.6 by reg 6(c) of GoN R1339 in G. 12542; am by reg 6(c) of GoN R2062 in G. 13473; rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

8.6.2 ...

[Reg 8.6.2 ins by reg 6(c) of GoN R1339 in G. 12542; am by GoN R2062 in G. 13473; rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

8.6.3 ...

[Reg 8.6.3 ins by reg 6(c) of GoN R1339 in G. 12542; rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

8.7.1 ...

[Reg 8.7 subs by reg 8(d) of GoN R367 in G. 10621; reg 8.7.1 subs for reg 8.7 by reg 6(d) of GoN R1339 in G. 12542; reg 8.7.1 rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

8.7.2 ...

[Reg 8.7.2 ins by reg 6(d) of GoN R1339 in G. 12542; am by reg 6(c) of GoN R2062 in G. 13473; rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

8.8 ...

[Reg 8.8 am by GoN R513 in G. 5488, GoN R537 in G. 6892, GoN R3083 in G. 13684, GoN R94 in G. 17725, GoN R959 in G. 23615.]

8.9 In every coal mine—

8.9.1 ...

[Reg 8.9.1 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R959 in G. 23615.]

8.9.2 ...

[Reg 8.9.2 am by reg 8 of GoN R305 in G. 3397; rep by GoN R959 in G. 23615.]

8.9.3.1 ...

[Reg 8.9.3.1 am by reg 8(b) of GoN R1352 in G. 11397, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

8.9.3.2 ...

[Reg 8.9.3.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

8.9.4 ...

[Reg 8.9.4 am by GoN R367 in G. 10621, GoN R2062 in G. 13473, GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R904 in G. 23583, GoN R1237 in G. 25404.]

8.9.5 ...

[Reg 8.9.5 am by GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

8.9.6 ...

[Reg 8.9.6 rep by GoN R959 in G. 23615.]

8.9.7 where coal pillars are being extracted, the ganger or miner shall not have charge of more than 12 working places or such lesser number of working places as the Principal Inspector of Mines may determine for the particular section of the mine and the said inspections shall include all accessible portions of the goaf edge of each working place;

[Reg 8.9.7 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

8.9.8 ...

[Reg 8.9.8 am by reg 8(f) of GoN R367 in G. 10621; rep by GoN R904 in G. 23583, GoN R1237 in G. 25404.]

8.9.9 ...

[Reg 8.9.9 subs by reg 8(g) of GoN R367 in G. 10621; am by reg 6(c) of GoN R2062 in G. 13473; rep by GoN R904 in G. 23583, GoN R1237 in G. 25404.]

8.9.10 ...

[Reg 8.9.10 subs by reg 6 of GoN R513 in G. 5488; am by reg 8(f) of GoN R367 in G. 10621, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583, GoN R1237 in G. 25404.]

8.10 ...

[Reg 8.10 am by GoN R303 in G. 3397, GoN R305 in G. 3397, GoN R2101 in G. 4498, GoN R367 in G. 10621, GoN R1352 in G. 11397, GoN R2062 in G. 13473, GoN R3083 in G. 13684, GoN R94 in G. 17725, GoN R904 in G. 23583, GoN R959 in G. 23615, GoN R1237 in G. 25404; rep by GoN 1278 in G. 29457.]

8.11 ...

[Reg 8.11 subs by reg 8(d) of GoN R1352 in G. 11397; rep by GoN 1278 in G. 29457.]

## **CHAPTER 9 EXPLOSIVES**

...

[Chapter 9 am by GoN R303 in G. 3397, GoN R305 in G. 3397, GoN R2101 in G. 4498, GoN R2102 in G. 4498, GoN R513 in G. 5488, GoN R537 in G. 6892, GoN R367 in G. 10621, GoN R1352 in G. 11397, GoN R1339 in G. 12542, GoN R2062 in G. 13473, GoN R3083 in G. 13684, GoN R94 in G. 17725, GoN R1325 in G. 20606, GoN R904 in G. 23583; rep by GoN 1278 in G. 29457.]

## **CHAPTER 10 VENTILATION, GASES AND DUST**

A. The following provisions shall apply to works and to the surface of every mine—

10.1.1 ...

[Reg 10.1.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.1.2 ...

[Reg 10.1.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.2.1 ...

[Reg 10.2.1 rep by GoN R904 in G. 23583.]

10.2.2 ...

[Reg 10.2.2 rep by GoN R904 in G. 23583.]

10.2.3 ...

[Reg 10.2.3 rep by GoN R904 in G. 23583.]

10.2.4 ...

[Reg 10.2.4 subs by reg 6(a) of GeN 160 in G. 13002; rep by GoN R904 in G. 23583.]

10.2.5 ...

[Reg 10.2.5 rep by GoN R904 in G. 23583.]

10.2.6 ...

[Reg 10.2.6 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.3.1 ...

[Reg 10.3.1 rep by GoN R904 in G. 23583.]

10.3.2 ...

[Reg 10.3.2 am by reg 10(a) of GoN R1352 in G. 11397; rep by GoN R904 in G. 2358.],

10.3.3 ...

[Reg 10.3.3 rep by GoN R904 in G. 23583.]

10.3.4 ...

[Reg 10.3.4 am by reg 10(b) of GoN R1352 in G. 11397; rep by GoN R904 in G. 23583.]

10.3.5 ...

[Reg 10.3.5 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.3.6 ...

[Reg 10.3.6 rep by GoN R904 in G. 23583.]

10.4 ...

[Reg 10.4 am by reg 6(b) of GeN 160 in G. 13002; rep by GoN R904 in G. 23583.]

10.5.1 ...

[Reg 10.5.1 rep by GoN R904 in G. 23583.]

10.5.2 ...



[Reg 10.5.2 subs by reg 10(a) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

B. The following provisions shall apply to the workings of mines—

10.6.1 ...

[Reg 10.6.1 rep by GoN R904 in G. 23583.]

10.6.2 ...

[Reg 10.6.2 am by reg 8(a) of GoN R1339 in G. 12542; rep by GoN R904 in G. 23583.]

10.6.3 ...

[Reg 10.6.3 am by reg 8(a) of GoN R1339 in G. 12542; rep by GoN R904 in G. 23583.]

10.6.4 ...

[Reg 10.6.4 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.6.5 ...

[Reg 10.6.5 am by reg 8(a) of GoN R1339 in G. 12542; rep by GoN R904 in G. 23583.]

10.6.6 ...

[Reg 10.6.6 am by reg 10(a) of GoN R367 in G. 10621, reg 8(a) of GoN R1339 in G. 12542, reg 8(a) of GoN R2062 in G. 13473, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.6.7 ...

[Reg 10.6.7 am by GoN R303 in G. 3397; rep by GoN R904 in G. 23583.]

10.6.8 ...

[Reg 10.6.8 subs by reg 10(b) of GoN R367 in G. 10621, reg 8(c) of GoN R1339 in G. 12542; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R788 in G. 23498.]

10.7 ...

[Reg 10.7 am by GoN R303 in G. 3397, reg 16 of GoN R305 in G. 3397, reg 10(c) of GoN R367 in G. 10621, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.8 ...

[Reg 10.8 am by GoN R303 in G. 3397, GoN R305 in G. 3397, GoN R2102 in G. 4498, GoN R1339 in G. 12542, GoN R2062 in G. 13473, GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.9.1.1 ...

[Reg 10.9.1.1 rep by GoN R904 in G. 23583.]

10.9.1.2 ...

[Reg 10.9.1 am by reg 10(c) of GoN R367 in G. 10621; regs 10.9.1.1 and 10.9.1.2 subs for reg 10.9.1 by reg 10(c) of GoN R3083 in G. 13684; reg 10.9.1.2 am by reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.9.2 ...

[Reg 10.9.2 am by reg 10(d) of GoN R367 in G. 10621; subs by reg 8(e) of GoN R1339 in G. 12542, reg 10(d) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.9.3 ...

[Reg 10.9.3 corrected by GoN R304 in G. 3397; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.9.4 ...

[Reg 10.9.4 subs by reg 18 of GoN R305 in G. 3397; corrected by GoN R2103 in G. 4498; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.9.5 ...

[Reg 10.9.5 rep by GoN R904 in G. 23583.]

10.9.6 ...

[Reg 10.9.6 am by reg 10(c) of GoN R367 in G. 10621, reg 26(a) and (c) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.10 ...

[Reg 10.10 am by reg 10(c) of GoN R367 in G. 10621; rep by GoN R904 in G. 23583.]

10.10.1 ...

[Reg 10.10.1 am by reg 19 of GoN R305 in G. 3397, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.10.2 ...

[Reg 10.10.2 am by reg 20 of GoN R305 in G. 3397, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.10.3 ...

[Reg 10.10.3 rep by GoN R904 in G. 23583.]

10.10.4 ...

[Reg 10.10.4 rep by GoN R904 in G. 23583.]

10.10.5 ...

[Reg 10.10.5 am by GoN R303 in G. 3397, reg 8(c) of GoN R2062 in G. 13473, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.10.6 ...

[Reg 10.10.6 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.11.1 In every coal mine there shall be in each ventilating district a return airway leading to the main return aircourse of the mine. Each return airway, including the main return aircourse, shall be kept fenced off from disused workings and maintained in a proper state of repair. Every such return airway shall be inspected at intervals not exceeding 14 days by a competent person, who is the holder of an appropriate permanent blasting certificate and has been appointed for the purpose in writing by the manager, and shall, in addition, be inspected by a shift boss or an official of more senior rank at intervals not exceeding three months. The results of the aforementioned inspections shall be entered without delay in a book to be kept for the purpose in an office on surface and such reports shall be countersigned by the manager within three days of entry.

[Reg 10.11.1 subs by reg 8 of GoN R513 in G. 5488; am by reg 10(c) of GoN R1352 in G. 11397.]

10.11.2 ...

[Reg 10.11.2 rep by GoN R904 in G. 23583.]

10.12 ...

[Reg 10.12 subs for reg 10.12.1 by reg 10(d) of GoN R1352 in G. 11397; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

10.12.2 ...

[Reg 10.12.2 rep by reg 10(e) of GoN R1352 in G. 11397.]

10.13 ...

[Reg 10.13 rep by GoN 911 in G. 29214.]

10.13.1 ...

[Reg 10.13.1 rep by GoN R1237 in G. 25404, GoN 911 in G. 29214.]

10.13.2 ...

[Reg 10.13.2 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN 911 in G. 29214.]

10.13.3 ...

[Reg 10.13.3 rep by GoN 911 in G. 29214.]

10.13.4 ...

[Reg 10.13.4 am by reg 6(c) of GeN 160 in G. 13002; rep by GoN 911 in G. 29214.]

10.14 ...

[Reg 10.14 rep by GoN 911 in G. 29214.]

10.14.1 ...

[Reg 10.14.1 am by reg 8(f) of GoN R1339 in G. 12542, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN 911 in G. 29214.]

10.14.2 ...

[Reg 10.14.2(d) am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN 911 in G. 29214.]

10.14.3 ...

[Reg 10.14.3 rep by GoN 911 in G. 29214.]

10.15 ...

[Reg 10.15 subs by reg 10(e) of GoN R367 in G. 10621, reg 8(g) of GoN R1339 in G. 12542; am by reg 8(a) of GoN R2062 in G. 13473; rep by GoN R905 in G. 23584.]

10.16 ...

[Reg 10.16 effectively rep by GoN R904 in G. 23583.]

10.16.1 ...

[Reg 10.16.1 rep by GoN R904 in G. 23583.]

10.16.2 ...

[Reg 10.16.2 rep by GoN R904 in G. 23583.]

10.16.3 ...

[Reg 10.16.3 rep by GoN R904 in G. 23583.]

10.16.4 ...

[Reg 10.16.4 subs by reg 8(h) of GoN R1339 in G. 12542; rep by GoN R904 in G. 23583.]

10.17 ...

[Reg 10.17 effectively rep by GoN R904 in G. 23583.]

10.17.1 ...

[Reg 10.17.1 rep by GoN R904 in G. 23583.]

10.17.2 ...

[Reg 10.17.2 rep by GoN R904 in G. 23583.]

10.17.3 ...

[Reg 10.17.3 am by reg 8(i) of GoN R1339 in G. 12542; rep by GoN R904 in G. 23583.]

10.17.4 ...

[Reg 10.17.4 am by reg 8(i) of GoN R1339 in G. 12542, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.18 ...

[Reg 10.18 am by reg 10(c) of GoN R367 in G. 10621, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

10.19.1 ...

[Reg 10.19.1 am by GoN R303 in G. 3397, GoN R2102 in G. 4498, reg 10(c) of GoN R367 in G. 10621, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.19.2 ...

[Reg 10.19.2 rep by GoN R904 in G. 23583.]

10.19.3 ...

[Reg 10.19.3 rep by GoN R904 in G. 23583.]

10.20 ...

[Reg 10.20 am by reg 10(c) of GoN R367 in G. 10621; reg 10.20 effectively rep by GoN R904 in G. 23583.]

10.20.1 ...

[Reg 10.20.1 am by reg 26(a) and (c) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.20.2 ...

[Reg 10.20.2 rep by GoN R904 in G. 23583.]

10.20.3 ...

[Reg 10.20.3 rep by GoN R904 in G. 23583.]

10.21 ...

[Reg 10.21 am by reg 10(c) of GoN R367 in G. 10621; reg 10.21 effectively rep by GoN R904 in G. 23583.]

10.21.1 ...

[Reg 10.21.1 rep by GoN R904 in G. 23583.]

10.21.2 ...

[Reg 10.21.2 rep by GoN R904 in G. 23583, GoN R904 in G. 23583.]

10.21.3 ...

[Reg 10.21.3 rep by GoN R904 in G. 23583.]

10.21.4 ...

[Reg 10.21.4(b) subs by reg 6 of GoN R2101 in G. 4498; am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.21.5 ...

[Reg 10.21.5 rep by GoN R904 in G. 23583.]

10.22 ...

[Reg 10.22 am by GoN R303 in G. 3397, GoN R305 in G. 3397, GoN R2101 in G. 4498, GoN R367 in G. 10621, GoN R2062 in G. 13473, GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

10.23 ...

[Reg 10.23 am by reg 10(c) of GoN R367 in G. 10621; subs by reg 10(f) of GoN R367 in G. 10621, reg 8(e) of GoN R2062 in G. 13473, reg 10(e) of GoN R3083 in G. 13684; rep by GoN R904 in G. 23583.]

10.24 ...

[Reg 10.24 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

10.24.1 ...

[Reg 10.24.1 am by GoN R303 in G. 3397; rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

10.24.2 ...

[Reg 10.24.2 rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

10.24.3 ...

[Reg 10.24.3 rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

10.24.4 ...

[Reg 10.24.4 am by GoN R303 in G. 3397, rep by GoN R905 in G. 23584,  
GoN R1237 in G. 25404.]

10.24.5 ...

[Reg 10.24.5 am by GoN R303 in G. 3397, reg 26(a) of GoN R3083 in G. 13684,  
reg 2(a) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584,  
GoN R1237 in G. 25404.]

10.24.6 ...

[Reg 10.24.6 am by GoN R303 in G. 3397, GoN R2102 in G. 4498, GoN R3083 in G. 13684,  
GoN R94 in G. 17725; rep by GoN R905 in G. 23584, GoN R1237 in G. 25404.]

10.24.7 ...

[Reg 10.24.7 rep by GoN R905 in G. 23584.]

10.24.8 ...

[Reg 10.24.8 rep by GoN R905 in G. 23584.]

10.24.9 ...

[Reg 10.24.9 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725;  
rep by GoN R905 in G. 23584.]

10.24.10 ...

[Reg 10.24.10 subs by reg 8 of GoN R513 in G. 5488; rep by GoN R905 in G. 23584.]

10.24.11 ...

[Reg 10.24.11 am by GoN R303 in G. 3397; rep by GoN R905 in G. 23584.]

10.25.1 No internal combustion engine other than a diesel engine shall be used underground in any mine.

10.25.2 No diesel engine shall be used underground—

(a) ...

[Reg 10.25.2(a) rep by GoN R904 in G. 23583; corrected by GoN R528 in G. 24734.]

(b) in any fiery mine or in any other mine in the workings of which there may be a risk of such diesel engine igniting gas or coal dust unless it is of a design and construction approved in writing by the Chief Inspector, and then only under such conditions and subject to such restrictions as he may specify.

[Reg 10.25.2(b) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

10.25.3 ...

[Reg 10.25.3 rep by GoN R904 in G. 23583.]

10.25.4

[Reg 10.25.4 am by GoN R2062 in G. 13473; rep by GoN R904 in G. 23583.]

10.25.5 ...

[Reg 10.25.5 am by GeN 160 in G. 13002, GoN R2062 in G. 13473; rep by GoN R904 in G. 23583.]

10.25.6 ...

[Reg 10.25.6 rep by reg 6(e) of GeN 160 in G. 13002.]

10.25.7 Diesel engine fuel shall be delivered underground in such a manner that no spillage can take place during delivery. When the fuel is piped underground the pipes shall be drained each time after use. The fuel shall be stored underground only in robust closed containers which do not leak. Except with the written permission of the Principal Inspector of Mines, the quantity of diesel fuel stored underground shall not exceed three days' estimated consumption.

[Reg 10.25.7 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

10.25.8 ...

[Reg 10.25.8 am by reg 22 of GoN R305 in G. 3397; rep by GoN R904 in G. 23583.]

10.25.9 Refuelling of diesel powered mobile units underground shall be carried out only at such properly established filling stations.

10.25.10 ...

[Reg 10.25.10 am by reg 23 of GoN R305 in G. 3397; subs by reg 6(f) of GeN 160 in G. 13002; rep by GoN R1237 in G. 25404.]

10.25.11 No unauthorised person shall enter any filling station and no person shall smoke or use an open light in the vicinity of any filling station.

10.25.12 In every mine other than a fiery mine suitable notices prohibiting persons from smoking or using any open light within the vicinity of a filling station shall be kept posted up and maintained at the entrance to the filling station.

10.25.13 ...

[Reg 10.25.13 rep by GoN R1237 in G. 25404.]

10.25.14 In any coal mine every mobile diesel powered unit underground shall, when not in use, be kept in a place approved by the manager.



## **CHAPTER 11**

### **PRECAUTIONS AGAINST FIRE**

- 11.1     ...  
[Reg 11.1 am by reg 11(a) of GoN R1352 in G. 11397; rep by GoN R1237 in G. 25404.]
- 11.2     ...  
[Reg 11.2 rep by GoN R1237 in G. 25404.]
- 11.3     ...  
[Reg 11.3 am by reg 25 of GoN R305 in G. 3397, reg 16 of GoN R1189 in G. 6489, reg 11(b) of GoN R1352 in G. 11397, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1237 in G. 25404.]
- 11.4     ...  
[Reg 11.4 am by GoN R305 in G. 3397, GeN 160 in G. 13002; rep by GoN R1237 in G. 25404.]
- 11.5     ...  
[Reg 11.5 am by GoN R305 in G. 3397; rep by GoN R1237 in G. 25404.]
- 11.6     ...  
[Reg 11.6 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1237 in G. 25404.]
- 11.7     ...  
[Reg 11.7 rep by GoN R1237 in G. 25404.]
- 11.8     ...  
[Reg 11.8 rep by GoN R1237 in G. 25404.]
- 11.9     ...  
[Reg 11.9 rep by GoN R1237 in G. 25404.]
- 11.10    ...  
[Reg 11.10 rep by GoN R1237 in G. 25404.]
- 11.11    At every mine and at every works any enclosure containing stationary electric motors, switchgear or other electrical apparatus, excluding telephones, bells and incandescent lamps, shall as far as possible be built and fitted with non-inflammable materials.  
[Reg 11.11 am by reg 29 of GoN R305 in G. 3397.]

## **CHAPTER 12**

### **MINE SURVEYING**

...

[Chapter 12 am by GoN R303 in G. 3397, corrected by GoN R2103 in G. 4498, GoN R304 in G. 3397, GoN R305 in G. 3397, GoN R2102 in G. 4498, GoN R2706 in G. 12858, GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

## **CHAPTER 13**

### **UNDERGROUND CONTRACT WORK**

...

[Chapter heading am by GoN R303 in G. 3397, GoN R2102 in G. 4498, GoN R537 in G. 6892, GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R1305 in G. 26963.]

## **CHAPTER 14**

### **STATISTICAL RETURNS**

- 14.1.1 The owner or manager of a mine or a works shall forward to the office of the Chief Inspector monthly, or at such greater intervals as the Chief Inspector may determine, complete and correct returns of the work accomplished, the persons employed and the results obtained and also the number of persons employed on Sundays, Christmas Day, Good Friday, Day of the Covenant and Republic Day.

[Reg 14.1.1 subs by reg 36 of GoN R305 in G. 3397; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 14.1.2 Every purchaser, seller or exporter of minerals, whether acting as agent or principal, shall forward monthly to the office of the Chief Inspector complete and correct returns for the preceding month of the purchases, sales and exports transacted by him during that month.

[Reg 14.1.2 am by reg 26(a) of GoN R3083 in G. 13684; reg 2(a) of GoN R94 in G. 17725.]

- 14.1.3 The returns must reach the office of the Chief Inspector not later than the 15th of the month following the period in respect of which it is made and must be written intelligibly in such form as may from time to time be prescribed for that purpose by the Chief Inspector.

[Reg 14.1.3 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 14.2 Persons who, in terms of the preceding regulation, have to make returns may obtain the necessary forms in advance at the office of the Chief Inspector, either by personal request or written application.

[Reg 14.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 14.3 The owner or manager of a mine or a works shall furnish the Chief Inspector yearly and in such form as may from time to time be prescribed by the Chief Inspector with returns respecting stores, employees, salaries, wages and machinery. Such owner or manager shall also provide the Chief Inspector at his request with such other returns and data as may be reasonably required. Each such return and other data shall be furnished on or before a date to be fixed by the Chief Inspector and specified on the prescribed forms or otherwise notified in writing.  
[Reg 14.3 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]
- 14.4 The owner, agent or local representative of every mining concern shall also file with the Chief Inspector immediately on publication a copy of each annual report, including the balance sheet and profit and loss account, issued by the directors of such concern, and also a copy of the liquidator's reports on liquidation.  
[Reg 14.4 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]
- 14.5 The Chief Inspector may require that the accuracy of the returns mentioned in this chapter be verified on oath.  
[Reg 14.5 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]
- 14.6 ...  
[Reg 14.6 ins by reg 25 of GoN R537 in G. 6892; rep by reg 13 of GoN R3083 in G. 13684.]

## **CHAPTER 15**

### **LIGHTING, SAFETY LAMPS AND CONTRABAND**

- 15.1 No person shall work or travel or cause or permit any other person to work or travel in any unilluminated part of a mine or works unless he or such other person carries a light.
- 15.2 ...  
[Reg 15.2 rep by GoN R904 in G. 23583.]
- 15.2.1 ...  
[Reg 15.2.1 rep by GoN R904 in G. 23583.]
- 15.2.2 ...  
[Reg 15.2.2 rep by GoN R904 in G. 23583.]
- 15.3.1 ...  
[Reg 15.3.1 rep by GoN R904 in G. 23583.]
- 15.3.2 At all times underground and at night on the surface the leading end of every moving train and every self-propelled mobile machine shall be provided with a light of sufficient intensity shining in the direction of travel to enable the driver to identify any dangerous conditions ahead and to stop

the train or machine timeously: Provided that the average light intensity in the direction of travel shall not be less than 10 lux at a distance of 20 metres.

[Reg 15.3.2 subs by reg 8(a) of GeN 160 in G. 13002.]

15.4.1 ...

[Reg 15.4.1 am by reg 9(a) of GoN R2062 in G. 13473; rep by GoN R905 in G. 23584.]

15.4.2 ...

[Reg 15.4.2 am by reg 9(a) of GoN R2062 in G. 13473; rep by GoN R905 in G. 23584.]

15.4.3 ...

[Reg 15.4 subs by reg 11 of GoN R367 in G. 10621; reg 15.4.3 am by reg 9(a) of GoN R2062 in G. 13473; rep by GoN R905 in G. 23584.]

15.5.1 ...

[Reg 15.5.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 26(h) of GoN R3083 in G. 13684, reg 2(a) and (b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

15.5.2 ...

[Reg 15.5.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 26(c) of GoN R3083 in G. 13684, reg 2(a) and (b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

15.5.3 ...

[Reg 15.5.3 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

15.6.1 ...

[Reg 15.6.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

15.6.2 ...

[Reg 15.6.2 rep by GoN R905 in G. 23584.]

15.7.1 ...

[Reg 15.7.1 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

15.7.2 ...

[Reg 15.7.2 rep by GoN R905 in G. 23584.]

15.7.3 ...

[Reg 15.7.3 rep by GoN R905 in G. 23584.]

15.8 ...

[Reg 15.8 effectively rep by GoN R905 in G. 23584.]

15.8.1 ...

[Reg 15.8.1 rep by GoN R905 in G. 23584.]

15.8.2 ...

[Reg 15.8.2 rep by GoN R905 in G. 23584.]

15.8.3 ...

[Reg 15.8.3 subs by reg 37 of GoN R305 in G. 3397; rep by GoN R905 in G. 23584.]

15.8.4 ...

[Reg 15.8.4 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

15.8.5 ...

[Reg 15.8.5 rep by GoN R905 in G. 23584.]

15.9.1 ...

[Reg 15.9.1 rep by GoN R905 in G. 23584.]

15.9.2 ...

[Reg 15.9.2 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

15.10 ...

[Reg 15.10 rep by GoN R905 in G. 23584.]

15.10.1 ...

[Reg 15.10.1 subs by reg 14 of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

15.10.2 ...

[Reg 15.10.2 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R905 in G. 23584.]

15.10.3 ...

[Reg 15.10.3 corrected by GoN R304 in G. 3397; am by reg 12(a) of GoN R1352 in G. 11397; rep by GoN R905 in G. 23584.]

15.10.4 ...

[Reg 15.10.4 rep by GoN R905 in G. 23584.]

15.10.5 ...

[Reg 15.10.5 rep by GoN R905 in G. 23584.]

15.10.6 ...

[Reg 15.10.6 rep by GoN R905 in G. 23584.]

15.10.7 ...

[Reg 15.10.7 am by GoN R303 in G. 3397; rep by GoN R905 in G. 23584.]

15.10.8 ...

[Reg 15.10.8 rep by GoN R905 in G. 23584.]

15.10.9 ...

[Reg 15.10.9 am by reg 12(a) of GoN R1352 in G. 11397; rep by GoN R905 in G. 23584.]

15.11 ...

[Expression preceding Reg 15.11.1 am by reg 9(b) of GoN R2062 in G. 13473; reg 15.11 rep by GoN R905 in G. 23584.]

15.11.1 ...

[Reg 15.11.1 am by reg 12(b) of GoN R1352 in G. 11397; rep by GoN R905 in G. 23584.]

15.11.2 ...

[Reg 15.11.2 subs by reg 9(c) of GoN R2062 in G. 13473; rep by GoN R905 in G. 23584.]

## **CHAPTER 16**

### **WINDING**

#### ***The Conveyance of Persons in Shafts and Winzes***

16.1 No person shall ride or cause or permit any person to ride in or on a conveyance operated by a winding plant, unless it is permitted by a prescribed permit or by regulation 16.94.

[Reg 16.1 subs by reg 9(a) of GeN 160 in G. 13002, reg 15(a) of GoN R3083 in G. 13684, reg 3(a) of GoN R2449 in G. 15362.]

16.2.1 Except as provided for in regulation 16.94, the manager of a mine shall not use a winding plant nor permit a winding plant to be used unless he is in possession of a prescribed permit issued by a Principal Inspector of Mines.

[Reg 16.2.1 am by reg 9(b) of GoN 160 in G. 13002; rep by Reg 15(b) of GoN R3083 in G. 13684; ins by Reg 3(b) of GoN R2449 in G. 15362; am by reg 2(b) of GoN R94 in G. 17725.]

16.2.2 Every application for the use of a winding plant shall be made to the Principal Inspector of Mines on the form obtainable from him.

[Reg 16.2.2 am by reg 17 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

16.2.3 The Principal Inspector of Mines may grant a permit to use such winding plant, subject to conditions as he may specify.

[Reg 16.2.3 am by reg 26(d) of GoN R3083 in G. 13684; reg 2(b) of GoN R94 in G. 17725.]

16.2.4 ...

[Reg 16.2.4 rep by reg 15(c) of GoN R3083 in G. 13684.]

16.2.5 The permit shall be kept at the mine office and a legible copy thereof shall be displayed in a suitable glazed frame in the engine room.

16.2.6 ...

[Reg 16.2.6 rep by reg 15(d) of GoN R3083 in G. 13684.]

16.2.7 The regional director may direct that any regulation contained in Chapter 17 of these Regulations shall apply to an automatic or semi-automatic winding plant by giving written notice to that effect to the manager, with specific reference to the regulation concerned, whereafter such regulation shall apply to such winding plant.

[Reg 16.2.7 ins by reg 5(a) of GoN R2703 in G. 7953; subs by reg 15(e) of GoN R3083 in G. 13684.]

16.3 The principal inspector of mines may carry out specific or periodic tests or inspections of any winding plant.

[Reg 16.3 am by reg 26(g) of GoN R3083 in G. 13684, reg 6 of GoN R814 in G. 13811, reg 2(c) of GoN R94 in G. 17725.]

### ***Design of Winding Engine***

16.4 In calculating the total mass of persons for the purpose of regulation 16.6 and regulations 16.30.2 to 16.40.2 inclusive, 75 kilograms must be allowed for each person.

[Reg 16.4 am by GoN R303 in G. 3397, GoN R1325 in G. 20606.]

16.5 The winding engine shall be such that—

16.5.1 when running at various speeds with light or heavy loads it can be readily slowed and stopped and after being stopped it can be restarted immediately in either direction, and

16.5.2 it can lift from the bottom to the top of the shaft or winze the maximum unbalanced load on one drum. This provision shall not apply where other means exist enabling persons employed below to reach the top of the shaft or winze.

16.6.1 Each winding drum or winding sheave shall be provided with an adequate brake or brakes which shall be kept in proper working order.

16.6.2 For drum type of winding engines where the rope is securely attached to the winding drum the brake or brakes, without the assistance of any counterbalancing effect of any load supported by the other drum, shall be capable of holding without slipping a load on the rope at the drum equivalent to the combined mass of—

- (a) the conveyance and its attachments.
- (b) the maximum permitted mass of mineral, or double the maximum permitted mass of persons, or the maximum permitted mass of material together with double the maximum permitted mass of persons when both material and persons are conveyed simultaneously, whichever is the greatest, and
- (c) the mass of rope between the sheave and the conveyance, when the conveyance is at a point in the shaft which produces the maximum static torque on the brakes.

[Reg 16.6.2 am by GoN R303 in G. 3397.]

16.6.3 For a friction drive or sheave type winding engine where the rope or ropes are not securely attached to the winding drum or winding sheave, the brake or brakes shall be capable of holding without slipping the maximum static out-of-balance load which occurs when one of the conveyances, or where a counterpoise is used the conveyance—

- (a) is loaded with the permitted mass of mineral; or
- (b) is loaded with double the permitted mass of persons; or
- (c) is loaded with double the permitted mass of material together with double the mass of the permitted number of persons when both material and persons are conveyed simultaneously; or
- (d) is removed from its bridle.

[Reg 16.6.3 am by GoN R303 in G. 3397; subs by reg 8 of GoN R2101 in G. 4498.]



- 16.6.4 Every winding drum shall have flanges or horns, and if conical or spiral, such other appliances to prevent the rope from slipping off or coiling unevenly.
- 16.6.5 Except for friction drive or sheave type of winding engines, there shall not be less than three turns of rope upon the drum when the cage, skip or other means of conveyance is at the lowest point in the shaft or winze from which hoisting is effected and the end of the rope where applicable shall be fastened securely round the arm or the shaft of the drum.
- 16.6.6 For friction drive or sheave type of winding engines where no part of the rope is securely attached to the winding drum or sheave, there shall be no dangerous slipping of the rope on such drum or sheave under any possible working conditions.
- 16.6.7 Every winding drum at the driver's right hand side shall have overlay rope; where only one drum is used it shall have overlay rope.
- 16.6.8 The reversing lever of every steam or air operated winding engine and the control lever of every electrically operated winding engine shall follow the overlay rope in the direction of movement.
- 16.6.9 Where a hand-operated brake lever is provided on any winding engine it shall be pulled towards the driver to apply the brakes.
- 16.6.10 The relief and throttle valve levers of every steam or air operated winding engine shall be in a central position.
- 16.6.11 The operating mechanism of the clutch of every winding drum shall be provided with a locking arrangement which shall be used to prevent inadvertent withdrawal of the clutch. If the clutch is not clearly visible from the driver's operating position, means shall be provided to indicate to the driver at all times the extent to which the clutch is engaged or disengaged.
- 16.6.12 It shall be impossible to unclutch any winding drum unless the brake or brakes of such drum are fully applied and it shall be impossible to release the brake or brakes of such drum until the clutch is fully engaged and securely locked.
- 16.6.13 All bolts and other fittings of winding drums, brakes and clutches shall be rendered secure by means of suitable locking devices.
- 16.7 In addition to any marks on the rope, every winding engine shall be provided with reliable depth indicators conveniently situated, which will at all times show clearly and accurately to the winding-engine driver at his operating position the position of the cage, skip or other means of conveyance and where a reduction in winding speed is necessary. The pointer of the dial indicator on the driver's right hand side shall move in a clockwise direction when lowering, and the pointer of a post and spiral indicator shall move up or down as the conveyance moves up or down. On every

winding engine where the rope is driven by friction, every single-drum winding engine and every winding engine having two drums permanently fixed on one shaft, only one indicator need be provided.

- 16.8 Where the length of wind below the uppermost landing place for persons exceeds 100 metres, adequate provision shall be made whereby the winding-engine driver is warned of the arrival of the ascending cage, skip or other means of conveyance at a point in the shaft, the distance of which from the uppermost landing place for persons is not less than the equivalent of three revolutions of the drum or sheave of the winding engine: Provided that in the case of a single drum winder a similar device shall be fitted to warn the winding engine driver of the approach of the descending conveyance to the lowest landing place for persons.

[Reg 16.8 am by GoN R303 in G. 3397, reg 9(d) of GeN 160 in G. 13002.]

- 16.9 Every winding engine shall be fitted with at least one effective automatic overwind prevention device, as well as an effective automatic overspeed prevention device.

[Reg 16.9 subs by reg 5(b) of GoN R2703 in G. 7953.]

- 16.9.2.1 The employer must install a device or combination of devices that detect slack rope on every winding plant in which the rope is attached to the drum operating in a vertical shaft, excluding a shaft in the course of being sunk.

[Reg 16.9.2.1 ins by reg 5 of GoN R802 in G. 18992.]

- 16.9.2.2 The device or combination of devices contemplated in regulation 16.9.2.1 must on detecting a slack rope condition either automatically halt all winding operations in the vertical shaft safely or warn all winding engine drivers operating in such shaft of the slack rope condition.

[Reg 16.9.2.2 ins by reg 5 of GoN R802 in G. 18992.]

- 16.9.2.3 The employer must establish an effective and safe procedure for rectifying any slack rope conditions.

[Reg 16.9.2.3 ins by reg 5 of GoN R802 in G. 18992.]

- 16.9.2.4 All winding operations in the vertical shaft must cease when a slack rope condition occurs, except such operations necessary for rectifying the slack rope condition authorised by the engineer or person appointed in terms of regulation 2.13.2.

[Reg 16.9.2.4 ins by reg 5 of GoN R802 in G. 18992.]

- 16.9.2.5 No winding operations may resume, except operations permissible in terms of regulation 16.9.2.4, until the slack rope condition has been rectified.

[Reg 16.9.2.3 ins by reg 5 of GoN R802 in G. 18992.]

- 16.10 Any winding engine with a permitted speed of over five metres per second shall be fitted with a speed indicator and a tachograph, which shall be used and maintained in efficient working order.

The speed indicator shall be so situated that the winding speed can be easily read at all times by the winding-engine driver from his operating position.

[Reg 16.10 am by GoN R303 in G. 3397.]

### ***Construction of Winding Plant Conveyances***

- 16.11 Every cage used for the regular conveyance of persons shall be of substantial construction and shall be provided with a proper roof or cover and doors. The cage shall be enclosed in such a manner as to prevent any portion of the body of any person therein from accidentally coming into contact with the timbering or other equipment in the shaft or winze or the sides of the shaft or winze. The doors shall be securely attached to the cage and so arranged that they cannot be opened outwards or accidentally. Provision shall be made for adequate ventilation through the cage.
- 16.12 Every skip or kibble, used for the regular conveyance of persons in a vertical or steeply inclined shaft or winze shall be provided with a substantial roof or cover that will safeguard the occupants.
- 16.13 Every conveyance used for examining, repairing or doing other work in a vertical or steeply inclined shaft or winze shall be provided with a substantial roof or cover and shall be sufficiently enclosed to protect any person from accidentally falling out.
- 16.14 Where the roof or cover of a cage, skip or any other means of conveyance is used as a platform for persons engaged in examining, repairing or doing other work in a vertical or steeply inclined shaft or winze, the persons so engaged shall be protected by a hood or cover immediately above them. Such hood or cover shall be removed as soon as this work is completed.

[Reg 16.14 am by reg 9(e) of GeN 160 in G. 13002.]

- 16.15 No trailer—
- (a) shall be used in a shaft or winze where persons are regularly conveyed;
  - (b) shall be attached to a conveyance when such conveyance is used for the transportation of persons, and
  - (c) shall be used for the regular transport of persons,

unless it is allowed by the permit referred to in section 33(1) of the Act: Provided that for the purpose of this regulation, “trailer” shall mean any conveyance operated by a winding engine and which is attached to but not forming an integral part of the permanent conveyance, and of which the lateral movement is restrained by means of guide shoes or wheels running in or on guides or tracks.

[Reg 16.15 am by reg 9(f) of GeN 160 in G. 13002; subs by reg 15(f) of GoN R3083 in G. 13684.]

### ***Connection to Winding Plant Conveyances***

- 16.16 No rope, bar, link, chain or other connection shall be used for winding purposes unless it is of good quality and manufacture, free from any visible defect and of adequate calculated strength.

[Reg 16.16 am by reg 5(c) of GoN R2703 in G. 7953.]

- 16.17 The connection between—

- (a) any winding rope and the cage, skip, bucket, kibble, other means of conveyance or counterpoise;
- (b) any balance rope or tail rope and the conveyance or counterpoise; and
- (c) any connecting rope and the conveyance and any trailer or other attached conveyance, shall be such that no accidental disconnection can take place.

[Reg 16.17 am by GoN R303 in G. 3397, reg 9(g) of GeN 160 in G. 13002.]

- 16.18 At intervals of not more than six months the connections between—

- (a) any winding rope and the conveyance or counterpoise,
- (b) the conveyance and any trailer or other attached conveyance, and
- (c) any balance rope or tail rope and the conveyance or counterpoise,

shall be annealed or given other proper heat treatment or shall be discarded and replaced. With connections of a class of steel approved by the Chief Inspector, the interval for heat treatment may be extended with the written permission of the Chief Inspector.

[Reg 16.18 am by GoN R303 in G. 3397, reg 9(g) of GeN 160 in G. 13002,  
reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 16.19 A proper record shall be kept of the heat treatment and working life of the connections referred to in regulation 16.18 and an engineer shall add to the record his report on the method and procedure followed in such treatment and his comments on the results. All such connections and their component parts shall be marked clearly for the purpose of identification.

[Reg 16.19 am by reg 9(h) of GeN 160 in G. 13002.]

### ***Winding Ropes***

16.20.1 Any winding rope must be manufactured by a manufacturer accredited in terms of ISO 9001: "Quality Systems - Model for quality assurance in design, development, production, installation and servicing."

16.20.2 The diameter and construction of the winding rope must be suited to the diameter of the sheaves and drums forming part of the winding plant.

[Reg 16.20 subs by GoN R1325 in G. 20606.]

16.21 A winding rope which has been joined or reinforced in any manner, may not be used as part of a winding plant without the written permission of the Principal Inspector of Mines.

[Reg 16.21 subs by reg 26 of GoN R537 in G. 6892; am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; subs by GoN R1325 in G. 20606.]

16.22 ...

[Reg 16.22 subs by reg 27 of GoN R537 in G. 6892; rep by GoN R1325 in G. 20606.]

16.23.1 Any winding rope, balance rope or guide rope which has previously been in use may not be re-used unless the breaking strength of a specimen cut from the end of such rope has been determined by a destructive test at an approved rope testing station to comply with these Regulations.

16.23.2 Any winding rope, balance rope or guide rope which has previously been in use may not be re-used unless the engineer is in possession of the documented history of the working life of the rope.

[Reg 16.23 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; subs by GoN R1325 in G. 20606.]

16.24 For every winding plant in use there must be in reserve and ready for use at all times a spare winding rope that complies with these Regulations. One such spare rope may be kept in reserve for more than one winding plant if that rope is suitable for use on such other winding plants.

[Reg 16.24 am by reg 17 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; subs by GoN R1325 in G. 20606.]

16.25 No winding rope, balance rope or guide rope may be installed unless the manager is in possession of a certificate not older than two years confirming that the breaking strength, as determined by a destructive test at an approved rope testing station, complies with these Regulations.

[Reg 16.25 am by GoN R303 in G. 3397; subs by GoN R1325 in G. 20606.]

16.26 ...

[Reg 16.26 am by GoN R303 in G. 3397, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R1325 in G. 20606.]

16.27.1 Any newly installed winding rope, balance rope or guide rope and the rope connections of any such rope, must be carefully examined by the engineer and may not be used for the raising or lowering of persons until the conveyance loaded with the maximum permitted mass has been run two complete test trips between the highest and lowest stopping places ordinarily in use.

16.27.2 The engineer, in addition to recording the results in terms of regulation 16.79, must record and sign the results of the examination in terms of regulation 16.27.1 immediately in the Driver's Log Book provided in terms of regulation 16.81.

[Reg 16.27 am by GoN R303 in G. 3397, GoN R2102 in G. 4498; subs by GoN R1325 in G. 20606.]

16.28.1 When any winding rope, balance rope or guide rope is installed, the Particulars specified in paragraphs (a) and (b) of the regulation 16.79.2 must be submitted to the Principal Inspector of Mines.

16.28.2 When any winding rope in use is replaced, the reasons for discard, the life in terms of winding cycles, the time in use and such other particulars regarding that winding rope as the Principal Inspector of Mines may require must be submitted to the Principal Inspector of Mines.

[Reg 16.28 am by reg 17 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; subs by GoN R1325 in G. 20606.]

16.29 ...

[Reg 16.29 am by reg 17 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1325 in G. 20606.]

16.30.1

- (i) **“approved rope testing station”** means a testing station approved by the Chief Inspector of Mines for the destructive testing of ropes used in a winding plant;
- (ii) **“attached load”** means everything suspended from or attached to the winding rope and includes the portion of any balance rope and one half of any tail carriage and one half of any sheave which contributes to load at the termination of the winding rope;
- (iii) **“attachments”** include everything suspended from or attached to the conveyance other than the winding rope and includes any balance rope;
- (iv) **“balance rope”** includes tail rope, balance rope or balance chain;
- (v) **“effective length of rope”** means the length of winding rope between the centre of sheave or drum in the headgear and the lowest working point of the conveyance;
- (vi) **“initial breaking strength”** means the breaking strength of the rope determined by the destructive testing of a sample immediately after the manufacture of the rope;

- (vii) “**nominal rope diameter**” means the rope diameter specified by the manufacturer;
- (viii) “**suspended load**” means the sum of the attached load and the mass of the effective length of rope;
- (ix) “**winding cycle**” means a full or partial return trip starting with a conveyance at the bank level and ending with the same conveyance returning to the bank level.

[Reg 16.30.1 subs by GoN R1325 in G. 20606.]

16.30.2 In determining, in accordance with the provisions of regulations 16.32.1 to 16.40.2 inclusive, the minimum allowable breaking strength of any rope used in a winding plant, the weight in Newtons of any mass carried by the rope must be obtained by multiplying this mass in kilograms by a factor of 9.81.

[Reg 16.30.2 am by GoN R1325 in G. 20606; regs 16.30.1 and 16.30.2 subs for reg 16.30 by GoN R303 in G. 3397.]

16.31 ...

[Reg 16.31 am by GoN R303 in G. 3397; rep by GoN R1325 in G. 20606.]

16.32.1 Where a conveyance is suspended by two or more winding ropes, such ropes must be of equal nominal rope diameter and approximate strength.

16.32.2 Arrangements must be made to equalise the tension in the ropes referred to in regulation 16.32.1.

16.32.3 In calculating rope selection factors for purposes of regulation 16.32.1, each winding rope must be assumed to carry an equal share of the attached load.

[Reg 16.32 am by GoN R303 in G. 3397; regs 16.32.1, 16.32.2 and 16.32.3 subs for reg 16.32 by GoN R1325 in G. 20606.]

16.33 The condition of a winding rope or balance rope must be assessed in accordance with the South African Bureau of Standards Code of Practice for the Condition Assessment of Steel Wire Ropes on Mine Winders, SABS 0293, as amended and the rope may not be used if the condition thus assessed at that point in the rope has reached the discard criteria.

[Reg 16.33 am by GoN R303 in G. 3397; subs by GoN R1325 in G. 20606.]

***Exemption from regulation 16.34.1 may be granted until SABS 0294 has been approved.***

16.34.1 Where a winding system operating in a vertical shaft and not using a balance rope is such that it allows for the periodic testing of the winding rope as required by regulation 16.41.1.1, the winding rope must have a breaking strength at installation of not less than—

- (a) eight times the attached load; and
- (b) four and a half times the suspended load.

16.34.2 Despite the provisions of regulations 16.34.1 and 16.37, where a winding system operating in a vertical shaft and not using a balance rope—

- (a) allows for the periodic testing of the winding rope as required by regulation 16.41.1.1; and
- (b) complies with the South African Bureau of Standards Code of Practice for Performance, Operation, Testing and Maintenance of Drum Winders relating to Rope Safety, SABS 0294, as amended,

the winding rope must have a breaking strength at installation of not less than  $25000/(4000 + L)$  times the suspended load where L is equal to the effective length of the winding rope in metres.

16.34.3 Where a winding plant operating in an incline shaft allows for the testing of the winding rope as required by regulation 16.41.1.1, the winding rope must have a breaking strength not less than—

- (a) ten times the incline component of the attached load; and
- (b) five times the incline component of the suspended load.

[Reg 16.34 am by GoN R303 in G. 3397; reg 16.34.1, 16.34.2 and 16.34.3 subs for regs 16.34, 16.34.1, 16.34.2, 16.34.3 and 16.34.4 by GoN R1325 in G. 20606.]

16.35 Where a winding plant using a balance rope or ropes does not allow for the periodic testing of the winding rope or ropes as required by regulation 16.41.1.1 the breaking strength of the rope must not be less than 8.1 times the suspended load, provided that this factor may be reduced by 0,00135 for every metre of the effective length of rope, but the factor must not be less than—

- (a) 6,75 where the conveyance is suspended by a single winding rope; or
- (b) 6,19 where the conveyance is suspended by 2 or 3 winding ropes; or
- (c) 5,62 where the conveyance is suspended by 4 or more winding ropes.

[Reg 16.35 am by GoN R303 in G. 3397; subs by GoN R1325 in G. 20606.]

16.35.1 ...

[Reg 16.35.1 am by GoN R303 in G. 3397; rep by GoN R1325 in G. 20606.]

16.35.2 ...

[Reg 16.35.2 am by GoN R303 in G. 3397; rep by GoN R1325 in G. 20606.]



16.36 ...

[Reg 16.36 am by GoN R303 in G. 3397; rep by GoN R1325 in G. 20606.]

16.36.1 ...

[Reg 16.36.1 am by GoN R303 in G. 3397; rep by GoN R1325 in G. 20606.]

16.36.2 ...

[Reg 16.36.2 am by GoN R303 in G. 3397; rep by GoN R1325 in G. 20606.]

16.37 Where a winding system operating in a vertical shaft and not using a balance rope allows for the periodic testing of the winding ropes as required by regulation 16.41.1.1 and each conveyance is suspended by two or more winding ropes in conjunction with a rope-tension compensating system which is constructed in such a way that the failure of one rope will not result in a momentary lowering of the force acting in any other rope, the breaking strength of the winding ropes at installation must be as specified in regulation 16.34.1(a) or 0,95 times that specified in regulation 16.34.1(b), whichever is the greater.

[Reg 16.37 am by GoN R303 in G. 3397; subs by GoN R1325 in G. 20606.]

16.38 ...

[Reg 16.38 am by GoN R303 in G. 3397; rep by GoN R1325 in G. 20606.]

16.39 A balance rope must not be used if its breaking strength at installation is less than five times the combined weight of the balance rope and one half of any tail carriage and sheave.

[Reg 16.39 am by GoN R303 in G. 3397; subs by GoN R1325 in G. 20606.]

16.40.1 The breaking strength of a guide rope used in a winding system must not be less than five times the combined weight of the rope and its tensioning weight.

16.40.2 Any rope which is used to raise or lower a stage in a shaft must have a breaking strength at installation of not less than 4,5 times the combined weight of the effective length of rope and its share of the attached load.

[Reg 16.40 am by GoN R303 in G. 3397; regs 16.40.1 and 16.40.2 subs for reg 16.40 by GoN R1325 in G. 20606.]

16.41.1.1 A sample of every winding rope in use must be cut from the end attached to the conveyance or counterweight at intervals not exceeding six months unless the winding system does not allow shortening of the winding rope. The length of the sample must be as specified by an approved rope testing station.

[Reg 16.41.1 am by GoN R303 in G. 3397, GoN R2102 in G. 4498, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; reg 16.41.1.1 subs for reg 16.41.1 by GoN R1325 in G. 20606.]

16.41.1.2 Where winding ropes are connected to a compensating sheave on the conveyance or counterweight, that part of the ropes that is in contact with the sheave must be cut off and the ropes re-terminated at intervals not exceeding three months.

[Reg 16.41.1.2 ins by GoN R1325 in G. 20606.]

16.41.2 The manager must send the sample of the rope cut off in terms of regulation 16.41.1.1 within two weeks to an approved rope testing station where the breaking strength and general condition must be determined.

[Reg 16.41.2 subs for reg 16.41.2.1 by GoN R1325 in G. 20606.]

16.41.3 The approved rope testing station must provide the manager with a certificate showing the results of the test performed in terms of regulation 16.41.2.

[Reg 16.41.3 subs for reg 16.41.2.2 by GoN R1325 in G. 20606.]

16.41.4 If the sample of the winding rope received at the approved rope testing station is in a condition not permitting a satisfactory test, the manager must upon request of the approved rope testing station provide a new sample.

[Reg 16.41.2 am by GoN R303 in G. 3397; regs 16.41.2.1, 16.41.2.2 and 16.41.2.3 subs for reg 16.41.2 by reg 15(g) of GoN R3083 in G. 13684, subs for reg 16.41.2.3 by GoN R1325 in G. 20606.]

### ***Winding Plant Signalling Arrangements***

16.42 Unless exempted, in writing, by the Principal Inspector of Mines—

[Reg 16.42 am by reg 28 of GoN R537 in G. 6892, reg 6 of GoN R814 in G. 13811, reg 2(b) of GoN R94 in G. 17725.]

16.42.1 every shaft in which winding is carried on, other than a shaft in the course of being sunk, shall be provided with some efficient signalling arrangement in respect of each winding plant for interchanging distinct and definite signals between—

(a) the winding-engine driver and the bank, and

(b) the winding-engine driver and every established point below the bank from which winding is carried on.

Where persons are regularly conveyed in such shaft and the signalling arrangements are operated by electricity, the provisions of regulation 16.43 shall be complied with;

16.42.2 every shaft where persons travel on or in the conveyance while carrying out any examination, repair or other work shall be provided with some efficient means, approved by the Principal Inspector of Mines, whereby persons doing such examination or work can signal effectively from any depth in the shaft to the winding-engine driver;

[Reg 16.42.2 am by reg 6 of GoN R814 in G. 13811, reg 2(b) of GoN R94 in G. 17725.]

16.42.3 every inched shaft in the course of being sunk shall be provided with some efficient signalling arrangement in respect of each winding plant for interchanging distinct and definite signals between—

- (a) the winding-engine driver and the bank, and
- (b) the winding-engine driver and every established intermediate landing station below the bank, and
- (c) the winding-engine driver and a point not more than 40 metres from the bottom of the shaft. When this point is more than 15 metres from the bottom of the shaft, some efficient signalling arrangements shall also be provided and used for signalling from the bottom of the shaft to this point; and

[Reg 16.42.3 am by GoN R303 in G. 3397.]

16.42.4 every vertical shaft in the course of being sunk shall be provided with two separate means for each winding plant whereby persons employed in the sinking process can signal effectively from the bottom of the shaft and from any depth in the shaft to the winding engine driver and there shall also be provided in respect of each winding plant an efficient signalling arrangement for interchanging distinct and definite signals between the winding-engine driver and the bank and between the winding-engine driver and every established intermediate landing station below the bank.

16.43 At every shaft and winze, other than a shaft or winze in the course of being sunk, where persons are regularly conveyed and where the signalling arrangements are operated by electricity, the following provisions, except as is provided for in regulation 16.44, shall be observed in respect of each winding plant used for the raising or lowering of persons—

16.43.1 There shall be provided and maintained in good working order two separate, independent, and efficient signalling arrangements, hereinafter referred to as the locked-bell system and the call-bell system, which shall be used for transmitting signals.

16.43.2 The locked-bell system shall be for the interchange of signals between—

- (a) the winding-engine driver and the bank, and
- (b) the winding-engine driver and every established point below the bank from which winding is normally carried on, but it shall not enable the banksman to signal on this system to anyone but the winding-engine driver.

16.43.3 The system shall be arranged so that the winding engine-driver can easily distinguish between signals received from the bank and signals received from below the bank.

16.43.4 The system shall further be arranged and maintained so as to prevent as far as possible signals being given by unauthorised persons. The signal operating mechanism at the bank and at all points below the bank shall be securely enclosed in a metal casing of substantial construction and shall be kept locked when not in actual use. The key shall be removable and when not required shall be removed and retained by the banksman, onsetter or other authorised person: Provided that other locking arrangements may be used if approved by the Principal Inspector of Mines.

[Reg 16.43.4 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

16.43.5 There shall be in use a device which automatically prevents the conveyance or conveyances being raised or lowered after the winding-engine driver has given a signal on the circuit of the locked-bell system provided for interchanging signals with the bank or on the circuit of the locked-bell system provided for interchanging signals with the established points below the bank from which winding is normally carried on, until he has received a signal on each of the circuits on which he gave a signal.

16.43.6 The call-bell system shall enable signals to be transmitted—

(a) to the winding-engine driver from the bank, and

(b) to the winding-engine driver from every established point below the bank from which winding is normally carried on,

and shall also enable signals to be interchanged between the bank and every established point below the bank from which winding is normally carried on, but it shall not enable the winding-engine driver to transmit signals on this system.

16.43.7 The signal operating mechanism of the call-bell system shall be accessible to any person to transmit the signals “10 followed by station signal” and “one long ring” referred to in regulation 16.45, but it shall not be used for any other purpose: Provided that the banksman or onsetter or any person duly authorised by the manager may use the system to indicate the station at which the conveyance is required and subject to the approval of the regional director to transmit special signals.

[Reg 16.43.7 am by reg 26(d) of GoN R3083 in G. 13684.]

16.43.8 The tone of the bells of the call-bell system shall be such as to be easily distinguishable from that of the bells of the locked-bell system.

16.43.9 In a shaft or winze where efficient telephonic intercommunication is provided between the bank and every established landing station for persons below the bank, it shall be necessary to provide only one call-bell system in respect of all the winding plants serving such shaft or winze.

16.44 Signalling arrangements other than those required by regulation 16.43 may be used with the written approval of the Principal Inspector of Mines.

[Reg 16.44 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

16.45 The following code of signals shall be used and strictly observed where a winding plant is operated at a shaft or winze where persons are regularly allowed to ride:

Knocks or rings—

1..... Raise when engine at rest.

1..... Stop when engine in motion.

2..... Lower.

3..... Persons about to travel.

3..... In reply: persons may continue to travel or may enter the cage or other conveyance for the purpose of travelling.

3..... From engine-driver when cage or other conveyance containing persons is brought to rest at a station: persons may leave the cage or other conveyance.

2 pause 2.. ..... From driver (clear signal requested): Driver wishes to start winding engine at his discretion.

2 pause 2.. ..... To driver (clear signal): Driver may start the winding engine at his discretion.

2 pause 2 pause 2..... From driver: persons must leave the conveyance.

2 pause 2 pause 2..... In reply: no persons in the conveyance.

2 pause 2 pause 2 pause 2..... Cancel or repeat signal.

3 pause 3 pause 3..... Person giving signal about to travel.

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3 pause 3 pause 3.....	In reply: acknowledgement by driver that person signalling is about to travel.
4 pause 1.....	Raise slowly.
4 pause 2.....	Lower slowly.
4 pause 4.....	To driver: mark signal.
4 pause 4.....	In reply: acknowledgement by driver of "mark" signal.
4 pause 4 pause 4.....	To driver: clutching signal.
4 pause 4 pause 4.....	In reply: clutching operations completed.
5 pause 5.....	To driver: explosives about to be placed in the conveyance.
5 pause 5.....	In reply: explosives may be placed in the conveyance.
5 pause 5.....	From driver when conveyance containing explosives is brought to rest at a station: explosives may be removed from the conveyance.
5 pause 5 pause 5.....	To driver: no explosives in the conveyance.
5 pause 5 pause 5.....	In reply: acknowledgement by driver that there are no explosives in the conveyance.
6 pause 6.....	To driver: winding compartments served by engine locked.
6 pause 6 .....	In reply: acknowledgement by driver of "compartments locked" signal.
6 pause 6 followed by station signal	To driver: winding compartments served by engine locked below station designated.
6 pause 6 followed by station signal	In reply: acknowledgement by driver of "compartments locked below station designated" signal.
6 pause 6 pause 6.....	To driver: compartments served by engine re-opened.
6 pause 6 pause 6.....	In reply: acknowledgement by driver of "compartments served by engine re-opened" signal.

6 pause 6 pause 6 pause 6.....	To driver: shaft examination and repairs about to take place.
6 pause 6 pause 6 pause 6.....	In reply: acknowledgement by driver "shaft examination and repairs" signal.
7 .....	To driver: persons about to have access to the conveyance for a purpose other than travelling or the loading or unloading of mineral in trucks or of material.
7 .....	In reply: person may have access to conveyance for a purpose other than travelling or the loading or unloading of mineral in trucks or of material.
7 pause 7.....	To driver: conveyance is clear of all persons who have had access to it for a purpose other than travelling or the loading or unloading of mineral in trucks or of material.
7 pause 7.....	In reply: acknowledgement by driver of "persons clear" signal.
15.....	Electrician testing bells.
15.....	In reply: acknowledgement of "bell testing" signal.
15 pause 2 pause 2.....	Electrician has completed test
10 followed by station signal	Accident to person: station where conveyance is required.
1 long ring.....	Accident to shaft: winding operations to be suspended immediately in all compartments of the shaft.

In any purely mechanical signalling system "continued ringing" shall replace "one long ring" for the "accident to shaft" signal.

When raising or lowering mineral in trucks or material:

Knocks or rings—

8.....	To driver: raising or lowering of mineral in trucks or of material about to commence.
8. . .....	In reply: acknowledgement by driver that raising or lowering of mineral in trucks or of material is about to commence.

- 1..... From driver: persons may have access to conveyance for the purpose of loading or unloading mineral in trucks or material.
- 8 pause 8..... To driver: raising or lowering of mineral in trucks or of material completed.
- 8 pause 8..... In reply: acknowledgement by driver that raising or lowering of mineral in trucks or of material is completed.

[Reg 16.45 corrected by reg 1 of GoN R2103 in G. 4498; am by reg 5(d) of GoN R2703 in G. 7953.]

- 16.46 In addition to the foregoing signals special signals may be used provided they have been approved in writing by the Principal Inspector of Mines.

[Reg 16.46 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 16.47 Any person acting in conflict with the code of signals referred to in regulation 16.45 or of any of the special signals used on a mine shall be guilty of an offence.

- 16.48 No person shall enter or have access to or be permitted to enter or have access to a cage or other conveyance for any purpose whatsoever or shall continue to travel in a cage or other conveyance or shall leave or be permitted to leave a cage or other conveyance unless and until the appropriate signals required in terms of regulation 16.45 have been exchanged, or, if a signal cannot be given on the bell system, some other appropriate and distinct signal has been received from the winding-engine driver.

- 16.49.1 The code of signals referred to in regulation 16.45 or an abridged form thereof approved by the Chief Inspector, as well as the special signals that may be in use on a mine, shall be displayed suitably in the form of distinctly legible notices in letters and figures not less than ten millimetres in height. The decision whether such notices are suitably displayed and distinctly legible shall rest with the Principal Inspector of Mines. Such notices shall be posted up in the winding engine room, at the bank and at all shaft or winze stations for the time being in use.

[Reg 16.49.1 am by GoN R303 in G. 3397, reg 26(a) of GoN R3083 in G. 13684, reg 26(d) of GoN R3083 in G. 13684, reg 2(a) and (b) of GoN R94 in G. 17725.]

- 16.49.2 Where only some of the signals in the aforementioned code are used it shall be necessary to display only that portion of the code which is used.

### ***Requirements in Shafts and Winzes***

- 16.50 Every vertical shaft and every vertical winze exceeding 30 metres in depth and used for winding purposes shall be provided with guides for skips, cages or other conveyances unless exempted in writing by the Principal Inspector of Mines.



- 16.51 At any place in a shaft where it is necessary for workmen to pass from one side to the other, provision shall be made for them to do so without entering or crossing a compartment in which winding is taking place; such passage shall be securely fenced off from moving parts of machinery and from any conveyance.
- 16.52 No person shall enter or cross a compartment of a shaft or of a headgear in which winding is taking place, except for the purpose of entering, leaving or having access to a cage, skip or other conveyance or for the purpose of conducting an examination, effecting repairs or doing other necessary work in such compartment.
- 16.53 No winding operations shall be carried on in a shaft or a headgear while persons are engaged in effecting repairs, conducting an examination or doing other work in such shaft or headgear, except—
- 16.53.1 where such winding operations are necessary for the purpose of effecting the repairs, conducting the examination or doing the other work, or
- 16.53.2 where the persons engaged in effecting the repairs, conducting the examination or doing the other work are adequately protected from the conveyances and other winding equipment used in such winding operations as well as from falling stones and falling material.
- 16.54 No person shall effect repairs, conduct an examination or do other work in a shaft or a headgear while winding operations are being carried on in such shaft or headgear, except—
- 16.54.1 where such person is adequately protected from the conveyances and from other winding equipment as well as from falling stones and falling material; or
- 16.54.2 where the winding operations are necessary for such person to effect the repairs, conduct the examination or to do the other work.
- 16.55 The person in immediate charge of any repairs or examination in a winding compartment of a shaft or winze or a headgear or in immediate charge of any work in connection with maintenance or installation of equipment in a winding compartment of a shaft or winze or a headgear shall warn the driver of the winding engine operating the conveyance in such compartment that such repairs, examination or work are about to be undertaken and where practicable shall enter forthwith, in the presence of the driver on duty at the time, such warning in the driver's logbook provided in terms of regulation 16.81. Such entry shall be countersigned by the driver and by any driver relieving him. Where it is not practicable for the person in charge of such repairs, examination or work to enter such warning, the entry shall be made by the driver on duty. Except where the provisions of regulations 16.53.2 and 16.54.1 are complied with, the driver of every other winding engine

operating conveyances in the shaft or winze or headgear shall be warned in a similar manner. The entry shall be cancelled by the person in immediate charge of such repairs, examination or work on completion thereof.

[Reg 16.55 am by reg 9(i) of GeN 160 in G. 13002.]

16.56 For the purpose of regulations 16.53, 16.54 and 16.55 work in a shaft shall not include work at the bottom of a shaft in the course of being sunk.

16.57 Where winding is carried on in a shaft or winze there shall be fitted above the bank spring keps or jack catches or some other effective contrivance to support any conveyance detached from the winding rope as a result of an overwind.

[Reg 16.57 am by reg 9(i) of GeN 160 in G. 13002.]

16.58 For a winding system in a vertical shaft or winze where the end of the winding rope is fastened to the drum of the winding engine, there shall be fitted detaching hooks to detach from the winding rope any conveyance overwound in the headgear and to support it. Such detaching hooks shall be additional to the devices required in terms of regulation 16.57: Provided that detaching hooks need not be fitted to the ropes of any winding plant used in a vertical shaft or winze in the course of being sunk.

[Reg 16.58 am by reg 5(e) of GoN R2703 in G. 7953, reg 9(i) of GeN 160 in G. 13002.]

16.59 For a winding system in a vertical shaft or winze where the winding rope is not fastened to the drum or sheave of the winding engine—

[Reg 16.59 am by reg 9(i) of GeN 160 in G. 13002.]

16.59.1 the over-run space in the headgear above the highest established stopping place shall be provided with rigid guides or other appliances arranged so that an overwound conveyance is retarded to minimise the risk of the conveyance coming into contact with the rope sheave or the buffer stops in the headgear, and

16.59.2 the over-run space at the bottom of the shaft below the lowest established stopping place shall be provided with rigid guides or other appliances arranged so that an overwound conveyance is retarded and arrested before it can come into contact with any fixed obstacle.

16.60 The headgear shall be carried sufficiently high to allow a clearance of at least 7,5 metres in which the conveyance can travel above or beyond the highest landing place for persons before it comes into contact with any fixed obstacle excluding any retarding appliance provided in terms of regulation 16.59.

[Reg 16.60 am by GoN R303 in G. 3397.]

16.61 The shaft or winze shall be carried sufficiently deep to allow an over-run space of at least 7,5 metres in which the conveyance can travel below or beyond the lowest landing place for persons before it comes into contact with any fixed obstacle excluding any retarding appliance provided in terms of regulation 16.59: Provided that such over-run space need not be provided in a shaft or winze in the course of being sunk or in a shaft or winze not exceeding 300 metres in depth or length below the bank where the winding system does not include the use of a balance rope or tail rope.

[Reg 16.61 am by GoN R303 in G. 3397, reg 9(i) of GeN 160 in G. 13002.]

16.61.1 The employer must, for every station level—

- (a) identify and clearly demarcate an area surrounding the shaft as the shaft station;
- (b) show the shaft station, including the location of all safety devices on the shaft station, on a plan; and
- (c) prominently and conspicuously display a copy of such plan at every shaft station.

[Reg 16.61.1 ins by reg 6 of GoN R802 in G. 18992.]

16.61.2.1 The employer must install a device or combination of devices that prevent inadvertent access of vehicles to the shaft as close as practicable to all entrances to the shaft.

[Reg 16.61.2.1 ins by Reg 6 of GoN R802 in G. 18992.]

16.61.2.2 The device or combination of devices referred to in 16.61.2.1 must be—

- (a) fail-safe or lockable;
- (b) equipped with mechanisms that prevent their unauthorised operation;
- (c) operated only under the direct supervision of a competent person appointed by the engineer or by the person appointed in terms of regulation 2.13.2; and
- (d) operated only if a conveyance is being used for the loading or unloading of persons, equipment, material, minerals or explosives at that entrance to the shaft.

[Reg 16.61.2.2 ins by reg 6 of GoN R802 in G. 18992.]

16.61.2.3 The employer must install a device or combination of devices which ensure, or the employer must ensure that the access configuration to the shaft station is such, that the speed of any self-propelled mobile machine or combination of vehicles entering the shaft station is limited to ensure that the kinetic energy of such machine or any combination of vehicles reaching any entrance to the shaft station is not greater than the energy absorption capacity of the device or combination of devices referred to in regulation 16.61.2.1.

[Reg 16.61.2.3 ins by Reg 6 of GoN R802 in G. 18992.]

16.61.2.4 The employer must ensure that procedures are in place, or that the device or combination of devices referred to in regulation 16.61.2.1 are equipped with mechanisms, that prevent the unauthorised operation or removal of such device or combination of devices.

[Reg 16.61.2.4 ins by reg 6 of GoN R802 in G. 18992.]

16.61.2.5 The engineer or person appointed in terms of regulation 2.13.2 must approve any access configuration for purposes of regulation 16.61.2.3 and must with regard to the device or combination of devices used for the purposes of regulations 16.61.2.1 and 16.61.2.3—

(a) approve the design of every such device; and

(b) ensure that every such device is installed and maintained in good working order.

[Reg 16.61.2.5 ins by reg 6 of GoN R802 in G. 18992.]

16.61.3 No self-propelled mobile machine may be parked in the shaft station.

[Reg 16.61.3 ins by reg 6 of GoN R802 in G. 18992.]

16.61.4 A self-propelled mobile machine may only enter the shaft station under power if it is under the direct supervision of a competent person appointed by the engineer or the person appointed in terms of regulation 2.13.2.

[Reg 16.61.4 ins by reg 6 of GoN R802 in G. 18992.]

### ***Loading of Winding Plant Conveyances***

16.62 No person shall travel in a conveyance operated by a winding engine if such conveyance is loaded or partially loaded with mineral, and no person shall travel in a conveyance operated by a winding engine that is being used simultaneously for the winding of mineral: Provided that, if authorised by the manager or mine overseer, persons engaged in sinking operations in a vertical shaft or winze may descend such shaft or winze in a conveyance operated by a winding engine that is being used simultaneously for the raising of mineral.

16.63 Subject to the provisions of regulations 16.64 and 16.65 no person shall travel—

(a) with material or explosives in a conveyance operated by a winding engine; and

(b) in a conveyance operated by a winding engine that is being used simultaneously for the winding of material or explosives.

[Reg 16.63 subs by reg 9(j) of GeN 160 in G. 13002, reg 2(a) of GoN R2223 in G. 14192.]

16.64 Subject to the provisions of regulation 16.65—

- (a) the manager, engineer or mine overseer may grant permission in writing for persons to travel with material if such material is not likely to endanger persons travelling in the conveyance; and
- (b) the manager shall—
  - (i) cause a list to be kept of the material which is regularly conveyed in the shaft or winze for which permission has been granted in terms of paragraph (a);
  - (ii) ensure that all persons authorised to give signals for the raising and lowering of persons are conversant with the material mentioned in the list; and
  - (iii) make a copy of the list readily available to all persons concerned.

[Reg 16.64 subs by reg 2(b) of GoN R2223 in G. 14192.]

16.65 The manager, engineer or mine overseer may authorise the following persons to travel in a shaft or winze with material or explosives prohibited in terms of regulation 16.63 if such travelling is necessary for the efficient carrying out of their duties—

[Reg 16.65 am by reg 9(k) of GeN 160 in G. 13002; subs by reg 2(c) of GoN R2223 in G. 14192.]

16.65.1 Onsetters and their gangs;

16.65.2 ...

[Reg 16.65.2 rep by reg 2(d) of GoN R2223 in G. 14192.]

16.65.3 persons engaged in sinking operations or in conducting an examination, effecting repairs or doing other work in the shaft or winze;

16.65.4 persons required to ensure the safe passage through the shaft or winze of material which cannot be conveyed inside a conveyance.

16.66 No person shall place explosives in or remove them from a conveyance operated by a winding engine except under the immediate supervision of the banksman or onsetter or a competent person authorised thereto by the manager or mine overseer.

[Reg 16.66 am by reg 13(a) of GoN R1352 in G. 11397.]

16.67 No person shall ride in any shaft or winze on the roof, top, side, bow, rim, bridle or frame of or in any position outside a conveyance operated by a winding engine, except that persons engaged in examining or repairing the shaft or winze or doing other work in the shaft or winze may ride on the roof of such conveyance or on a special platform if authorised to do so by the manager or mine

overseer and if riding on the roof of such conveyance or on the special platform is necessary for the efficient carrying out of such examination, repairs or other work.

- 16.68 Persons shall not, except when permitted in writing by the regional director, be raised or lowered in a conveyance attached to the normal conveyance.

[Reg 16.68 am by reg 9(l) of GeN 160 in G. 13002, reg 6 of GoN R814 in G. 13811.]

- 16.69 No bucket or other means of conveyance that can sway shall be allowed to leave the top or bottom of the shaft or winze unless the workman in charge thereof has steadied it or caused it to be steadied.

- 16.70 No bucket or other means of conveyance shall be filled with loose rock or ground above the level of the brim.

- 16.71 Tools or other material which project above the top of the cage, skip, bucket, kibble or other means of conveyance and which are raised or lowered in a shaft or winze shall be fastened securely and placed in such a manner that the operation of any arresting device is not affected.

[Reg 16.71 subs by reg 9(m) of GeN 160 in G. 13002.]

#### ***Trial Run of Winding Plant***

- 16.72 When winding in any compartment or compartments of a shaft, winze or headgear has been stopped for repairs or blasting operations or when it has been stopped for any other purpose for a period exceeding one hour in duration or when a conveyance has been changed, the winding engine serving such compartment or compartments shall not be used for the raising or lowering of persons until the cage, skip or other means of conveyance has been run at least one complete trip up and down such compartment or compartments: Provided that this regulation shall not apply to the use of the winding engine for the raising or lowering of persons conducting an examination or effecting repairs; and provided further that where such stoppage is confined to a portion of any compartment or compartments, the requirements of this regulation shall apply only to such portion.

#### ***Examination of Winding Plant and Shaft***

- 16.73 The manager or subordinate manager and an engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, shall, in respect of his area of responsibility, appoint in writing competent persons whose duty it shall be to examine carefully, to an extent to be clearly defined in their respective letters of appointment, at least once in each week, and at intervals not exceeding 10 days, the guides or rails and the shaft compartments and equipment, including the doors, gates and barriers and ancillary equipment at stations, landing platforms and loading boxes.

[Reg 16.73 subs by reg 5(f) of GoN R2703 in G. 7953; am by reg 13(b) of GoN R1352 in G. 11397, reg 9(n) of GeN 160 in G. 13002.]

- 16.74 An engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, shall appoint, in writing, some competent person or persons whose duty it shall be to examine carefully—

[Reg 16.74 am by reg 13(b) of GoN R1352 in G. 11397, reg 9(n) of GeN 160 in G. 13002.]

16.74.1 at least once in each day the winding ropes, the balance ropes or tail ropes, the connection of the winding ropes to the drums, the connections referred to in regulation 16.18, the conveyances and the main members by which they are suspended and any safety catches attached thereto, the pulley wheels and sheaves, the brakes, the depth indicators, the safety devices and all external parts of the winding equipment upon the proper working of which the safety of persons depends: Provided that these examinations will not be necessary on any day mentioned in section 9 (1) of the Act, if the winding plant makes less than 50 trips during any such day; and

16.74.2 at least once in each week the signalling arrangements and safety devices used in connection therewith.

- 16.75 An engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, shall examine carefully—

[Reg 16.75 am by reg 9(n) of GeN 160 in G. 13002.]

16.75.1 at least once in each week, and at intervals not exceeding 10 days, the overspeed and overwind prevention devices and the external parts of the winding engine.

[Reg 16.75.1 subs by reg 5(g) of GoN R2703 in G. 7953.]

16.75.2 at least once in each year the winding engine as to the condition of the internal mechanical parts and, as far as reasonably practicable, the internal electrical parts;

16.75.3 at least once in each calendar month at intervals not exceeding 45 days the structure of the winding rope and the balance rope or tail rope, with a view to ascertaining the amount of deterioration thereof. For the purpose of this examination the rope shall be cleaned at places selected by the person making the examination who shall note any reduction in the circumference of the rope, any variation in the length of lay of the rope, the superficial condition of the wires as to wear, corrosion, fractures and brittleness, and all other data necessary for ascertaining the amount, extent, and distribution of the deterioration of rope. If the examination discloses features such as undue or rapid wear or fractures of the wires, which, although not constituting sufficient reason for condemning the rope, call for more than usual attention, the examination required under this paragraph shall be made more frequently;

16.75.4 at least once in each calendar month at intervals not exceeding 45 days the connections between the winding rope and the drum, the connections referred to in regulation 16.18 and the sheave wheel or wheels; and

[Reg 16.75.4 subs by reg 5(h) of GoN R2703 in G. 7953.]

16.75.5 after every accident or occurrence referred to in regulation 25.6(a) and before winding operations are resumed, all portions of the winding equipment affected by such accident or occurrence on which the safety of persons depends.

16.75.6 by dynamically testing the automatic overwind and overspeed prevention devices at least once in every six months, at intervals not exceeding 200 days.

[Reg 16.75.6 ins by reg 5(i) of GoN R2703 in G. 7953.]

16.76 In the case of connections referred to in regulation 16.18 being of a class of steel approved by the Director-General, such connections and their component parts shall be dismantled, cleaned and then examined by an engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, at intervals not exceeding 12 months.

[Reg 16.76 am by reg 9(n) of GeN 160 in G. 13002, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

16.77 If on any examination required in terms of regulations 16.73, 16.74, 16.75 and 16.76 there is discovered any weakness or defect which may endanger the safety of persons, and such weakness or defect cannot be remedied immediately, the person making the discovery shall report such weakness or defect to the manager without delay. Until such weakness or defect is remedied the winding plant shall not be used except in so far as may be necessary to remedy such weakness or defect.

### ***Winding Plant Record and Log Books***

16.78 The manager shall provide for each winding plant a book to be termed the Machinery Record Book in which shall be entered—

16.78.1 the name of each person appointed under regulation 16.74 to perform the duties called for in the said regulation together with the particulars of the duties of each such person; and

16.78.2 a true report of every examination referred to in regulations 16.74, 16.75 and 16.76.

These reports shall be recorded and signed without delay by the person making such examination. The reports made by the persons appointed in terms of regulation 16.74 shall be scrutinised and countersigned by an engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, at least once in each week.

[Reg 16.78.2 am by reg 9(n) of GeN 160 in G. 13002.]



16.79 The manager shall provide a book to be termed the Rope Record Book in which shall be entered—

16.79.1 the name of each person appointed under regulation 16.27;

16.79.2 the following particulars for each winding rope, balance rope or tail rope used on each winding plant—

(a) Name of manufacturer.

Date of manufacture.

Coil number.

Length in metres.

Mass per metre in kilograms.

Diameter in millimetres, or

Width and thickness in millimetres.

Construction of rope—

type and length of lay;

number of strands;

class of heart;

type of lubricant.

Construction of strands—

number of wires;

diameter of wires in millimetres;

class of core;

class of steel in wires;

tensile strength of steel in megapascals.

breaking force in kilonewtons.

Rope test certificate number and place of test;

(b) Whether used for winding or balance purposes.

Name and type of shaft.

Name of compartment.

Winding plant certificate number.

Date put on;

(c) Dates of recapping, shortening or turning end for end.

Dates of testing and the breaking force obtained at each test.

Date taken off.

Dates of annealing or renewing connections; and

[Reg 16.79.2 am by GoN R303 in G. 3397.]

16.79.3 a true report of every test or examination referred to in regulation 16.27. These reports shall be recorded and signed without delay by the person making such test or examination.

16.80 The manager shall provide for each shaft or winze where persons are regularly conveyed a book to be termed the Shaft Log Book in which shall be entered—

16.80.1 the name of each person appointed under regulation 16.73 to perform the duties mentioned therein together with the particulars of the duties of each such person;

16.80.2 a true report of every examination referred to in regulation 16.73. This report shall be recorded and signed without delay by the person making such examination and the reports shall be scrutinised and countersigned by the manager or mine overseer and by, an engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, at least once each week.

[Reg 16.80.2 am by reg 9(n) of GeN 160 in G. 13002.]

16.81 The manager shall provide in respect of each winding engine, other than an automatic winding engine, a book to be termed the Drivers' Log Book, which shall be kept in the winding engine room and in which shall be recorded in duplicate—

[Reg 16.81 subs by reg 5(j) of GoN R2703 in G. 7953.]

16.81.1 a true report of the condition of the winding engine, including the brakes, clutches, reversing gear, depth indicators and all other fittings. Such report shall be made and signed by the winding-engine driver for each period of charge, the time and duration of which shall be recorded;

16.81.2 a true report of the condition of the signalling arrangements together with a record of any signals received by the winding-engine driver which he has questioned. Such report shall be made and signed by the winding-engine driver for each period of charge;

16.81.3 any special instructions involving the safety of persons given to the winding-engine driver and the time such instructions were given. Such entry shall be signed by the person giving the instruction and shall be counter-signed by the winding-engine driver; and

16.81.4 any warning given in terms of regulation 16.55 and the time such warning was given.

16.81.5 the contents of the conveyances and the last signals received by the winding engine driver when his relief is about to take over, and such report shall be countersigned by the winding engine driver by whom he is relieved.

[Reg 16.81.5 ins by reg 9(o) of GeN 160 in G. 13002.]

16.82 The entries in the Drivers' Log Book shall be scrutinised and countersigned daily by the persons appointed to carry out the duties specified in regulation 16.74. The duplicate shall be scrutinised and countersigned within 24 hours by an engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, and shall be retained by him for at least 30 days.

[Reg 16.82 am by reg 9(n) of GeN 160 in G. 13002.]

### ***Winding-engine Drivers***

16.83.1 Nobody shall drive or be caused or permitted to drive a winding plant, for which a prescribed permit has been issued unless he is a certificated winding-engine driver: Provided that a learner winding-engine driver may drive such a winding plant under the direct supervision of a certificated winding-engine driver while no persons are being conveyed.

[Reg 16.83 renumbered as 16.83.1 by reg 5(k) of GoN R2703 in G. 7953; reg 16.83.1 subs by reg 15(h) of GoN R3083 in G. 13684, reg 3(c) of GoN R2449 in G. 15362.]

16.83.2 For the purpose of regulation 16.83.1 'drive' shall mean any action requiring skill whereby the control levers of the winding plant are manipulated in such a way that the winding engine moves in direct relation to the movement of the levers.

[Reg 16.83.2 ins by reg 5(k) of GoN R2703 in G. 7953.]

16.84 Upon engaging a winding-engine driver, who is required in terms of regulation 16.83 to be the holder of a certificate, the manager shall record or cause to be recorded the number and type of such certificate: Provided that if such winding engine driver has not driven a winding engine for the preceding two years or more, the manager shall not engage him, but shall refer the matter to the Government Mining Engineer who may require such winding engine driver to undergo a medical examination and a proficiency examination.

[Reg 16.84 am by reg 9(p) of GeN 160 in G. 13002, reg 6 of GoN R814 in G. 13811.]

**[Editor Note:** Reg 6 of GoN R814 in G. 13811 substituted "regional director" for the expression "Inspector of Machinery" wherever it occurs. This amendment has, however, not been effected as the expression "Inspector of Machinery" does not appear in Reg 16.84.]

16.85 No person shall speak to or in any way distract the attention of the person operating a winding engine while it is in motion, except a person in authority, and then only in cases of necessity or emergency.

16.86 The driver of a winding engine—

16.86.1 shall not start his engine before he has received a distinct and proper signal to do so, unless he has been instructed in writing to do so by the manager, the mine overseer or an engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, or unless he has received the “clear signal” two pause two, or unless he has sole control of the cage, skip or other means of conveyance;

[Reg 16.86.1 am by reg 5(l) of GoN R2703 in G. 7953, reg 9(n) of GeN 160 in G. 13002.]

16.86.2 shall not act on any signal if he has been unable to do so within one minute after receiving it but shall request a repeat signal: Provided that after having received the “clear signal” he may move the winding engine at any time during his shift at his discretion, but when a period of more than five minutes has lapsed after he has received such “clear signal” he shall move the conveyance slowly;

[Reg 16.86.2 subs by reg 9(q) of GeN 160 in G. 13002.]

16.86.3 shall not run such engine at a greater speed than that fixed by the regional director;

[Reg 16.86.3 am by reg 6 of GoN R814 in G. 13811.]

16.86.4 shall, except in the case of emergency, avoid shocks in starting, in running and in stopping the said engine;

16.86.5 shall apply correctly every device and means at his disposal to prevent the conveyance over-running—

(a) the signalled destination; or

(b) when the destination is not signalled, the highest or lowest landing place when persons are being conveyed and the highest or lowest established stopping place when persons are not being conveyed, to an extent which may endanger the safety of persons or may cause damage to the winding equipment;

16.86.6 shall apply correctly every device and means at his disposal to prevent the conveyance moving in a direction opposite to that signalled;

16.86.7 shall not start his engine until the expiry of at least ten seconds after receiving a signal to raise or lower persons: Provided that this requirement shall not apply when blasting is about to take place in a shaft or winze in the course of being sunk;

16.86.8 shall not act in response to any signal on the call-bell system other than the one long ring referred to in regulation 16.45;

16.86.9 shall not unclutch a drum of his engine until he has assured himself immediately beforehand by testing the brake of the drum against sufficient power of the engine that the brake is in proper condition to hold the load suspended from the said drum;

16.86.10 shall when a drum of his engine is unclutched use the brake only for the purpose of maintaining such drum stationary. Lowering from an unclutched drum shall not be permitted;

16.86.11 shall when such engine is fitted with a friction clutch, test the holding power of the clutch after engaging the clutch and before releasing the brake of the corresponding drum. For a steam engine or an air engine the test shall be made against the full power of the engine, and for an electric engine against the normal starting current, while the brake of the other drum is kept off;

16.86.12 shall not perform clutching operations while persons are in either of the conveyances operated by his engine;

16.86.13 shall not, unless he intends operating the winding engine on single drum during shaft examination, shaft repairs or shaft sinking operations, give the signal that clutching operations are completed until he has engaged the clutch and has securely locked it and where applicable has carried out the test prescribed in regulation 16.86.11;

[Reg 16.86.13 subs by reg 9 of GoN R2101 in G. 4498; am by reg 5(m) of GoN R2703 in G. 7953.]

16.86.14 shall not work nor shall be caused or permitted to work a longer shift on the winding engine than 10 hours, except where permission has been obtained from the Principal Inspector of Mines and under such conditions as he may direct.

[Reg 16.86.14 am by reg 26(d) of GoN R3083 in G. 13684; reg 2(b) of GoN R94 in G. 17725.]

16.86.15 shall take all reasonable measures to safeguard persons being conveyed and to avoid any unnecessary delays in conveying such persons.

[Reg 16.86.15 ins by reg 5(n) of GoN R2703 in G. 7953.]

### ***Banksmen and Onsetters***

16.87 No unauthorised person shall give any signal other than an accident signal, or shall in any manner whatsoever interfere with the signalling arrangements provided for winding operations.

16.88 No person shall be permitted to carry out the duties of a banksman or onsetter unless he is the holder of an onsetter's certificate issued in accordance with these Regulations. Every appointment of a banksman or onsetter shall be made in writing by the manager.

16.89.1 No person, other than the banksman or onsetter on duty, shall give or shall be caused or permitted to give any signals for the raising or lowering of persons provided that—

- (a) when the banksman or onsetter is not available, a competent person to whom the manager has given written permission to do so may give signals for the conveyance of himself and of any person travelling with him,

[Reg 16.89.1(a) am by reg 13(c) of GoN R1352 in G. 11397.]

- (b) the ganger or miner in charge at the bottom of a shaft or winze in the course of being sunk or a person acting under his immediate supervision may give a signal to raise persons, and

- (c) any person duly authorised in writing by the manager or mine overseer may give signals for the conveyance of persons between the main mineral loading station at the bottom of a vertical or inclined shaft and the lowest landing station for persons.

The Principal Inspector of Mines shall be furnished on demand with a list of persons to whom permission has been granted in terms of paragraph (a) above and may order its revision.

[Reg 16.89.1 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

16.89.2 No person other than the banksman or onsetter on duty shall give any signal for the raising or lowering of material or mineral unless duly authorised by the manager or mine overseer. Where the winding plant is also used for the conveyance of persons, such authorisation shall be in writing.

16.90 No person shall be appointed as a banksman or onsetter, nor shall any person be authorised to give signals, unless such person has sufficient knowledge of the shaft operations and of the signals to be given in connection with such operations.

16.91 The banksman, onsetter or other person authorised to give signals for winding operations—

16.91.1 shall not, after the winding-engine driver has signalled that persons may enter the conveyance for the purpose of travelling or that persons in the conveyance may continue to travel, give any signal on the signalling arrangements for that winding compartment until all persons are properly placed in the conveyance and the doors or gates of the conveyance and the gates or barriers at the bank, station or landing platform are properly shut: Provided that when the banksman, onsetter or other person authorised to give signals intends to travel, such doors, gates or barriers as will prevent his entrance to the conveyance may be left open until he has given the signal to raise or lower and has entered the conveyance;

16.91.2 shall not, when the conveyance containing persons is brought to rest in the proper position at the bank, station or landing platform and the winding engine driver has signalled that persons may leave the conveyance, give any signal on the signalling

arrangements for that winding compartment until all persons who are to leave the conveyance are out and clear of it.

The provisions of regulations 16.91.1 and 16.91.2 shall not be taken to prohibit the giving of the “accident to shaft” signal;

16.91.3 shall ensure that the roof, cover or hood, required to be provided in terms of regulations 16.11 to 16.14 inclusive, is properly in position before persons are raised or lowered in or on such conveyance;

16.91.4 shall take all reasonable measures to prevent persons from having unauthorised access to the conveyance and to the winding compartments;

16.91.5 shall not allow any person to travel in a conveyance operated by a winding engine if such conveyance contains mineral and, except as is provided for in regulation 16.62, shall not allow any person to travel in a conveyance operated by a winding engine that is being used simultaneously for the winding of mineral;

16.91.6 shall not, except as is provided for in regulations 16.63 and 16.65, allow any person to travel in a conveyance operated by a winding engine that is being used simultaneously for the winding of material;

16.91.7 shall not, except as provided for in regulation 16.67, allow any person to ride on the roof, top, side, bow, rim, bridle or frame of or in any position outside a conveyance operated by a winding engine;

16.91.8 shall acquaint himself with the maximum number of persons authorised by the Principal Inspector of Mines to travel at any one time in the cage and on each deck of the cage, or in the skip or other means of conveyance and shall not allow such maximum to be exceeded;

[Reg 16.91.8 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

16.91.9 shall not allow any unauthorised person to give signals on the signalling arrangements used in connection with winding operations;

16.91.10 shall not give the “clear signal” 2 pause 2 or any signal to raise or lower the conveyance unless all persons at the bank, station, landing platform, loading box or other place where he is in charge, are in a position in which they will not be endangered by the movement of such conveyance or any other conveyance operated by the same winding engine;

16.91.11 shall not give a signal to clutch unless all persons are out of and clear of the conveyance or conveyances operated by the winding engine;

16.91.12 shall not cause or permit any person to enter or have access to the conveyance or conveyances until he has received a signal from the winding-engine driver that clutching operations are completed; and

16.91.13 shall take all reasonable measures to safeguard against accident all persons at the place where he is in charge, whether such persons are under his direct supervision or not.

### ***Notices Required at Winding Plants***

16.92 Where a winding plant is used the following shall be kept posted up—

16.92.1 At each winding engine—

- (a) a copy of the permit issued in terms of section 33 (1) of the Act; and  
[Reg 16.92.1(a) subs by reg 15(i) of GoN R3083 in G. 13684.]
- (b) the code of signals and any special signals.

16.92.2 At each bank, station or landing platform—

- (a) a notice showing clearly the maximum number of persons permitted to ride in each conveyance, or a notice prohibiting the conveyance of persons where it is not allowed in terms of the permit issued under section 33(1) of the Act; and  
[Reg 16.92.2(a) subs by reg 15(j) of GoN R3083 in G. 13684.]
- (b) the code of signals and any special signals.

### ***Requirements at Shafts Being Sunk***

16.93 The provisions of regulations 16.8, 16.9, 16.24, 16.57, 16.60 and 16.72 shall not apply to a platform winder used at any shaft or winze in the course of being sunk but, in addition to the already existing regulations, the following provisions shall apply to any winding plant used at any shaft in the course of being sunk—

[Reg 16.93 subs by reg 5(o) of GoN R2703 in G. 7953.]

16.93.1 The winding-engine driver shall control the speed of the winding engine in such manner as to ensure that when any bucket or other means of conveyance is approaching or passing through the stage, or the covering provided in accordance with the requirements of regulation 16.93.4, it does so slowly and safely and that the crosshead is picked up or released, as the case may be, without shock.



16.93.2 The bucket or other means of conveyance shall not be lowered directly to the bottom of the shaft if men are there present but shall be stopped by the winding-engine driver at least five metres above the bottom and shall not be lowered further until the signal has been given by one of the sinkers thereat.

[Reg 16.93.2 am by GoN R303 in G. 3397.]

16.93.3.1 In a vertical shaft where sets are used to support the guides, guides for conveyances shall extend down to the lowest set which shall not be more than 15 metres from the bottom, and when winding is being done to the bottom the crosshead shall travel to the lowest set but one. In a vertical shaft where the guides are not supported by sets, the guides for conveyances shall extend down to 30 metres or less from the bottom, and when winding is being done to the bottom the crosshead shall travel to as near the end of the guides as is practicable.

[Reg 16.93.3 am by GoN R303 in G. 3397; reg 16.93.3 renumbered as 16.93.3.1 by reg 5(p) of GoN R2703 in G. 7953.]

16.93.3.2 Every vertical shaft or winze where a crosshead is used to guide the bucket or other means of conveyance, shall be equipped with—

- (a) an effective device so arranged as to prevent the bucket or other means of conveyance from being lowered below the shaft bank if it is unaccompanied by the crosshead; and
- (b) an effective device which will prevent the bucket or other means of conveyance and the crosshead from separating unintentionally anywhere in the shaft or winze, or which will automatically warn the winding engine driver should such separation take place.

[Reg 16.93.3.2 ins by reg 5(p) of GoN R2703 in G. 7953.]

16.93.4 No person shall work or be caused or permitted to work at the bottom of the shaft unless protected by an adequate covering extending over the whole area of such shaft, sufficient space only being left therein for the passage of any bucket, skip or other means of conveyance. In a vertical shaft such covering shall be situated not more than 25 metres from the bottom. In an inclined shaft such covering shall be situated not more than 30 metres from the bottom.

[Reg 16.93.4 am by GoN R303 in G. 3397.]

16.93.4.1 In a shaft or winze being sunk or equipped, clutching may be performed with a sinking platform winder with such persons on the sinking platform necessary to ensure that the operations are carried out safely.

[Reg 16.93.4.1 ins by reg 9(r) of GeN 160 in G. 13002.]

16.93.5 No person shall enter the conveyance at the bottom of the shaft until such conveyance has been raised and lowered or until some other distinct signal has been received from the winding-engine driver.

- 16.93.6 The person in charge of blasting operations shall notify the winding-engine driver by a special signal, namely five knocks or rings, when blasting is about to take place, and except in the case of firing by electricity, the driver shall reply by raising and lowering the conveyance approximately two metres.

[Reg 16.93.6 am by GoN R303 in G. 3397.]

### ***Small Winding Plants***

- 16.94 The prescribed permit shall not be required for a winding plant that is driven by an engine or motor developing not more than 250 kilowatts, provided that such winding plant—

- (a) is not used for the raising or lowering of persons other than persons engaged in repairing or examining a shaft; and
- (b) does not operate in any portion of a shaft or winze in any manner likely to interfere with the conveyance operated in that shaft served by a winding plant for which a prescribed permit has been granted.

[Reg 16.94 am by GoN R303 in G. 3397; rep by reg 15(k) of GoN R3083 in G. 13684;  
ins by reg 3(d) of GoN R2449 in G. 15362.]

- 16.94.1 ...

[Reg 16.94.1 subs by reg 10 of GoN R2101 in G. 4498; rep by reg 15(k) of GoN R3083 in G. 13684.]

- 16.94.2 ...

[Regulation 16.94.2 rep by reg 15(k) of GoN R3083 in G. 13684.]

- 16.95.1 A winding plant, referred to in regulation 16.94, shall not be subject to the provisions of regulations 16.5.1, 16.5.2, 16.7, 16.9 to 16.15 inclusive, 16.18, 16.19, 16.24 to 16.29 inclusive, 16.41.1, 16.41.2, 16.49.1, 16.58 to 16.61 inclusive, 16.74, 16.75 and 16.81: Provided that the manager, or subordinate manager appointed in terms of regulation 2.6.1 shall appoint in writing any competent person to carry out the duties and examinations prescribed in regulation 16.74 and provided further that the engineer, or person appointed in terms of regulation 2.13.2 shall appoint in writing any competent person to examine at least once each week the item specified in regulation 16.74.1.

[Reg 16.95.1 subs by reg 3(e) of GoN R2449 in G. 15362.]

- 16.95.2 Notwithstanding the provisions of regulations 16.78 and 16.79 a record book or card index system may be provided in place of the machinery record book.

[Reg 16.95 am by reg 13(d) of GoN R1352 in G. 11397, reg 9(n) of GeN 160 in G. 13002;  
regs 16.95.1 and 16.95.2 subs for reg 16.95 by reg 15(l) of GoN R3083 in G. 13684.]

- 16.95.3 Notwithstanding the provisions of regulation 16.95.1, a winding rope may not be used for a winding plant contemplated in regulation 16.94 unless—

- (a) its breaking strength, determined by a test on a representative sample as prescribed in regulation 16.25, is at least 10 times the attached load; and
- (b) that part of the winding rope attached to the conveyance or counterweight is cut off and re-terminated at intervals not exceeding six months.

[Reg 16.95.3 ins by GoN R1325 in G. 20606.]

16.96 The engineer, or person appointed in terms of regulation 2.13.2 shall satisfy himself that any person who is not a certificated winding engine driver, and who shall drive a winding plant not permitted for the conveyance of persons, is competent to do so.

[Reg 16.96 am by reg 9(n) of GeN 160 in G. 13002; subs by reg 15(m) of GoN R3083 in G. 13684.]

16.97 ...

[Reg 16.97 am by GoN R303 in G. 3397; rep by reg 15(n) of GoN R3083 in G. 13684.]

### ***Lifting Machine and Lifting Tackle***

16.98 ...

[Reg 16.98 rep by GoN R1225 in G. 28333.]

16.98.1 ...

[Reg 16.98.1 am by reg 5(c) of GoN R2703 in G. 7953; rep by GoN R1225 in G. 28333.]

16.98.2 ...

[Reg 16.98.2 rep by GoN R1225 in G. 28333.]

16.98.3 ...

[Reg 16.98.3 rep by GoN R1225 in G. 28333.]

16.98.4 ...

[Reg 16.98.4 rep by GoN R1225 in G. 28333.]

16.98.5 ...

[Reg 16.98.5 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R1225 in G. 28333.]

16.99 ...

[Reg 16.99 rep by GoN R1225 in G. 28333.]

16.100 ...

[Reg 16.100 rep by GoN R1225 in G. 28333.]

16.101 ...

[Reg 16.101 rep by GoN R1225 in G. 28333.]

16.102 ...

[Reg 16.102 rep by GoN R1225 in G. 28333.]

16.103 ...

[Reg 16.103 rep by GoN R1225 in G. 28333.]

16.103.1 ...

[Reg 16.103.1 rep by GoN R1225 in G. 28333.]

16.103.2 ...

[Reg 16.103.2 rep by GoN R1225 in G. 28333.]

16.104 ...

[Reg 16.104 subs by reg 9(s) of GeN 160 in G. 13002; rep by GoN R1225 in G. 28333.]

### ***Chairlifts***

16.105 No chairlift installation shall be used for the conveyance of persons unless it is permitted by a prescribed permit for such installation.

[Reg 16.105 ins by reg 3 of GoN R1885 in G. 7219; rep by reg 15(o) of GoN R3083 in G. 13684;  
ins by reg 3(f) of GoN R2449 in G. 15362.]

16.106 No chairlift shall be installed in any portion of a mine or works where winding plants or moving machinery operates unless the persons using and operating the chairlift are adequately protected from the conveyances, other winding equipment or moving machinery or unless it is so arranged that simultaneous operation of the chairlift and the winding plant or other machinery is impossible.

[Reg 16.106 ins by reg 3 of GoN R1885 in G. 7219.]

16.107 The manager of a mine or works who intends to install and use or modify a chairlift after inurement of this subregulation shall timeously apply in writing to the Principal Inspector of Mines for permission to do so before such installation or modification is commenced.

[Reg 16.107 ins by reg 3 of GoN R1885 in G. 7219; am by reg 26(d) of GoN R3083 in G. 13684,  
reg 2(b) of GoN R94 in G. 17725.]

16.108 Each application for permission to install, modify and use a chairlift shall be accompanied by—

(a) dimensioned drawings in plan, elevation and section to the scale of at least 1 in 100;

(b) the manufacturer's or supplier's specifications of the proposed installation; and

(c) full particulars of all ropes and chains intended for use in the installation.

[Reg 16.108 ins by reg 3 of GoN R1885 in G. 7219.]

16.109 ...

[Reg 16.109 ins by Reg 3 of GoN R1885 in G. 7219; rep by Reg 15(p) of GoN R3083 in G. 13684.]

16.110 In addition to the requirements of these Regulations the Principal Inspector of Mines may grant permission to use a chairlift subject to such conditions as he may specify.

[Reg 16.110 ins by reg 3 of GoN R1885 in G. 7219; am by reg 6 of GoN R814 in G. 13811, reg 2(b) of GoN R94 in G. 17725.]

16.110.1 ...

[Reg 16.110.1 ins by reg 3 of GoN R1885 in G. 7219; rep by reg 15(q) of GoN R3083 in G. 13684.]

16.111 No chairlift shall be used unless—

[Reg 16.111 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.1 it is of good construction, sound material, adequate calculated strength and free from any patent defect;

[Reg 16.111.1 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.2 it is so used that the safety of persons is not endangered;

[Reg 16.111.2 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.3 the axis of its line of operation, in plan, between stations, is a straight line;

[Reg 16.111.3 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.4 the slope of the loaded hauling rope or traction chain is less than 45 degrees;

[Reg 16.111.4 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.5 the distance between the centre lines of two passing chairs or carriers is 900 mm or more and the distance from the centre line of a chair or carrier to a handrail or handrail support or to the sidewall is 500 mm or more along the entire operating length of the chairlift: Provided that at all landing and boarding sites the clearance from the centre line of the chair to the outside is at least 1,5 metres;

[Reg 16.111.5 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.6 the vertical clearance between the underside of a chair loaded with a passenger and the terrain below it, in underground installations, is not more than 1,5 metres or less than 0,3 metres;

[Reg 16.111.6 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.7 the minimum spacing in metres between any two consecutive carriers or chairs is equal to or greater than four times the velocity in metres per second for single-seat carriers or five times the velocity in meters per second for two-seat carriers where passengers board and leave simultaneously, or seven times the velocity in metres per second for two-seat carriers where passengers board and leave one after the other;

[Reg 16.111.7 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.8 the gradient at boarding and landing sites is not more than six degrees and the length of both boarding and landing sites is 6 metres if the installation is designed to convey less than 500 persons per hour and 8 metres if the installation is designed to convey 500 or more persons per hour or equal to the minimum spacing of carriers called for in regulation 16.111.7, whichever is the greater;

[Reg 16.111.8 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.9 the speed of operation does not exceed 1,5 metres per second for a fixed grip system and does not exceed 3 metres per second for a detachable grip system;

[Reg 16.111.9 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.10 all components which, whilst in motion, may be a source of danger are out of reach of a passenger when seated normally on the chair;

[Reg 16.111.10 ins by reg 3 of GoN R1885 in G. 7219.]

16.111.11 the type of carriers used are of a design and construction approved by the Principal Inspector of Mines and are either—

- (a) chairs with one seat equipped with a footrest;
- (b) chairs with two seats, providing a seating width of not less than 0,5 metre per person, and equipped with suitable footrests;
- (c) special, easily detachable receptacles attached to the chair or containers to permit the transport of material; or
- (d) special stretcher carriers used for the transportation of stretcher cases.

[Reg 16.111.11 ins by Reg 3 of GoN R1885 in G. 7219; am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

16.112 Any rope used on a chairlift shall be made of steel wire and the bending stiffness of the rope shall be suited to the diameter of the sheaves.

[Reg 16.112 ins by reg 3 of GoN R1885 in G. 7219.]

16.112.1 Any chain used as a traction chain on a chairlift shall be manufactured from a class of steel approved by the Chief Inspector.

[Reg 16.112.1 ins by reg 3 of GoN R1885 in G. 7219; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

16.112.2 No rope or chain shall be used on a chairlift if the calculated breaking force at any point is less than nine-tenths of the breaking force of the rope or chain when it was new.

[Reg 16.112.2 ins by reg 3 of GoN R1885 in G. 7219.]

16.112.3 Where a traction chain or rope is used on a chairlift with the carriers running in or on a rope or rail circuit, a safety rope or ropes clamped to each carrier shall be provided to prevent runback in the event of the traction chain or rope breaking.

[Reg 16.112.3 ins by reg 3 of GoN R1885 in G. 7219.]

16.112.4 Any rope or chain forming part of a chairlift installation shall have a factor of safety of at least six, calculated on its static load.

[Reg 16.112.4 ins by reg 3 of GoN R1885 in G. 7219.]

16.112.5 In calculating the total mass of persons for the purpose of regulation 16.112.4, 70 kilograms shall be allowed for each person.

[Reg 16.112.5 ins by reg 3 of GoN R1885 in G. 7219.]

16.112.6 Splices in ropes forming part of a chairlift installation shall be made by experienced persons and the length of such splice shall not be less than 1 200 times the rope diameter. Whenever clamps are used on ropes the clamps used shall be sufficient in number to ensure an efficient joint.

[Reg 16.112.6 ins by reg 3 of GoN R1885 in G. 7219.]

16.112.7 Except with the written permission of the Principal Inspector of Mines, not more than two splices shall be allowed along a closed loop formed by a carrying-hauling rope. Where more than one splice is made the clear distance between successive splices shall be at least 3 000 times the diameter of the rope.

[Reg 16.112.7 ins by reg 3 of GoN R1885 in G. 7219; am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

16.113 The force exerted by a carrying-hauling rope on each supporting roller shall be positive when the system is operating unloaded.

[Reg 16.113 ins by reg 3 of GoN R1885 in G. 7219.]

16.114 The carrier of a chairlift installation shall be free to incline itself in the direction of travel with respect to the vertical by an amount equal to the inclination of the installation. Swinging shall be restricted to within practical limits.

[Reg 16.114 ins by reg 3 of GoN R1885 in G. 7219.]

16.115 The passage of the carriers around the sheaves shall not be a source of danger to passengers who have been unable to alight.

[Reg 16.115 ins by reg 3 of GoN R1885 in G. 7219.]

16.116 The driving motor of a chairlift installation shall be—

[Reg 16.116 ins by reg 3 of GoN R1885 in G. 7219.]

16.116.1 of adequate power to ensure starting the chairlift under the most unfavourable conditions;

[Reg 16.116.1 ins by reg 3 of GoN R1885 in G. 7219.]

16.116.2 stopped automatically when any brake is applied or if any safety device is operated;

[Reg 16.116.2 ins by reg 3 of GoN R1885 in G. 7219.]

16.116.3 provided with a reverse phase relay or other equivalent protection to prevent the reversal of the driving motor through an inadvertent reversal of the phases if the motor is supplied with polyphase alternating current.

[Reg 16.116.3 ins by reg 3 of GoN R1885 in G. 7219.]

16.117.1 Every chairlift installation shall be equipped with two independent brakes, a main brake and a backup brake, so designed that either brake is capable of holding, without slipping, the chairlift installation when loaded in such a way that the maximum static torque is produced on the brake. The provisions of this subregulation are applicable even if the installation is fitted with a special device which will automatically prevent reverse movement of the carriers.

[Reg 16.117.1 ins by reg 3 of GoN R1885 in G. 7219.]

16.117.2 Both brakes shall be so designed that they are automatically applied when the power supply to the driving motor is interrupted or if any safety device is operated.

[Reg 16.117.2 ins by reg 3 of GoN R1885 in G. 7219.]

16.117.3 The main brake of the chairlift shall operate on the driving sheave or on the shaft of the driving sheave and not on any intermediate shaft.

[Reg 16.117.3 ins by reg 3 of GoN R1885 in G. 7219.]

16.118 An emergency stopping device, which interrupts the power supply to the driving motor, shall be provided along the full length of the chairlift installation and shall be so arranged that it can easily be brought into operation by any passenger travelling on the chairlift.

[Reg 16.118 ins by reg 3 of GoN R1885 in G. 7219.]



16.119 Every passenger boarding and landing site as well as the entire length of the chairlift installation shall be adequately illuminated at all times underground and at night on the surface, whenever the chairlift is in use.

[Reg 16.119 ins by reg 3 of GoN R1885 in G. 7219.]

16.120.1 Except where some other warning system, approved by the Principal Inspector of Mines, is installed, every chairlift installation shall be equipped with an alarm or warning system, audible along the entire length of the installation, and such alarm or warning system shall be actuated automatically before the chairlift is set in motion.

[Reg 16.120.1 ins by reg 3 of GoN R1885 in G. 7219; am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725,

16.120.2 Every place where a chairlift is installed such that the inclination exceeds 20 degrees from the horizontal and where passengers are able to alight anywhere along its length when it is stationary, shall be provided with an emergency ladderway so arranged that it is either separate from the installation or situated between the carriers.

[Reg 16.120.2 ins by reg 3 of GoN R1885 in G. 7219.]

16.120.3 Where the ladderway is between the carriers, chairlift attendants responsible for starting and stopping the installation shall be stationed at each boarding and landing site and their duty shall also be to ensure that the chairlift is not set in motion whilst persons are on the ladderway.

[Reg 16.120.3 ins by reg 3 of GoN R1885 in G. 7219.]

16.120.4 Where the ladderway is separate from, but adjacent to, the chairlift installation, it shall be provided with a smooth handrail separating it from the chairlift.

[Reg 16.120.4 ins by reg 3 of GoN R1885 in G. 7219.]

16.121.1 No person shall travel on a chairlift with material other than articles which are unlikely to endanger him or any other person and for which permission has been granted by the manager, mine overseer or an engineer or competent person appointed in terms of regulation 2.13.2, as the case may be.

[Reg 16.121.1 ins by reg 3 of GoN R1885 in G. 7219; am by reg 9(n) of GeN 160 in G. 13002.]

16.121.2 At all boarding and landing sites the manager shall cause a list to be kept of all articles for which permission has been granted in terms of regulation 16.121.1 and he shall ensure that all persons concerned are made aware of the articles included in the list.

[Reg 16.121.2 ins by reg 3 of GoN R1885 in G. 7219.]

16.122 No person travelling on a chairlift and no person in the vicinity of a chairlift installation shall in any way interfere or attempt to interfere with the equipment of the chairlift or any other person travelling on the chairlift or any other person who is in the vicinity of the chairlift.

[Reg 16.122 ins by reg 3 of GoN R1885 in G. 7219.]

16.123.1 The complete chairlift installation or any part thereof shall be examined regularly by such persons and at such intervals as may be determined by an engineer or competent person appointed in terms of regulation 2.13.2, as the case may be, having due regard to the duty and frequency of operation of the installation: Provided that the Principal Inspector of Mines may insist on more frequent inspections or inspections by such other persons as he may deem necessary.

[Reg 16.123.1 ins by reg 3 of GoN R1885 in G. 7219; am by reg 9(t) of GeN 160 in G. 13002, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

16.123.2 A written record of each such inspection shall be kept by the person or persons responsible for the inspection in a book specially provided for the purpose by the manager.

[Reg 16.123.2 ins by reg 3 of GoN R1885 in G. 7219.]

## **CHAPTER 17**

### **ELEVATORS**

17.1.1 No elevator shall be used unless a prescribed permit for its use has been issued by the Principal Inspector of Mines.

[Reg 17.1.1 rep by reg 16(a) of GoN R3083 in G. 13684; ins by reg 4(a) of GoN R2449 in G. 15362; am by reg 2(b) of GoN R94 in G. 17725.]

17.1.2 No elevator shall be used for the conveyance of persons unless it is permitted by a prescribed permit for such elevator.

[Reg 17.1.2 rep by reg 16(a) of GoN R3083 in G. 13684; ins by reg 4(a) of GoN R2449 in G. 15362.]

17.2.1 The manager of a mine or works who intends to install, use or modify an elevator shall apply in writing to the Principal Inspector of Mines on the form obtainable from him.

[Reg 17.2.1 am by reg 17 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684; reg 2(b) of GoN R94 in G. 17725.]

17.2.2 The application for the installation and use of an elevator shall be accompanied by—

- (a) dimensioned drawings of the machine room in plan and elevation to the scale of at least 1 in 50,
- (b) dimensioned drawings of the installation in plan and elevation,
- (c) a diagram of all the electrical circuits of the installation, and

- (d) particulars of the ropes as detailed in regulation 17.3.4(b) and of their connections.

[Reg 17.2.2 am by GoN R303 in G. 3397.]

17.2.3 ...

[Reg 17.2.3 rep by reg 16(b) of GoN R3083 in G. 13684.]

17.2.4 ...

[Reg 17.2.4 rep by reg 16(b) of GoN R3083 in G. 13684.]

- 17.2.5 If any permit is lost, defaced or destroyed, the manager shall apply in writing to the Principal Inspector of Mines for the issue of a duplicate permit. The application shall have affixed to it uncanceled revenue stamps to the value of R50.

[Reg 17.2.5 am by reg 17 of GoN R1189 in G. 6489, reg 10(a) of GeN 160 in G. 13002, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 17.2.6 The permit shall be displayed in a suitable glazed and locked or sealed frame in a conspicuous place inside the car or at any other place approved by the Principal Inspector of Mines.

(Reg 17.2.6 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.)

- 17.3.1 The Principal Inspector of Mines shall provide the manager with an elevator inspection register for each elevator, in which the Principal Inspector of Mines shall record the result of each of his examinations.

[Reg 17.3.1 am by reg 17 of GoN R1189 in G. 6489; subs by reg 16(c) of GoN R3083 in G. 13684; am by reg 2(b) and (c) of GoN R94 in G. 17725.]

- 17.3.2 The manager shall keep the register in a safe place at the mine or works.

- 17.3.3 If the register is lost, defaced or destroyed, the manager shall apply in writing to the Principal Inspector of Mines for the issue of a duplicate register. The application shall have affixed to it uncanceled revenue stamps to the value of R100.

[Reg 17.3.3 am by reg 17 of GoN R1189 in G. 6489, reg 10(b) of GeN 160 in G. 13002, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 17.3.4 The manager shall provide for each elevator an Elevator Record Book in which shall be entered—

- (a) the name or names of the competent person or persons appointed to carry out the examinations prescribed in regulations 17.5.1 and 17.5.2,

- (b) the following particulars of every winding rope and balance rope—

Name of manufacturer.

Date of manufacture.  
Coil number.  
Length in metres.  
Diameter in millimetres.  
Mass per metre in kilograms.

Construction of rope—

Type of lay.  
Number of strands.  
Class of heart.

Construction of strands—

Number of wires.  
Diameters of wires in millimetres.  
Class of core.  
Class of steel in wires.  
Tensile strength of steel in megapascals.  
Breaking force in kilonewtons.  
Rope test certificate number and place of test.  
Purpose of use.  
Date put on.  
Dates of recapping, shortening or turning end for end.  
Date taken off.  
Factor of safety (static); and

[Reg 17.3.4(b) am by GoN R303 in G. 3397.]

- (c) a true report of the result of every examination prescribed in regulations 17.5.1 and 17.5.2 and details of any repairs or alterations made. The report shall be signed by the person who carried out the inspection or effected the repairs or alterations.

17.4.1 The following particulars shall be marked in a conspicuous place inside the car or in a place the Principal Inspector of Mines may direct—

- (a) The name of the maker.  
  
(b) The maximum mass of material or mineral permitted to be conveyed in the car.

[Reg 17.4.1(b) am by GoN R303 in G. 3397.]

- (c) The maximum number of persons permitted to travel in the car at one time.

(d) The official number allocated to the elevator by the Principal Inspector of Mines.  
[Reg 17.4.1 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

17.4.2 Where machinery of more than one elevator is installed in the same room, the machinery and switch gear of each elevator shall be distinctly and separately marked.

17.4.3 The driving motor of every elevator shall be distinctly marked to indicate the direction of rotation for upward and downward movement of the car.

17.4.4 A diagram of all the electrical circuits of the installation shall be displayed in a suitable frame in the motor room.

17.5.1 The Manager, engineer, or person appointed in terms of regulation 2.13.2, shall assign any competent person, to examine at least once in each week the hatchway, guides, ropes and rope attachments, the engine or motor, the drums and sheaves and all safety appliances.

[Reg 17.5.1 am by reg 10(c) of GeN 160 in G. 13002; subs by reg 16(d) of GoN R3083 in G. 13684.]

17.5.2 An engineer or competent person appointed in terms of regulation 2.13.2 shall examine carefully at least once in each month the elevator and all its fittings and appliances. At this examination the ropes supporting the elevator car and counterpoise, and the balance ropes or chains, if fitted, shall be thoroughly cleaned at selected places for the purpose of ascertaining the amount of deterioration thereof.

[Reg 17.5.2 am by GoN R303 in G. 3397, reg 10(c) of GeN 160 in G. 13002.]

17.5.3 If as a result of examination, any weakness or defect is found whereby the safety of any person is or may be endangered, the defect shall be reported in writing without delay to the manager or an engineer or competent person appointed in terms of regulation 2.13.2 and no person shall be conveyed until the defect has been rectified.

[Reg 17.5.3 am by reg 10(c) of GeN 160 in G. 13002.]

17.5.4 Adequate precautions shall be taken to prevent any person from using the elevator—

(a) while it is being operated from the motor room, or

(b) while examination, servicing or any work is being done in the hatchway.

17.5.5 When a landing door or gate is required to be open while an elevator is being examined, serviced, or repaired or while any other work is being done in the hatchway, an effective barrier shall be provided and used to prevent inadvertent access to the hatchway.

17.6.1 Whenever a Principal Inspector of Mines intends inspecting an elevator he shall notify the manager of the date and time of such inspection.

[Reg 17.6.1 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

17.6.2 The manager shall, after notification, cause all ropes and machinery to be thoroughly cleaned and prepared for the inspection.

17.6.3 The manager shall place free of charge at the disposal of the regional mining engineer, workmen, tools and any other equipment which are required for the purpose of carrying out an inspection.

[Reg 17.6.3 subs by reg 16(e) of GoN R3083 in G. 13684.]

17.6.4 Any manager who fails without good reason to have the elevator properly cleaned and ready for inspection on the date and at the time notified or who fails to provide the necessary facilities for the inspection, shall be guilty of an offence. The manager shall apply in writing within seven days of the date on which the inspection should have taken place for a new date and time to be specified for the inspection and shall affix uncanceled revenue stamps to the value of R250 to his application.

[Reg 17.6.4 am by reg 10(d) of GeN 160 in G. 13002.]

17.7.1 The Principal Inspector of Mines shall determine the maximum number of persons and the maximum mass of material or mineral that may be conveyed by the elevator at any one time. In calculating the total mass of persons for the purpose of these Regulations, 70 kilograms shall be allowed for each person.

[Reg 17.7.1 am by GoN R303 in G. 3397, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

17.7.2 Except with the written permission of the Principal Inspector of Mines, the manager shall not cause or permit any person other than an attendant or an operator to travel, and no person other than the attendant or the operator shall travel, in a car while material is being conveyed in such car.

[Reg 17.7.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

17.7.3 No person shall travel in a car while mineral is being conveyed.

17.7.4 No person shall be conveyed in any car while material or mineral is being conveyed in a conveyance attached to such car.

17.8.1 Every elevator shall be under the charge of and operated by a competent person, referred to as the operator, not less than 17 years of age, who shall have received training for not less than six shifts and who shall have been properly instructed regarding the dangers attaching to the operation of an elevator.

17.8.2 No person other than the operator shall operate an elevator.

17.8.3 The operator shall not absent himself from the elevator during the period he is in charge unless he has ensured that the elevator cannot be operated by any unauthorised person.

- 17.8.4 The operator shall be responsible for the locking of every door or gate at a landing before the car is moved from the landing. He shall cease to use the elevator should any defect be found whereby the safety of any person is or may be endangered.
- 17.8.5 The provisions of regulations 17.8.1. to 17.8.4 inclusive, shall not apply to an automatic elevator arranged to be controlled by push button.

### ***Hatchways***

- 17.9 Where a hatchway is not enclosed by walls, access to the hatchway from any adjacent stairway, platform or floor, which is not a landing shall be prevented by means of an adequate brattice or grill work to a height of at least two metres. The complete space above any hatchway landing door or gate shall be closed by bratticing or grill work. A space of not more than 40 millimetres shall be permitted between any two members of the bratticing or grill work, which shall be maintained in good order.

[Reg 17.9 am by GoN R303 in G. 3397.]

- 17.10.1 Every landing entrance to the hatchway shall be provided with a substantial door or doors or a shutter type gate or gates at least 1,8 metres in height, the inner surface of which when closed shall be flush, as nearly as practicable, with the inside of the hatchway.

[Reg 17.10.1 am by GoN R303 in G. 3397.]

- 17.10.2 Vertical-sliding doors shall not be fitted at any landing except with the written permission of the Principal Inspector of Mines.

[Reg 17.10.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 17.10.3 Except at a landing, no door shall be provided to a hatchway unless permitted or required by the Principal Inspector of Mines in writing and then only if the provisions of regulation 17.16.1 are complied with.

[Reg 17.10.3 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 17.10.4 Where a landing door is coupled mechanically to a car door or gate for the purpose of opening or closing, a device shall be provided which automatically retracts the door or gate if it is obstructed in any way during closing. The device for closing any door or gate automatically shall be so adjusted that the force with which the door or gate closes will not cause injury to any person.

- 17.11.1 Every landing entrance to the hatchway of an automatic elevator shall be provided with the following devices, constructed or situated so as to be inaccessible to any unauthorised person—

- (a) A mechanical lock which operates in conjunction with an electrical circuit breaker arranged so that the car can be moved by power only when every landing door is closed and locked and no landing door can be opened unless the car is at rest at that landing.
- (b) An additional circuit breaker arranged so that a car can be moved by power only when every landing door or gate is closed.

17.11.2 The circuit breakers referred to in regulation 17.11.1 shall be in two separate control circuits.

17.11.3 Where any car door or gate is coupled mechanically with a landing door or gate for the purpose of opening and closing, the provisions of regulation 17.11.1(b) shall not apply.

17.11.4 Every landing entrance to the hatchway of an elevator controlled by an operator shall be fitted with—

- (a) a substantial mechanical lock which cannot be opened from the outside unless the car is at rest at the landing, and
- (b) a circuit breaker arranged so that the car can be moved by power only when every door or gate is closed and constructed or situated so as to be inaccessible to any unauthorised person.

17.11.5 Notwithstanding the provisions of regulations 17.11.1 to 17.11.4 inclusive, any landing door may be caused to open before the car comes to rest at the landing, subject to the conditions prescribed under regulation 17.22.4.

17.11.6 Every door or gate opening into the hatchway shall be kept locked when not in use.

17.12.1 Where a car is fitted with a lattice-type gate, every projection in the hatchway, including every door-lintel if the landing door is not flush with the inside of the hatchway, shall be rendered safe by a bevelled approach on the hatchway side facing the opening of the car or where possible by a suitable fascia plate.

17.12.2 No bevel shall be less than 70 degrees to the horizontal and the bevelled surface shall be covered with smooth metal.

17.13.1 Every car and every counterpoise shall be guided throughout its travel by guides of substantial construction, securely fastened in the hatchway.

[Reg 17.13.1 am by GoN R303 in G. 3397.]



- 17.13.2 The hatchway construction, the guides and the means of securing the guides, shall be able to withstand effectively the application of the safety catches as well as any other force resulting from the normal operation of the elevator.
- 17.13.3 The bottom end of any guide rail shall rest on a secure foundation and shall be fixed firmly in that position.
- 17.13.4 The top end of any rail shall not be fixed in the ceiling of the hatchway.
- 17.13.5 No wooden guide shall be installed if the speed of the car exceeds 0,5 metre per second.  
[Reg 17.13.5 am by GoN R303 in G. 3397.]
- 17.13.6 No cast-iron or hollow-metal guide shall be installed.
- 17.13.7 The counterpoise guides shall be enclosed by bratticing from a point 300 millimetres above the floor of the hatchway to a point at least two metres above the floor of the hatchway, except where a compensating chain or rope attached to the counterpoise precludes the use of this bratticing.  
[Reg 17.13.7 am by GoN R303 in G. 3397.]
- 17.14 Directly under every sheave at the top of the hatchway, unless the sheave is separated from the hatchway by a floor of adequate strength, there shall be provided and placed a substantial grating or screen of iron or steel having a space of not more than 40 millimetres between any two members of the grating or screen.  
[Reg 17.14 am by GoN R303 in G. 3397.]
- 17.15.1 Every hatchway in which the car operates at a speed of up to and including 1,8 metres per second shall be provided with spring, air or hydraulic buffers. Every hatchway in which the car operates at a speed exceeding 1,8 metres per second shall be provided with hydraulic buffers. The buffers shall be placed either at the bottom of the hatchway directly beneath both the car and the counterpoise or shall be attached to the bottom of the car and the bottom of the counterpoise.  
[Reg 17.15.1 am by GoN R303 in G. 3397; subs by reg 12 of GoN R2101 in G. 4498.]
- 17.15.2 Every buffer shall be of substantial construction and the buffers shall be capable of absorbing gradually and smoothly the energy of a fully loaded car travelling at the speed at which the governor is set to trip.
- 17.16.1 Where a door is fitted to give access to the bottom of a hatchway such door shall operate a circuit breaker which will prevent the elevator from working while the door is open.
- 17.16.2 Where a door is not provided to give access to the bottom of the hatchway and where the floor of the hatchway is more than 1,5 metres below the bottom landing, a permanently fixed metal ladder shall be provided to give such access.

[Reg 17.16.2 am by GoN R303 in G. 3397.]

17.16.3 One or more manually operated switches, which shall immobilise the elevator, shall be fitted in the hatchway within easy reach of the bottom landing and the floor of the hatchway.

17.17 Where two or more cars operate in one hatchway, the bottom of the hatchway for each elevator shall be separated from the adjacent elevator or from any winding plant compartment by a wall or brattice to a height of at least two metres above the floor of the hatchway.

[Reg 17.17 am by GoN R303 in G. 3397, reg 10(e) of GeN 160 in G. 13002.]

17.18.1 A clear space of not less than 600 millimetres shall be provided between the bottom of the hatchway and the lowest point or projection on the underside of the car when the car rests on its fully-compressed buffer, but guide shoes or rollers, safety jaw assemblies, aprons and guards need not be taken into account when determining the lowest point or projection of the car: Provided that where the car operates at a speed exceeding three metres per second the clear space shall be at least three metres.

[Reg 17.18.1 am by GoN R303 in G. 3397; subs by reg 13 of GoN R2101 in G. 4498.]

17.18.2 When the car rests on its fully-compressed buffer, the car or any equipment attached thereto shall not come in contact with the floor of the hatchway or any part of the equipment located at the bottom of the hatchway.

17.18.3 When the car is at rest at the lowest landing there shall be a clearance of not less than 300 millimetres between the buffer striking plate and the face of the fully extended buffer.

[Reg 17.18.3 am by GoN R303 in G. 3397.]

17.18.4 Clearance shall be provided at the top of the hatchway so that the car can travel a distance of at least one metre above the top landing without the car or any attachments thereto coming into contact with any part of the hatchway or any equipment located at the top of the hatchway: Provided that where the car operates at a speed exceeding three metres per second the clearance shall be at least three metres. When the car is resting on the fully-compressed buffer, clearance shall be provided at the top of the hatchway so that the counterpoise or any attachment thereto will not come into contact with any part of the hatchway or any equipment located therein.

[Reg 17.18.4 am by GoN R303 in G. 3397; subs by reg 14 of GoN R2101 in G. 4498.]

17.18.5 The clearance between the elevator car and any portion of the hatchway enclosure shall be not less than 25 millimetres except on the entrance side of the car where the clearance between the car sill and the landing sill shall be not less than 10 millimetres nor more than 30 millimetres.

[Reg 17.18.5 am by GoN R303 in G. 3397, GoN R2102 in G. 4498.]

- 17.18.6 The clearance between the car and the counterpoise shall be not less than 50 millimetres and the clearance between the counterpoise and any portion of the hatchway enclosure shall be not less than 20 millimetres.

[Reg 17.18.6 am by GoN R303 in G. 3397.]

- 17.18.7 Where a counterpoise screen is fitted, the clearance between the screen and the car shall be not less than 25 millimetres and the clearance between the screen and the counterpoise shall be not less than 20 millimetres.

[Reg 17.18.7 am by GoN R303 in G. 3397.]

- 17.18.8 When the car of an automatic elevator is at rest at a landing, the distance between the leading edge of the car door or gate during closing and the landing door or gate shall not be more than 100 millimetres.

[Reg 17.18.8 am by GoN R303 in G. 3397.]

- 17.19.1 In every hatchway there shall be provided devices arranged so that the power supply to the elevator is automatically cut off when the car is in a position not more than 300 millimetres above the top landing or not more than 300 millimetres below the bottom landing. In the case of an electrically operated elevator these devices shall be so arranged that all current is cut off, independently of any other operating device, and further movement of the car under power in the direction of the overtravel is prevented.

[Reg 17.19.1 am by GoN R303 in G. 3397.]

- 17.19.2 Every hoist operating a car by means of a winding drum shall be provided with an automatic stopping device to guard against overwinding.

### ***Counterpoises***

[Heading subs by GoN R303 in G. 3397.]

- 17.20.1 The sections of every counterpoise shall be secured together to prevent them becoming detached. The counterpoise shall be situated so that it cannot fall upon any part of the elevator or on any machinery and it shall operate in guides so that it will travel freely without danger of becoming detached.

[Reg 17.20.1 am by GoN R303 in G. 3397.]

- 17.20.2 In every building where the hatchway does not extend to the lowest floor and where the space underneath the hatchway is accessible to any person at any time, the counterpoise shall be provided with safety catches and a circuit breaker arranged so that the power supply to the elevator is automatically cut off when the safety catches come into operation.

[Reg 17.20.2 am by GoN R303 in G. 3397.]

### ***Cars***

17.21.1 Every car shall be of substantial construction, enclosed on all sides which are not entrances and the top covered with a substantial roof.

17.21.2 In every car provision shall be made for adequate ventilation through the car at all times.

17.22.1 Every car shall be provided with a door or doors or a gate or gates each of which shall operate an electrical circuit breaker arranged so that the car cannot be moved by power when any door or gate is open.

17.22.2 No car shall be fitted with a lattice-type gate except with the written permission of the Principal Inspector of Mines.

[Reg 17.22.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

17.22.3 Every door or gate of the car of an automatic elevator shall open and close automatically and, unless it is mechanically coupled to the landing door for the purpose of opening and closing, the car door or gate shall not start to close until the landing door or gate is closed: Provided that a lattice-type gate need not open or close automatically.

[Reg 17.22.3 subs by reg 15 of GoN R2101 in G. 4498.]

17.22.4 Notwithstanding the provisions of regulation 17. 22.1, any door of a car may be caused to open before the car comes to rest at a landing if the car is fitted with an automatic levelling device which operates in conjunction with devices causing the doors to open when the car enters the levelling zone, provided that the levelling zone does not extend more than 400 millimetres above or below any landing, the speed of the car within the levelling zone does not exceed 0,2 metre per second, an apron of not less than 450 millimetres long is fitted to the car and, where there is a bevelled approach in terms of regulation 17.12.1, the bevelling is not less than 450 millimetres long.

[Reg 17.22.4 am by GoN R303 in G. 3397.]

17.23 The car of any automatic elevator which serves more than two landings shall be fitted with a retiring cam arranged so that no manually operated landing door or gate can be opened unless the car is at rest at the landing.

17.24.1 Every car shall be provided with—

- (a) a button, marked “alarm”, inside the car whereby a bell, buzzer or siren may be sounded,
- (b) a switch, attached to the suspension beam on top of the car, to enable the car to be stopped during servicing or inspection, and
- (c) an electric light inside the car, which shall be kept on when the elevator is available for use and when it is being serviced.

- 17.24.2 Every electric alarm and light required to be provided in terms of regulation 17.24.1 shall be connected to a circuit other than that of the power supply to the elevator driving machinery.
- 17.25.1 Every car suspended by ropes shall be provided with efficient safety catches which, on test under statical conditions, shall be capable of holding in any position in the hatchway the car together with twice the maximum authorised load.
- 17.25.2 The principal inspector of mines may conduct a test of the safety catches with the car in motion but shall only do so when there is no load in the car.  
[Reg 17.25.2 am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]
- 17.25.3 Where safety catches are operated through shafting, any lever and every safety catch shall be keyed or welded to the shafting.
- 17.25.4 A switch, arranged automatically to break the circuit controlling the power supply to the elevator when the safety catches come into operation, shall be fitted on top of the car in an accessible position.
- 17.25.5 No cam type or other instantaneous grip type safety catch shall be fitted where the speed of the car is greater than one metre per second.  
[Reg 17.25.5 am by GoN R303 in G. 3397.]
- 17.26 A suitable locking grip shall be provided for every hand starting rope, rod or chain in any car through which such rope, rod or chain passes.

### ***Winding and Balance Ropes***

- 17.27.1 Every rope from which a car or counterpoise is suspended shall be of steel wire, of good quality and sound manufacture, free from any visible defect and of adequate strength.  
[Reg 17.27.1 am by GoN R303 in G. 3397; reg 5(c) of GoN R2703 in G. 7953.]
- 17.27.2 The gauge of the wires in the rope shall be suited to the diameter of the sheave or drum over which the rope passes and the diameter of the sheave or drum shall not be less than 40 times the diameter of the rope.
- 17.27.3 Every car or counterpoise operated by ropes shall be suspended by at least two ropes which shall be of equal diameter and strength.  
[Reg 17.27.3 am by GoN R303 in G. 3397.]

17.27.4.1 The ropes supporting a car or counterpoise shall not be used when the estimated aggregate breaking force of all ropes supporting the car or counterpoise has become reduced to less than 10 times the effective weight-load, whichever is the greater of—

- (a) the combined mass of the car, its attachments, the maximum authorised load and any cable, balance rope or chain, or
- (b) the combined mass of the counterpoise, its attachments and any balance rope or chain.

17.27.4.2 In determining the minimum allowable breaking force of any rope used for supporting a car or counterpoise the weight in newtons of any mass carried by the rope shall be obtained by multiplying this mass in kilograms by the factor 9,8.

[Reg 17.27.4 subs by GoN R303 in G. 3397.]

17.27.5 Before any winding or balance rope is used on an elevator, full particulars thereof as detailed in regulation 17.3.4(b) shall be supplied to the Principal Inspector of Mines.

[Reg 17.27.5 am by reg 17 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

17.27.6 The breaking force of any new winding rope or balance rope or any such rope put on anew shall be ascertained by actual test.

[Reg 17.27.6 am by GoN R303 in G. 3397.]

17.28 Where the end of any winding rope is secured to the drum, there shall be at least three full turns of rope on the drum when the car or counterpoise has reached its limit.

[Reg 17.28 am by GoN R303 in G. 3397.]

17.29.1 Every connection between a winding rope and the car, counterpoise, drum or the hatchway structure shall be designed to prevent accidental disconnection and shall have a strength not less than the breaking strength of the rope. The end of each rope shall be attached by means of an independent connection and an appliance shall be provided to distribute equally the load between the ropes.

[Reg 17.29.1 am by GoN R303 in G. 3397.]

17.29.2 Every winding rope required to be secured to the hatchway structure shall be anchored to the beams supporting the elevator driving machine or to suitable rolled-steel sections provided for this purpose.

17.29.3 Every connection in respect of any rope shall be renewed at intervals not exceeding 10 years or whenever the ropes are changed, whichever is the shorter period.

[Reg 17.29.3 subs by reg 10(f) of GeN 160 in G. 13002.]

- 17.30 Where a rope is not secured to the elevator drum or sheave, the construction shall be such that no dangerous slipping of the rope on the drum or sheave shall occur under any possible working condition.

### ***Elevator Machinery***

- 17.31.1 The overhead driving machinery of every elevator shall be supported on beams constructed of rolled-steel sections or of reinforced concrete having sufficient strength to carry the total maximum loading and every end shall rest on a wall or a pillar of adequate strength.
- 17.31.2 The driving machinery shall be secured in position and shall be capable of developing sufficient power to raise at least 115 per cent of the maximum authorised load in the car.
- 17.32.1 Where the driving machinery is operated by a motor or by an engine, there shall be provided an efficient brake designed so as to hold the car at rest in any position in the hatchway when the car is loaded with at least 1½ times its maximum authorised load.
- 17.32.2 The brake shall be constructed so that it is automatically applied when the driving machinery is not in operation and when any stopping or electrical protective device comes into operation.
- 17.32.3 The brake of every electrically operated driving machine shall be arranged so that it cannot be released during normal operation before power has been applied to the driving motor.
- 17.33.1 Every car suspended by a rope shall be equipped with a speed governor to operate the safety catches.
- 17.33.2 Where any counterpoise is fitted with safety catches a separate speed governor to operate such safety catches shall be provided.  
[Reg 17.33.2 am by GoN R303 in G. 3397.]
- 17.33.3 Every speed governor for a car shall be set to trip at a speed of not less than 115 per cent and not more than 140 per cent of the permitted speed of the car. Where a speed governor for a counterpoise is fitted, it shall be set to trip at a speed greater than, but not more than 10 per cent greater than, the speed at which the governor for the car is set to trip.  
[Reg 17.33.3 am by GoN R303 in G. 3397.]
- 17.33.4 Where driving machinery is not governed effectively, there shall be provided a reliable speed safety device to control the speed of the machinery within safe limits.
- 17.34.1 Except for trailing cables, the electrical wiring of every elevator shall be in screwed conduits or ducting unless suitably sheathed cables are used.

17.34.2 Except for the lighting circuit, the electrical installation of every elevator shall be provided with a main switch in the motor room. This switch shall be placed in easily accessible position as close to the entrance to the motor room as practicable.

17.34.3 The motor of every elevator supplied with polyphase alternating current shall be provided with a reverse phase relay or other equivalent protection to prevent the reversal of the driving motor through an inadvertent reversal of the phases.

17.35 The motor room of every elevator—

- (a) shall be of ample size with a clear space of not less than 600 millimetres on at least three sides of each machine,
- (b) shall be at least two metres high measured from the floor to the underside of the lowest portion of the roof structure,
- (c) shall contain only equipment which forms part of the elevator installation,
- (d) shall not be used as a storeroom for oil, grease, tools and any other material, and
- (e) shall be kept locked except when an inspection is being made or when work in connection with the operation of the elevator is in progress. A key to the lock shall be kept readily available.

[Reg 17.35 am by GoN R303 in G. 3397.]

## **CHAPTER 18**

### **TRACTION**

18.1.1 ...

[Reg 18.1.1 rep by GoN R583 in G. 26333.]

18.1.2 ...

[Reg 18.1.2 rep by GoN R583 in G. 26333.]

18.1.3 ...

[Reg 18.1.3 rep by GoN R583 in G. 26333.]

18.1.4 ...

[Reg 18.1.4 rep by GoN R583 in G. 26333.]

18.1.5 ...

[Reg 18.1.5 rep by GoN R583 in G. 26333.]



18.1.6 ...

[Reg 18.1.6 subs by reg 17 of GoN R3083 in G. 13684; rep by GoN R583 in G. 26333.]

18.1.7 Whenever a person who has been authorised to drive a self-propelled mobile machine has, for any reason whatsoever, not driven such machine for a period of 180 days or longer, he may be authorised again to drive such machine: Provided that the provisions of regulation 18.1.2(d) are complied with.

18.2.1 Except where a self-propelled mobile machine is designed to be driven with the driver standing or walking no person shall drive or be permitted to drive such machine unless he is positioned properly in a seat provided for the driver.

18.2.2.1 ...

[Reg 18.2.2.1 subs by reg 7 of GoN R802 in G. 18992; rep by GoN R583 in G. 26333.]

18.2.2.2 ...

[Reg 18.2.2.2 rep by GoN R583 in G. 26333.]

18.3.1 No person shall travel in or on any self-propelled mobile machine, vehicle attached to a haulage rope or vehicle operated by machinery in or on a haulage way, unless such travelling has been authorised by the manager, mine overseer, engineer or competent person appointed in terms of regulation 2.13.2.

18.3.2 The manager, mine overseer, engineer or competent person appointed in terms of regulation 2.13.2 may authorise the regular conveyance of persons in or on any self-propelled mobile machine, rolling stock or vehicle operated by machinery in or on a haulage way: Provided that such machine, rolling stock or vehicle has been approved by the Principal Inspector of Mines: Provided further that the provisions of this regulation shall not apply to the conveyance of persons—

(a) in or on a conventional motor vehicle; and

(b) necessary for the working of such self-propelled mobile machine.

[Reg 18.3.2 am by reg 7 of GoN R814 in G. 13811, reg 2(b) of GoN R94 in G. 17725.]

18.3.3 ...

[Reg 18.3.3 rep by GoN R583 in G. 26333.]

18.3.4 No person shall board or alight from a self-propelled mobile machine, any rolling stock or any vehicle operated by machinery, other than an underground train as contemplated in Mine Health and Safety Act regulation 8.2, while it is in motion: Provided that this regulation shall not apply to—

- (a) any person riding a man-trolley attached to an endless rope haulage; or
- (b) a trained or trainee shunter engaged in shunting operations on the surface: provided further that the speed of the locomotive, rolling stock or vehicle does not exceed 10 kilometres per hour.

[Reg 18.3.4 rep by GoN R583 in G. 26333; subs by GoN R584 in G. 26333.]

18.4.1.1 ...

[Reg 18.4.1.1 rep by GoN R583 in G. 26333.]

18.4.1.2 ...

[Reg 18.4.1.2 rep by GoN R583 in G. 26333.]

18.4.1.3 ...

[Reg 18.4.1.3 rep by GoN R583 in G. 26333.]

18.4.2.1 ...

[Reg 18.4.2.1 rep by GoN R583 in G. 26333.]

18.4.2.2 ...

[Reg 18.4.2.2 rep by GoN R583 in G. 26333.]

18.4.2.3 When any machine, rolling stock or vehicle is parked in or near a haulage way, the minimum clearance between such parked machine, rolling stock or vehicle and any moving machine, rolling stock or vehicle shall be not less than 500 millimetres.

18.5.1 No locomotive or train may be run at a speed greater than 10 kilometres per hour over a level crossing of a road unless—

- (a) the level crossing is closed off by gates which are operated manually or automatically to prevent a vehicle from entering the level crossing when a train is approaching the level crossing or moving across such level crossing;
- (b) effective warning devices, activated by any approaching locomotive or train, are installed to warn any approaching vehicle or person; or
- (c) the level crossing is manned at all times.

18.5.2 A person driving or in control of a locomotive or train shall not cross any road at a level crossing unless he has given sufficient warning to users of the road of the intention to cross such road with such locomotive or train.

18.5.3.1 No locomotive or train may be run unless it is equipped with a braking system or systems capable of safely stopping and holding the locomotive or train under operating conditions.

[Reg 18.5.3.1 ins by reg 8 of GoN R802 in G. 18992.]

18.5.3.2 The engineer or the person appointed in terms of regulation 2.13.2 must ensure that the braking systems used for the purposes of regulation 18.5.3.1 are designed, operated, maintained and tested in accordance with an appropriate safety standard.

[Reg 18.5.3.2 ins by reg 8 of GoN R802 in G. 18992.]

18.6.1 ...

[Reg 18.6.1 rep by GoN R583 in G. 26333.]

18.6.2 ...

[Reg 18.6.2 rep by GoN R583 in G. 26333.]

18.6.3 ...

[Reg 18.6.3 rep by GoN R1237 in G. 25404.]

18.7 ...

[Reg 18.7 rep by GoN R1237 in G. 25404, GoN R583 in G. 26333.]

18.8.1 On any rail track where any vehicle is attached to a rope operated by a winch or haulage engine there shall be provided, used and maintained in sound working order effective signalling arrangements whereby distinct signals can be given to the driver of the winch or haulage engine from all places where vehicles are attached or detached from the rope, and from any other place along the rail track where the giving of such signals is necessary for the safe and efficient conduct of the tramming operations.

18.8.2 Where traction is operated by gravity and the inclined plane exceeds 50 metres in length, some effective system of communicating distinct signals between the stopping places shall be provided.

18.8.3 ...

[Reg 18.8.3 rep by GoN R583 in G. 26333.]

18.8.4.1 ...

[Reg 18.8.4.1 rep by GoN R583 in G. 26333.]

18.8.4.2 Any device referred to in regulation 18.8.4.1 shall, where possible, be designed in such a manner that it will reset automatically;

18.8.4.3 If the device referred to in regulation 18.8.4.1 is operated manually the person operating the device shall be—

- (a) afforded adequate protection from any moving vehicle;
- (b) appointed by the manager or person authorised by him to make such appointment.

18.8.5 ...

[Reg 18.8.5 rep by GoN R583 in G. 26333.]

18.8.6 ...

[Reg 18.8.6 rep by GoN R583 in G. 26333.]

18.8.7.1 ...

[Reg 18.8.7.1 am by reg 26(e) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R583 in G. 26333.]

18.8.7.2 ...

[Reg 18.8.7.2 rep by GoN R583 in G. 26333.]

18.8.7.3 ...

[Reg 18.8.7.3 rep by GoN R583 in G. 26333; Chapter 18 am by GoN R303 in G. 3397, GoN R305 in G. 3397, GoN R2101 in G. 4498, GoN R513 in G. 5488, GoN R1189 in G. 6489, GoN R1885 in G. 7219, GoN R1352 in G. 11397; subs by reg 11 of GeN 160 in G. 13002.]

## **CHAPTER 19**

### **SCRAPER-WINCH INSTALLATIONS**

19.1 ...

[Reg 19.1 am by reg 15 of GoN R1352 in G. 11397; rep by GoN R1225 in G. 28333.]

19.2.1 ...

[Reg 19.2.1 rep by GoN R1225 in G. 28333.]

19.2.2 ...

[Regs 19.2.1 and 19.2.2 subs for reg 19.2 by reg 12(a) of GeN 160 in G. 13002; rep by GoN R1225 in G. 28333.]

19.3.1 ...

[Reg 19.3.1 rep by GoN R1225 in G. 28333.]

19.3.2 ...

[Reg 19.3.2 rep by GoN R1225 in G. 28333.]

19.3.3 ...

[Reg 19.3.3 rep by GoN R1225 in G. 28333.]

19.3.4 ...

[Regs 19.3.4 subs by reg 12(b) of GeN 160 in G. 13002; rep by GoN R1225 in G. 28333.]

19.4 ...

[Reg 19.4 rep by GoN R1225 in G. 28333.]

19.5 ...

[Regs 19.5 subs by reg 12(c) of GeN 160 in G. 13002; rep by GoN R1225 in G. 28333.]

19.6 ...

[Reg 19.6 ins by reg 12(d) of GeN 160 in G. 13002; rep by GoN R1225 in G. 28333.]

## **CHAPTER 20**

### **MACHINERY - SPECIAL SAFETY MEASURES**

20.1.1 The operation of or attendance on machinery shall be in charge of a competent shiftsman, but unskilled persons working under his direction may be employed on such operation or attendance provided that the shiftsman exercises effective control.

[Reg 20.1.1 am by reg 16 of GoN R1352 in G. 11397.]

20.1.2 No persons having charge of any machinery which, for the safety of life or limb, requires constant supervision shall for any reason whatever absent himself or cease to have continual supervision of such machinery during the periods for which he is in charge unless he be replaced by a competent person, nor shall any person in charge of such machinery be caused or allowed to work more than 10 hours during any continuous period of 24 hours: Provided that this limit may be exceeded where ordered by the manager or other person in authority in cases of emergency or where written permission thereto has been granted by the Principal Inspector of Mines.

[Reg 20.1.2 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

20.2 No employee, unless his duty absolutely necessitates it, shall trespass within the safety guards or fences erected under these Regulations. In case he notices anything which might be dangerous to life or limb, or to the working of machinery, he shall as soon as possible inform the person in charge thereof.

20.3.1 Every dangerous place, such as an elevated platform, pit or traphole, shall be fenced off so as effectively to safeguard any person authorised to work there or be in the vicinity.

20.3.2 No person shall without authority enter any place where machinery is erected.

- 20.4 No person engaged in close proximity to moving machinery shall wear or be permitted to wear loose outer clothing.
- 20.5 All exposed machinery which, when in motion, may be dangerous to any person shall be securely fenced off. Efficient guards shall be provided to such parts of any machinery as may be a source of danger to any person.
- 20.6 The repairing, adjusting, testing, examining, cleaning or lubricating of machinery in motion shall not be undertaken by any person other than a competent person where there is a risk of personal injury, and then only when it is impracticable to stop such machinery. Automatic devices for oiling machinery whilst in motion shall be provided wherever practicable.  
[Reg 20.6 am by reg 13(a) of GeN 160 in G. 13002.]
- 20.7.1 Belt-driven machinery, which it is necessary to stop and start without interfering with the speed of the prime mover, shall be permanently fitted with a satisfactory mechanical appliance for the purpose.
- 20.7.2 No person shall ship or unship any driving belt while the machinery is in motion, with the exception of the customary shifting of light belts on the coned pulleys of machine tools for the purpose of alteration in the working speed.
- 20.7.3 No person shall set a machine or machinery in motion unless he has taken all reasonable precautions to ensure that no other person can be injured by the setting in motion thereof.  
[Reg 20.7.3 ins by reg 6(a) of GoN R2703 in G. 7953.]
- 20.8 Every reasonable precaution shall be taken in connection with the use of machinery to ensure that the safety of every person employed on or about such machinery is not endangered.
- 20.9.1 Every safety appliance at a mine or works shall be maintained in good working order and properly used.
- 20.9.2 The using of any apparatus or of any machinery which does not comply with the provisions of these Regulations, or the working of any apparatus or of any machinery the using of which appears in any way to be or to have become dangerous, shall immediately be stopped. Until such time as such apparatus or machinery complies with the requirements of these Regulations, or such dangerous condition has been rectified, such apparatus or machinery shall not be used.  
[Reg 20.9.2 subs by reg 6(b) of GoN R2703 in G. 7953.]
- 20.9.3.1 Subject to regulation 20.6 the person in immediate charge of any work on or repairs to machinery shall ensure that the power supply to such machinery is switched off and locked out or disconnected in accordance with a code drawn up in writing by the engineer or competent person

appointed in terms of regulation 2.13.2, and that the power supply remains disconnected or switched off until the work or repairs have been completed.

[Reg 20.9.3.1 subs by reg 13(b) of GeN 160 in G. 13002.]

20.9.3.2 No person shall conduct maintenance or repair work, and no person shall cause or permit such work to be done, until all reasonable precautions have been taken to ensure that the work can be done safely. A machine or any part of a machine which may fall on the person conducting such work or on any other person shall be adequately supported.

[Reg 20.9.3 subs by reg 9 of GoN R1885 in G. 7219.]

20.10 No apparatus, component or machinery made of a light metal shall be used in a hazardous area unless such apparatus, component or machinery is—

(a) protected by means of a housing, sheath, cover or coating (excluding paint); or

(b) contained, situated or used,

in such a manner that no dangerous condition can result therefrom.

[Reg 20.10 ins by reg 13(c) of GeN 160 in G. 13002; am by reg 26(a) of GoN R3083 in G. 13684; subs by reg 8 of GoN R814 in G. 13811.]

## **CHAPTER 21 ELECTRICITY**

[Chapter 21 am by GoN R303 in G. 3397, GoN R305 in G. 3397; subs by reg 14 of GeN 160 in G. 13002; am by reg 26 of GoN R3083 in G. 13684, reg 9 of GoN R814 in G. 13811, reg 2 of GoN R94 in G. 17725, GoN R1237 in G. 25404; rep by GoN R331 in G. 38708.]

## **CHAPTER 22 BOILERS**

22.1.1 No boiler shall be used unless a prescribed permit for its use has been issued by the Principal Inspector of Mines.

[Reg 22.1.1 rep by reg 19(a) of GoN R3083 in G. 13684; ins by reg 5(a) of GoN R2449 in G. 15362; am by reg 2(b) of GoN R94 in G. 17725.]

22.1.2 Boilers which have been out of use for 12 months shall not be used again before permission is obtained from the Principal Inspector of Mines.

[Reg 22.1.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.2 No boiler shall be used unless—

22.2.1 it is constructed in accordance with a code of practice approved by the Chief Inspector, or, where an approved code does not exist for any particular boiler, the construction of the boiler is approved by the Chief Inspector;

[Reg 22.2.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

22.2.2 it has been manufactured under the supervision of an inspecting authority approved by the Chief Inspector;

[Reg 22.2.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

22.2.3 it complies with the provisions of these Regulations; and

22.2.4 it is maintained in a safe working condition at all times.

22.3.1 The manager of a mine or works who intends to erect or use a boiler shall apply in writing to the Principal Inspector of Mines on the form obtainable from him.

[Reg 22.3.1 am by reg 19 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.3.2 For every new boiler the application shall be accompanied by—

- (a) the manufacturer's complete specification on the form for this purpose;
- (b) legible, dimensioned drawings of the complete boiler showing details of the plating, riveting and welding;
- (c) drawings showing the boiler house, if any, in plan and elevation and the position of the boiler; and
- (d) a certificate issued by an inspecting authority incorporating the following information—
  - (i) that the authority is satisfied that the boiler is constructed in accordance with the specified code;
  - (ii) results of the physical and chemical tests carried out on the material used in construction;
  - (iii) details of the heat treatment; and
  - (iv) details of the hydraulic test, witnessed by the inspecting authority.

22.4.1 On receipt of the application to erect or use a boiler, the Principal Inspector of Mines—



- (a) may issue a provisional permit subject to the conditions and for the period he may determine; or
- (b) if he is satisfied as a result of inspection and hydraulic test that the boiler is safe to use and that the provisions of these Regulations have been complied with, may issue a permit subject to the conditions he may specify.

[Reg 22.4.1 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.4.2 ...

[Reg 22.4.2 rep by reg 10(a) of GoN R814 in G. 13811.]

22.4.3 The permit issued in terms of regulation 22.4.1 shall cease to be valid on transfer of ownership of a boiler or in the case of a stationary boiler when the boiler is moved from the existing site.

22.5.1 The Principal Inspector of Mines shall provide the manager with a boiler inspection register for each boiler, in which the regional mining engineer (mining equipment) shall record the result of each of his inspections and hydraulic tests.

[Reg 22.5.1 am by reg 19 of GoN R1189 in G. 6489; subs by reg 19(b) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

22.5.2 The manager shall keep this register in a safe place at the mine or works.

22.5.3 If any register is lost, defaced or destroyed, or if the permit contained in the register is defaced or destroyed, the manager shall apply in writing to the Principal Inspector of Mines for the issue of a duplicate register and permit. The application shall have affixed to it uncanceled revenue stamps to the value of R2.

[Reg 22.5.3 am by reg 19 of GoN R1189 in G. 6489, reg 10(b) of GoN R814 in G. 13811, reg 2(b) of GoN R94 in G. 17725.]

22.5.4 The manager of a mine or works shall provide a log book for each boiler in which shall be entered without delay the dates on which such boiler was cleaned, examined or tested and the condition of the boiler at this examination or test, together with a full report of any alterations or repairs carried out at any time. Each entry in the book shall be made and signed by the person who conducted the examination or test or who performed the alteration or repair and shall be countersigned by the person appointed in terms of regulation 2.13.1, 2.13.2 or 2.13.3 if such entry was not made by him.

[Reg 22.5.4 subs by reg 7(a) of GoN R2703 in G. 7953.]

22.5.5 If the manager of a mine or works disposes of a boiler or ceases permanently to use a boiler, he shall immediately return the Boiler Inspection Register containing the permit and the log book referred to in regulation 22.5.4 to the Principal Inspector of Mines.

[Reg 22.5.5 am by reg 19 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 22.6.1 Every new boiler shall have stamped on the shell the name of the manufacturer, the factory number, the year of manufacture and the intended maximum working gauge pressure in terms of pascals.

[Reg 22.6.1 am by GoN R303 in G. 3397, GoN R2102 in G. 4498.]

- 22.6.2 Every boiler shall be provided with a soft copper plate, 100 millimetres by 60 millimetres in size by three millimetres thick, which shall be fixed by means of four copper rivets, 10 millimetres in diameter, to the front of the boiler shell and in a position so that it can readily be seen at all times. The rivet holes in this plate shall be countersunk so that the rivet heads are flush with the copper plate. The principal inspector of mines shall stamp on this plate in a clear manner the official number, the year when the boiler was first inspected and the authorised working gauge pressure.

The copper rivet heads shall be stamped by the principal inspector of mines with the official stamp. The copper plate shall not be removed and the record stamped thereon shall not be defaced or altered except by the principal inspector of mines.

[Reg 22.6.2 am by GoN R303 in G. 3397, reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

- 22.7.1 Every boiler shall be erected so as to facilitate access to all chambers, flues, inspection openings and fittings and a clear space of not less than one metre to the nearest wall or structure shall be left around it. This space may be reduced by not more than 150 millimetres by lagging or encasement.

[Reg 22.7.1 am by GoN R303 in G. 3397.]

- 22.7.2 The provision of the one metre clearance required in regulation 22.7.1 shall not apply to a boiler where masonry constitutes an integral part of the boiler.

[Reg 22.7.2 am by GoN R303 in G. 3397.]

- 22.7.3 The highest point of any fitting on top of every boiler shall be at a distance of not less than one metre from the ceiling or the underside of the lowest portion of the roof structure.

[Reg 22.7.3 am by GoN R303 in G. 3397.]

- 22.7.4 Access to every boiler shall be unobstructed.

- 22.7.5 No stationary boiler shall be used in a position other than that in which it was situated when the permit was issued.

- 22.7.6 The manager shall notify the Principal Inspector of Mines in writing if he intends moving a stationary boiler.

[Reg 22.7.6 am by reg 19 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.8.1 The principal inspector of mines shall inspect and test every boiler before it is commissioned after it has been installed for the first time or any subsequent time, or after it has been out of commission for more than one year, or after major repairs have been effected to it, and he may carry out periodic inspections and tests on any boiler: Provided that whenever the principal inspector of mines intends inspecting or testing a boiler he shall notify the manager of the date and time of the intended inspection or test.

[Reg 22.8.1 subs by reg 7(b) of GoN R2703 in G. 7953; am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

22.8.2 The manager shall upon receipt of such notification cause all parts of the boiler to be thoroughly cleaned and prepared for inspection or test in accordance with the instructions.

22.8.3 When the inspection or test of a boiler cannot be properly executed, the whole or parts of the masonry or casing shall be removed when required by the principal inspector of mines.

[Reg 22.8.3 am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

22.8.4 No boiler shall be encased by masonry or other material before it has been inspected or tested by the principal inspector of mines, except with his written permission.

[Reg 22.8.4 am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

22.8.5 Whenever the masonry or casing of any boiler in use has been removed either for the purpose of renewal or for repairs to the boiler, and the stoppage of work occasioned thereby provides sufficient time for an external inspection or a hydraulic test of the boiler, the masonry or casing shall not be replaced without the written permission of the principal inspector of mines.

[Reg 22.8.5 am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

22.8.6 When any boiler is being emptied and opened for cleaning, repairs or for any other purpose, every precaution shall be taken to ensure the safety of every person employed on this work or who may be in the vicinity.

22.8.7 No person shall be permitted to enter any boiler or flue unless the person in charge has satisfied himself that it is safe to do so and that every steam-stop, feed, blow-off and every other valve or cock which may be a source of danger is blanked off. If any valve or cock cannot be blanked off it shall be closed and fastened securely by means of a chain and lock. While the boiler is being cleaned or repaired, no person shall interfere with or open any valve or cock which has been fastened and locked.

22.8.8 Where a portable electric lamp is used during cleaning, repair or inspection of any boiler, the operating voltage of such lamp shall not exceed 32 volts.

22.8.9 No water shall be used on hot flue dust or ash where danger may arise therefrom.

22.8.10 The hydraulic test pressure—

- (a) for a boiler having an authorised working gauge pressure not exceeding 500 kilopascals shall be double the authorised working gauge pressure, and

[Reg 22.8.10(a) am by GoN R2102 in G. 4498.]

- (b) for a boiler having an authorised working gauge pressure exceeding 500 kilopascals shall be one and one-fifth times the authorised working gauge pressure plus 400 kilopascals.

[Reg 22.8.10(b) am by GoN R2102 in G. 4498, GoN R303 in G. 3397.]

22.8.11 When the hydraulic test is performed in the presence of the principal inspector of mines it shall be regarded as satisfactory if the boiler has withstood the test pressure to his satisfaction.

[Reg 22.8.11 subs by reg 7(c) of GoN R2703 in G. 7953, reg 19(c) of GoN R3083 in G. 13684; am by reg 2(c) of GoN R94 in G. 17725.]

22.8.12 The manager shall place, free of charge, at the disposal of the principal inspector of mines, workmen, tools and any other equipment which may be required for the purpose of carrying out the inspection or test.

[Reg 22.8.12 am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

22.8.13 Any manager who fails without good reason to have any boiler prepared for inspection or test on the date and at the time notified or who fails to provide the necessary facilities for the inspection or test shall be guilty of an offence. The manager shall then apply, in writing, to the Principal Inspector of Mines within seven days of the date on which the inspection or test should have taken place for a new date to be specified for the inspection or test and shall affix uncanceled revenue stamps to the value of R10 to his application.

[Reg 22.8.13 am by reg 19 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.8.14.1 Every boiler under the charge of a person appointed in terms of regulation 2.13.1, 2.13.2 or 2.13.3 shall be inspected and tested by him at least once in each year, at intervals not exceeding 15 months: Provided that the Principal Inspector of Mines may require more frequent inspections or tests, or may extend the period of such intervals on written application by the manager.

[Reg 22.8.14.1 ins by reg 7(d) of GoN R2703 in G. 7953; am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.8.14.2 The inspection shall consist of a careful examination of the external and internal surfaces of the boiler and of all the fittings and appurtenances.

[Reg 22.8.14.2 ins by reg 7(d) of GoN R2703 in G. 7953.]

22.8.14.3 The test shall consist of a pressure test by water to the pressure prescribed in regulation 22.8.10.

[Reg 22.8.14.3 ins by reg 7(d) of GoN R2703 in G. 7953.]

22.9.1 The authorised working gauge pressure of a boiler shall be that determined by the principal inspector of mines and the boiler shall not be operated at a higher pressure.

[Reg 22.9.1 am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

22.9.2 When it appears from an inspection or test that a boiler can no longer be operated with safety at the authorised working gauge pressure, the Principal Inspector of Mines may fix a new authorised pressure at which the boiler may continue to be operated and he shall mark the new pressure on the copper plate provided for this purpose and the boiler shall not be operated at a higher pressure.

[Reg 22.9.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.9.3 When at an inspection any boiler is found to be in a condition which holds immediate danger, the principal inspector of mines shall order the operation of the boiler to be suspended and the boiler shall not be used until repairs have been carried out to his satisfaction.

[Reg 22.9.3 subs by reg 19(d) of GoN R3083 in G. 13684; am by reg 2(c) of GoN R94 in G. 17725.]

22.10.1 The Manager shall notify the Principal Inspector of Mines in writing when—

- (a) he acquires a boiler;
- (b) a boiler is damaged;
- (c) he proposes effecting important repairs to a boiler, such as general re-tubing, renewal of any furnace or flue, fixing of any new plate or patch and changing of any stay and he shall furnish details and the drawings that may be necessary of any proposed repair;
- (d) he ceases permanently to use a boiler; and
- (e) he transfers the ownership of a boiler and shall give the name and address of the new owner.

[Reg 22.10.1 am by reg 19 of GoN R1189 in G. 6489, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.10.2 No person shall effect any important repair to any boiler without the prior approval of the Principal Inspector of Mines.

[Reg 22.10.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.10.3 The person appointed in terms of regulation 2.13.1, 2.13.2 or 2.13.3 shall notify the Principal Inspector of Mines, at least seven days in advance, of the date and time he intends to perform the inspection and test prescribed in regulation 22.8.14.1.

[Reg 22.10.3 ins by reg 7(e) of GoN R2703 in G. 7953; am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.11.1 The lowest working level of the liquid for any stationary boiler shall be at least 75 millimetres above the highest part of the flues passing round or through the boiler, and for any portable boiler and any boiler of a locomotive or locomobile such level shall be of sufficient height above the fire line that even with oscillation of the boiler the highest part of the surface reached by the fire and heated gases remains covered by liquid.

[Reg 22.11.1 am by GoN R303 in G. 3397.]

22.11.2 Where it is impossible for plating to become overheated, the Principal Inspector of Mines may approve of portions of the steam, vapour or gas space of a boiler being overlapped by the flues.

[Reg 22.11.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.11.3.1 Subject to the provisions of regulations 22.11.3.4 and 22.11.3.8, every boiler shall be fitted with at least two glass liquid level gauges, with proper blow-through cocks or valves, for ascertaining the true level of the liquid in the boiler. Where any liquid-gauge cock or valve is not attached directly to the shell of the boiler but to a stand pipe or column, a cock or a valve shall be fitted between the boiler and the stand pipe or column if the connecting pipe is of a diameter less than 50 millimetres or if it is longer than one metre: Provided that the Principal Inspector of Mines may approve of any other reliable means for ascertaining the level of the liquid in the boiler.

[Reg 22.11.3.1 am by GoN R303 in G. 3397, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.11.3.2 Any connecting pipe between the boiler and the stand pipe or column may be of a diameter less than 50 millimetres in any part or may be longer than one metre and may be attached to the boiler without the intervention of a cock or a valve, provided that the arrangement is otherwise satisfactory and provided further that there is no difficulty in keeping the passage at the end clear and in ascertaining that it is clear. For the latter purpose, the passage in the part of the stand pipe or column between the top and bottom gauge-glass cocks shall be cut off or closed which may be done permanently or by the insertion of a cock in this part.

[Reg 22.11.3.2 am by GoN R303 in G. 3397.]

22.11.3.3 Every blow-through cock or valve shall be provided with a tail pipe arranged to discharge so that the safety of any person will not be endangered.

22.11.3.4 One liquid level gauge shall be sufficient for any boiler with a total capacity of less than 100 litres.

[Reg 22.11.3.4 am by GoN R303 in G. 3397.]

22.11.3.5 The fixed lowest liquid level shall be indicated by a conspicuous mark on the liquid level gauge as well as on the boiler shell or masonry.

22.11.3.6 Every liquid level gauge of the tubular-glass type shall be provided with an efficient guard which shall not obstruct the reading of the gauge.

22.11.3.7 Every liquid level gauge shall be situated and illuminated so that the level of the liquid in the boiler can be readily observed from the operating floor of the boiler at all times.

22.11.3.8 Notwithstanding the provisions of regulation 22.11.3.1 or 22.11.3.4, a liquid level gauge is not required on any fuel or electrically heated boiler where at least two independent means are provided for automatically isolating the source of heat should there be a deficiency of liquid.

[Reg 22.11.3.8 am by reg 7(f) of GoN R2703 in G. 7953.]

22.12.1 Every boiler which has a total capacity of 100 litres or more shall be provided with at least two reliable apparatuses, each of which shall be capable of adequately supplying the liquid feed requirement of the boiler under all operating conditions, provided that where more than two feeding apparatuses are provided, such feeding apparatuses shall be of sufficient size in the aggregate to supply all the feed requirements should any one such feeding apparatus fail to operate. One of these feeding apparatuses shall be either a power pump or an injector. These feeding apparatuses shall be independent of each other, except that when a separate feed discharge stop valve is fitted to each pump or injector one feed delivery pipe shall be considered to be sufficient. Two or more boilers combined for joint working shall be considered to be one for the purpose of this regulation.

[Reg 22.12.1 am by GoN R303 in G. 3397.]

22.12.2 Where the feeding apparatus consists of a steam driven pump, the steam supply to the pump shall be by means of a separate supply pipe from the boiler. Every such steam supply pipe shall be provided with a stop valve as close as practicable to the boiler. Where the source of steam supply to the feeding apparatus can be from more than one boiler, a non-return valve shall be placed adjacent to the stop valve and between the stop valve and the feeding apparatus.

22.12.3.1 Every boiler with a total capacity of less than 100 litres shall be provided with at least one feeding apparatus.

[Reg 22.12.3.1 am by GoN R303 in G. 3397.]

22.12.3.2 One feed pump shall be considered to be sufficient for any oil, gas or electrically heated boiler where a means is provided for automatically isolating the source of heat should there be a deficiency of liquid.

22.12.3.3 In any boiler in which the product of the authorised working gauge pressure in kilopascals and the evaporative capacity in kilograms per hour, does not exceed 125 000, one feeding apparatus may consist of a hand-operated pump, provided that it is of adequate capacity to supply the boiler with liquid.

[Reg 22.12.3.3 am by GoN R303 in G. 3397, GoN R2102 in G. 4498.]

22.12.4 The provisions of regulations 22.12.1, 22.12.2 and 22.12.3 shall not apply to a separately-fired superheater.

22.12.5 The point where the feed delivery pipe enters the boiler shall be provided with a self-acting non-return valve and a stop cock or a wheel valve. The stop cock or the wheel valve shall be placed between the non-return valve and the boiler. Where the feed delivery pipes are duplicated and provided with an inter-connecting valve arrangement, the Principal Inspector of Mines may permit the use of a combined stop and non-return valve on each feed pipe.

[Reg 22.12.5 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.13 Where the feed supply of liquid to any boiler is through an economiser which is not an integral part of the boiler—

- (a) the economiser flue shall be fitted with a damper and a by-pass flue, and
- (b) an alternative direct feed from the feeding apparatus shall be provided to the boiler.

22.14.1 Every boiler, other than an economiser and a separately-fired superheater, shall be provided with a contrivance by which the deficiency of liquid is made known automatically and independently of any personal observation. The contrivance may be either a whistle operated by a float or other means, or any other contrivance approved by the Principal Inspector of Mines.

[Reg 22.14.1 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.14.2 Notwithstanding the provisions of regulation 2.14.1, every fuel or electrically heated boiler shall either have a low-liquid alarm other than a fusible plug or be provided with a means for automatically isolating the source of heat should there be a deficiency of liquid.

[Reg 22.14.2 am by reg 7(f) of GoN R2703 in G. 7953.]

22.15.1 Subject to the provisions of regulation 22.15.4, every boiler shall be provided with at least two reliable safety valves. Each valve shall be loaded so that it will open at or below the authorised working gauge pressure. The aggregate area of opening of the valves for the discharge of steam, vapour or gas shall be sufficient to prevent the pressure rising in excess of 10 per cent above the authorised working gauge pressure, should any one of the safety valves fail to operate.

22.15.2 Every safety valve shall be attached as close as possible to the main steam, vapour or gas space of the boiler without any intervening stop valve.

22.15.3 At least one of the safety valves shall be locked and shall be accessible only to the person in control. The locked valve or valves shall have an area not less than and shall open at a pressure not greater than any valve not locked.

22.15.4 One safety valve, which shall be locked and which shall be accessible only to the person in control, shall be sufficient—



- (a) for any boiler with a total capacity of less than 100 litres,  
[Reg 22.15.4(a) am by GoN R303 in G. 3397.]
- (b) for any economiser and any separately-fired superheater which can be shut off from the boiler, and
- (c) for any oil, gas or electrically heated boiler where a means is provided for automatically isolating the source of heat should the pressure rise above that at which the safety valve is loaded to open.

22.15.5 No undue weight shall be placed on a safety valve of any boiler nor shall the load on any safety valve be increased in a way which will prevent the safety valve opening at the authorised working gauge pressure.

22.16.1 Every safety valve shall be constructed so that the valve can be freed easily from its seat at any time and provision shall be made to prevent the valve from flying off should the spring or lever break or should the load on the valve be removed suddenly by accident or other cause.

22.16.2 Every safety valve loaded by a weight or spring acting on a lever shall be constructed so that the load acts only upon the extreme end of the lever and such load shall be secured to the lever. Where a safety valve is loaded directly by a spring, every compression adjusting screw shall abut against a metal stop or washer when the spring is at the working-load compression.

22.17.1 Every boiler shall be provided with a main stop valve at the discharge outlet and as close as practicable to the boiler.

22.17.2 If more than one boiler is connected to a common main, a self-acting non-return valve shall be placed between each boiler and the common main.

22.17.3 Steam, vapour or gas required for any purpose other than for the operation of the boiler auxiliary apparatus shall be drawn only through the main stop valve.

22.18 Every safety valve and every valve at any discharge outlet, its component parts and its connection to the boiler shall be constructed of a metal approved by the Principal Inspector of Mines: Provided that cast iron shall not be approved for any such valve, its component parts and its connection to a boiler which has an authorised working gauge pressure exceeding 1 megapascal.

[Reg 22.18 am by GoN R303 in G. 3397, GoN R2102 in G. 4498, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.19.1 Every boiler shall be provided with at least one blow-off cock or valve connected by a flange direct or by means of a flanged pipe to its lowest point.

22.19.2 Every blow-off cock or valve, its component parts and its connection to the boiler shall be constructed of a metal, other than cast iron, approved by the Principal Inspector of Mines.

[Reg 22.19.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.19.3 Where any connecting pipe is fitted between the blow-off cock or valve and the boiler, the pipe shall not be in contact with any masonry; it shall be joined by flanges, and, if the flange is not solid with the pipe or welded to the pipe, the pipe shall pass through the flange and shall be riveted over on the inside in addition to any other connection between the flange and the pipe, such as screw threads or rivets; where the authorised working gauge pressure is in excess of 3 megapascals, every flange shall be welded on and the welding shall be stress-relieved.

[Reg 22.19.3 am by GoN R303 in G. 3397, GoN R2102 in G. 4498.]

22.19.4 Every key for operating a blow-off cock or valve shall be removed when the blow-off cock or valve is fully closed.

22.19.5 The discharge from blow-off cocks or valves of two or more boilers shall not lead into a common pipe except with the written permission of the Principal Inspector of Mines.

[Reg 22.19.5 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.19.6 The discharge from every blow-off cock or valve shall be conducted by means of a pipe into an open or suitably vented tank, drain or sump which is situated and guarded so as to prevent danger to any person. The blow-down pipe shall be graded so that the liquid will flow freely to the tank.

22.20.1 Every boiler shall be provided with at least one reliable pressure gauge which shall be connected to that part of the boiler where the highest vapour pressure occurs. The dial of the gauge shall be graduated to show pressure in terms of pascals and the maximum pressure which the gauge shall be capable of registering shall not be less than the hydraulic test pressure as defined in regulation 22.8.10 and not more than double the authorised working gauge pressure. The authorised working gauge pressure shall be clearly marked with a red line on the dial of the gauge. The gauge shall be situated and the dial illuminated so that the working pressure can be read distinctly from the operating floor of the boiler at all times.

[Reg 22.20.1 am by GoN R303 in G. 3397, GoN R2102 in G. 4498.]

22.20.2 Every pressure gauge shall have a separate direct connection with the boiler. Where a pressure gauge is attached directly to the shell or drum of the boiler the connection shall be by means of a U-pipe or equivalent device of sufficient capacity to keep the gauge tube filled with liquid. The pressure gauge shall be capable of being shut off from the boiler and the cock or valve for this purpose shall be in full view.

22.21.1 Where the authorised working gauge pressure of any boiler is 2,8 megapascals or less there shall be provided a contrivance consisting of a cock with a flange 40 millimetres in diameter by five millimetres thick for the attachment of the test pressure gauge of the principal inspector of mines.

[Reg 22.21.1 am by GoN R303 in G. 3397, GoN R2102 in G. 4498, reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

22.21.2 Where the authorised working gauge pressure of any boiler is in excess of 2,8 megapascals there shall be provided a contrivance consisting of a valve or a cock carrying in a vertical position a receiving socket for the attachment of the test pressure gauge of the principal inspector of mines. The receiving socket shall be tapped with a 10 millimetre B.S. thread and shall be fitted with an easily removable screw plug.

[Reg 22.21.2 am by GoN R303 in G. 3397, GoN R2102 in G. 4498, reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

22.21.3 The contrivances required in terms of regulations 22.21.1 and 22.21.2 shall be situated so that the test gauge and the boiler gauge can be read from the same place.

22.22.1 Every boiler shall be provided where necessary with sufficient and suitable inspection openings situated so that all internal surfaces and seams may be readily cleaned and inspected: Provided that the Principal Inspector of Mines shall determine whether the number and size of inspection openings are sufficient.

[Reg 22.22.1 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

22.22.2 Every boiler where the dimensions permit entry shall be provided with at least one manhole of not less than 400 millimetres by 300 millimetres for an elliptical hole and not less than 400 millimetres in diameter for a circular hole, provided that where a boiler is fitted with a removable end or cover plate which is of sufficient size to permit entry, the boiler shall be deemed to comply with the provisions of this regulation.

[Reg 22.22.2 am by GoN R303 in G. 3397.]

## **CHAPTER 23**

### **PRESSURE VESSELS, COMPRESSORS AND REFRIGERATION PLANTS**

23.1 Every pressure vessel—

23.1.1 shall be constructed in accordance with a code of practice approved by the Chief Inspector, or where no approved code exists for any particular vessel, its construction shall be approved by the Chief Inspector;

[Reg 23.1.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

23.1.2 shall be manufactured under the supervision of an inspecting authority approved by the Chief Inspector;

[Reg 23.1.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

23.1.3 shall be kept clean and free from—

- (a) carbonised oil or other inflammable material which may ignite under working conditions; or
- (b) material which may cause corrosion; or
- (c) material which is liable to chemical reaction which may cause an uncontrolled rise in pressure; and

23.1.4 shall be maintained in a safe working condition at all times.

23.2 The manager of a mine or works at which a pressure vessel is used shall have in his possession a certificate, or a copy thereof, issued by the inspecting authority referred to in regulation 23.1.2 in which the code to which the vessel was manufactured is certified.

23.3 Every pressure vessel shall have a plate, securely fixed to it in a conspicuous place on the shell bearing the following particulars—

- (a) name of manufacturer;
- (b) country of origin;
- (c) maker's number;
- (d) year of manufacture;
- (e) maximum safe working gauge pressure in terms of pascals;  
[Reg 23.3(e) am by GoN R2102 in G. 4498.]
- (f) capacity in cubic metres; and
- (g) number of the code of manufacture.

[Reg 23.3 am by GoN R303 in G. 3397.]

23.4 The manager shall keep a record for each pressure vessel on which shall be entered the dates on which such vessel was cleaned, examined, repaired and tested. This record shall be signed by the person in charge of such cleaning, examination, repair and test.

[Reg 23.4 am by reg 19 of GoN R2101 in G. 4498.]

23.5.1 Every pressure vessel shall be provided with one or more suitable inspection openings, situated so that all internal surfaces and seams may be conveniently cleaned and inspected.

23.5.2 Every pressure vessel where the dimensions are such as to permit of entry into the vessel, shall be provided with at least one manhole, which shall be not less than 400 millimetres by 300 millimetres for an elliptical hole and at least 400 millimetres in diameter for a circular hole: Provided that where there is no danger from internal corrosive action no manhole need be provided.

[Reg 23.5.2 am by GoN R303 in G. 3397.]

23.5.3 The Principal Inspector of Mines shall determine whether the number and size of the inspection openings are sufficient and he may require more inspection openings to be provided.

[Reg 23.5.3 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

23.6.1 Every pressure vessel shall be provided with at least one reliable pressure gauge, the dial of which shall be graduated to show gauge pressure in terms of pascals and the maximum pressure which the gauge shall be capable of registering shall not be less than the hydraulic test pressure as defined in regulation 23.12.5 and not more than double the maximum safe working gauge pressure of the vessel: Provided that where two or more pressure vessels with the same maximum safe working gauge pressure are connected to a common supply main, one pressure gauge fitted directly to the supply main, situated so that its reading is easily visible from any of the pressure vessels, shall be sufficient.

[Reg 23.6.1 am by GoN R303 in G. 3397, GoN R2102 in G. 4498.]

23.6.2 The maximum safe working gauge pressure of the vessel shall be clearly marked with a red line on the dial of the pressure gauge.

23.7.1 Every pressure vessel shall be provided with at least one safety valve which shall be—

- (a) kept locked, sealed or otherwise rendered inaccessible to any unauthorised person;
- (b) set to open at or before reaching the maximum safe working gauge pressure;
- (c) such as to prevent the pressure rising in excess of 10 per cent above the maximum safe working gauge pressure;
- (d) attached to the pressure vessel and which shall be incapable of being shut off therefrom, except where two or more pressure vessels with the same maximum safe working gauge pressure are connected to a common supply main, one safety valve fitted directly to the supply main, situated so that it is easily visible from any of the pressure vessels, shall be sufficient: Provided that where a pressure vessel is capable of being isolated from such common supply main, the principal inspector of mines may require the fitting of a fusible plug or rupturing disc to such pressure vessel;

[Reg 23.7.1(d) am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

- (e) constructed of metal approved by the Principal Inspector of Mines: Provided that cast iron shall not be used if the maximum safe working gauge pressure of the pressure vessel is in excess of 1 megapascal; and

[Reg 23.7.1(e) am by GoN R303 in G. 3397, GoN R2102 in G. 4498, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- (f) arranged to discharge by means of a pipe any dangerous or toxic gas, vapour or liquid so as not to endanger the safety of persons.

23.7.2 Where the use of a safety valve in any particular process is impracticable due to its inability to operate under all working conditions, the Principal Inspector of Mines may require or permit the use of a rupturing disc subject to such conditions as he may prescribe.

[Reg 23.7.2 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

23.7.3 Where the maximum safe working gauge pressure of any steam receiver cannot be exceeded, the Principal Inspector of Mines may exempt in writing such receiver from being fitted with a safety valve.

[Reg 23.7.3 am by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

23.8 Every pressure vessel in which liquid may collect shall be provided with a suitable drain at the lowest part of the vessel. The discharge shall be controlled by a cock or valve and shall be led to a safe place.

23.9.1 Every pressure vessel in which the level of the liquid in the vessel is material to safety shall be provided with a means for indicating at all times the actual level of the liquid.

23.9.2 The level indicator shall be conspicuously marked, with corresponding marks on the shell of the vessel, to indicate the safe working level limits of the liquid in the vessel.

23.9.3 Any indicator of the tubular-glass type shall be fitted with an efficient guard which shall not obscure the reading of the indicator and shall be constructed so as to prevent automatically the escape of any poisonous, explosive or inflammable substance into the atmosphere should the glass break.

23.10.1 Every pressure vessel which is fed from a supply, the pressure of which is higher than the safe working gauge pressure of such vessel, shall be provided with—

- (a) a pressure reducing valve to reduce the supply pressure to the maximum safe working gauge pressure of the vessel; and
- (b) a safety valve fitted adjacent to the low pressure side of the reducing valve and set to release at the maximum safe working gauge pressure of the vessel to prevent the pressure rising in excess of 10 per cent above the maximum safe working gauge pressure.

23.10.2 Where two or more pressure vessels with the same working gauge pressure are connected to the same source of supply, one pressure reducing valve and one safety valve shall be sufficient.

23.11 Every pressure vessel which is intended to operate under steam pressure and which is equipped for its operation with a removable or hinged door or cover shall be provided with an interlock or other effective means so as to prevent a rise in pressure inside the vessel before the door or cover is in the fully closed or locked position and to prevent the release of the door or cover from the locked or closed position before the pressure inside the vessel has been reduced to atmospheric pressure.

23.12.1 The person appointed in terms of regulation 2.13.1, 2.13.2 or 2.13.3 shall ensure that every pressure vessel is inspected and tested in accordance with the provisions of this regulation.

23.12.2 Every pressure vessel in which the product of the designed working gauge pressure in kilopascals and the capacity in cubic metres exceeds 10 but does not exceed 30, shall be inspected and tested before it is used for the first time.

[Reg 23.12.2 am by GoN R303 in G. 3397, GoN R2102 in G. 4498.]

23.12.3 Every pressure vessel in which the product of the designed working gauge pressure in kilopascals and the capacity in cubic metres exceeds 30, shall be—

- (a) inspected and tested before being commissioned after installation for the first time or any subsequent time, after having been out of commission for more than two years or after major repairs;
- (b) inspected at regular intervals of not more than one year; and
- (c) tested at regular intervals of not more than two years: Provided that where any particular working condition exists the Principal Inspector of Mines may require more frequent inspections and tests to be carried out.

[Reg 23.12.3 am by GoN R303 in G. 3397, GoN R2102 in G. 4498, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

23.12.4 The inspection shall consist of an examination of the internal and external surfaces of the vessel and of all the fittings and appurtenances.

23.12.5 The test shall consist of a pressure test by water or, where the use of water is impracticable, by any other suitable liquid, to a pressure of 1,3 times the maximum safe working gauge pressure of the vessel.

[Reg 23.12.5 am by GoN R303 in G. 3397.]

23.12.6 Where the construction of the vessel is such as to preclude a thorough inspection of all the internal surfaces, such as vessel jackets, the internal inspection may be substituted by a pressure test.

23.12.7 Where it is impracticable to use a liquid for the above-mentioned test, the Principal Inspector of Mines may permit a test with a non-inflammable gas to a pressure of 1,1 times the maximum safe working gauge pressure of the vessel: Provided that the test is preceded by an internal inspection and any conditions and precautionary measures he may prescribe are complied with.

[Reg 23.12.7 amended by GoN R303 in G. 3397, reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

23.12.8 Notwithstanding anything to the contrary contained in this regulation, any cooking pot and similar jacketed vessel, irrespective of capacity, shall be inspected and tested as prescribed by regulation 23.12.3.

23.13.1 When it appears from an examination or test that a pressure vessel can no longer be used with safety at the manufacturer's intended maximum working gauge pressure, the principal inspector of mines may fix a new maximum working gauge pressure at which the vessel may continue to be used and he shall require the new reduced pressure to be marked on the plate provided in terms of regulation 23.3 and no person shall require or permit such a vessel to be used at a higher pressure.

[Reg 23.13.1 amended by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725.]

23.13.2 When at any time a pressure vessel is found to be in a condition from which danger may arise, the use of the vessel shall be suspended immediately and it shall not again be used until repairs have been carried out.

23.13.3 No person shall effect any important repair to any pressure vessel without the prior approval of the Principal Inspector of Mines.

[Reg 23.13.3 inserted by reg 8 of GoN R2703 in G. 7953; amended by reg 26(d) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

23.14.1 ...

[Reg 23.14.1 repealed by GoN R1578 in G. 24168.]

23.14.2 ...

[Reg 23.14.2 repealed by GoN R1578 in G. 24168.]

23.14.3 ...

[Reg 23.14.3 amended by GoN R303 in G. 3397, corrected by GoN R2103 in G. 4498; reg 23.14.3 repealed by GoN R1578 in G. 24168.]

23.14.4 ...



[Reg 23.14.4 rep by GoN R1578 in G. 24168.]

23.15.1 ...

[Reg 23.15.1 am by GoN R303 in G. 3397; rep by GoN 911 in G. 29214.]

23.15.2 ...

[Reg 23.15.2 rep by GoN 911 in G. 29214.]

23.15.3 ...

[Reg 23.15.3 rep by GoN 911 in G. 29214.]

23.15.4 ...

[Reg 23.15.4 rep by GoN 911 in G. 29214.]

23.15.5 ...

[Reg 23.15.5 rep by GoN 911 in G. 29214.]

23.15.6 ...

[Reg 23.15.6 rep by GoN 911 in G. 29214.]

23.15.7 ...

[Reg 23.15.7 rep by GoN 911 in G. 29214.]

23.15.8 ...

[Reg 23.15.8 am by reg 26(g) of GoN R3083 in G. 13684, reg 2(c) of GoN R94 in G. 17725; rep by GoN 911 in G. 29214.]

23.15.9 ...

[Reg 23.15.9 rep by GoN 911 in G. 29214.]

23.15.10 At the entrance to the plant, other than a plant in which fluorinated hydro-carbons are used as the refrigerant, there shall be provided and kept readily accessible an adequate length of hose permanently connected to a water supply and two suitable gas masks which shall be examined at least once in every six months by a person appointed by the manager.

23.15.11 ...

[Reg 23.15.11 am by reg 17 of GoN R1352 in G. 11397; rep by GoN 911 in G. 29214.]

23.15.12 ...

[Reg 23.15.12 am by GoN R303 in G. 3397; rep by GoN 911 in G. 29214.]

23.15.13 ...

[Reg 23.15.13 rep by GoN 911 in G. 29214.]

23.15.14 ...

[Reg 23.15.14 rep by GoN 911 in G. 29214.]

23.15.15 ...

[Reg 23.15.15 am by reg 42 of GoN R305 in G. 3397; rep by GoN 911 in G. 29214.]

23.15.16 ...

[Reg 23.15.16 am by reg 43 of GoN R305 in G. 3397; rep by GoN 911 in G. 29214.]

## **CHAPTER 24**

### **FIRST AID AND RESCUE BRIGADES**

- 24.1 First aid equipment in accordance with the following requirements shall be provided, maintained and be readily available for use on the surface at every mine and at every works—
- 24.1.1 Where the number of persons employed on surface including opencast workings, at any one time is 300 or less, there shall be kept in a readily accessible, clean and dry place a suitable stretcher, provided with two blankets, and a substantially constructed first aid box containing tourniquets, splints, bandages, individually wrapped sterile dressings and antiseptic solution.
- 24.1.2 Where the number of persons employed on surface, including opencast workings, at any one time exceeds 300, first aid rooms adequate in number shall be established at readily accessible places to serve the persons employed. Each first aid room shall be clearly marked as such, kept clean and equipped with at least two suitable stretchers, each provided with two blankets, and two first aid boxes equipped as detailed in regulation 24.1.1.
- 24.2 First aid equipment in accordance with the following requirements shall be provided, maintained and be readily available for use in the underground workings of every mine other than a coal mine—
- 24.2.1 Where the number of persons employed underground at any one time is 50 or less, there shall be kept in a readily accessible, clean and dry place a suitable stretcher and a first aid box equipped as detailed in regulation 24.1.1.
- .
- 24.2.2 Where the number of persons employed underground at any one time exceeds 50 but does not exceed 300, first aid rooms, clearly marked as such, shall be established at a conspicuous place underground and equipped and maintained as detailed in regulation 24.1.2: Provided that where a first aid room is established on surface a first aid room need not be established in the underground workings if at least one first aid box equipped as detailed in regulation 24.1.1 is kept in a readily accessible, clean and dry place underground for each 150 persons so employed.

- 24.2.3 Where the number of persons employed underground at any one time exceeds 300, a first aid room shall be established at every main shaft, main winze or main adit in which persons regularly travel and in any case not more than 1 000 metres along the shortest travelling way from any place where ordinary mining operations, other than shaft sinking or main development, are being conducted. Each first aid room, clearly marked as such, shall be equipped and maintained as detailed in regulation 24.1.2. In each shift boss's section a first aid box equipped as detailed in regulation 24.1.1 shall be kept in a readily accessible, clean and dry place.

[Reg 24.2.3 am by GoN R303 in G. 3397.]

- 24.3 First aid equipment in accordance with the following requirements shall be provided, maintained and be readily available for use in the workings of every coal mine—

24.3.1 Where the number of persons employed underground at any one time is 50 or less, there shall be kept in a readily accessible, clean and dry place a suitable stretcher provided with two blankets and a first aid box equipped as detailed in regulation 24.1.1.

24.3.2 Where the number of persons employed underground at any one time exceeds 50 but does not exceed 300, a first aid room, clearly marked as such, shall be established at a conspicuous place and equipped and maintained as detailed in regulation 24.1.2 and there shall be kept in a readily accessible, clean and dry place in each working section a suitable stretcher provided with two blankets and a first aid box equipped as detailed in regulation 24.1.1.

24.3.3 Where the number of persons employed underground at any one time exceeds 300, a first aid room shall be established at every mine overseer's cabin, provided that, when any working section is situated more than 1 000 metres along the shortest travelling way from such first aid room, the Principal Inspector of Mines may require the establishment of a separate first aid room adjacent to such working section or sections. Each first aid room, clearly marked as such, shall be equipped and maintained as detailed in regulation 24.1.2. In addition there shall be kept in a readily accessible, clean and dry place in each working section a suitable stretcher provided with two blankets and a first aid box equipped as detailed in regulation 24.1.1.

[Reg 24.3.3 am by GoN R303 in G. 3397, reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

- 24.4 Only appliances and requisites for first aid and rescue work shall be kept in a first aid box or in a first aid room.

[Reg 24.4 am by reg 44 of GoN R305 in G. 3397.]

- 24.5.1 Every first aid room shall be under the general charge of a person appointed by the manager and who shall be the holder of a valid first aid certificate as required in regulation 24.7.

[Reg 24.5.1 am by reg 18(a) of GoN R1352 in G. 11397.]

- 24.5.2 During each shift when persons are at work in any part of a mine or works the holder of a valid first aid certificate shall be in constant attendance at each first aid room serving such part of the mine or works.
- 24.6 One or more notices on which are legibly printed in both official languages simple directions setting forth the approved procedures for the immediate treatment of cases of gassing, heat stroke, heat exhaustion, drowning and electric shock shall be posted up in a conspicuous place in every change-house and in every first aid room.
- 24.7 At every mine where more than 300 persons are employed every person under the age of 50 years who is in charge of workmen and who is employed in the workings or is normally employed on the surface where machinery is operated, shall within one year of his engagement on the mine be in possession of a valid first aid certificate recognised by the Chief Inspector: Provided that any person appointed in terms of regulation 2.5.1, 2.6.1, 2.12.1, 2.13.1 or 2.13.3 shall be exempted from being the holder of such certificate. Every first aid certificate shall be renewed at intervals of not more than three years. The provisions of this regulation shall not apply to any person who is the holder of the gold medal of the South African Red Cross Society, the medallion and two labels of the St John Ambulance Association, the highest diploma of Die Suid-Afrikaanse Noodhulpliga or to any registered medical, surgical or mental nurse.

[Reg 24.7 am by reg 18(b) of GoN R1352 in G. 11397, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 24.8.1 At every mine and at every works in the vicinity of where cyanide is used there shall be kept in a conspicuous place and maintained for immediate use a sufficient supply of antidote for cyanide poisoning.
- 24.8.2 Such antidote shall be kept in a box labelled "Cyanide Antidote-Sianiedteengif" and explicit directions in both official languages for the use of such antidote shall be displayed inside or near the box.
- 24.9 Hand basins or baths with an adequate supply of clean water shall be provided for use by persons who are required to handle, or who may come in contact with, poisonous or corrosive solutions or substances.
- 24.10 An adequate supply of wholesome drinking water shall be provided in each testing room and assay office, and this supply shall be distinctly labelled "Drinking Water-Drinkwater".
- 24.11 When any person employed at a mine or works sustains injury by accident or otherwise, the manager shall make all reasonable arrangements to ensure that the injured person received prompt medical attention and that where necessary the resident medical practitioner or the nearest

registered medical practitioner is immediately sent for. If the injured person is unable to proceed unaided to his abode or to a hospital, the manager of the mine or works shall have such person conveyed to his abode or to hospital as quickly as practicable and at the expense of the owner of the mine or works.

24.12.1 ...

[Reg 24.12.1 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.12.2 ...

[Reg 24.12.2 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.13.1 ...

[Reg 24.13.1 rep by GoN R1305 in G. 26963.]

24.13.2 ...

[Reg 24.13.2 rep by GoN R1305 in G. 26963.]

24.13.3 ...

[Reg 24.13.3 rep by GoN R1305 in G. 26963.]

24.14 ...

[Reg 24.14 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.14.1 ...

[Reg 24.14.1 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.14.2 ...

[Reg 24.14.2 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.14.3 ...

[Reg 24.14.3 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.14.4 ...

[Reg 24.14.4 am by GoN R305 in G. 3397, GoN R1352 in G. 11397, GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.14.5 ...

[Reg 24.14.5 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.14.6 ...

[Reg 24.14.6 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R904 in G. 23583.]

24.15 ...

[Reg 24.15 am by reg 46 of GoN R305 in G. 3397; rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.16 ...

[Reg 24.16 am by GoN R303 in G. 3397; rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.17 ...

[Reg 24.17 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.18.1 ...

[Reg 24.18.1 am by reg 18(d) of GoN R1352 in G. 11397; rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.18.2 It shall be the duty of the person in charge of the central rescue station to ensure that every set of breathing apparatus under his control is tested and maintained and that the oxygen and carbon dioxide absorbent supplied for use with a breathing apparatus are of the required standard of purity.

24.18.3 ...

[Reg 24.18.3 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.19 ...

[Reg 24.19 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.20.1 ...

[Reg 24.20.1 ins by reg 2 of GoN R2264 in G. 10502; subs by reg 10(a) of GoN R2062 in G. 13473; am by GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R569 in G. 23410.]

24.20.2.1...

[Reg 24.20.2.1 rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.20.2.2...

[Reg 24.20.2.2 am by GoN R3083 in G. 13684, GoN R94 in G. 17725, GoN R569 in G. 23410; rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.20.2.3...

[Reg 24.20.2 ins by reg 2 of GoN R2264 in G. 10502; regs 24.20.2.1, 24.20.2.2 and 24.20.2.3 subs for reg 24.20.2 by reg 10(a) of GoN R2062 in G. 13473; reg 24.20.2.3 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725; rep by GoN R91 in G. 30698 wef 1 August 2008.]

24.20.3 ...

[Reg 24.20.3 ins by reg 2 of GoN R2264 in G. 10502; subs by reg 10(a) of GoN R2062 in G. 13473; rep by GoN R569 in G. 23410.]

24.20.4 ...

[Reg 24.20.4 ins by reg 2 of GoN R2264 in G. 10502; subs by reg 10(a) of GoN R2062 in G. 13473; rep by GoN R904 in G. 23583.]

24.20.5 ...

[Reg 24.20.5 ins by reg 10(a) of GoN R2062 in G. 13473; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725; rep by GoN R569 in G. 23410.]

## **CHAPTER 25**

### **ACCIDENTS AND INQUIRIES**

[Chapter 25 am by GoN R303 in G. 3397, GoN R537 in G. 6892, GoN R1885 in G. 7219, GoN R2703 in G. 7953, GoN R1352 in G. 11397, GoN R3083 in G. 13684, GoN R1556 in G. 15067, GoN R94 in G. 17725; rep by GoN R788 in G. 23498.]

## **CHAPTER 26**

### **SUMMONING OF WITNESSES**

26.1 The form of summons served on any witness whose evidence is required at any inquiry in terms of the Act is as follows:

**To** ..... **Place** .....

You are hereby directed to summon .....

..... that he appears

personally at ..... to attend an

inquiry before ..... on the ..... day

of..... at ..... to testify or declare

all he knows concerning .....

and in connection therewith to hand in the documents and papers hereinafter specified:

.....

and serve on the said .....

a copy of this summons, and report to the undersigned, stating what you have done about it.

Dated at ..... this ..... day of ..... 19 .....

.....  
(Signature of person authorised to issue summons.)

Address .....

..... Code.....

26.2 Whenever a summons is served as is mentioned in regulation 26.1 on any person, such service shall be effected through the Court of the Magistrate within whose area of jurisdiction such person is resident or employed, or by a member of the Police force, or by another person who has been authorised by the person issuing such summons.

26.3 Every such summons as aforesaid shall be signed by the Chief Inspector, Principal Inspector of Mines, regional mining engineer or any other person duly authorised by the Chief Inspector to issue it and shall specifically state the time and place at which the witness named therein is to attend.

[Reg 26.3 am by reg 2(a) and (b) of GoN R94 in G. 17725.]

26.4 Whenever a summons in terms of regulation 26.1 is served on a witness at an inquiry under section 28(1), (2) or (5) of the Act, or the attendance of such person at an inquiry is otherwise secured, the provisions of the law and regulations for summoning or securing the attendance of witnesses, in force in the magistrates' courts of the province in which the inquiry is to be held, and also the allowances payable to witnesses, shall *mutatis mutandis* apply.

[Chapter 26 am by reg 20 of GoN R2101 in G. 4498, reg 35 of GoN R537 in G. 6892; subs by reg 21 of GoN R3083 in G. 13684.]

## **CHAPTER 27**

### **APPEALS**

27.1.1 In the case of a mine or works the owner or manager of such mine or works, hereinafter referred to as the appellant, may, within one month after the receipt of any notice, decision, order or instruction issued or given in terms of the Act or of any other notice, decision, order or instruction given to the appellant by the Director-General or any regional director, lodge with the Minister or the Director-General as the case may be, a written notice of appeal against such notice, decision, order or instruction.



- 27.1.2 The notice of appeal shall state clearly the grounds on which the appellant intends to rely at the hearing of the appeal.
- 27.1.3 The appellant shall deposit with the Director-General a sum of R200 when lodging the notice of appeal.
- 27.1.4 The Minister or the Director-General may, in his discretion and on such conditions as he may decide, condone the late noting of an appeal.
- 27.1.5 On receipt of a notice of appeal, the Minister or the Director-General, as the case may be shall appoint a special commission to hear the appeal, which commission shall be constituted from—
- (a) two persons nominated by the Minister or the Director-General, as the case may be, one of whom shall be designated as chairman,
  - (b) two persons nominated by the appellant, and
  - (c) one person nominated by or on behalf of the workers mostly concerned with the subject of the appeal, in the manner set out in regulation 27.1.6.
- 27.1.6 The Minister or the Director-General shall, in his discretion, decide which class or type of worker is mostly concerned with the subject of the appeal and appoint one of not less than three persons who shall be nominated in each case by the workers' organisation for that class or type of worker: Provided that if such organisation fails to nominate such persons within three days of being requested thereto or if no appropriate organisation exists, the Minister or the Director-General, as the case may be, shall in consultation with the Director-General of the State Department deemed by him to be appropriate in the circumstances, appoint a person.
- 27.1.7 The commission shall commence the hearing of the appeal on the date and at the time and place notified by the chairman to the appellant and the Minister, the Director-General and the regional director concerned.
- 27.1.8 The Director-General or regional director concerned shall, within three days upon receipt of the notification referred to in regulation 27.1.7, submit to the chairman of the commission and to the appellant the reasons for the notice, decision, order or instruction against which an appeal has been lodged and inform the commission what witnesses and evidence are to assist the commission in deciding the appeal: Provided that should such notice, decision, order or instruction have been given verbally, the Director-General or the regional director concerned shall commit it to writing and forward it with the reasons.
- 27.1.9 The hearing of the appeal shall consist of the hearing of oral testimony given under oath, inspections of relevant objects or places, documentary evidence in the form of reports, drawings,

plans and the like, or any form of evidence admissible in a Court of Law, and arguments by the Director-General or regional director concerned and by the appellant or his representative on all evidence on record.

- 27.1.10 The commission shall first hear the evidence tendered by the Director-General or regional director concerned and shall afford the appellant or his representative an opportunity to cross-examine them; thereafter the evidence of the appellant shall be heard whereupon he may be cross-examined by each member of the commission in the order indicated by the chairman. The commission may call other relevant witnesses who may be cross-examined by the appellant or his representative.
- 27.1.11 The Director-General or regional director concerned may question any witness on any matter relevant to the subject of the appeal.
- 27.1.12 Evidence gained at inspections shall be given in a clear voice and recorded within hearing distance of the Director-General or regional director concerned and the appellant.
- 27.1.13 All evidence shall be recorded mechanically or in writing and transcriptions thereof shall be made available to any person on request and on payment of such fee as the Director-General in each case may determine.
- 27.1.14 At the conclusion of the evidence the Director-General or regional director concerned shall first address the commission on the evidence, and thereafter the appellant or his representative shall address the commission.
- 27.1.15 All witnesses, except the appellant and the Director-General or regional director concerned, shall be excluded from the hearing until called to testify.
- 27.1.16 All decisions of the commission shall be by majority vote of the members and in the event of an equality of votes, the chairman shall have a casting vote in addition to a deliberative vote.
- 27.1.17 The commission shall report its decision with reasons for judgment, which decision shall be final and open to the public for inspection.
- 27.1.18 The provisions of sections 29 and 30 of the Act, except subsection 2(b) of section 29, shall mutatis mutandis apply to the hearing of an appeal.
- 27.2.1 Where the decision of the commission is given against the appellant in any respect, the appellant may be ordered to pay the entire cost of the commission, or such proportion thereof as the commission may determine, as well as any fees payable to any witnesses who may have been summoned to appear: Provided. that the deposit lodged with the Director-General may be forfeited in whole or in part for this purpose.

27.2.2 Where the decision of the commission is given in favour of the appellant the sum deposited by him shall be returned to him forthwith.

27.3 The members of such commission other than Government officers, while engaged in the hearing of the appeal, shall in addition to all reasonable travelling expenses, receive the following daily allowances—

(a) When not away overnight from his usual place of residence, the chairman R10,50 and any other member of such commission R8;

(b) When away overnight from his usual place of residence, the chairman R21,50 and any other member of such Commission R19.

[Chapter 27 am by GoN R2101 in G. 4498; subs by reg 22 of GoN R3083 in G. 13684.]

## **CHAPTER 28**

### **CERTIFICATES OF COMPETENCY**

28.1.1 The certificates of competency mentioned in this chapter shall be granted by the Chief Inspector in accordance with the recommendation of the relevant Commissions of Examiners, except where specifically stated to the contrary.

[Reg 28.1.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.1.2 Any person wishing to obtain a certificate of competency, as provided for in this chapter, shall make application therefor to the relevant Commission of Examiners, appointed from time to time, or other examining authority.

28.1.3 A candidate may appeal against any decision of any examining authority to the Chief Inspector, who may refer the matter back to the examining authority for further report and the decision of the Chief Inspector shall be final. Each such appeal, which shall be in writing, shall be lodged within 31 days after the date of the examining authority's decision and each such appeal shall be accompanied by R40 in the case of a written examination and R20 in the case of an oral examination: Provided that in the event of the appeal being successful the fee shall be refunded: Provided further that in the case of the qualifying examination for a mechanical engineer's or electrical engineer's certificate of competency an appeal against the examining authority's decision shall be lodged with the Department of National Education in accordance with such rules and subject to the payment of such fees as may be determined from time to time by that Department.

[Reg 28.1.3 subs by reg 4 of GoN R1346 in G. 3625, reg 11 of GoN R513 in G. 5488; am by reg 10(a) of GoN R2703 in G. 7953; subs by reg 2(a) of GoN R2566 in G. 11037; am by reg 26(a) of GoN R3083 in G.

13684, reg 2(a) of GoN R94 in G. 17725.]

28.2.1 ...

[Reg 28.2.1 rep by reg 20(a) of GoN R1352 in G. 11397.]

28.2.2 Any certificate in which any alteration or erasure has been made, other than by the relevant issuing authority or other legally authorised person, shall be invalid.

28.3 Each Commission of Examiners shall be selected, appointed and discharged by the Chief Inspector, and shall furnish regular reports of its proceedings to him: Provided that in the case of mechanical and electrical engineers' certificates of competency such selection, appointment and discharge shall be in consultation with the Chief Inspector as defined in the Machinery and Occupational Safety Act, 1983.

[Reg 28.3 am by reg 2(b) of GoN R2566 in G. 11037, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.4 Examinations shall be held by the said Commissions at such times and places as may be determined by the Chief Inspector: Provided that in the case of the qualifying examination for a mechanical engineer's or an electrical engineer's certificate of competency the examination shall be held by the Department of National Education at times and places determined by that Department.

[Reg 28.4 am by reg 2(c) of GoN R2566 in G. 11037, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.5 An applicant for examination may obtain gratis from the secretary to the Commissions of Examiners the appropriate application form and a copy of the relevant examination syllabus and of the rules applying to candidates.

28.6 Instructions for the guidance of examining and issuing authorities, as well as rules for the conduct of examinations by such authorities, including syllabi for such examinations, shall be framed by the Chief Inspector who shall have power to amend such instructions or alter such rules as occasion may require: Provided that in the case of a mechanical engineer's or an electrical engineer's certificate of competency the framing of instructions and rules, including syllabi, and amendments thereto shall be done in consultation with the Chief Inspector as defined in the Machinery and Occupational Safety Act, 1983: Provided further that the rules for the conduct of the qualifying examination shall be determined by the Department of National Education.

[Reg 28.6 am by reg 2(d) of GoN R2566 in G. 11037, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.7 A *quorum* of a Commission of Examiners shall consist of the chairman and two members or, in the case of a Commission of Examiners for blasting certificates, of the chairman and one member. Should any difference of opinion arise in any matter connected with the examination of a candidate, it shall be decided by a majority of votes of the members of the Commission. If the votes be equal the chairman shall have an additional or casting vote.

28.8 An officer of the Department of Mineral and Energy Affairs shall act as secretary to every Commission of Examiners and shall keep minutes of the proceedings of such Commission.

[Reg 28.8 am by reg 2(e) of GoN R2566 in G. 11037.]

28.9 Any Commission of Examiners, in any special case may recommend to the Chief Inspector the issue to a candidate of a certificate limited in scope in accordance with rules framed in terms of regulation 28.6 provided such candidate has the requisite experience and qualifications, and satisfies the Commission that he has sufficient knowledge of his statutory responsibilities and of the subjects appropriate to his work. The validity of a certificate issued in terms of this regulation may be further limited to a specified period of time. The Commission may require such candidate to submit himself to a written or an oral examination in any of the subjects prescribed, and shall make a recommendation regarding the limitations to which such certificate is subject.

[Reg 28.9 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.10 An initial application for acceptance as a candidate and each application thereafter for examination for a certificate of competency shall, when handed or sent in, bear uncanceled revenue stamps to the value shown hereunder: Provided that in the case of a mechanical engineer's or an electrical engineer's certificate of competency application to sit for the qualifying examination shall be made to the Department of National Education, to whom the examination fees, as determined from time to time by that Department, shall be paid.

		<b>Proposed value of stamps to be affixed to applications</b>	
		<b>On initial application for acceptance as a candidate</b>	<b>On each application for examination for a certificate</b>
1.	Mine Manager's certificate	Part A: R50 Part B: R50 Part C: R50	Part A: R100 Part B: R100 Part C: R100
2.	Mine Overseer's certificate	R50	Part A: R50 Part B: R50 Part A & Part B: R100
3.	Mine Surveyor's certificate	R50	Part A: R100 Part B: R100 Part A & Part B: R200
4.	Mechanical Engineer's: Mines & Works certificate	R50	Fees as determined by the appropriate department
5.	Electrical Engineer's: Mines & Works certificate	R50	Fees as determined by the appropriate department

6.	Mine Assayer's certificate	R50	Part A: R100 Part B: R100
7.	Winding Engine Driver's certificate	R50	R50
8.	Locomotive Engine Driver's certificate	R50	R50
9.	Stationary Engine Driver's certificate	R50	R50
10.	Boiler Attendant's certificate	R50	R50
11.	Blasting Certificate: Scheduled mines or fiery mines— (i) Permanent (ii) Provisional (iii) Exchange: provisional to permanent	- - -	R50 R50 R10
12.	Blasting Certificate: Opencast & other mines or works— (i) Permanent (ii) Provisional (iii) Exchange: provisional to permanent	- - -	R25 R25 R10
13.	Lampman's certificate	-	R25
14.	Onsetter's certificate	-	R25

[Reg 28.10 subs by reg 10(b) of GoN R2703 in G. 7953, reg 2(f) of GoN R2566 in G. 11037; am by reg 11(a) of GoN R2062 in G. 13473, reg 23(a) of GoN R3083 in G. 13684, GoN R1324 in G. 20606.]

28.11 No person shall submit an application for examination unless and until he has been accepted as a candidate.

28.12 On proof being furnished by the holder, to the satisfaction of the Chief Inspector, that a certificate mentioned in regulation 28.10 has been lost, defaced or destroyed or has become dilapidated, a duplicate certificate shall be issued on payment of a fee of R20 in the case of a mine manager's certificate, mine overseer's certificate, mine surveyor's certificate, mechanical engineer's or electrical engineer's certificate or mine assayer's certificate and a fee of R10 in the case of any other certificate. The prescribed fee shall be paid in uncanceled revenue stamps. Such certificate shall bear the words "Duplicate-Duplikaat".

[Reg 28.12 subs by reg 23 of GoN R2101 in G. 4498, reg 2(g) of GoN R2566 in G. 11037; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

### **MINE MANAGER'S CERTIFICATE**

28.13.1 The constitution of a Commission of Examiners for a mine manager's certificate of competency shall be as follows—

A Chief director or a director who is a certificated mine manager (the chairman); any officer in the service of the Department who is a certificated mine manager; an officer in the service of the Department who is a certificated mechanical and electrical engineer (mines); and at least three certificated mine managers, whether actually engaged in the management of a mine or not, of whom at least one shall be the holder of a certificate appropriate to the examination being conducted.

[Reg 28.13.1 am by reg 2(h) of GoN R2566 in G. 11037; subs by reg 23(b) of GoN R3083 in G. 13684.]

28.13.2 The examination shall consist of three parts, namely—

*Part A.* – Mine surveying, geology and mechanical and electrical engineering.

*Part B* – Mining, mining technical services and mine management and industrial law.

*Part C* – The Act and the regulations made or deemed to have been made thereunder.

[Reg 28.13.2 subs by reg 11(b) of GoN R2062 in G. 13473.]

28.13.3 An applicant who can satisfy the Director-General—

- (a) that he holds a mine manager's certificate of competency not issued in terms of this chapter or a mining engineer's degree of a university or any other qualification, provided such certificate, degree or other qualification is recognised for the purpose by the Chief Inspector; and

[Reg 28.13.3(a) am by reg 2(a) of GoN R94 in G. 17725.]

- (b) that he has had such period of mining experience, acceptable for the purpose by the Chief Inspector, gained in the workings of a mine,

[Reg 28.13.3(b) am by reg 2(a) of GoN R94 in G. 17725.]

shall be exempted from such part or subjects of the examination as the Director-General may determine, provided he submits an application bearing uncanceled revenue stamps to the value specified in regulation 28.10 for the whole of the examination.

[Reg 28.13.3 am by reg 47 of GoN R305 in G. 3397, reg 26(a) of GoN R3083 in G. 13684.]

28.14.1 An applicant shall not be accepted as a candidate for Part A of the examination unless he has produced evidence satisfactory to the Commission—

- (a) of his sobriety and general good conduct; and

- (b) that he has had at least three years mining experience acceptable to the Commission.

[Reg 28.14.1 subs by reg 11(c) of GoN R2062 in G. 13473.]

28.14.2 An applicant shall not be accepted as a candidate for Part B of the examination unless he has passed part A and he has produced evidence satisfactory to the Commission—

- (a) of his sobriety and general good conduct;
- (b) that he is the holder of an appropriate blasting certificate recognised by the Chief Inspector for the purpose of the examination; and

[Reg 28.14.2(b) am by reg 26(a) of GoN R3083 in G. 13684.]

- (c) that he has had at least four years mining experience acceptable to the Commission.

[Reg 28.14.2 subs by reg 11(d) of GoN R2062 in G. 13473; am by reg 2(a) of GoN R94 in G. 17725.]

28.14.2(A) An applicant shall not be accepted as a candidate for Part C of the examination unless he has passed Part B and has produced evidence satisfactory to the Commission—

- (a) that he has attained the age of 23 years,
- (b) of his sobriety and general good conduct,
- (c) that he is the holder of a permanent blasting certificate recognised by the Chief Inspector for the purpose of the examination,

[Reg 28.14.2(A)(c) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- (d) that, except as is provided for in regulation 28.14.3, he has had at least five years mining experience acceptable to the Commission of which at least four years shall have been gained in the workings of a mine and such experience shall include at least six months at the working face on rock-breaking or winning minerals or work directly connected therewith; and
- (e) that he has had at least six months mining experience, acceptable to the Commission, in the workings of the class mine appropriate to the certificate for which he wishes to qualify.

[Reg 28.14.2(A) ins by reg 11(e) of GoN R2062 in G. 13473.]

28.14.3 An applicant who can satisfy the Commission—

- (a) that he holds a mining engineer's degree of a South African university; or
- (b) that he holds a mechanical or electrical engineer's certificate of competency for mines and works issued in accordance with these Regulations; or
- (c) that he holds any other degree, certificate or diploma recognised by the Chief Inspector for the purposes of the examination,



[Reg 28.14.3(c) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

may be exempted from not more than three of the number of years of mining experience required in terms of regulation 28.14.1 or 28.14.2, the period of exemption being as laid down in the rules framed under regulation 28.6. The period for which no exemption is granted shall be a period during which experience was gained in the workings of a mine.

- 28.14.4 The experience gained by the applicant in the workings of a mine during the unexempted period referred to in regulation 28.14.3, shall be such as is acceptable to the Commission and as much thereof as may be required by the Commission shall be practical experience additional to the experience prescribed for the said degree, certificate or diploma.

[Reg 28.14.4 subs by reg 36 of GoN R537 in G. 6892.]

- 28.15 Except as is provided for in regulation 28.13.3, a certificate shall not be issued unless the Commission is satisfied that, within the scope indicated in the syllabus for the examination drawn up in terms of regulation 28.6, the candidate possesses a sufficient knowledge of mining, mine ventilation, mechanical and electrical engineering, mine surveying, geology, and the Act and the regulations made or deemed to have been made thereunder.

- 28.16.1 Separate certificates shall be issued for metalliferous mines and for coal mines and the examination shall be conducted to suit each class of certificate.

- 28.16.2 A certificate for metalliferous mines shall be valid for all mines except coal mines. A certificate for coal mines may be limited in scope to non-fiery coal mines.

- 28.16.3 The holder of a mine manager's certificate for non-fiery coal mines shall qualify for a mine manager's certificate for coal mines if he can furnish proof that he has had six months' experience acceptable to the Commission in fiery mines and submits an application bearing uncanceled revenue stamps to the value of R14.

### **MINE OVERSEER'S CERTIFICATE**

- 28.17 The constitution of a Commission of Examiners for a mine overseer's certificate of competency shall be as follows—

An officer in the service of the Department who is a certificated mine manager (the chairman); an officer in the service of the Department who is a certificated mechanical or electrical engineer (mines); and at least two certificated mine managers, whether actually engaged in the management of a mine or not: Provided that the qualifying certificates of the members of the commission shall be appropriate to the examination being conducted.

[Reg 28.17 subs by reg 23(c) of GoN R3083 in G. 13684.]

28.18.1 An applicant shall not be accepted as a candidate for examination unless he has produced evidence satisfactory to the Commission—

- (a) that he has attained the age of 22 years;
- (b) of his sobriety and general good conduct;
- (c) that he is the holder of a permanent blasting certificate recognised by the Chief Inspector for the purposes of the examination;

[Reg 28.18.1(c) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- (d) that, except as is provided for in regulation 28.18.2, he has had at least four years of practical experience, acceptable to the Commission, gained in the workings of a mine and such experience shall include at least six months at the working face on rock-breaking or winning minerals or work directly connected therewith; and
- (e) that he has had at least six months' mining experience, acceptable to the Commission, in the workings of the class of mine appropriate to the certificate for which he wishes to qualify.

28.18.2 An applicant who can satisfy the Commission—

- (a) that he holds a mining engineer's degree of a South African University; or
- (b) that he holds a mechanical or electrical engineer's certificate of competency for mines and works issued in accordance with these Regulations; or
- (c) that he holds any other degree, certificate or diploma recognised by the Chief Inspector for the purposes of the examination,

may be exempted from not more than two of the said four years of practical experience in the workings of a mine, the period of exemption being as laid down in the rules framed in terms of regulation 28.6.

[Reg 28.18.2(c) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.18.3 The experience gained by the applicant in the workings of a mine during the unexempted period referred to in regulation 28.18.2, shall be such as is acceptable to the Commission and as much thereof as may be required by the Commission shall be practical experience additional to the experience prescribed for the said degree, certificate or diploma.

[Reg 28.18.3 subs by reg 37 of GoN R537 in G. 6892.]

28.19.1 A certificate shall not be issued unless the Commission is satisfied that, within the scope of the syllabus for the examination drawn up in terms of regulation 28.6, the candidate possesses a

sufficient knowledge of mining practice, shaft practice, ventilation, gases, dust control, underground machinery, mine plans and the Act and the regulations made or deemed to have been made thereunder.

- 28.19.2 Separate certificates shall be issued for metalliferous mines and for coal mines and examination shall be conducted to suit each class of certificate.
- 28.19.3 A certificate for metalliferous mines shall be valid for all mines except coal mines. A certificate for coal mines may be limited in scope to non-fiery coal mines.
- 28.19.4 The holder of a mine overseer's certificate for non-fiery coal mines shall qualify for a mine overseer's certificate for coal mines if he can furnish proof that he has had six months' experience acceptable to the Commission in fiery mines and submits an application bearing uncanceled revenue stamps to the value of R6.

### **MINE SURVEYOR'S CERTIFICATE**

- 28.20.1 The constitution of a Commission of Examiners for a mine surveyor's certificate of competency shall be as follows—

A Chief director or a director who is a certificated mine surveyor (the chairman); an officer in the service of the department who is a certificated mine surveyor; and at least four other certificated mine surveyors.

[Reg 28.20.1 subs by reg 12 of GoN R513 in G. 5488; am by reg 2(i) of GoN R2566 in G. 11037; subs by reg 23(d) of GoN R3083 in G. 13684.]

- 28.20.2 The examination shall consist of two parts, namely—

Part A - Survey 1, Mining Economics 1, Mining Legislation, Geology and a trial survey; and

Part B - Survey 2, Survey 3, Mathematics and Mining Economics 2.

A candidate must pass Part A before writing Part B.

[Reg 28.20.2 subs by reg 6(a) of GoN R2706 in G. 12858.]

- 28.20.3 An applicant shall not be accepted as a candidate for examination unless he has produced evidence satisfactory to the commission—

- (a) of his sobriety and general good conduct;
- (b) that he has had at least three year's practical experience in surveying acceptable to the commission; at least one year of which shall be in the underground workings of a mine; and

- (c) that he has academic qualifications as stipulated in the rules framed under regulation 28.6.

[Reg 28.20.3 subs by reg 6(b) of GoN R2706 in G. 12858.]

28.20.4 A certificate shall not be issued unless the Commission is satisfied that, within the scope indicated in the syllabus for the examination drawn up in terms of regulation 28.6 the candidate possesses a sufficient knowledge of surveying, mathematics, mining economics, geology and the relevant portions of the mining laws of the Republic of South Africa.

[Reg 28.20.4 am by reg 6(c) of GoN R2706 in G. 12858.]

### **GRADUATES**

28.20.5 An applicant who can satisfy the Chief Inspector that he holds a University degree recognised for the purpose by the Chief Inspector shall be exempted from such part of subjects of the examination as the Chief Inspector may determine and shall be accepted as a candidate provided that—

- (a) he qualifies for acceptance as a candidate in terms of regulation 28.20.3(a);
- (b) that he has had at least one year's practical experience in underground surveying acceptable to the commission; and
- (c) that he submits an application bearing uncanceled revenue stamps to the value specified in regulation 28.10 for the whole of the examination.

[Reg 28.20.5 am by reg 20(b) of GoN R1352 in G. 11397; subs by reg 6(d) of GoN R2706 in G. 12858; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

### **MINE ASSAYER'S CERTIFICATE**

28.21.1 ...

[Reg 28.21.1 rep by reg 23(e) of GoN R3083 in G. 13684.]

28.21.2 ...

[Reg 28.21.2 rep by reg 23(e) of GoN R3083 in G. 13684.]

28.21.3 ...

[Reg 28.21.3 rep by reg 23(e) of GoN R3083 in G. 13684.]

28.21.4 ...

[Reg 28.21.4 rep by reg 23(e) of GoN R3083 in G. 13684.]

28.21.5 ...

[Reg 28.21.5 rep by reg 23(e) of GoN R3083 in G. 13684.]

28.21.6 ...

[Reg 28.21.6 rep by reg 23(e) of GoN R3083 in G. 13684.]

28.21.7 ...

[Reg 28.21.7 rep by reg 23(e) of GoN R3083 in G. 13684.]

28.21.8 ...

[Reg 28.21.8 rep by reg 23(e) of GoN R3083 in G. 13684.]

28.21.9 ...

[Reg 28.21.9 rep by reg 23(e) of GoN R3083 in G. 13684.]

## **MECHANICAL AND ELECTRICAL ENGINEERS' CERTIFICATES FOR MINES AND WORKS**

28.22.1 The constitution of a Commission of Examiners for a mechanical engineer's or an electrical engineer's certificate of competency shall be as follows—

A Chief director, director or deputy director who is a certified mechanical and electrical engineer (mines) (the chairman); an officer in the service of the Department who is a certificated mechanical or electrical engineer (mines); at least two certificated mechanical engineers and at least two certificated electrical engineers: Provided that for the purpose of this regulation "certificated engineer" means a person who holds a mechanical engineer's or an electrical engineer's certificate of competency, which certificate has been granted in terms of regulations made under section 63 of the Minerals Act, 1991 (Act 50 of 1991), under section 35 of the Machinery and Occupational Safety Act, 1983 (Act 6 of 1983) or under any other prior law.

[Reg 28.22.1 subs by reg 2(j) of GoN R2566 in G. 11037, reg 23(f) of GoN R3083 in G. 13684.]

28.22.2 The qualifying examination shall consist of two subjects, namely—

(a) Plant Engineering (Mining); and

(b) the Act and regulations made or deemed to have been made thereunder.

The two subjects may be taken at the same examination or at separate examinations, but a candidate who has passed one subject only shall receive credit for such subject for a limited period only, as laid down in the rules framed under regulation 28.6.

[Reg 28.22.2 subs by reg 2(k) of GoN R2566 in G. 11037.]

28.23.1 An applicant shall not be accepted as a candidate for the qualifying examination, unless he has produced evidence satisfactory to the Commission—

- (a) that he has attained the age of 23 years,
- (b) of his sobriety and general good conduct,
- (c) that, except as is provided for in regulations 28.23.2 and 28.23.3, he has had at least nine years of practical experience acceptable to the Commission and appropriate to the certificate for which he wishes to qualify, and
- (d) that he has academic qualifications as stipulated in the rules framed under regulation 28.6.  
[Reg 28.23.1 subs by reg 2(1) of GoN R2566 in G. 11037.]

28.23.2 An applicant who can satisfy the Commission—

- (a) that he holds a degree in mechanical or electrical engineering recognised by the Chief Inspector for the purpose of acceptance as a candidate; or  
[Reg 28.23.2(a) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]
- (b) that he holds a diploma or certificate in mechanical or electrical engineering recognised by the Chief Inspector for the purpose of acceptance as a candidate; or  
[Reg 28.23.2(b) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]
- (c) that he has served an apprenticeship in a trade or undergone a course of training acceptable to the Chief Inspector for the purpose of acceptance as a candidate,  
[Reg 28.23.2(c) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

may be exempted from a portion, but not exceeding seven years, of the said nine years of practical experience. The period of exemption being as laid down in the rules framed under regulation 28.6.  
[Reg 28.23.2 subs by reg 2(m) of GoN R2566 in G. 11037.]

- 28.23.3 The experience gained during the unexempted period under regulation 28.23.2 shall be acceptable to the Commission and shall be additional to any practical experience prescribed for the degree, diploma or certificate referred to in paragraphs (a) and (b) of regulation 28.23.2.  
[Reg 28.23.3 subs by reg 2(n) of GoN R2566 in G. 11037.]

28.23.4 An applicant who can satisfy the Director-General—

- (a) that he holds a university degree or equivalent qualification in mechanical or electrical engineering which is acceptable to the Chief Inspector for the purposes of the examination; and  
[Reg 28.23.4(a) am by reg 2(a) of GoN R94 in G. 17725.]
- (b) that he has had at least three years of practical experience acceptable to the Commission,

may be exempted from such subjects of the examination as the Chief Inspector may determine.  
[Reg 28.23.4 subs by reg 2(o) of GoN R2566 in G. 11037; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 28.24 Except as provided in regulation 28.23.4, a certificate shall not be issued unless a candidate has satisfied the Commission that, within the scope indicated in the syllabus for the examination drawn up in terms of regulation 28.6, the candidate possesses a sufficient knowledge of the design, construction, erection, operation and maintenance of machinery, apparatus and plant, and of the Act and the regulations made, or deemed to have been made thereunder.

### **WINDING-ENGINE DRIVER'S CERTIFICATE**

- 28.25 The constitution of a Commission of Examiners for a winding-engine driver's certificate of competency shall be as follows—

An officer in the service of the Department who is a certificated mechanical or electrical engineer (mines) (the chairman); at least one certificated mechanical engineer; at least one certificated electrical engineer; and at least two certificated winding engine drivers employed in driving engines used for the purpose described in regulation 16.83.1.

[Reg 28.25 am by reg 2(p) of GoN R2566 in G. 11037; subs by reg 23(g) of GoN R3083 in G. 13684.]

- 28.26.1 An applicant shall not be accepted as a candidate for examination unless he has produced evidence satisfactory to the Commission—

- (a) that he has attained the age of 19 years;

[Reg 28.26.1(a) am by reg 24 of GoN R2101 in G. 4498.]

- (b) that he is a moderate user of alcohol, generally of good conduct and a fit and proper person to be the holder of a winding-engine driver's certificate;

[Reg 28.26.1(b) subs by reg 20(c) of GoN R1352 in G. 11397.]

- (c) of having had experience, acceptable to the Commission, of shaft operations and of the work of an onsetter or a banksman for at least 12 shifts;

- (d) of having had experience, acceptable to the Commission, on reversible winding engines fitted with clutches and depth indicators and operated at a normal winding speed of not less than 2,5 metres per second, as specified in regulations 28.26.2.1, 28.26.2.2, 28.26.2.3 and 28.26.2.4; and

[Reg 28.26.1(d) am by GoN R303 in G. 3397.]

- (e) of having had experience, acceptable to the Commission, of the working of steam boilers, as specified in regulations 28.26.2.1, 28.26.2.2, 28.26.2.3 and 28.26.2.4.

[Reg 28.26.1 am by reg 38 of GoN R537 in G. 6892.]

28.26.2.1 To obtain a certificate to drive an electric winding engine, the experience required in terms of paragraph (d) of regulation 28.26.1 shall be at least six months, which shall include at least 50 shifts on alternating current electric winding engines and at least 50 shifts on direct current electric winding engines. No experience shall be required under paragraph (e) of regulation 28.26.1.

28.26.2.2 To obtain a certificate to drive a steam winding engine, the experience required in terms of paragraph (d) of regulation 28.26.1 shall be at least five months, which shall include at least 75 shifts on steam winding engines. The experience required in terms of paragraph (e) of regulation 28.26.1 shall be at least 25 shifts.

28.26.2.3 To obtain a certificate to drive all type of winding engines, the experience required in terms of paragraph (d) of regulation 28.26.1 shall be at least eight months, which shall include at least 50 shifts on alternating current electric winding engines, at least 50 shifts on direct current electric winding engines and at least 50 shifts on steam winding engines. The experience required in terms of paragraph (e) of regulation 28.26.1 shall be at least 25 shifts.

28.26.2.4 The experience specified in regulations 28.26.2.1 and 28.26.2.2 shall be periods of full-time employment.

28.26.3 An applicant who can satisfy the Commission that he has completed a course of training for winding engine drivers approved by the Chief Inspector, may be accepted as having had training and experience equivalent to that specified in paragraphs (c), (d) and (e) of regulation 28.26.1.

[Reg 28.26.3 subs by reg 39 of GoN R537 in G. 6892; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.26.4 An applicant who can satisfy the Commission that he holds any of the undermentioned certificates issued in accordance with these Regulations, may be exempted from some or all of the experience specified under paragraph (c), (d) and (e) of regulation 28.26.1 as follows—

- (a) Stationary-engine driver's certificate or steam locomotive-engine driver's certificate:

Seventy-five shifts in charge of winding engines and 25 shifts on boilers.

- (b) Locomotive-engine driver's certificate, other than for steam or internal combustion locomotive:

Seventy-five shifts in charge of winding engines.



- (c) Boiler attendant's certificate:

Twenty-five shifts on boilers.

- (d) Onsetter's certificate:

Twelve shifts of shaft operations and the work of an onsetter or a banksman.

28.26.5.1 An applicant, who can satisfy the Commission that he holds a winding-engine driver's certificate for electric winding engines only, issued in accordance with these Regulations, and who wishes to obtain a certificate for steam winding engines, shall not be accepted as a candidate for examination unless he has produced evidence of having had experience, acceptable to the Commission, of at least 50 shifts on reversible steam winding engines fitted with depth indicators and clutches and operating at a normal winding speed of not less than 2,5 metres per second and at least 25 shifts in the working of steam boilers.

[Reg 28.26.5.1 am by GoN R303 in G. 3397.]

28.26.5.2 An applicant who can satisfy the Commission that he holds a winding-engine driver's certificate for steam winding engines only, issued in accordance with these Regulations, and who wishes to obtain a certificate for electric winding engines, shall not be accepted for examination unless he has produced evidence of having had experience, acceptable to the Commission, of at least 75 shifts on both alternating current and direct current electric winding engines, with a minimum of 25 shifts on each type of engine, such engines to be reversible, fitted with depth indicators and clutches and operating at a normal speed of not less than 2,5 metres per second.

[Reg 28.26.5.2 am by GoN R303 in G. 3397.]

28.26.6 An applicant for a certificate to drive electric winding engines only who can submit a certificate granted to him by the manager to the effect that—

- (a) he has completed a course of training of seven months of full time service as a learner driver, which period shall include at least 50 shifts on alternating current electric winding engines and at least 50 shifts on direct current electric winding engines under the supervision of a certificated winding engine driver, such winding engines to be reversible, fitted with clutches and operating at a normal speed of not less than 2,5 metres per second, and

[Reg 28.26.6(a) am by GoN R303 in G. 3397.]

- (b) he has acquired competency in the handling of winding engines to the satisfaction of the person appointed in terms of regulation 2.13.1, 2.13.2 or 2.13.3 and the certificated driver under whose supervision he received his training, may be accepted as having had training and experience equivalent to that called for under paragraph (d) of regulation 28.26.1.

28.26.7 An applicant for a certificate to drive steam winding engines only who can submit a certificate granted to him by the manager to the effect that—

- (a) he has completed a course of training of seven months of full time service as a learner driver, which period shall include at least 75 shifts under the supervision of a certificated winding engine driver on reversible steam winding engines fitted with clutches and operating at a normal winding speed of not less than 2,5 metres per second and at least 25 shifts on the working of steam boilers, and

[Reg 28.26.7(a) am by GoN R303 in G. 3397.]

- (b) he has acquired competency in the handling of steam winding engines to the satisfaction of the person appointed in terms of regulation 2.13.1, 2.13.2 or 2.13.3 and the certificated driver under whose supervision he received his training,

may be accepted as having had training and experience equivalent to that called for under paragraphs (d) and (e) of regulation 28.26.1.

28.27 A certificate shall not be issued unless the Commission is satisfied that neither the sight nor hearing of the candidate is defective, that he is not subject to any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties, and that, within the scope indicated in the syllabus for the examination drawn up in terms of regulation 28.6, the candidate possesses a sufficient knowledge of the working of winding plants, of winding operations, of other machinery and ancillary equipment used in or in connection with winding, and of the Act and the regulations made or deemed to have been made thereunder.

#### **LOCOMOTIVE-ENGINE DRIVER'S CERTIFICATE**

28.28 A locomotive-engine driver's certificate may be granted for any one or for all types of locomotives used at a mine or at a works and shall especially qualify the holder to drive the type of locomotive specified on his certificate while such locomotive is in use for the conveyance of persons at a mine or at a works.

28.29 The constitution of a Commission of Examiners for a locomotive-engine driver's certificate of competency shall be as follows:

An officer in the service of the Department who is a certificated mechanical or electrical engineer (mines) (the chairman); at least one certificated engineer and at least two certificated locomotive engine drivers.

[Reg 28.29 am by reg 2(p) of GoN R2566 in G. 11037; subs by reg 23(h) of GoN R3083 in G. 13684.]

28.30 An applicant shall not be accepted as a candidate for examination unless he has produced evidence satisfactory to the Commission—

- (a) that he has attained the age of 19 years;  
[Reg 28.30(a) am by reg 25 of GoN R2101 in G. 4498.]
- (b) that he is a moderate user of alcohol, generally of good conduct and a fit and proper person to be the holder of a locomotive-engine driver's certificate, and  
[Reg 28.30(b) subs by reg 20(d) of GoN R1352 in G. 11397.]
- (c) of having had training and experience on locomotives.

Such training and experience shall be acceptable to the Commission and shall include at least six months on the footplate of a running locomotive in the case of a steam locomotive-engine driver's certificate and three months of equivalent experience in the case of any other locomotive-engine driver's certificate.

- 28.31 A certificate shall not be issued unless the Commission is satisfied that neither the sight nor hearing of the candidate is defective, that he is not subject to any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties, and that, within the scope indicated in the syllabus for the examination drawn up in terms of regulation 28.6, the candidate possesses a sufficient knowledge of the construction and operation of locomotives, trains and ancillary equipment, and of the Act and the regulations made or deemed to have been made thereunder.

#### **STATIONARY ENGINE DRIVER'S CERTIFICATE**

28.32 ...

[Reg 28.32 rep by reg 23(i) of GoN R3083 in G. 13684.]

28.33 ...

[Reg 28.33 am by reg 2(p) of GoN R2566 in G. 11037; rep by reg 23(i) of GoN R3083 in G. 13684.]

28.34.1 ...

[Reg 28.34.1(c) am by GoN R303 in G. 3397; subs by reg 26 of GoN R2101 in G. 4498; rep by Reg 23(i) of GoN R3083 in G. 13684.]

28.34.2 ...

[Reg 28.34.2 rep by reg 23(i) of GoN R3083 in G. 13684.]

28.35 ...

[Reg 28.35 rep by reg 23(i) of GoN R3083 in G. 13684.]

#### **BOILER ATTENDANT'S CERTIFICATE**

28.36 ...

[Reg 28.36 am by reg 2(p) of GoN R2566 in G. 11037; rep by reg 23(i) of GoN R3083 in G. 13684.]

28.37 ...

[Reg 28.37 rep by reg 23(i) of GoN R3083 in G. 13684.]

28.38 ...

[Reg 28.38 rep by reg 23(i) of GoN R3083 in G. 13684.]

### **BLASTING CERTIFICATES**

28.39 The constitution of a Commission of Examiners for a blasting certificate shall be as follows—

An officer in the service of the Department who is a certificated mine manager, (the chairman); the holder of a mine manager's certificate; and the holder of a blasting certificate: Provided that the qualifying certificates of the members of the commission shall be appropriate to the examination being conducted.

[Reg 28.39 subs by reg 23(j) of GoN R3083 in G. 13684.]

28.40.1 Every application for examination for a permanent or for a provisional blasting certificate shall be on the appropriate form and shall be addressed to the secretary of the relevant Commission of Examiners or to the Principal Inspector of Mines, as the case may be; and—

- (a) shall bear uncanceled revenue stamps to the value indicated in regulation 28.10;
- (b) shall contain a true record, certified by the manager under whom the applicant is working, of the applicant's experience and qualifications;

[Reg 28.40.1(b) am by reg 40(1)(a) of GoN R537 in G. 6892.]

- (c) shall contain a statement by the manager under whom the applicant is working at the time of his application, specifying whether the applicant is a moderate user of alcohol, whether he is generally of good conduct and that he is a fit and proper person to be the holder of a blasting certificate and to be in charge of explosives, and

[Reg 28.40.1(c) subs by reg 20(e) of GoN R1352 in G. 11397.]

- (d) shall contain proof that the applicant is in possession of a valid first aid certificate recognised by the Chief Inspector.

[Reg 28.40.1(d) ins by reg 40(1)(b) of GoN R537 in G. 6892 wef 1 October 1980; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725, reg 23(k) of GoN R3083 in G. 13684; reg 28.40.1 am by reg 2(b) of GoN R94 in G. 17725.]

28.40.2 Notwithstanding anything stated to the contrary, the issuing authority in exceptional circumstances may accept an application for a provisional or for a permanent blasting certificate without the application being endorsed by a manager.

28.40.3 A provisional blasting certificate shall be valid for an indefinite period but only for the mine or for the works in respect of which it is issued, provided that it shall be transferable by the issuing authority from mine to mine or from works to works on application of the manager of the mine or of the works to which it is to be transferred.

28.40.4 A provisional blasting certificate may be exchanged for a permanent blasting certificate on application to the issuing authority, provided that the applicant has attained the age of 20 years and the application—

- (a) bears uncanceled revenue stamps to the value indicated in regulation 28.10;
- (b) contains a record of the work which the applicant has performed prior to and while holding a provisional blasting certificate, and provided that the total period of his work is sufficient to qualify him for a permanent blasting certificate;
- (c) is endorsed by the manager under whom the applicant is working to the effect that the applicant has performed the work indicated in paragraph (b) of this regulation and is a fit and proper person to be the holder of a permanent blasting certificate; and
- (d) is accompanied by the provisional blasting certificate.

28.40.5 The holder of a mining engineer's degree or diploma recognised by the Chief Inspector may be exempted from one half of the period of experience required for a blasting certificate.

[Reg 28.40.5 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.40.6 A student of the Government Miners' Training College or a student attending a training course in mining approved by the Chief Inspector, may be exempted from the age restriction of 20 years, and from such part of the qualifying period of experience for a provisional or a permanent blasting certificate, as the issuing authority may determine.

Any other applicant for a provisional blasting certificate may be exempted from the age restriction of 20 years, provided that he has undergone training acceptable to the issuing authority.

[Reg 28.40.6 subs by reg 13 of GoN R513 in G. 5488; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.40.7 Except as is provided for in regulations 28.40.6, 28.40.8.1 and 28.40.8.2—

[Reg 28.40.7 subs by reg 14 of GoN R513 in G. 5488.]

28.40.7.1 an applicant shall not be accepted as a candidate for examination for a provisional blasting certificate for any mine or for any works. unless he has produced evidence satisfactory to the issuing authority that—

- (a) he has attained the age of 20 years; and
- (b) subject to regulation 28.41.3.1, he has had at least the required number of shifts of experience, acceptable to the issuing authority, gained in the workings of a mine or in a works. Of this period at least 75 shifts shall have been spent at the working face on rock-breaking or winning minerals or work directly connected therewith, of which shifts, in the case of a mine, at least 25 shall have been in a mine of the class to which the certificate is appropriate;

[Reg 28.40.7.1(b) subs by reg 15 of GoN R513 in G. 5488.]

28.40.7.2 an applicant shall not be accepted as a candidate for examination for a permanent blasting certificate for any mine or for any works unless he has produced evidence satisfactory to the issuing authority that—

- (a) he has attained the age of 20 years; and
- (b) subject to regulation 28.41.3.2. he has had at least the required number of shifts of experience acceptable to the issuing authority, gained in the workings of a mine or in a works. Of this period at least 75 shifts shall have been spent at the working face on rock-breaking or winning minerals or work directly connected therewith, of which shifts, in the case of a mine, at least 25 shall have been in a mine of the class to which the certificate is appropriate;

[Reg 28.40.7.2(b) subs by reg 16 of GoN R513 in G. 5488.]

28.40.7.3 an applicant for a provisional or permanent blasting certificate for fiery mines shall further satisfy the issuing authority that he has attended at least 75 per cent of the lectures and passed the prescribed examination on a course on gases and gas-testing based on a syllabus approved by the Chief Inspector and conducted by an institution recognised by the Chief Inspector.

[Reg 28.40.7.3 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.40.8.1 An applicant shall not be accepted as a candidate for examination for a provisional certificate for opencast mines or for works where no subterranean tunnel operations are in progress unless he has produced evidence satisfactory to the Principal Inspector of Mines that—

- (a) he has attained the age of 20 years; and
- (b) he has had at least 60 shifts of experience acceptable to the Principal Inspector of Mines.

[Reg 28.40.8.1 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

28.40.8.2 An applicant shall not be accepted as a candidate for examination for a permanent blasting certificate for opencast mines or for works where no subterranean tunnel operations are in progress unless he has produced evidence satisfactory to the regional director that—

- (a) he has attained the age of 20 years, and
- (b) subject to regulation 28.41.3.2, he has had at least the required number of shifts of experience acceptable to the Principal Inspector of Mines.

[Reg 28.40.8.2(b) subs by reg 17 of GoN R513 in G. 5488; am by reg 2(b) of GoN R94 in G. 17725, reg 26(c) of GoN R3083 in G. 13684.]

28.41.1 A blasting certificate shall not be issued unless the issuing authority has satisfied itself that, within the scope indicated in the syllabus for the examination drawn up in terms of regulation 28.6, the applicant is competent to conduct blasting operations and to perform the duties of a ganger or miner in terms of the Regulations. The issuing authority shall further satisfy itself that the sight and hearing of the applicant are adequate to enable him to carry out his work safely.

[Reg 28.41.1 subs by reg 12 of GoN R367 in G. 10621.]

28.41.2 Any issuing authority, in any special case, may issue to a candidate a certificate limited in scope in accordance with rules framed in terms of regulation 28.6, provided such candidate has the requisite experience and qualifications and satisfies the issuing authority that he has sufficient knowledge of the responsibilities appropriate to his work.

28.41.3 The number of qualifying shifts for a provisional blasting certificate and a permanent blasting certificate shall be not less than indicated in regulations 28.41.3.1 and 28.41.3.2.

[Reg 28.41.3 ins by reg 18 of GoN R513 in G. 5488.]

28.41.3.1 *Provisional blasting certificate—*

(a)	University students in mining:	110 shifts	Blasting certificate valid for the mine
(b)	(i) Chamber of Mines Training College students (ii) Learner officials (iii) Learner miners attending a training course in mining approved by the Chief Inspector	10 shifts	Blasting certificate valid in training section only.
(c)	(i) Chamber of Mines Training College students (ii) Learner officials (iii) Learner miners attending a training course in mining approved by the Chief Inspector	154 shifts	Blasting certificate valid for the mine, but holder to be under the supervision of a certificated ganger or miner
(d)	Other learners	200 shifts	Blasting certificate valid for the mine, but holder to be under the supervision of a certificated ganger or miner.

[Reg 28.41.3.1 ins by Reg 18 of GoN R513 in G. 5488; am by reg 20(f) of GoN R1352 in G. 11397, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.41.3.2 *Permanent blasting certificate—*

- |  |              |
|--|--------------|
| (a) University students in mining:   | 200 shifts   |
| (b) (i) Chamber of Mines Training College students   | } 312 shifts |
| (ii) Learner officials   |              |
| (iii) Learner miners attending a training course in mining approved by the Chief Inspector |              |
| (c) Other learners   | 400 shifts   |

[Reg 28.41.3.2 ins by reg 18 of GoN R513 in G. 5488; am by reg 20(g) of GoN R1352 in G. 11397, reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

**BLASTING CERTIFICATE FOR SCHEDULED MINES**

28.42.1 The issuing authority for blasting certificates for scheduled mines shall be a Commission of Examiners.

28.42.2 A blasting certificate for a scheduled mine shall be valid for a works where subterranean tunnel operations are in progress and for any mine other than a fiery mine and an opencast mine.

**BLASTING CERTIFICATE FOR FIERY MINES**

28.43.1 The issuing authority for blasting certificates for fiery mines is a commission of Examiners: Provided that a Principal Inspector of Mines may issue a provisional blasting certificate for a fiery mine.

[Reg 28.43.1 subs by reg 23(l) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

28.43.2 A blasting certificate for a fiery mine shall be valid for a works where subterranean tunnel operations are in progress and for any mine other than a scheduled mine and an opencast mine.

**BLASTING CERTIFICATE FOR OPENCAST MINES**

28.44 The issuing authority for blasting certificates for opencast mines shall be the Principal Inspector of Mines in whose district the applicant is, or is to be, employed. Such certificates shall be valid only for opencast mines.

[Reg 28.44 am by reg 26(c) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

**BLASTING CERTIFICATES FOR OTHER MINES INCLUDING NON-FIERY COAL MINES**



28.45.1 The issuing authority for blasting certificates for mines other than those referred to in regulations 28.42.1 and 28.43.1 and for works, is the Principal Inspector of Mines in whose region the applicant is, or is to be employed.

[Reg 28.45.1 am by reg 2(b) of GoN R94 in G. 17725.]

28.45.2 A certificate issued for such mines shall be valid for all mines, other than scheduled mines, fiery mines and opencast mines.

28.45.3 A certificate issued for works shall only be valid for the class of works to which the certificate is applicable.

[Regs 28.45.1, 28.45.2 and 28.45.3 subs for reg 28.45 by reg 23(m) of GoN R3083 in G. 13684.]

### **LAMPMAN'S CERTIFICATE**

28.46.1 Every application to sit for the examination for a lampman's certificate shall be submitted to the Principal Inspector of Mines for the region where the applicant is, or is to be employed, which Principal Inspector of Mines who is the issuing authority shall conduct such examination as he may deem necessary.

[Reg 28.46.1 subs by reg 23(n) of GoN R3083 in G. 13684; am by reg 2(b) of GoN R94 in G. 17725.]

28.46.2 Such application shall bear uncanceled revenue stamps to the value indicated in regulation 28.10.

### **ONSETTER'S CERTIFICATE**

28.47.1.1 Every application to sit for the examination for an onsetter's certificate shall be submitted to the Principal Inspector of Mines for the region where the applicant is, or is to be, employed.

[Reg 28.47.1.1 am by reg 2(b) of GoN R94 in G. 17725.]

28.47.1.2 Uncanceled revenue stamps as indicated in regulation 28.10 shall be affixed to the application form.

[Regs 28.47.1.1 and 28.47.1.2 subs for reg 28.47.1 by reg 23(o) of GoN R3083 in G. 13684.]

28.47.2 An applicant shall not be accepted as a candidate for examination unless—

(a) he has attained the age of 18 years;

(b) he has at least 12 shifts of experience acceptable to the Principal Inspector of Mines; and

[Reg 28.47.2(b) am by reg 2(b) of GoN R94 in G. 17725.]

(c) he submits a statement by the manager under whom he is working at the time of his application, specifying whether the applicant is a moderate user of alcohol, whether he is

generally of good conduct and that he is a fit and proper person to be the holder of an onsetter's certificate.

[Reg 28.47.2 subs by reg 20(h) of GoN R1352 in G. 11397; am by reg 26(c) of GoN R3083 in G. 13684.]

28.47.3 An onsetter's certificate shall be issued by the Principal Inspector of Mines.

[Reg 28.47.3 am by reg 26(e) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

28.47.4 A certificate shall not be issued unless the applicant has been examined by an officer in the service of the Department who is a certificated mine manager or a certificated mechanical or electrical engineer (mines), assisted by two persons, one of whom has been appointed in terms of section 31 of the Act or regulation 2.6.1 or regulation 2.14.1, and the other appointed in terms of regulation 2.13.1 or regulation 2.13.3.

[Reg 28.47.4 subs by reg 23(p) of GoN R3083 in G. 13684.]

28.47.5 A certificate shall not be issued unless the Principal Inspector of Mines is satisfied that, within the scope indicated in the syllabus for the examination drawn up in terms of regulation 28.6, the applicant is competent to perform the duties of an onsetter, has sufficient knowledge of the shaft operations which he has to control, of the signals to be given in connection with such operations and of the regulations appertaining to the duties of banksmen and onsetters.

[Reg 28.47.5 am by reg 26(e) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

28.47.6 Subject to the provisions of regulation 16.90 an onsetter's certificate shall be valid for all mines.

28.47.7 An onsetter's certificate issued prior to the date of promulgation of these Regulations shall retain its validity for such time as the holder thereof is employed at the mine in respect of which such certificate was issued. Subject to the provisions of regulation 28.2.1 it may be exchanged without examination for a certificate issued in terms of this regulation, provided the holder submits an application bearing uncanceled revenue stamps to the value of 50 cents.

#### **ADDITIONAL REQUIREMENTS FOR ADMISSION**

28.48.1 The Chief Inspector shall not accept any application in respect of a winding-engine driver's certificate, locomotive-engine driver's certificate, blasting certificate or onsetter's certificate unless the manager concerned, in addition to the requirements of regulations 28.26.1, 28.30, 28.40.1 and 28.47.2, submits acceptable written evidence—

- (a) that the applicant possesses the minimum educational qualification as recommended by the relevant advisory committee and as accepted by the Minister;
- (b) that the applicant is medically fit to practice the occupation for which the certificate is required; and

- (c) that the applicant's ability to communicate both orally and in writing with his colleagues in one of the official languages, is of an acceptable standard.

[Reg 28.48.1 ins by reg 20(i) of GoN R1352 in G. 11397; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

28.48.2 If the Chief Inspector is satisfied that the applicant complies with the requirements of regulation 28.48.1, he shall, issue to the applicant a certificate as proof of compliance with the requirements for admission as a candidate for the relevant certificate of competency, and the application shall thereafter be dealt with in accordance with the preceding provisions of this chapter.

[Reg 28.48.2 ins by reg 20(i) of GoN R1352 in G. 11397; subs by reg 3(a) of GoN R1263 in G. 13288; am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

### **ADVISORY COMMITTEES**

28.49.1 The Minister shall in respect of certificates of competency mentioned in regulation 28.48.1 establish advisory committees to advise him from time to time in respect of the certificate of competency for which it has been established, regarding the minimum educational qualification and any other requirements with which a person must comply in order to be accepted as a candidate for the acquisition of that certificate of competency.

[Reg 28.49.1 ins by reg 20(i) of GoN R1352 in G. 11397; subs by reg 3(b) of GoN R1263 in G. 13288.]

28.49.2 An advisory committee established in respect of the occupations in mines and works for which a valid winding-engine driver's certificate is required consists of—

- (a) the Deputy Director-General referred to in section 2(2) of the Act who shall *ex officio* be the chairman of the advisory committee;

[Reg 28.49.2(a) subs by reg 23(q) of GoN R3083 in G. 13684.]

- (b) a chief director or director in the service of the Department with specialised knowledge of machinery designated by the Director-General who shall act as chairman if the chairman is for any reason absent;

[Reg 28.49.2(b) subs by reg 23(q) of GoN R3083 in G. 13684.]

- (c) an officer of the Department of Manpower designated by the Director-General: Manpower;

- (d) two persons appointed by the Minister as members of the advisory committee from persons whose names have at the written request of the Chief Inspector been submitted within thirty days after the date of that request by an employees' organisation or by employees' organisations representing the holders of winding-engine driver's certificates employed at mines and works;

[Reg 28.49.2(d) am by reg 2(a) of GoN R94 in G. 17725.]

- (e) two persons appointed by the Minister as members of the advisory committee from persons whose names have at the written request of the Chief Inspector been submitted within thirty days after the date of that request by an employers' organisation or by employers' organisations representing the owners of mines and works; and

[Reg 28.49.2(e) am by reg 2(a) of GoN R94 in G. 17725.]

- (f) two other persons appointed by the Minister as members of the advisory committee and who, in the opinion of the Chief Inspector, have a direct interest in the practising of the occupation of winding-engine driver.

[Reg 28.49.2(f) am by reg 2(a) of GoN R94 in G. 17725; ins by reg 20(i) of GoN R1352 in G. 11397; am by reg 26(a) of GoN R3083 in G. 13684.]

28.49.3 An advisory committee established in respect of the occupations in mines and works for which a valid locomotive-engine driver's certificate is required consists of—

- (a) the deputy director-general referred to in section 2(2) of the Act who shall *ex officio* be the chairman of the advisory committee;

[Reg 28.49.3(a) subs by reg 23(r) of GoN R3083 in G. 13684.]

- (b) a chief director or director in the service of the Department with specialised knowledge of machinery designated by the Director-General who shall act as chairman if the chairman is for any reason absent;

[Reg 28.49.3(b) subs by reg 23(r) of GoN R3083 in G. 13684.]

- (c) an officer of the Department of Manpower designated by the Director-General: Manpower;

- (d) two persons appointed by the Minister as members of the advisory committee from persons whose names have at the written request of the Chief Inspector been submitted within thirty days after the date of that request by an employees' organisation or by employees' organisations representing the holders of locomotive-engine driver's certificates employed at mines and works;

[Reg 28.49.3(d) am by reg 2(a) of GoN R94 in G. 17725.]

- (e) two persons appointed by the Minister as members of the advisory committee from persons whose names have at the written request of the Chief Inspector been submitted within thirty days after the date of that request by an employers' organisation or by employers' organisations representing the owners of mines and works; and

[Reg 28.49.3(e) am by reg 2(a) of GoN R94 in G. 17725.]

- (f) two other persons appointed by the Minister as members of the advisory committee and who, in the opinion of the Chief Inspector, have a direct interest in the practising of the occupation of locomotive-engine driver.

[Reg 28.49.3 ins by reg 20(i) of GoN R1352 in G. 11397; am by reg 26(a) of GoN R3083 in G. 13684; reg 28.49.3(f) am by reg 2(a) of GoN R94 in G. 17725.]

28.49.4 An advisory committee established in respect of the occupations in mines and works for which a valid blasting certificate is required consists of—

- (a) the deputy director-general referred to in section 2(2) of the Act who shall *ex officio* be the chairman of the advisory committee;

[Reg 28.49.4(a) subs by reg 23(s) of GoN R3083 in G. 13684.]

- (b) a chief director or director in the service of the Department with specialised knowledge in mining designated by the Director-General who shall act as chairman if the chairman is for any reason absent;

[Reg 28.49.4(b) subs by reg 23(s) of GoN R3083 in G. 13684.]

- (c) an officer of the Department of Manpower designated by the Director-General: Manpower;

- (d) two persons appointed by the Minister as members of the advisory committee from persons whose names have at the written request of the Chief Inspector been submitted within thirty days after the date of that request by an employees' organisation or by employees' organisations representing the holders of blasting certificates employed at mines and works;

[Reg 28.49.4(d) am by reg 2(a) of GoN R94 in G. 17725.]

- (e) two persons appointed by the Minister as members of the advisory committee from persons whose names have at the written request of the Chief Inspector been submitted within thirty days after the date of that request by an employers' organisation or by employers' organisations representing the owners of mines and works; and

[Reg 28.49.4(e) am by reg 2(a) of GoN R94 in G. 17725.]

- (f) two other persons appointed by the Minister as members of the advisory committee and who in the opinion of the Chief Inspector, have a direct interest in the practising of an occupation where a blasting certificate is required.

[Reg 28.49.4 ins by reg 20(i) of GoN R1352 in G. 11397; am by reg 26(a) of GoN R3083 in G. 13684; reg 28.49.4(f) am by reg 2(a) of GoN R94 in G. 17725.]

28.49.5 An advisory committee established in respect of the occupations in mines and works for which a valid onsetter's certificate is required consists of—

- (a) the deputy director-general referred to in section 2(2) of the Act who shall *ex officio* be the chairman of the advisory committee;

[Reg 28.49.5(a) subs by reg 23(t) of GoN R3083 in G. 13684.]

- (b) a chief director or director in the service of the Department designated by the Director-General who shall act as chairman if the chairman is for any reason absent;

[Reg 28.49.5(b) subs by reg 23(t) of GoN R3083 in G. 13684.]

- (c) an officer of the Department of Manpower designated by the Director-General: Manpower;

- (d) two persons appointed by the Minister as members of the advisory committee from person whose names have at the written request of the Chief Inspector been submitted within thirty days after the date of that request by an employees' organisation or by employees' organisations representing the holders of onsetter's certificates employed at mines and works;

[Reg 28.49.5(d) am by reg 2(a) of GoN R94 in G. 17725.]

- (e) two persons appointed by the Minister as members of the advisory committee from persons whose names have at the written request of the Chief Inspector been submitted within thirty days after the date of that request by an employers' organisation or by employers' organisations representing the owners of mines and works; and

[Reg 28.49.5(e) am by reg 2(a) of GoN R94 in G. 17725.]

- (f) two other persons appointed by the Minister as members of the advisory committee and who, in the opinion of the Chief Inspector, have a direct interest in the practising of the occupation of onsetter.

[Reg 28.49.5 ins by reg 20(i) of GoN R1352 in G. 11397; am by reg 26(a) of GoN R3083 in G. 13684; reg 28.49.5(f) am by reg 2(a) of GoN R94 in G. 17725.]

28.49.6.1 For each member appointed under paragraph (d), (e) and (f) of regulations 28.49.2, 28.49.3, 28.49.4 and 28.49.5 there shall be one or more alternate members and an alternate member or alternate members to members shall be appointed in the same manner as such member.

[Reg 28.49.6.1 ins by reg 20(i) of GoN R1352 in G. 11397.]

28.49.6.2 A member or an alternate member referred to in regulation 28.49.6.1 who is not in the full-time employment of the State shall be appointed—

- (a) on such conditions of service as the Minister in consultation with the Minister of Finance may determine; and
- (b) for such period, but not exceeding three years, as the Minister may determine: Provided that a member or an alternate member whose period of office has terminated, may be re-appointed: Provided further that the Minister may, if in his opinion good reason exists therefor, at any time terminate the period of office of such member.

[Reg 28.49.6.2 ins by reg 20(i) of GoN R1352 in G. 11397.]

## **EXEMPTIONS**

- 28.50 If the Minister is satisfied that special circumstances, justifying the granting of relief, exist with regard to any mine or works, he may in writing grant exemption from any provision of this chapter to the manager of such mine or works subject to such restrictions and conditions (if any) as he may deem fit.

[Reg 28.50 ins by reg 20(i) of GoN R1352 in G. 11397.]

## **TRANSITIONAL PERIOD**

- 28.51.1 ...

[Reg 28.51.1 ins by reg 20(i) of GoN R1352 in G. 11397; rep by reg 3(c) of GoN R1263 in G. 13288.]

- 28.51.2 ...

[Reg 28.51.2 ins by reg 20(i) of GoN R1352 in G. 11397; rep by reg 3(c) of GoN R1263 in G. 13288.]

## **CHAPTER 29**

### **SUSPENSION AND CANCELLATION OF CERTIFICATES OF COMPETENCY**

- 29.1.1 If the Chief Inspector is from information laid before him of the opinion that the holder of a mine manager's, mechanical or electrical engineer's, mine surveyor's, mine assayer's or mine overseer's certificate issued in accordance with these Regulations or any amendments thereof or heretofore issued under any law in force in any province of the Republic, has been guilty of gross negligence or misconduct or noncompliance with these Regulations, he may forthwith suspend or cancel such certificate or may submit the matter for inquiry and report to the respective commissions of examiners appointed under the said regulations, and may, on the recommendation of such commission, suspend or cancel such certificate, in which case the holder thereof may appeal to the Minister, who shall, if the matter has not been reported on by the commission of examiners, submit it for inquiry and report to a person or persons designated by him: Provided that all suspended or cancelled certificates, including an engine-driver's or boiler attendant's certificate, shall be returned by the holder to the Chief Inspector within two weeks of the date of suspension or cancellation.

[Reg 29.1.1 subs by reg 24(a) of GoN R3083 in G. 13684; am by reg 2(a) of GoN R94 in G. 17725.]

- 29.1.2 The Chief Inspector may cancel and retain any certificate issued in accordance with these Regulations or any subsequent amendments thereof, or heretofore issued under any law in force in any province of the Republic if, in his opinion, such certificate is being fraudulently or improperly used.

[Reg 29.1.2 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 29.2.1 If at any time a winding-engine driver, locomotive-engine driver, stationary-engine driver or boiler attendant, being the holder of a certificate issued in accordance with these Regulations or heretofore issued under any law in force in any province of the Republic, is, in the opinion of any

Principal Inspector of Mines guilty of misconduct or gross negligence in the execution of his duties, or suffer from any infirmity, likely to be detrimental to the efficient discharge of his duties, such Principal Inspector of Mines may suspend such certificate or recommend the same to the Chief Inspector for cancellation or both.

[Reg 29.2.1 am by reg 20 of GoN R1189 in G. 6489; subs by reg 24(b) of GoN R3083 in G. 13684; am by reg 2(a) and (b) of GoN R94 in G. 17725.]

29.2.2 The winding-engine driver, locomotive-engine driver, stationary-engine driver or boiler attendant shall have the right to appeal from such decision to the Chief Inspector as in manner hereafter provided.

[Reg 29.2.2 am by reg 26(a) of GoN R3083 in G. 13684, am by reg 2(a) of GoN R94 in G. 17725.]

29.2.3 The Principal Inspector of Mines shall immediately report such suspension or recommendation to the Chief Inspector who, on receipt of such appeal as aforesaid, may submit the matter for inquiry and report to the commission of examiners appointed under the said regulations.

[Reg 29.2.3 subs by reg 24(c) of GoN R3083 in G. 13684; am by reg 2(a) and (b) of GoN R94 in G. 17725.]

29.2.4 The Chief Inspector may confirm such suspension or cancel such certificate or take such other action as may seem to him desirable under the circumstances.

[Reg 29.2.4 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

29.2.5 Any such suspension, if confirmed by the Chief Inspector, may be noted on the certificate.

[Reg 29.2.5 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

29.3 If the holder of a blasting certificate, an onsetter's certificate or a lampman's certificate issued in accordance with these Regulations is, in the opinion of any regional director guilty of misconduct or gross negligence in the execution of his duties, or suffers from any infirmity likely to be detrimental to the efficient discharge of his duties, such regional director may immediately suspend or cancel such certificate, in which case the holder of such certificate may appeal against such decision to the Chief Inspector in a manner hereinafter stipulated, and the Chief Inspector shall either personally or by deputy decide such appeal.

[Reg 29.3.1 renumbered as 29.3 by reg 27 of GoN R2101 in G. 4498; reg 29.3 subs by reg 24(d) of GoN R3083 in G. 13684; am by reg 2(a) of GoN R94 in G. 17725.]

29.3.2 ...

[Reg 29.3.2 rep by reg 27 of GoN R2101 in G. 4498.]

29.4 Any person wishing to appeal under any regulation contained in this chapter shall proceed with his appeal within 30 days after receiving notice that his certificate has been suspended or cancelled or recommended for cancellation, as the case may be, by filing with the Minister or with the Chief Inspector a written statement setting out the grounds upon which the appeal is based.



[Reg 29.4 am by reg 20 of GoN R1189 in G. 6489; subs by reg 24(e) of GoN R3083 in G. 13684; am by reg 2(a) of GoN R94 in G. 17725.]

## **CHAPTER 30**

### **UNDERWATER MINING AND PROSPECTING**

[Chapter 30 ins by reg 2 of GoN R2227 in G. 7284; am by GoN R3083 in G. 13684, GoN R94 in G. 17725; rep by GoN R91 in G. 30698.]

## **CHAPTER 31**

### **OFFSHORE INSTALLATIONS**

31.1 In this chapter—

**“accommodation”** means any dining-room, sleeping quarters, kitchen, recreation room, sickbay, laundry, linen-room and any store-room or office integral with and used in connection with such accommodation and including any corridor giving access to any of these rooms;

**“Certifying Authority”** means any person, committee, society or other body of persons approved in accordance with regulation 31.3.1;

**“Certificate of Fitness”** means a certificate issued under regulation 31.3.2;

**“fixed installation”** means an offshore installation which is not a mobile installation;

**“ife-saving appliance”** means any lifebuoy, life-jacket, survival craft, life-raft or other equipment to be provided under this chapter;

**“mobile installation”** means an offshore installation which can be moved from place to place without dismantling or modification to its primary structure, whether or not it has its own motive power;

**“natural oil”** means any combustible gas or liquid or solid hydrocarbon compound existing in a natural condition in the earth’s crust, but does not include coal;

**“normally enclosed motor-propelled survival craft”** means a self-propelled survival craft of rigid construction specially designed and constructed for carrying persons safely through fire on water;

**“offshore installation”** means an offshore structure supported on the sea-bed or a vessel used at sea in connection with the prospecting for or the mining of natural oil and on which persons are normally present;

**“owner”** means the owner of an offshore installation and includes any lessee or contractor thereof;

**“pipeline”** means any pipeline between a fixed point ashore and an offshore installation, and a pipeline between an offshore installation and another offshore installation which is intended to be used to convey natural oil and which forms an integral part of the offshore installation;

**“primary structure”** means all structural components of an offshore installation, the failure, of which would seriously endanger the safety of the installation;

- 31.2.1 The Chief Inspector may grant an Offshore Installation Permit to use an offshore installation in the sea as defined in section 1 of the Seashore Act, 1935 (Act 21 of 1935), and on the continental shelf referred to in section 7 of the Territorial Waters Act, 1963 (Act 87 of 1963), subject to conditions as he may specify.

[Reg 31.2.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 31.2.2 Every application for the use of an offshore installation shall be made by the owner to the Principal Inspector of Mines and shall, where possible, be accompanied by a Certificate of Fitness granted by a Certifying Authority.

[Reg 31.2.2 am by reg 26(b) of GoN R3083 in G. 13684, am by reg 2(b) of GoN R94 in G. 17725.]

- 31.3.1 The Chief Inspector may approve any Certifying Authority to conduct or to cause to be conducted surveys and assessments under these Regulations and to certify offshore installations as fit for any of the purposes referred to in these Regulations.

[Reg 31.3.1 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- 31.3.2 A Certifying Authority may, if it is satisfied that it is proper to do so, issue a Certificate of Fitness, certifying that the offshore installation concerned is fit to be established or stationed in the said waters.

- 31.3.3 A Certificate of Fitness shall contain the following information—

- (a) The name of the Certifying Authority.
- (b) The Certificate of Fitness identification number.
- (c) The name or emblem of the offshore installation.
- (d) A description of the offshore installation.
- (e) The name of the owner.
- (f) A declaration that the offshore installation is fit to be established or stationed and maintained in the said waters.

- (g) The period for which the Certificate of Fitness is valid.
- (h) Special conditions of validity.
- (i) The date of issue.
- (j) The name and signature of person designated to sign on behalf of the Certifying Authority.

31.4 After the date of coming into operation of these Regulations no—

- (a) fixed installation shall be established;
- (b) mobile installation shall be brought into or stationed; or
- (c) fixed or mobile installation shall be maintained,

in the sea or on the continental shelf without a Certificate of Fitness.

31.5 On or after the date of coming into operation of these Regulations no mobile installation shall be moved unless, prior to moving, the owner has obtained from a competent person a report on the environmental factors at the new station and the owner has reasonable grounds for believing that the offshore installation is capable of withstanding the factors referred to in regulation 31.12.

31.6 One copy of the Offshore Installation Permit shall be kept posted on board the offshore installation in such a position that it can be conveniently read.

31.7 If the Certifying Authority is not satisfied that a Certificate of Fitness can be issued, the Certifying Authority shall notify the owner in writing and supply him with the reasons for the conclusion and shall at the same time send a copy of the said notification to the Principal Inspector of Mines.  
[Reg 31.7 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

31.8 If the Certifying Authority is of the opinion that the offshore installation has become unsafe, it shall revoke the Certificate of Fitness issued in respect thereof and notify the Principal Inspector of Mines by the quickest means available and supply him with the reason for forming that opinion and shall at the same time send a copy of that notification to the owner.  
[Reg 31.8 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

31.9 The Chief Inspector may revoke a Certificate of Fitness if—

- (a) he is satisfied that, in the interest of safety and health, that the offshore installation is no longer fit to be maintained; or

- (b) there has been a failure to comply with the requirements of any regulation which may be applicable.

[Reg 31.9 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

31.10 A Certificate of Fitness shall be valid for such period as the Certifying Authority may determine.

31.11.1 An official, as contemplated in section 175 of the Mining Rights Act, 1967 (Act 20 of 1967), may carry out specific or periodic tests or inspections of any offshore installation.

31.11.2 The manager shall place workmen, tools and any other equipment which may be required for the purpose of carrying out the inspection or test free of charge at the disposal of the official.

31.12 Every offshore installation shall be capable of withstanding—

(a) any combination of—

- (i) meteorological and oceanological conditions; and
- (ii) properties and configuration of the sea bed and subsoil, to which the offshore installation may foreseeably be subjected at the place at which it is, or is intended to be located; and

(b) any foreseeable combination of forces arising from—

- (i) the maximum weight of the offshore installation;
- (ii) the buoyancy of any structural element which may be, or may become, submerged in water;
- (iii) the process of moving the offshore installation or any part thereof from place to place;
- (iv) environmental factors;
- (v) the inertia of structural and other masses when the offshore installation is constrained to move under the influence of the forces exerted by environmental factors;
- (vi) the operation of equipment and all functional activity associated with the offshore installation;
- (vii) ships berthing and departing, aircraft landing and taking off, and any other operations associated with the transfer of persons, stores and equipment; and

- (viii) (in the case of a mobile installation) changes of trim during transition between the floating modules and sea bed and subsoil supported modules, or a combination of the two, together with any impact or impulse forces developed as a result of the sudden application of all or any of the aforesaid forces.

31.13 The parts of the offshore installation which either sometimes or at all times are intended to be in direct contact with and transmitting loads to the seabed and subsoil shall be capable of maintaining the integrity of the structure of the offshore installation and of the sea-bed and subsoil and generally of supporting the offshore installation and maintaining it in a safe and stable condition.

31.14 Every mobile installation shall be constructed so that—

- (a) under any foreseeable combination of forces its weight or buoyancy shall operate to induce the offshore installation to maintain, or return to, an upright position; and
- (b) any part thereof intended to remain buoyant on immersion in water shall be subdivided into watertight compartments strong enough to withstand any hydrostatic pressure to which that part may foreseeably be subjected.

31.15 The primary structure shall be capable of withstanding all forces owing to—

- (a) deck houses and other structures on the deck which may be swept away by waves; and
- (b) all concentrations of loads to which it may foreseeably be subjected.

31.16 In respect of any offshore installation—

- (a) stresses shall be calculated either by means of mathematical analysis of the forces acting on the structure of the offshore installation in a manner approved by the Chief Inspector or by means of established rules for the design of such an offshore installation approved by the Chief Inspector;

[Reg 31.16(a) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- (b) factors of safety and maximum working stresses shall be in accordance with recognised standards appropriate to the material concerned and the conditions under which the material is to be used;
- (c) the design of the joints or other structural details shall be such as to minimise stress concentrations; and

- (d) deflections of the structural components shall not be such as to affect the safety of the offshore installation.

31.17 The manager shall appoint an offshore installation manager who shall be responsible for the safety of the said offshore installation and the safety, health and welfare of all persons on or working from that installation.

31.18.1 The owner shall compile, or cause to be compiled, an operations manual for the information, guidance and instruction of the manager for securing the safety of the offshore installation in respect of a—

- (a) fixed installation for when established at a station; and
- (b) mobile installation for when established at a station and the seaworthiness and stability of the offshore installation when moving to or from, or being located on, or removed from, or maintained at a station.

31.18.2 A copy of the operations manual, referred to in regulation 31.18.1, shall be provided to the Principal Inspector of Mines within 14 days after being brought into use.

[Reg 31.18.2 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

31.18.3 No alteration shall be made to the operations manual without the written consent of the Principal Inspector of Mines.

[Reg 31.18.3 am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

31.19

- (a) The manager shall provide a record system for each offshore installation in which shall be recorded details of every major repair, replacement, alteration or dismantlement likely to impair the safety, strength, stability and, in the case of a mobile installation, the seaworthiness thereof.
- (b) These notes shall be scrutinised by the offshore installation manager within two days after such recording has been made.

31.20 Every pipeline intended to be used to convey natural oil shall be provided with an emergency shutdown valve either on the sea-bed or in such a position as to survive the conflagration of the said offshore installation.

31.21 Every helicopter landing area forming part of an offshore installation shall be—

- (a) located in a position readily accessible from the accommodation of the offshore installation or from any other area of the offshore installation likely to be regularly manned;

- (b) large enough, and have sufficient clear approach and departure paths, to enable any helicopter intended to use the landing area to land thereon and take off safely from it in any wind and weather conditions that permit helicopter flights;
- (c) strong enough to withstand any landing by any helicopter intended to be used; and
- (d) provided with—
  - (i) a non-slip surface for landing;
  - (ii) suitable tie-down points;
  - (iii) markings and lighting sufficient to make possible easy identification of the landing area by day or by night;
  - (iv) suitable safety nets along the sides thereof to protect persons falling from it;
  - (v) one or more dry powder fire extinguishers having in aggregate a capacity of not less than 45 kg; and
  - (vi) either one or more—
    - (aa) carbon dioxide fire extinguishers having in aggregate a capacity of not less than 18 kg; or
    - (bb) halogenated hydrocarbon fire extinguishers having in aggregate a capacity of not less than 12 kg.

31.22 If an offshore installation is provided with accommodation, such accommodation shall be—

- (a) placed remote from the offshore installation or, if integral with the offshore installation it must be separated from the hazardous area by sufficient space, effective explosion-proof doors and insulation to afford protection to persons therein in case of fire, explosion or other danger;
- (b) constructed so as to afford persons on the offshore installation protection from the blast of an explosion, and from weather, heat, noxious gases, noise and vibration;
- (c) sufficient in area in accordance with the accepted ergonomic standards to meet the needs of the maximum number of persons which may be on board the offshore installation at any time; and

- (d) adequately equipped for the number of persons that normally operate the offshore installation in respect of sleeping facilities, food and water storage, food preparation and dining rooms and sanitary and recreation requirements.

31.23 Every offshore installation shall be provided with—

- (a) ventilation, heating and cooling systems capable of maintaining a moderate non-injurious atmosphere in all areas used for accommodation and all other enclosed areas manned;
  - (b) lighting throughout sufficient to ensure the safety of the persons thereon and so arranged that the operational control areas, escape routes and embarkation areas remain illuminated in both normal and emergency conditions;
  - (c) normally totally enclosed motor-propelled survival craft having sufficient capacity to accommodate safely on board the number of persons on the offshore installation;
  - (d) survival craft having sufficient capacity to accommodate safely on board half the number of persons on the offshore installation;
  - (e) additional survival craft or life rafts having, together with the survival craft provided for under regulation 31.23 (d), sufficient capacity to accommodate safely on board twice the number of persons on the offshore installation;
  - (f) at least as many life-jackets as 1,5 times the number of persons on the offshore installation;
  - (g) suitable and sufficient means for persons to evacuate it safely or for persons to descend safely from the offshore installation to the water in an emergency;
  - (h) lifebuoys—
    - (i) installed in such numbers as required by the Principal Inspector of Mines and stowed in such places that at least one is readily accessible from any part of a deck of the offshore installation from which a person is liable to fall into the water; and
- [Reg 31.23(h)(i) am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]
- (ii) which shall have attached to them a self-igniting buoyant light inextinguishable in water and lit by a battery;
  - (i) survival craft, life-rafts, lifebuoys and lifejackets which shall be—



- (i) of a type approved by the Chief Inspector and of a class or description suitable for that offshore installation;

[Reg 31.23(i)(i) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]

- (ii) properly constructed of suitable materials, having regard to their life-saving function and the circumstances in which they may be used; and
- (iii) of such colour as will make them conspicuous when in use;
- (j) a general alarm system capable of raising the alarm by signals audible and visible at every part of the offshore installation to which persons have access;
- (k) a public address system capable of being heard distinctly at all parts of the offshore installation to which persons have access and where oral communication is practicable;
- (l) an automatically actuated fire detection system;
- (m) a manually actuated fire alarm system by which the presence of a fire in any part of the offshore installation to which persons have access can be indicated both audibly and visibly to a person at the control point on the offshore installation;
- (n) an automatic flammable gas detection system capable of monitoring continuously every part of the offshore installation in which flammable gas may accumulate;
- (o) a water-main system by means of which water can be supplied to any part of the offshore installation and which shall be—
  - (i) connected to at least two pumps situated at different parts of the offshore installation;
  - (ii) capable, when supplied by any pump, of maintaining a supply of water to any part of the offshore installation at a pressure sufficient for fire-fighting by means of handheld hoses; and
  - (iii) equipped with an independent power supply for the pumps;
- (p) a water deluge system or water monitors, or both, by means of which any part of the offshore installation containing equipment used for storing, conveying or processing natural oil can be protected in the event of fire, and such water deluge system or water monitors shall be connected to a separate main, which shall be—
  - (i) connected to at least two pumps, which when activated shall be capable of operating automatically for 12 hours; and

- (ii) capable of maintaining a supply of water at a pressure sufficient to enable the system or the monitors to operate sufficiently when supplied by either pump, if only one is connected;
  - (q) an automatic sprinkler system capable of—
    - (i) detecting the presence of a fire in any part of the accommodation;
    - (ii) operating automatically to protect any part of the accommodation in which a fire is present; and
    - (iii) indicating both audibly and visibly that a sprinkler has come into operation at the control point of the offshore installation;
  - (r) fire extinguishers installed in such numbers and in such places that at least one extinguisher is readily accessible from any part of the offshore installation, and
  - (s) sufficient sets of fire-fighting equipment as approved by the Principal Inspector of Mines.
- [Reg 31.23(s) am by reg 26(b) of GoN R3083 in G. 13684, reg 2(b) of GoN R94 in G. 17725.]

31.24 On every offshore installation—

- (a) every general area which is regularly manned shall have at least two separate escape routes situated as far apart as practicable and leading to abandonment stations situated on the helicopter landing deck, on the survival craft embarkation deck, at sea-level, or at any combinations of such locations;
- (b) every such escape route and abandonment station shall be readily accessible and unobstructed;
- (c) must be provided where practicable with escape routes—
  - (i) leading to an upper level in the form of ramps or stairways; and
  - (ii) leading to a lower level shall be provided in the form of ramps, stairways or chutes; and
- (d) additional to and independent of the main source of electrical power, emergency equipment shall be provided with sufficient capacity to supply electricity to those services necessary for the safety of the offshore installation and of persons thereon.

- 31.25 Every normally totally enclosed motor-propelled survival craft shall be provided with devices whereby the craft may be—
- (a) lowered into the water by one person on the craft; and
  - (b) disengaged from its launching apparatus by one person inside the craft when lowered down.
- 31.26 There shall be displayed inside every normally totally enclosed motor-propelled survival craft clear instructions in both official languages for disengaging the craft from its launching apparatus and for operating the craft.
- 31.27 Every normally totally enclosed motor-propelled survival craft shall be provided with—
- (a) a radio of a type and capacity approved by the Chief Inspector; and  
[Reg 31.27(a) am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]
  - (b) a set of tools and spare parts for repairing each type of engine installed in such craft.
- 31.28 A survival craft or life-raft shall be—
- (a) clearly and permanently marked with the name or emblem of the offshore installation; and
  - (b) equipped with—
    - (i) a waterproof electric hand lamp suitable for signalling;
    - (ii) a sufficient supply of drinking water, having regard to the maximum number of persons the survival craft is designed to accommodate, safely kept in suitable containers; and
    - (iii) a suitable first-aid outfit having regard to the maximum number of persons the survival craft is designed to accommodate.
- 31.29 Life-saving appliances shall at all times be available for immediate use, and shall be protected from damage.
- 31.30 Fire-fighting equipment on an offshore installation shall be approved by the Chief Inspector.  
[Reg 31.30 am by reg 26(a) of GoN R3083 in G. 13684, reg 2(a) of GoN R94 in G. 17725.]
- 31.31 The control point on an offshore installation and every place on an offshore installation which contains—
- (a) an internal combustion engine having in aggregate a power of 750 kW or more; and

- (b) an oil or gas-fired boiler, heater or incinerator having a thermal rating of 75 kW or more,

shall be provided with a fixed fire extinguishing system.

[Chapter 31 ins by GoN R1664 in G. 12610.]

**[Editor's Note:** Chapter 31 has been rep by Government Notice R1015 in *Government Gazette* 33711, dated 5 November 2010 with effect from the date on which Offshore Installations are published in the *Government Gazette*.]

## **CHAPTER 32**

### **APPLICATION FEES**

32.1 Application fees payable in terms of the Act shall be as follows—

In relation to—

- (a) a prospecting permit or renewal thereof: R20,00;
- (b) a mining permit: R50,00;
- (c) a mining licence: R100,00;
- (d) the lodging of an appeal: R200,00;
- (e) the supply of copies of documents: R0,15 per page with a minimum of R5,00 per document;
- (f) the division of mineral rights: R20,00 per application;
- (g) permission referred to in section 8(1): R20,00;
- (h) consent or a certificate referred to in section 17(1)(i) or (ii) or (6)(a)(aa) or (bb): R20,00; or
- (i) cancellation referred to in section 48(3)(b)(i): R20,00.

32.2 The fees prescribed in this chapter shall be paid when the application or appeal concerned is lodged and shall not be refundable: Provided that the fee paid in respect of an appeal shall be refunded to the applicant if his appeal is upheld.

[Chapter 32 ins by reg 27 of GoN R3083 in G. 13684.]

## **CHAPTER 33**

### **SKETCH PLANS**

33.1 Sketch plans which are to be lodged in terms of section 9(5)(b) of the Act shall—

- (a) indicate—
  - (i) the north point;
  - (ii) the scale to which the sketch plan has been drawn;
  - (iii) the name, number and situation of the farm on which the mining area is situated; and
  - (iv) in relation to farm boundaries and surveyed points—
    - (aa) the size and shape of the proposed mining area;
    - (bb) the boundaries of the land comprising the subject of the application for the mining authorisation concerned;
    - (cc) the lay-out of the proposed mining operations;
    - (dd) surface structures; and
    - (ee) the topography of the immediate vicinity;
- (b) be signed and dated by the applicant for the mining authorisation concerned; and
- (c) be drawn up in such form and to such scale as may be required by the Director: Mineral Development.

[Chapter 33 ins by reg 28 of GoN R3083 in G. 13684; reg 33.1(c) am by reg 2 of GoN R847 in G. 18078.]

## CHAPTER 34

### FORMS

34.1 The following forms are prescribed for use under the Act:

Form 1	APPLICATION FOR PROSPECTING PERMIT
Form 2	APPLICATION FOR MINING AUTHORISATION
Form 3	PROSPECTING PERMIT
Form 4	MINING PERMIT
Form 5	MINING LICENCE
Form 6	WINDING PLANT PERMIT
Form 7	ELEVATOR PERMIT
Form 8	CHAIR LIFT PERMIT
Form 9	BOILER PERMIT
Form 10	REPORTABLE ACCIDENT IN TERMS OF REGULATIONS 25.1.1 (a). (b). (c). (d) and (f)

	AND 25.6 (a). (b). (c). (d) and (e).
Form 11	REPORTABLE ACCIDENT IN TERMS OF REGULATIONS 25.1.1 (a), (b), (c), (d) and (f). DETAILS OF DECEASED OR INJURED PERSON.
Form 12	REPORTABLE ACCIDENT IN TERMS OF REGULATION 25.1.1 (e)
Form 13	ROCKBURSTS AND FALL OF GROUND ACCIDENTS

*(Please note that a copy of the forms listed above will be provided upon request. Kindly refer to our website for our contact details.)*

[Chapter 34 ins by reg 29 of GoN R3083 in G. 13684, reg 34.1 am by reg 4 of GoN R1556 in G. 15067, reg 6 of GoN R2449 in G. 15362, reg 2(b) of GoN R94 in G. 17725, reg 2 of GoN R847 in G. 18078.]

## **CHAPTER 35**

### **SAFETY RESEARCH**

[Chapter 35 ins by GoN R1110 in G. 13927; am by GoN R2223 in G. 14192, GoN R94 in G. 17725, am by GoN R918 in G. 23585, corrected and subs by GoN R1574 in G. 24168; rep by GoN 846 in G. 29144.]