

BUITENGEWONE  
**OFFISIËLE KOERANT**

VAN SUIDWES-AFRIKA.

**OFFICIAL GAZETTE**

EXTRAORDINARY  
OF SOUTH WEST AFRICA.



UITGAWE OP GESAG.

PUBLISHED BY AUTHORITY.

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Dinsdag, 1 Oktober 1968

WINDHOEK

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INHOUD

CONTENTS

Bladsy/Pag.

GOEWERMENSKENNISGEWING:

GOVERNMENT NOTICE:

No. 143 Ordonnansie op Myne, Bedrywe en Minerale  
1968: Regulasies

Mines, Works and Minerals Ordinance, 1968:  
Regulations

1514

*PAE Reg 194*

Goewermentskennisgewing.

Government Notice.

Die volgende Goewermentskennisgewing word vir  
algemene inligting gepubliseer.

The following Government Notice is published for  
general information.

J. J. KLOPPER,  
*Sekretaris van Suidwes-Afrika.*

J. J. KLOPPER,  
*Secretary for South West Africa.*

Kantoor van die Administrateur,  
Windhoek.

Administrator's Office,  
Windhoek.

No. 143.]

[1 Oktober 1968

No. 143.]

[1 October 1968

REGULASIES INGEVOLGE DIE BEPALINGS VAN  
DIE ORDONNANSIE OP MYNE, BEDRYWE EN  
MINERALE, 1968 (ORDONNANSIE 20 VAN 1968)

REGULATIONS MADE UNDER THE PROVISIONS OF  
THE MINES, WORKS AND MINERALS ORDINANCE,  
1968 (ORDINANCE 20 OF 1968).

Dit behaag die Administrateur om kragtens en inge-  
volge die bevoegdheid hom verleen by artikel 95 van die  
Ordonnansie op Myne, Bedrywe en Minerale 1968 (Or-  
donnansie 20 van 1968) die onderstaande regulasies te  
maak:

The Administrator has been pleased, under and by  
virtue of the powers in him vested by section 95 of the  
Mines, Works and Minerals Ordinance, 1968 (Ordinance  
20 of 1968) to make the following regulations:

VERDUIDELIKING.

EXPLANATORY.

DEEL I: KLEIMS EN MYNGEBIEDE  
(Regulasies 1 tot 24)

PART I: CLAIMS AND MINING AREAS  
(Regulations 1 to 24)

DEEL II: MYNE EN WERKE  
(Regulasies 25 tot 160)

PART II: MINES AND WORKS  
(Regulations 25 to 160)

DEEL III: MASJINERIE  
(Regulasies 161 tot 234)

PART III: MACHINERY  
(Regulations 161 to 234)

DEEL IV: ONGELUKKE  
(Regulasies 235 tot 250)

PART IV: ACCIDENTS  
(Regulations 235 to 250)

DEEL V: SKIETSERTIFIKATE  
(Regulasies 251 tot 255)

PART V: BLASTING CERTIFICATES  
(Regulations 251 to 255)

DEEL VI: WERKSURE  
(Regulasies 256 tot 258)

PART VI: HOURS OF WORK  
(Regulations 256 to 258)

BUITENGEWONE

# OFFISIËLE KOERANT

VAN SUIDWES-AFRIKA

# OFFICIAL GAZETTE

EXTRAORDINARY

OF SOUTH WEST AFRICA

UITGAWE OP GESAG

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CONTENTS:

*Bladsy*

*Page*

**GOEWERMENSKENNISGEWING:**

**GOVERNMENT NOTICE:**

No. AG. 179 Wysiging van die Regulasies Uitgevaardig kragtens die Ordonnansie op Myne, Bedrywe en Minerale, 1968

1

No. AG. 179 Amendment of the Regulations Made under the Mines, Works and Minerals Ordinance, 1968

1

## Goewermentskennisgewing

## Government Notice

Kantoor van die

Office of the

ADMINISTRATEUR-GENERAAL VIR DIE  
GEBIED SUIDWES-AFRIKA

ADMINISTRATOR-GENERAL FOR THE  
TERRITORY OF SOUTH WEST AFRICA

DEPARTEMENT VAN EKONOMIESE SAKE

DEPARTMENT OF ECONOMIC AFFAIRS

No. AG. 179      1980

No. AG. 179      1980

WYSIGING VAN DIE REGULASIES UITGEVAARDIG Kragtens die ORDONNANSIE OP MYNE, BEDRYWE EN MINERALE, 1968

AMENDMENT OF THE REGULATIONS MADE UNDER THE MINES, WORKS AND MINERALS ORDINANCE, 1968

Die Administrateur-generaal het kragtens artikel 95 van die Ordonnansie op Myne, Bedrywe en Minerale, 1968 (Ordonnansie 20 van 1968), die regulasies vervat in die Bylae uitgevaardig.

The Administrator-General has, under section 95 of the Mines, Works and Minerals Ordinance, 1968 (Ordinance 20 of 1968), made the regulations set out in the Schedule.

### BYLAE

### SCHEDULE

*Wysiging van regulasie 28 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968, soos gewysig deur Goewermentskennisgewing R.89 van 1969*

*Amendment of regulation 28 of the regulations published by Government Notice 143 of 1968, as amended by Government Notice R.89 of 1969*

1. Regulasie 28 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1 Oktober 1968 (hieronder die regulasies genoem) word hierby gewysig deur paragraaf (a) te skrap.

1. Regulation 28 of the regulations published by Government Notice 143 of 1 October 1968 (hereinafter referred to as the regulations) is hereby amended by the deletion of paragraph (a).

“ (10) Die spanbaas moet enige geval van gasvergiftiging, hoe gering ook al, sonder versuim rapporteer aan die bestuurder, mynopsigter of skofbaas wat onmiddellik die gereelde geneesheer wat by die myn of bedryf aangestel is of, indien hy nie beskikbaar is nie, die naaste gekwalifiseerde geneesheer, of die betrokke hospitaal in kennis daarvan moet stel.”

*Wysiging van regulasie 38 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968, soos gewysig deur Goewermentskennisgewing R.89 van 1969*

9. Regulasie 38 van die regulasies word hierby gewysig —

(a) deur subregulasie (3) te skrap; en

(b) deur subregulasie (5) te skrap.

*Wysiging van regulasie 39 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968, soos gewysig deur Goewermentskennisgewing R.89 van 1969*

10. Regulasie 39 van die regulasies word hierby gewysig deur subregulasie (2) te skrap.

*Wysiging van regulasie 40 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968, soos gewysig deur Goewermentskennisgewing R.89 van 1969*

11. Regulasie 40 van die regulasies word hierby gewysig deur paragraaf (a) van subregulasie (2) te skrap.

*Wysiging van regulasie 45 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968, soos gewysig deur Goewermentskennisgewing R.89 van 1969*

12. Regulasie 45 van die regulasies word hierby gewysig deur subregulasie (1) deur die volgende subregulasie te vervang:

“ (1) Niemand mag seine gee vir die ophys of neerlaat van persone in 'n myn, of daartoe verplig of toegelaat word nie, tensy hy 'n bankwagter- of skagwagtersertifikaat het, wat deur die bestuurder van daardie myn onderteken is: Met dien verstande dat waar die bankwagter of skagwagter nie beskikbaar is nie, verantwoordelike persone aan wie die bestuurder skriftelike toestemming daartoe verleen het, seine kan gee vir hul eie vervoer en dié van persone wat saam met hulle ry: Met dien verstande voorts dat die mynwerker wat toesig hou in 'n skag wat gesink word, of iemand wat regstreeks onder sy toesig staan 'n sein kan gee om persone te hys.”

*Herroeping van regulasie 46 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968*

“ (10) The ganger shall report without delay any case of gassing, however slight, to the manager, mine overseer or shift boss, who shall immediately give notice to the regular medical practitioner appointed to the mine of works or, if he is not available, the nearest qualified medical practitioner, or the hospital concerned.”

*Amendment of regulation 38 of the regulations published by Government Notice 143 of 1968, as amended by Government Notice R.89 of 1969*

9. Regulation 38 of the regulations is hereby amended —

(a) by the deletion of subregulation (3); and

(b) by the deletion of subregulation (5).

*Amendment of regulation 39 of the regulations published by Government Notice 143 of 1968, as amended by Government Notice R.89 of 1969*

10. Regulation 39 of the regulations is hereby amended by the deletion of subregulation (2).

*Amendment of regulation 40 of the regulations published by Government Notice 143 of 1968, as amended by Government Notice R.89 of 1969*

11. Regulation 40 of the regulations is hereby amended by the deletion of paragraph (a) of subregulation (2).

*Amendment of regulation 45 of the regulations published by Government Notice 143 of 1968, as amended by Government Notice R.89 of 1969*

12. Regulation 45 of the regulations is hereby amended by the substitution for subregulation (1) of the following subregulation:

“ (1) No person shall give or cause or permit any signals to be given for the raising or lowering of persons in a mine unless he is the holder of a banksman's or onsetter's certificate signed by the manager of that mine: Provided that, when the banksman or onsetter is not available responsible persons to whom the manager has given written permission to do so may give signals for their own conveyance and that of persons travelling with them: Provided further that the miner in charge in a shaft in the course of sinking, or a person under his immediate superintendence may give a signal to raise persons.”

*Repeal of regulation 46 of the regulations published by Government Notice 143 of 1968*

13. Regulasie 46 van die regulasies word hierby herroep.

*Wysiging van regulasie 117 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968, soos gewysig deur Goewermentskennisgewing R.89 van 1969*

14. Regulasie 117 van die regulasies word hierby gewysig deur in paragraaf (e) van subregulasie (5) die woord "blanke" deur die woord "persoon" te vervang.

*Wysiging van regulasie 138 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968, soos gewysig deur Goewermentskennisgewing R.89 van 1969*

15. (1) Regulasie 138 van die regulasies word hierby gewysig deur in subregulasie (1) die woord "blanke", oral waar dit voorkom, te skrap.

(2) Subregulasie (1) tree in werking by die verstryking van 'n tydperk van ses maande na die datum van afkondiging daarvan in die *Offisiële Koerant*.

*Wysiging van regulasie 139 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968*

16. Regulasie 139 van die regulasies word hierby gewysig deur in subregulasie (2) die woorde "Elke blanke" deur die woord "Elkeen" te vervang.

*Wysiging van regulasie 142 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968*

17. Regulasie 142 van die regulasies word hierby gewysig deur in subregulasie (2) die woord "nie-blankes," deur die woorde "persone wat onder toesig in 'n spanbaas werk en" te vervang.

*Wysiging van regulasie 158 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968*

18. Regulasie 158 van die regulasies word hierby gewysig deur die woorde "veral 'n nie-blanke" te skrap.

*Wysiging van regulasie 246 van die regulasies afgekondig by Goewermentskennisgewing 143 van 1968, soos gewysig deur Goewermentskennisgewing R.89 van 1969*

19. Regulasie 246 van die regulasies word hierby gewysig —

(a) deur in subregulasie (2) die woord "blanke" te skrap; en

(b) deur in subregulasie (3) die woord "nie-blanke" te skrap en die woord "voorjongens" deur die woord "spanbase" te vervang.

13. Regulation 46 of the regulations is hereby repealed.

*Amendment of regulation 117 of the regulations published by Government Notice 143 of 1968, as amended by Government Notice R.89 of 1969*

14. Regulation 117 of the regulations is hereby amended by the substitution in paragraph (e) of subregulation (5) for the word "European" of the word "person".

*Amendment of regulation 138 of the regulations published by Government Notice 143 of 1968, as amended by Government Notice R.89 of 1969*

15. (1) Regulation 138 of the regulations is hereby amended by the deletion of the word "European", wherever it occurs.

(2) Subregulation (1) shall come into operation on the expiration of a period of six months after the date on which it is published in the *Official Gazette*.

*Amendment of regulation 139 of the regulations published by Government Notice 143 of 1968*

16. Regulation 139 of the regulations is hereby amended by the deletion in subregulation (2) of the word "European".

*Amendment of regulation 142 of the regulations published by Government Notice 143 of 1968*

17. Regulation 142 of the regulations is hereby amended by the substitution in subregulation (2) for the words "non-European persons" of the words "persons who work under the supervision of a ganger and are".

*Amendment of regulation 158 of the regulations published by Government Notice 143 of 1968*

18. Regulation 158 of the regulations is hereby amended by the deletion of the words "especially a non-European person".

*Amendment of regulation 246 of the regulations published by Government Notice 143 of 1968, as amended by Government Notice R.89 of 1969*

19. Regulation 246 of the regulations is hereby amended —

(a) by the deletion in subregulation (2) of the word "European"; and

(b) by the deletion in subregulation (3) of the word "non-European" and the substitution for the word "boss-boys" of the word "gangers".

- (v) "block of claims" means a block of not more than four claims, pegged individually on the same day, under the same prospecting licence, with the side of adjacent claims in that block coincident and conterminous and with the block not exceeding 72 hectares; (xvii)  
 "Chief Inspector" means the Chief Inspector of Mines appointed under section 4 (2);
- (vi) "claim" means an area of land which has in conformity with the provisions of this ordinance or a prior law been lawfully pegged as a claim and in respect of which the right to prospect for and mine minerals has been lawfully obtained; (xvi)
- (vii) "Coloured person" means a person who is not a white person or a Native and who is generally accepted as a Coloured person, and includes a Burgher of the Rehoboth *Gebiet*, but does not include a person, who although a Coloured person by descent, is generally accepted as a native; (xix)
- (viii) "continental shelf" means the continental shelf as defined in the Convention on the Continental Shelf signed at Geneva on the twenty-ninth day of April, 1958, or as it may from time to time be defined by international convention accepted by the Republic of South Africa; (xliii)
- (ix) "conversion" means conversion of claims into mining areas in accordance with the provisions of this ordinance; (xxviii)  
 "Department" means the Department of Mines of the Republic of South Africa;
- (x) "diagram" means a diagram as defined by the Land Survey Ordinance, 1963 (Ordinance 9 of 1963), and shall include a document which has prior to the commencement of this ordinance been accepted as a diagram in the Mines Division of the Administration; (xv)
- (xi)
- (xii) "game park" means any area declared to be a game park in terms of sections 37 and 38 of the Nature Conservation Ordinance, 1957 (Ordinance 31 of 1957); (xivii)  
 "Gazette" means the *Government Gazette* of the Republic of South Africa;
- (xiii) "grant area" means the defined area in respect of which an exclusive prospecting or mining right has been granted in terms of this ordinance; (xlii)
- (xiv) "holder of a claim" means the person or company registered as the owner of a claim in the claims register kept in the office of the mining commissioner; (xviii)
- (xv) "holder of a grant area" means the person or company holding a deed of grant in respect of an exclusive prospecting or mining right granted in terms of section 60 or 61 of this ordinance or a prior law; (xii)
- (xvi) "inspector" means any person appointed as an inspector of mines or machinery in terms of this ordinance and shall include an inspector of explosives appointed in terms of the Explosives Ordinance, 1962 (Ordinance 31 of 1962) or any person legally acting in such capacities; (xiv)
- (xvii) "land surveyor" means a land surveyor as defined in section 1 of the Land Survey Ordinance, 1963 (Ordinance 9 of 1963); (xx)
- (xviii) "lapse" means, in relation to any claim, that the land in respect of which such claim was held, is again open to prospecting and pegging; (xliv)

<sup>1</sup> Inserted by Proc. R. 89 of 1969.

<sup>2</sup> Deleted by Proc. R. 89 of 1969.

CHAPTER I.  
ADMINISTRATION.

4. (1) The Department shall, subject to the directions of the Minister, through the Secretary for Mines of the Republic of South Africa supervise and control the mining industry and exercise all the powers and perform all the functions and duties vested in the Department by this ordinance or any other law in regard to minerals, mines, works or machinery in force in the Territory: Provided that nothing in this section contained shall be deemed to fetter or restrict any discretion vested in the Chief Inspector, an inspector or the mining commissioner in terms of this ordinance.

Supervision and control of mining industry and appointment of officers.

NB ✓ yes!

(2) The Minister shall, subject to the laws governing the Public Service—

(a) appoint a Chief Inspector of Mines who shall exercise the powers and perform the functions and duties conferred or imposed upon the Chief Inspector by this ordinance or as may be assigned to him by the Minister and who shall exercise general supervision of mines, works and machinery;

NB ✓ yes!

(b) appoint properly qualified persons as inspectors of mines or of machinery who shall assist the Chief Inspector and exercise the powers and perform the functions and duties conferred or imposed upon such inspectors by this ordinance;

✓ ✓ yes!

(c) appoint a mining commissioner who shall exercise the powers and perform the functions and duties conferred or imposed upon him by this ordinance,

and may, subject to the said laws, designate officers or employees who shall in addition to their other duties exercise the powers and perform the functions and duties which in terms of this ordinance or any other law may be exercised or performed by the Chief Inspector, an inspector or the mining commissioner and as may be determined by the Minister.

✓ yes!

(3) ~~No action for injury or wrong shall lie in any court against the Chief Inspector, the mining commissioner or any officer acting under the instructions of the Chief Inspector or the mining commissioner for any act done reasonably and in good faith by the Chief Inspector, the mining commissioner or any such officer in the exercise of his powers or the performance of his functions or duties under this ordinance.~~

✓ yes!

5. (1) The Chief Inspector or any inspector of mines, machinery or explosives may enter upon any mine or works and inspect or examine the same or any part thereof or any machinery thereon at any hour of the day or night, provided that he does not unnecessarily impede, slow up or stop the working of the mine or the carrying on of the works.

Powers of Chief Inspector or any inspector to enter upon and inspect mines and works and give instructions regarding safety or health.

✓ yes!

(2) Whenever the Chief Inspector or any inspector finds at any mine or works that any thing or any practice in any way connected therewith is dangerous or defective or that the absence of any thing or practice is likely to cause bodily injury to or be injurious to the health of any person and no provision exists in any law, regulation, or special rule requiring any such thing to be done or not to be done, or requiring any such practice to be observed or forbidding any such practice, he shall give notice in writing to the manager of the mine or works stating the particular thing, matter or practice which he requires to be done or not to be done or observed or discontinued and may give such instructions about it as he may deem expedient.

✓ yes!

6. ~~Any person who obstructs or hinders any officer of the Department in the discharge of his duty or disobeys any lawful order given by any such officer or refuses or neglects to furnish any such officer with the means and assistance necessary for making an entry, inspection, examination or inquiry under this ordinance or any regulation thereof or to attend, when required, any such~~

Penalty for obstruction of Department officers.

✓ yes!  
Power ✓

<sup>1</sup> Substituted by Proc. R89 of 1969.

inspection or examination shall be guilty of an offence and liable on conviction to a fine not exceeding four hundred rand or, in default of payment, to imprisonment for a period not exceeding twelve months.

7. (1) Any person who contravenes any provision of this ordinance or of any regulation, or who fails to comply with the terms of any notice or instruction given by an officer of the Department under the provisions of this ordinance or any regulation thereof, shall, if no penalty be expressly provided by this ordinance or by the regulation for the contravention thereof or failure to comply therewith, be liable on conviction to a fine not exceeding four hundred rand, or, in default of payment, to imprisonment for a period not exceeding twelve months.

Penalty for breach of provisions of this ordinance or a regulation thereunder.

? Safety ?

(2) A Magistrate's Court shall have special jurisdiction to impose the maximum penalties mentioned in this section, notwithstanding anything to the contrary in any other law.

8. If any person be guilty of any act or omission or contravenes any of the provisions of this ordinance, or of the regulations, or of any special rules under section 12, whereby—

Penalty for an act that imperils safety or causes injury or death

Safety ✓

(a) the safety of any person is endangered or likely to be endangered, he shall be liable on conviction to a fine not exceeding four hundred rand, or, in default of payment, to imprisonment for a period not exceeding twelve months;

(b) serious bodily injury is caused to any person, he shall be liable on conviction to a fine not exceeding eight hundred rand, or, in default of payment, to imprisonment for a period not exceeding two years;

(c) the death of any person is caused, he shall be liable on conviction to a fine not exceeding two thousand rand, or in default of payment, to imprisonment for a period not exceeding five years, or to such imprisonment without the option of a fine:

S & H ✓

Provided that nothing in this section or in section 12 contained shall be construed as exempting any person from prosecution for an offence under the common law or any other statute, or as preventing the imposition on such a person, if convicted for such an offence, of a more severe penalty than is prescribed for a contravention of this ordinance or the regulations.

9. (1) The Chief Inspector or every inspector of mines, machinery or explosives acting under his instructions may try any breach of a regulation or of any special rule in force under section 12 unless the death of any person has been directly caused by the breach.

Power of Chief Inspector to try breaches of regulations and special rules and impose penalties

✓

(2) The Chief Inspector or any inspector, when acting under this section may, on finding a person guilty of a breach of a regulation or special rule, impose a fine not exceeding thirty rand and in default by the offender of payment of the fine, the Chief Inspector or inspector shall notify the amount to the offender's employer, who shall withhold the amount so notified from any wages due or to become due to the offender, and pay it over to the officer concerned for the benefit of the Consolidated Revenue Fund of the Republic of South Africa.

✓

(3) At every such trial the Chief Inspector or every such inspector shall, with the assistance, if necessary, of an interpreter, take down the evidence in writing and record his finding and sentence in writing and transmit it to the magistrate of the district concerned and an appeal shall lie to that magistrate against any such finding or sentence, if, within twenty-one days after the date of the sentence, notice stating the grounds of appeal be given in writing to the magistrate and the Chief Inspector. The decision of the magistrate on any such appeal shall be final.

<sup>1</sup> Amended by Proc. R. 82 of 1969

currence of the person conducting such trial or inquiry or who at such trial or inquiry wilfully insults such person conducting such trial or inquiry or wilfully interrupts the proceedings, shall be guilty of an offence and liable on conviction to the penalties mentioned in subsection (3).

(5) At any such trial the person conducting such trial shall, and at any such inquiry the person conducting such inquiry, may administer an oath or affirmation in lieu thereof to witnesses, and if any witness to whom an oath or affirmation has been so administered gives false evidence, he shall be guilty of an offence and liable on conviction to the penalties prescribed by section 7.

(6) Any such witness shall have the same privileges in respect of answering questions or producing documents as he would have under the same circumstances if he were summoned as a witness before a superior court.

12. (1) The manager of a mine may make special rules, not inconsistent with this ordinance or any regulation, for the maintenance of order and discipline, and the prevention of accidents in or on any such mine. The rules, when made, shall be submitted through the Chief Inspector to the Minister for approval, and when so approved by him they shall take effect after they have been posted up in a conspicuous place at such mine for fourteen clear days.

Mine Manager's power to make special rules.

(2) The Minister, if he considers any such rule unreasonable, unnecessary or otherwise undesirable may disallow it, amend it or at any time require it to be altered.

(3) Any objection to such rules may be lodged at the office of the Chief Inspector and shall be forwarded by him with his remarks thereon to the Minister, who may either confirm or alter the rule regarding which the objection may have been lodged.

(4) All such rules, when and so long as they are posted up and are legible, shall, until so disallowed and save in so far as they may be altered, have the same force and effect as the regulations, and any person who contravenes or fails to comply with any such rule shall be liable on conviction to a fine not exceeding thirty rand, or in default of payment, to imprisonment for a period not exceeding one month.

13. (1) No person who is resident outside the Territory of the Republic of South Africa shall be registered as the holder of a claim or a holder of a grant area or as the owner of a mining area, unless he has registered at the office of the mining commissioner an accredited agent resident in the Territory or in the Republic of South Africa.

Registration of agent by prospecting or mining title holder resident outside the Territory or the Republic of South Africa.

(2) Should any holder of a claim or holder of a grant area or owner of a mining area take up residence outside the Territory or the Republic of South Africa he shall within one month of taking up such residence register at the office of the mining commissioner an accredited agent resident in the Territory or in the Republic of South Africa.

(3) An agent referred to in subsections (1) and (2) shall be a person approved by the mining commissioner and such agent shall, on being registered by the mining commissioner, be personally responsible under the provisions of this ordinance for all matters, acts and omissions in connection with the claims, grant areas or mining areas held by his principal in the same manner as if such claims, grant areas or mining areas were registered in his name; Provided that prior to the registration of an agent as aforesaid such agent shall have informed the mining commissioner in writing that he is prepared to accept such responsibility.

(4) Any holder of a claim or holder of a grant area or owner of a mining area may at any time revoke the registration of his accredited agent and shall within one month of such revocation register another person approved by the mining commissioner as his accredited agent as aforesaid.

(5) A registered accredited agent may at any time resign his appointment as such by giving notice in writing to the mining commissioner. The resignation shall not take effect until the



(b) Subsequent payments of fees may be accepted for a maximum period of twelve months in advance, but shall, in any event, be made at least monthly in advance on the first day of every month and shall carry a penalty of one fourth of the amount payable if overdue.

(c) If such payments, together with penalties which may have accrued, are not made on or before the last day of the calendar month in which they fall due, all rights in the claim in respect of which such payments are due shall lapse and the land over which such claim was held shall become open to prospecting and pegging.

(d) For the purpose of paragraph (c) mining areas shall be treated as claims until the first mining area fee becomes payable in terms of section 47.

31. (1) Every holder of a claim shall maintain the beacons defining his claim in proper repair and in accordance with the regulations and if any beacons are found to be out of repair the mining commissioner shall serve written notice upon the holder concerned calling upon him to put the beacons in proper repair within a period to be stated in the notice.

Maintenance of claim beacons.

(2) A holder of a claim or his representative shall point out free of charge the middle and corner beacons of his claim on being requested to do so by the Chief Inspector, an inspector, the mining commissioner, a claim inspector, a member of the South African Police, the owner or occupier of the land on which such claim is situated or by any prospector who may desire to peg an adjoining claim: Provided that where it is found that the sketch plan of the claim concerned, filed in the office of the mining commissioner or the copy thereof sent to the owner of the land concerned under section 26 (5), is sufficiently accurate to enable the position of such claim to be located therefrom and that the beacons defining such claim are properly erected on such land, any such prospector or owner or occupier who has required such beacons to be pointed out to him in terms of the provisions of this subsection, shall be liable to the holder of such claim for any expenses incurred thereby.

32. The mining commissioner may give notice to the holder of any claim that within a period to be fixed in such notice, which shall not be less than three months, he shall execute prospecting operations as are in the opinion of the mining commissioner appropriate to the character of the mineral deposit on such claim.

Holder of claim to carry out operations when required to do so.

33. (1) If the holder of a claim fails to comply with any requirement of the Chief Inspector or mining commissioner, under section 31 (1) or 32 acceptance of further payment of claim fees may be refused by the mining commissioner until such requirement has been complied with.

Procedure to be followed in case of failure to comply with provisions as to beacons and prospecting.

(2) Any claim which lapses as a result of the refusal to accept further payment of claim fees in terms of subsection (1) may not be pegged or registered in the name of the same prospector within a period of twelve months from the date of lapsing of such claim: Provided that the Minister may on good cause shown, grant special permission to such prospector to repeg and register the said claim in his name.

34. (1) Every prospector shall to the satisfaction of the Chief Inspector, maintain his workings in a safe condition and shall repair or make safe to the satisfaction of the Chief Inspector the surface of any land which has been rendered unsafe by prospecting or mining operations for which such prospector is responsible or has become responsible in terms of section 79.

Preservation of the surface of land.

(2) If any prospector fails to repair or make safe the surface of any land as aforesaid, he shall be guilty of an offence.

(3) In any criminal proceedings instituted under the provisions of subsection (2) it shall be presumed that the accused is responsible for the surface damage that forms the subject of the

✓  
Safety &  
Health of  
employees.

charge until the contrary is proved: Provided that no such proceedings shall be instituted as aforesaid except on the written authority of the Attorney-General.

35. (1) Subject to the provisions of section 64, the holder of a claim may transfer his rights to such claim to a person who is the holder of a prospecting licence.

Transfer of claims.

(2) Such transfer shall be by written agreement executed on the form prescribed by the regulations and shall be absolute and unconditional.

(3) Such transfer shall not be registered until the mining commissioner is furnished with a copy of such agreement together with a sketch plan in quadruplicate of the claim it is intended to transfer.

(4) Transfer of a claim shall not take effect until the certificate provided for under section 29 (3) has been issued to the transferee.

(5) The mining commissioner shall notify the owner of private land of the transfer of any claim situate on his land.

36. (1) The holder of a claim may abandon his rights to such claim by giving notice of such abandonment to the mining commissioner and on receipt of such notification the mining commissioner shall cancel such claim in the claims register whereupon the said claims shall be deemed to have lapsed.

Abandonment of claims.

(2) Abandonment of a claim shall not affect the responsibility of the holder of such claim in regard to the observance of the provisions of section 34.

37. When a claim has lapsed, the holder thereof shall within thirty days of the date of lapsing remove all beacons and trenches marking such claim or block of claims in such a manner as to leave no doubt that the claim area concerned is again open to pegging and if such holder fails to fulfil his obligations in terms of this section, he shall be guilty of an offence.

Removal of beacons when claims lapse.

38. (1) No prospector shall remove from the site of his prospecting operations any minerals which have been won in the course of such operations or dispose of such minerals without being in possession of a permit issued by the mining commissioner who may issue such permit subject to such conditions as he may deem fit: Provided that a prospector may remove to a place of safekeeping in the Territory the minerals he has won from the site of his prospecting operations and upon such removal such prospector shall forthwith inform the mining commissioner in writing of such minerals, the quantity thereof and the place to which they have been removed and shall not remove or dispose of such minerals without being in possession of a permit issued under this subsection.

Removal or disposal of minerals won by prospecting, without permit from mining commissioner.

(2) No permit under this section shall be issued to any holder of a claim who has not paid all claim fees due in respect of claims registered in his name.

(3) No person shall sell any base mineral sample unless he is in possession of a permit issued by the mining commissioner who may issue such permit subject to such conditions as he may deem fit and no such permit shall be issued for a period longer than twelve months and no base mineral sample weighing more than ten pounds shall be sold: Provided that the mining commissioner may issue a permit for the sale of samples weighing more than ten pounds on good cause shown.

(4) No person shall receive or purchase, whether as principal or agent, from any prospector or other person, any minerals, unless such prospector or other person can produce a permit from the mining commissioner authorising the removal or disposal of such minerals and in such case such permit shall be retained by the receiver or purchaser: Provided that the purchaser of a base mineral sample sold to him in terms of subsection (3) shall not be required to retain any such permit.

- (k) the manner of holding inquiries at or in connection with any mine or works, the procedure to be followed at any such inquiry and the manner of securing the attendance of witnesses thereat;
- (l) the provision of ambulances and medical aid in case of accident;
- (m) the conditions upon which machinery may be erected or used;
- (n) the fees which shall be payable for any inspection under this ordinance;
- (o) the prohibition or restrictions in relation to the making or use of roads or railways or other travelling ways over, or the erection or use of buildings or other objects on areas which have been undermined;
- (p) the safety and health of persons employed in or about mines and works, and generally of persons, property and public traffic;
- (pA) the prevention and combating of pollution of the air, land or sea which arises or may possibly arise in the course of the operations involved in prospecting or mining for any mineral or after such operations have ceased;
- (pB) the making safe of undermined ground and of dangerous slimes dams, waste dumps, ash dumps, shafts, holes, trenches or excavations of whatever nature made in the course of prospecting or mining operations, the imposition of monetary and other obligations in connection with such safe-making on persons who are or were responsible for the undermining of such ground or the making of such slimes dams, waste dumps, ash dumps, shafts, holes, trenches or excavations or for the dangerous condition thereof, or who will benefit from such safe-making, and the assumption by the State of responsibility or co-responsibility for such safe-making in particular cases;
- (q) the procedure to be followed in connection with trials by the Chief Inspector or an inspector under this ordinance;
- (r) the grant, cancellation and suspension of certificates of competency to—
  - (i) mine managers;
  - (ii) mine overseers;
  - (iii) mine surveyors;
  - (iv) mechanical engineers;
  - (v) engine drivers;
  - (vi) miners entitled to blast;
  - (vii) such other classes of persons employed in, at or about mines, works and machinery as the Minister may from time to time deem it expedient to require to hold certificates of competency;
- (s) the fees to be payable by persons applying for any of the certificates mentioned in paragraph (r) or on their admission to an examination for any such certificate;
- (t) the limiting of the days and hours of work upon any mine or works;
- (u) the conditions governing the grant of paid leave of absence by owners of mines or works to their employees or to various categories of their employees;
- (v) in relation to any specific mineral or any specific category of a mineral—
  - (i) the prohibiting or regulating or restricting of its export from the Territory; or

*In Place*

(ii) the prohibiting of its disposal or use for any defined purpose or in any defined manner, or its disposal or use for any other purpose or in any other manner than may be defined; or

(iii) in general the restricting or regulating of its disposal or use; and

(w) generally for ensuring the proper working and management of all mines, works and machinery and as to all matters which he considers it necessary or expedient to prescribe for the better carrying out of the objects and purposes of this ordinance.

(2) The regulations may prescribe penalties for any contravention thereof or failure to comply therewith not exceeding the penalties mentioned in section 7; and daily penalties may be prescribed for a continuing contravention or non-compliance or increased penalties may be prescribed for a second or subsequent contravention or non-compliance subject to the limitations mentioned in section 7.

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101. The Land Survey Ordinance, 1963 (Ordinance 9 of 1963) is hereby amended by—

- (a) the deletion of paragraphs (a) and (c) of section 40; and
- (b) the deletion of the words "save as is otherwise provided in paragraph (c) of section forty" in section 41.

Amendment of sections 40 and 41 of Ordinance 9 of 1963.

102. This ordinance shall be called the Mines, Works and Minerals Ordinance, 1968, and shall come into operation on a date to be fixed by the Minister by proclamation in the *Gazette*.

Short title and commencement.

Am pbee

<sup>1</sup> Repealed by Act 3 of 1972.

- (a) 'n woordelike omskrywing van die figuur of figure;
- (b) die naam van die myngebied of -gebiede;
- (c) die nommer van elke myngebied (hierdie nommer word deur die Landmeter-generaal toegeken);
- (d) die name en nommers van die plase of onderverdelings waarop elke myngebied geheel of deels geleë is;
- (e) die registrasie-afdeling of -afdelings waarin die plase geleë is;
- (f) die naam van die Gebied;
- (g) in geval van 'n onderverdeling van 'n myngebied, 'n verwysing na die oorspronklike kaart en akte van omsetting of latere akte;
- (h) 'n beskrywing van alle plaas- en myngebiedbakens;
- (i) die geregistreerde nommers van alle bakens;
- (j) die skaal van die figuur.

#### *Tekening van figuur.*

19. Die figuur of figure op 'n kaart moet geteken word volgens 'n natuurlike skaal: Met dien verstande dat die grootte van enige afsonderlike figuur minstens 30 vierkante sentimeter moet wees.

#### *Gegewens vir kaart.*

20. (1) Die kaart van 'n myngebied moet, onder andere, die volgende getalgegewens bevat —

- (a) die grootte tot op vier desimale syfers van 'n hektaar van elke myngebied en van elke plaas of gedeelte van 'n plaas wat deur die myngebied geraak word;
- (b) die gemete afstande volgens skaal tussen aanliggende lynbakens en tussen 'n lynbaken en 'n aanliggende hoekbakens. Hierdie afstande moet op geskikte plekke buitekant die figuur ingeskryf word;
- (c) die waardes van die lengte- en breedtegrade van die in regulasie 10 bedoelde bakens.

(2) Die getalgegewens moet, buiten soos bepaal in paragraaf (1) (b), getabelleer word, en in hierdie tabel moet daar na die hoekpunte van die figuur verwys word in volgorde saam met die wysers.

#### *Saamgestelde kaarte.*

21. (1) Die kaart kan die figure van twee of meer myngebiede bevat vir die doeleindes van registrasie van 'n omsettingsakte mits —

- (i) die figure in hul juiste relatiewe liggings geteken word;
- (ii) die omsettingsaktes in die naam van dieselfde eienaar of eienaars geregistreer gaan word; en
- (iii) elke so 'n gebied in 'n afsonderlike paragraaf in 'n betrokke akte beskryf word, en ongeag strydige bepalinge in regulasie 27 (2) van die regulasies opgestel ingevolge die bepalinge van die Registrasie van Aktes Proklamasie 1939 (Proklamasie 37 van 1939), kan elke sodanige gebied oorgedra of onafhanklik oor beskik word sonder verskaffing van 'n verdere kaart daarvan.

(2) Daar mag nie meer as een deel van een myngebied op een onderverdelingskaart voorgestel word nie.

(3) Waar meer as een myngebied op 'n kaart voorgestel word, moet, behalwe sy beskrywing in die woordelike omskrywing soos regulasie 18 voorskryf, die naam en nommer van elke myngebied wat so voorgestel word, binne sy afsonderlike figuur ingeskryf word.

- (a) a verbal definition of the figure or figures;
- (b) the name of the mining area or areas;
- (c) the number of each mining area (this number will be allocated by the Surveyor-General);
- (d) the names and numbers of the farms or subdivisions upon which each mining area is wholly or partially situated;
- (e) the registration division or divisions in which the farms are situated;
- (f) the name of the Territory;
- (g) in the case of a subdivision of a mining area a reference to the original diagram and deed of conversion or subsequent deed;
- (h) a description of all farm and mining area beacons;
- (i) the registered numbers of all beacons;
- (j) the scale of the figure.

#### *Plot of figure.*

19. The figure or figures on a diagram shall be plotted to a natural scale provided that the size of any one figure shall not be less than 30 square centimetres.

#### *Data for diagrams.*

20. (1) The diagram of a mining area shall *inter alia* contain the following numerical data —

- (a) the area to four places of decimals of a hectare of each mining area and of each farm or portion of a farm affected by the mining area;
- (b) the scaled distances between adjacent line beacons and between a line beacon and an adjacent corner beacon; these distances must be written in appropriate positions outside the figure;
- (c) the value of the latitude and longitude of the beacon referred to in regulation 10.

(2) The numerical data except as provided in paragraph (1) (b) shall be tabulated and in this tabulation the corner points of the figure shall be referred to in a clockwise order.

#### *Composite diagrams.*

21. (1) The diagram may contain the figures of two or more mining areas for the purpose of registration of a deed of conversion provided —

- (i) the figures are plotted in their correct relative positions;
- (ii) the deeds of conversion are to be registered in the name of the same owner or owners; and
- (iii) each such area is described in any relevant deed in a separate paragraph and notwithstanding anything contained to the contrary in regulation 27 (2) of the regulations framed under the provisions of the Deeds Registry Proclamation, 1939 (Proclamation 37 of 1939), each such area may be transferred or dealt with independently without the production of a further diagram thereof.

(2) It is not permissible to represent more than one portion of one mining area on one subdivisional diagram.

(3) When more than one mining area is represented on a diagram the name and number of each mining area so represented shall, in addition to being described in the verbal definition as prescribed by regulation 18, be written within its respective figure.

*Kleinnommers.*

22. Die rang- en geregistreerde nommers van die kleims wat by 'n myngebied wat opgemeet word, ingesluit is, moet op die kaart aangedui word, maar hoef nie op die kaart van die onderverdeling herhaal te word nie.

*Sertifikaat op werksplan.*

23. Die werksplan van 'n landmeter moet met die onderstaande sertifikaat daarby onderteken word:

„Ek sertifiseer dat hierdie hele opmeting deur my of onder my toesig uitgevoer is, dat bakens volgens regulasie opgerig is en dat die myngebied wat hierop verteenwoordig is geheel en al binne die prospekterkleims lê wat deur ..... aan my uitgewys is.

.....  
Landmeter

Datum .....

*Kantoorgelde: Landmeter-generaal.*

24. Die kantoorgelde wat gehef word deur die Landmeter-generaal ten opsigte van enige optrede, saak of ding wat vereis of toegelaat word, moet ooreenkom met Goewermentskennisgewing 71 van 1962.

## DEEL II.

## MYNE EN BEDRYWE.

25. In hierdie regulasies, tensy die samehang andersins vereis, beteken —

*Woordomskrywing.*

„Afbouplek” 'n ondergrondse uitgraving wat gevorm is deur die verwydering van grond of minerale, uitgesonderd steenkool, maar is nie van toepassing nie op uitgrawings gemaak vir masjienkamers en pompkamers of ontsluitingsuitgrawings, soos skagte, strekgange, daalgange en styggange;

„bankwagter” 'n persoon wat werksaam is by die skag-top, wat in besit is van 'n sertifikaat wat deur die bestuurder uitgereik is om toesig te hou oor die op- en aflaai van persone en materiaal in die emmer, hysbak, hyshok of ander vervoermiddel en om die nodige seine te gee wat van hom verweg word in die uitvoering van hyswerksaamhede;

„bestuurder” die persoon wat die eienaar van 'n myn of bedryf skriftelik aangestel het om verantwoordelik te wees vir beheer, bestuur en leiding van die myn of deel van die myn of vir die bedryf of deel daarvan en omvat die term „hoofbestuurder”;

„bevoegde ingenieur” iemand wat skriftelik deur die bestuurder aangestel is om algemene toesig te hou oor alle masjinerie by 'n myn of bedryf of by 'n deel van 'n myn of deel van 'n bedryf;

„bevoegde skofman” iemand wat 'n vakleerlingskap in 'n toepaslike vak uitgedien het, of wat minstens vyf jaar ervaring met masjinerie gehad het, en wat genoegsame ervaring opgedoen het van die veilige werking van die soort van masjinerie wat onder sy toesig is, wat hy moet ondersoek of in verband waarmee hy moet werk;

*Numbers of claims.*

22. The ordinal and registered numbers of the claims included in the mining area surveyed shall be stated on the diagram but need not be repeated on the diagram of a subdivision.

*Certificate on working plan.*

23. The working plan of a land surveyor shall be signed under the following certificate —

I certify that the whole of this survey was performed by me or under my supervision, that beacons according to regulation have been erected and that the mining areas represented hereon fall wholly within the claims pointed out to me by .....

.....  
LAND SURVEYOR.

DATE: .....

*Fees of office: Surveyor-General.*

24. The fees of office to be charged by the Surveyor-General in respect of any act, matter or thing required or permitted to be done shall be in accordance with Government Notice 71 of 1962.

## PART II.

## MINES AND WORKS.

25. In these regulations, unless the context otherwise requires:—

*Interpretation of terms.*

“Approved authority” shall mean an authority approved for the purpose of these regulations by the Director;

“Banksman” shall mean a person stationed at the shaft top, who shall be the holder of a certificate issued by the manager to supervise the loading and unloading of persons and material in the bucket, skip, cage or other means of conveyance and to give the necessary signals required from him in the carrying out of winding operations;

“Boiler” shall mean any apparatus, with all its fittings and appurtenances, adapted to convert any liquid continuously into steam or vapour of a higher pressure than that due to the atmosphere, and includes any super-heater, economizer and steam accumulator, with all their fittings and appurtenances, and where any such apparatus consists of two or more parts, each of which is capable of being adapted for use as a separate boiler by the mere closing of a valve, shall mean each of such parts with all its fittings and appurtenances;

“circuit” shall mean an electric circuit forming a system or branch of a system;

“competent engineer” shall mean a person appointed in writing by the manager to take general charge of all machinery on a mine or works or portion of a mine or portion of a works;

“competent shiftsman” shall mean a person who served an apprenticeship in an appropriate trade.

„daalgang” enige tunnel met 'n hellingshoek onder die horisontale, in die rigting waarin gewerk word, van meer as vyf grade en wat nie deur die woordomscribing van „skag” omvat word nie;

„drukhouer” 'n druklugontvanger, tussenverkoeler, auto-klaaf, steriliseerder, verteertoestel, mantel-stoomhouer of ander houer wat gebruik word om druk, hoër as dié van die atmosfeer, te hou, maar sluit die onderstaande uit —

- (a) stoomketels;
- (b) vervoerbare gassilinders;
- (c) die werksilinders of die mantels van stoom-, hitte- of lugmasjiene;
- (d) alle dele van verkcelingstoestelle;
- (e) houers waarin die druk te weeg gebring word deur statiese vloeistof of deur vloeistof in 'n standpyp of stygbuis wat direk na die atmosfeer oop is: Met dien verstande dat geen versperring wat die houer sal verhoed om vryelik oop te wees na die atmosfeer in die standpyp of stygbuis ingestek mag word nie;

„elektriese apparaat” alle appaarte, masjiene en onderdele waarin geleiers gebruik word, of waarvan hulle deel uitmaak;

„elektriese spanning” die verskil in elektriese potensiaal tussen enige twee geleiers, of tussen 'n geleier en die aarde;

„geaard” op so 'n wyse met die aardmassa verbind dat dit te alle tye 'n onmiddellike en veilige ontlading van elektriese krag verseker;

„enjin” of „masjien” 'n toestel of kombinasie van toestelle waardeur krag, behalwe mense- of dierekrag, aangewend kan word om meganiese werk te verrig;

„gebruiker” in verband met enige masjinerie wat gebruik word, namens wie dit ook al gebruik word, die persoon of persone aan wie die masjinerie behoort: Met dien verstande dat die persoon of persone, aan wie die masjinerie behoort, die reg van gebruik, asook die verantwoordelikhede wat die gebruiker opgelê word, mag oordra, deur so 'n oordrag op die kantoor van die Direkteur van Mynwese te laat registreer.

In die geval van maatskappye of sindikate, word die bestuurder of die persoon wat belas is met die toesig oor die werk, as die gebruiker beskou. Die verantwoordelikheid van die gebruiker ingevolge hierdie regulasies hou nie op wanneer die masjinerie tydelik buite werking gestel word nie, maar duur voort tot tyd en wyl 'n kennisgewing van die algehele staking van die werk in verband met masjinerie deur die Direkteur van Mynwese ontvang is.

„gelaai” onder elektriese spanning;

„goedgekeurde gesag” 'n gesag wat die Direkteur vir die doeleindes van hierdie regulasies goedkeur;

„geleier” 'n elektriese geleier ontwerp om elektrisiteit met 'n stelsel verbind te word;

„lae spanning” spanning wat gewoonweg hoogstens 250 volt meet;

„materiaal” wat ook al deur middel van 'n hysinstallasie vervoer word, uitgesonderd persone en delfstowwe;

„metaalomhulsel” yster- of staal pantser met of sonder 'n lood- of ander metaalskede, na gelang van omstandighede, of yster- of staal pyp wat twee of meer geleiers omsluit;

„meterdruk” die druk wat hoër as atmosferiese druk is;

or who has had not less than five years' experience in working with machinery, and who has had adequate experience of the safe working of the class of machinery of which he is in charge and which he is required to examine or in connection with which he is required to work;

“conductor” shall mean an electrical conductor arranged to be electrically connected to a system;

“covered with insulating material” shall mean adequately covered with insulating material of such quality and thickness that there is no danger of contact between any outside object and the conductor so covered;

“dead” shall mean at or about zero potential, and disconnected from any live system;

“earthed” shall mean connected to the general mass of earth in such manner as will ensure at all times an immediate safe discharge of electrical energy;

“electrical apparatus” includes all apparatus, machines and fittings in which conductors are used, or of which they form a part;

“employee” shall mean any person employed by or working for any employer, and any other person whatsoever who in any manner assists in the carrying on or conducting of the business of an employer;

“employer” shall mean a person who in connection with a mine or works employs or provides work for or permits anyone in any manner whatsoever to assist him in carrying on his business in or about a mine or works;

“engine” shall mean any appliance or combination of appliances by which power, other than man or animal power, can be applied to do mechanical work;

“explosives” shall have the meaning assigned to that term by the Explosives Ordinance (No. 31 of 1962);

“ganger” or “miner” shall mean the person in charge of workmen in or at a mine or works;

“gauge pressure” shall mean the pressure in excess of that due to the atmosphere;

“heating surface” shall mean the manufacturers designed heating surface of a boiler, or in the absence thereof, the area of all surfaces of a boiler to which heat is applied for the purpose of raising the temperature of water or steam;

“live” or “alive” shall mean electrically charged;

“low pressure” shall mean a pressure not normally exceeding 250 volts;

“manager” shall mean the person appointed in writing by the owner of a mine or works to be responsible for the control, management and direction of the mine or portion of the mine or of the works or portion of the works, and shall include the term “General Manager”;

“material” shall mean and include whatever may be conveyed by means of a winding plant except persons and minerals;

“metallic covering” shall mean 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;

“miner” or “ganger” shall mean the person in charge of workmen in or at a mine or works;

“misfired hole” shall mean a hole in which the explosive or any portion thereof has failed to explode;

„mynwerker” of „spanbaas” iemand wat belas is met toesig oor werkers in of by 'n myn of bedryf;

„omhul met isoleermateriaal” gencegsaam omhul met isoleermateriaal van sodanige gehalte en dikte dat daar geen gevaar van kontak bestaan tussen enige buitekantse voorwerp en die geleier wat aldus omhul is nie;

„ondergrondse” of „onder die grond” onderkant die natuurlike oppervlakte van die grond in 'n myn wat deur 'n skag, tunnel, toegang of afbouplek binnegegaan word;

„skag” enige tunnel met 'n dwarsnitaafmeting van twaalf of meer voet en wat —

- (a) 'n hellingshoek met die horisontale maak van vyftien of meer grade; of
- (b) 'n hellingshoek met die horisontale maak van minder as vyftien maar meer as tien grade, en waar die trekvervoersnelheid vierhonderd voet per minuut te bowe mag gaan;

„skagwagter” iemand wat skriftelik deur die bestuurder gemagtig is om toesig te hou oor 'n hyshok, hysbak of ander vervoermiddel onder die grond waarin mense of materiaal opgehaal of neergelaat word en om die nodige seine te gee wat hom verwag word in die uitvoering van hyswerksaamhede;

„skofman” iemand wat skofwerk in verband met masjinerie verrig en wat —

- (i) gepaste opleiding gehad het om alle veiligheidstoestelle, -instrumente en skerms van sodanige masjinerie in stand te hou; en
- (ii) enige sodanige masjiën, wat weens 'n defek op enige manier gevaarlik vir mense is of geword het, tot stilstand kan bring; en
- (iii) een van die amptelike tale kan lees en skrywe;

„sok” 'n gat of deel van 'n gat wat oorbly nadat dit met springstof gelaai en geskiet is en wat nie as 'n weiergat bekend is nie;

„spanbaas” sien „mynwerker”;

het „springstowwe” die betekenis vir daardie term bepaal deur die Ordonnansie op Ontploffbare stowwe 1962 (No. 31 van 1962).

„steilhellend” in verband met skagte of daalgange of ander ondergrondse uitgrawings, 'n hellingshoek met die horisontale van meer as vyf-en-dertig grade;

„stelsel” 'n elektriese stelsel waarin al die geleiers en apparaat elektries verbind is met 'n gemeenskaplike bron van elektriese krag;

„stoomketel” 'n apparaat met al sy by- en toebehore, geskik gemaak om 'n vloeistof onafgebroke in stoom of damp van 'n hoër drukking as dié aan die atmosfeer toe te skrywe, te verander, en ook 'n oorverhitter, hitteverhaler en stoomakkumulator met al hul by- en toebehore, en waar enige sodanige apparaat uit twee of meer dele bestaan, waarvan elkeen vir gebruik as 'n aparte stoomketel geskik gemaak kan word deur die blote afsluiting van 'n klep, elke bedoelde deel met al sy by- en toebehore;

„stroombaan” 'n elektriese stroombaan wat 'n stelsel of tak van 'n stelsel uitmaak;

„stroomloos” op, of omtrent op, nulpotensiaal, en in geen verbinding met 'n gelaaiete stelsel nie;

„onsetter” shall mean the person authorised in writing by the manager to have charge of a cage, skip or other means of conveyance underground in which persons or material are being raised or lowered and to give the necessary signals required from such person in the carrying out of winding operations;

„pressure electrical” shall mean the difference of electrical potential between any two conductors, or between a conductor and earth;

„pressure vessel” shall mean a compressed air receiver, intercooler, autoclave, sterilizer, digester, steam jacketed vessel, or any other container used to hold a pressure higher than that of the atmosphere, but shall not include:—

- (a) boilers;
- (b) portable gas cylinders;
- (c) the working cylinders or chambers of steam, heat or air engines;
- (d) any part of refrigeration plants;
- (e) vessels in which the pressure is due to the static head of liquid or to liquid in a stand pipe or riser vented direct to the atmosphere, provided that no obstruction is inserted in the stand pipe or riser to prevent the vessel from freely venting to the atmosphere;

„raise” shall mean any tunnel having an inclination above the horizontal in the direction of working of more than five degrees and not included under the definition of „shaft”.

„safety pillar” shall mean 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;

„shaft” shall mean any tunnel having a cross-sectional dimension of twelve feet or more and —

- (a) having an inclination to the horizontal of fifteen degrees or more; or
- (b) having an inclination to the horizontal of less than fifteen degrees but more than ten degrees where the speed of traction may exceed four hundred feet per minute.

„shiftsman” shall mean a person employed on shift-work in attending to machinery who:—

- (i) has had suitable training to attend to the maintenance of all safety appliances, devices and guards of such machinery; and
- (ii) is able to stop the working of any such machine the using of which is or has become in any way dangerous to persons, due to any defect; and
- (iii) is able to read and write one of the official languages.

„socket” shall mean a hole or part of a hole remaining after being charged with explosives and blasted and which is not known to be a misfired hole;

„steeply inclined” in connection with shafts or winzes or other underground excavations, shall mean an inclination to the horizon of more than 35 degrees;

„stope” shall mean an underground excavation made in the removal of any ground or mineral, other than coal, but shall not apply to excavations made for engine rooms and pump chambers or development excavations such as shafts, drives, winzes and raises;



„styggang” enige tunnel met 'n hellingshoek, bo die horisontale in die rigting waarin gewerk word, van meer as vyf grade en wat nie deur die omskrywing van „skag” omvat word nie;

„veiligheidspilaar” elke deel van 'n rif, mineraalafsetting of grond wat *in situ* gelaat word vir die ondersteuning en beskerming van die oppervlakte, voorwerpe daarop of ondergrondse werkplekke;

„ventilasiewyk” elke deel van 'n myn met 'n onafhanklike intreklugbaan wat by 'n hoofinlaatlugkoers begin, en met 'n onafhanklike uittreklugbaan wat by 'n hoofuittreklugkoers eindig.

„verhittingsoppervlakte” die vervaardiger se ontwerpte verhittingsoppervlakte van 'n stoomketel, of, by gebreke daaraan, die area van alle oppervlaktes van 'n stoomketel wat verhit word ten einde die temperatuur van water of stoom te verhoog;

„watersproeier” 'n toestel waarmee water, deur middel van lugdruk, voortdurend in die vorm van 'n sproeiereën gespuit word;

„weiergat” 'n gat waarin springstof of gedeelte daarvan nie ontplof het nie;

„werkgewer” dié persoon wat in verband met 'n myn of bedryf iemand in diens het, of werk aan iemand verskaf of iemand enigins hoegenaamd toelaat om hom by te staan in die uitvoering van sy werk in of by 'n myn of bedryf;

„werknemer” iemand wat in diens van 'n werkgewer is, of wat vir 'n werkgewer werk, en enigiemand anders hoegenaamd wat by die uitvoering van die werk van 'n werkgewer enigins behulpsaam is;

„werkplekke” alle uitgrawings wat by of in die loop van prospekterwerk of mynwerk gemaak is of gemaak word, ongeag of sodanige uitgrawings reeds verlaat is al dan nie.

#### *Bestuurder — aanstelling en pligte.*

26. (1) Wanneer ook al prospekter- of mynbedrywighede op 'n kleim of myngebied of bedrywighede by bedrywe na die mening van die Direkteur in sodanige omvang uitgevoer word dat die aanstelling van 'n bestuurder nodig is, moet hy die eienaar van sodanige kleim, myngebied of bedryf aansê om die aanstelling te doen. Binne een maand na sodanige kennisgewing moet die eienaar 'n bestuurder skriftelik aanstel en 'n afskrif van die aanstellingsbrief wat deur die aangestelde bestuurder mede-onderteken is, aan die Direkteur besorg.

So 'n aanstellingsbrief moet die onderstaande besonderhede aangee —

- (a) die naam van die eienaar van die kleim, myngebied of bedryf;
- (b) die bestuurder se volle naam en sy adres;
- (c) die geregistreerde nommers van die kleims of naam van die myngebied of bedryf waarvoor die bestuurder verantwoordelik is;
- (d) die ligging van gemelde kleims, myngebied of bedryf;

(2) Waar 'n myn of bedryf aan een persoon behoort, kan sodanige eienaar self die pligte en verantwoordelikhede van die bestuurder aanvaar, en in so 'n geval moet hy binne ses dae nadat die mynwerk begin het op 'n kleim

“system” shall mean an electrical system in which all the conductors and apparatus are electrically connected to a common source of electric power;

“underground” shall mean below the natural surface of the earth in a mine which is entered by a shaft, tunnel, adit or stope;

“user”, in connection with any machinery which is being used and on behalf of whomsoever it may be used, shall mean the person or persons owning the machinery: Provided that the person or persons owning the same may transfer the right of using, together with the responsibilities imposed by the user, by registering the said transfer at the office of the Director of Mines. With companies or syndicates the user shall be considered to be the manager or the person charged with the supervision of the works. The responsibility of the user under these regulations shall not cease when the machinery is placed temporarily out of use, but shall continue until such time as notice of the working of the machinery having been entirely suspended is received by the Director of Mines;

“ventilating district” shall mean every part of a mine that has an independent intake commencing from a main intake aircourse and an independent return airway terminating at a main and return aircourse;

“water blast” shall mean an appliance by means of which water is continuously projected in the form of a spray by means of compressed air;

“winze” shall mean 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”;

“workings” shall include all excavations made or being made in the course of prospecting or mining operations, whether such excavations have been abandoned or not.

#### *Manager appointment and duties.*

26. (1) Whenever in the opinion of the Director, prospecting or mining operations on a claim or mining area or operations on a works, are carried on to such an extent as to require the appointment of a manager, he shall call upon the owner of such claim, mining area or works to do so. The owner shall within one month of such notification appoint a manager in writing and shall furnish the Director with a copy of the letter of appointment countersigned by the person appointed.

Such letter of appointment shall specify:

- (a) the name of the owner of such claim, mining area or works;
- (b) the full name of the manager and his address;
- (c) the registered numbers of the claims or name of the mining area or works for which the manager shall be responsible;
- (d) the situation of the said claims, mining area or works.

(2) In the case of a mine or works owned by an individual person such owner may himself assume the duties and responsibilities as manager in which event he shall within seven days of the commencement of mining

of myngebied wat in sy naam geregistreer is, die Direkteur skriftelik in kennis stel van sodanige aanvangs en sodanige aanvaarding van verantwoordelikheid.

(3) Die eienaar van 'n myn of bedryf moet binne sewe dae die Direkteur skriftelik kennis gee van —

- (a) enige verandering van bestuurder;
- (b) enige verandering in die omvang van die bestuurder se verantwoordelikheid.

(4) Die Direkteur moet 'n register hou van myn- en bedryfsbestuurders, met al die besonderhede van hul kwalifikasies en aanstellings wat hy nodig ag.

*Eienaar moet bestuurder geleentheid verskaf om regulasies na te kom.*

27. Die eienaar moet die bestuurder van 'n myn of bedryf met die nodige middele voorsien en hom alle fasiliteite verleen om die bepalinge van die regulasies na te kom.

*Mynbestuurders: Aanstelling, kwalifikasies, pligte.*

28. (1) Elke myn of bedryf moet onder 'n bestuurder staan wat verantwoordelik is vir die beheer, bestuur en leiding van so 'n myn of bedryf en wat —

- (a) behoudens die bepalinge van regulasie 29, 'n blanke moet wees waar die myn of bedryf aan 'n blanke behoort;
- (b) minstens een van die amptelike tale moet kan lees en skrywe;
- (c) op 'n myn, die houer moet wees van 'n paslike skietsertifikaat uitgereik deur die Direkteur;
- (d) waar die getal werknemers op die myn of bedryf onder hom twintig oortref, sodanige sertifikaat en/of sodanige praktiese ondervinding moet hê wat, na die mening van die Direkteur, hom vir die bestuurdersamp bekwaam.

(2) Twee of meer myne mag nie onder een bestuurder gewerk word nie, tensy die Direkteur skriftelik daartoe instem.

(3) Die Direkteur kan bepaal dat meer as een bestuurder aangestel moet word as hy meen dat die omvang van die mynbedrywighede dit regverdig.

Elk so 'n bestuurder moet vir 'n bepaalde gedeelte van die myn aangestel word, wat onder sy beheer en verantwoordelikheid moet staan.

Gesamentlike beheer van enige myn of gedeelte van 'n myn, mag geensins deur twee of meer bestuurders uitgeoefen word nie.

(4) Wanneer 'n bestuurder tydelik afwesig moet wees, moet hy 'n geskikte persoon, wat die Direkteur goedkeur, skriftelik aanstel as waarnemende bestuurder gedurende sy afwesigheid, en by so 'n aanstelling rus al die pligte en verantwoordelikhede van die bestuurder op so 'n aangestelde persoon.

(5) Die bestuurder moet —

- (a) alle redelike maatreëls tref om die bepalinge van die regulasies toe te pas en om te verseker dat elke werknemer by die myn of werke hierdie bepalinge nakom;
- (b) die nodige persone aanstel om hom behulpsaam te wees by die toepassing van die bepalinge van die regulasies;
- (c) sorg vir die veiligheid en behoorlike dissipline van die werknemers by die myn of werke;

operations on any claim or mining area registered in his name notify the Director in writing of such commencement and such assumption of responsibility.

(3) The owner of a mine or works shall within seven days give notice in writing to the Director of:

- (a) any change of manager;
- (b) any change in the scope of the responsibility of the manager.

(4) The Director shall keep a register of mine and works managers with such details of their qualifications and appointments as he may consider necessary.

*Owner to give facilities to manager to comply.*

27. The owner shall provide the manager of a mine or works with the necessary means and shall afford him every facility for complying with the requirements of the regulations.

*Mine manager: Appointment, qualifications and duties.*

28. (1) Every mine or works shall be under a manager who shall be responsible for the control, management and direction of the mine or works and who:

- (a) subject to the provisions of regulation 29, shall be a European if the mine or works is owned by a European;
- (b) shall be able to read and write at least one of the official languages;
- (c) shall in the case of a mine be the holder of an appropriate blasting certificate issued by the Director;
- (d) where the number of persons engaged on the mine or works under him exceeds twenty, shall hold such certificates and/or be possessed of such practical experience as in the opinion of the Director qualifies him to hold the position of manager.

(2) Two or more mines shall not be worked under one manager except with the written permission of the Director.

(3) The Director may require the appointment of more than one manager where in his opinion the extent of mining operations justifies it. Each such manager shall be appointed for a particular portion of such mine which shall be under his control and responsibility, and joint control of any mine or any portion of a mine shall not in any case be exercised by two or more managers.

(4) A manager shall during his own temporary absence appoint in writing some suitable person approved of by the Director to be acting manager during his absence and upon such appointment all the duties and responsibilities of the manager shall devolve upon the person so appointed.

(5) The manager shall:—

- (a) Take all reasonable measures to enforce the requirements of the regulations and to ensure that they are observed by every person employed on the mine or works;
- (b) appoint such persons as may be necessary to assist him in enforcing observation of the regulations;
- (c) provide for the safety and proper discipline of the persons employed on a mine or works;

(d) so gou doenlik na 'n oortreding van enige bepaling van hierdie regulasies, aan die Direkteur daarvan kennis gee, of sodanige ander tugmatreëls toepas wat die Direkteur voorgeskryf of goedgekeur het. Besonderhede van iedere sodanige oortreding en van die toegepaste tugmatreëls moet in 'n register opgeskrywe word wat op alle redelike tye vir die Direkteur ter insae beskikbaar moet wees.

(d) as soon as practicable, after the occurrence of a breach of any provisions of these regulations report such breach to the Director of Mines, or take such other disciplinary steps as such Director may have directed or approved of. Particulars of every such breach and of the disciplinary steps taken shall be entered in a register which shall be open for inspection at all reasonable times to the Director.

*Sekere regulasies nie van toepassing ten opsigte van 'n myn of bedryf wat in 'n nie-blanke gebied geleë is nie.*

*Non-applicability of certain regulations in respect of a mine or works situate in an area for non-Europeans.*

29. Die bepalings van regulasies 28 (1) (a); 30 (4); 32 (3); 33 (3); 35 (2); 38 (3) en (5); 39 (2) en 40 (2) (a) is nie van toepassing nie ten opsigte van 'n myn of bedryf wat in 'n natuurereservaat, die Rehoboth-Gebiet of enige gebied wat ingevolge enige wet opsy gesit is vir die alleengebruik en — bewoning deur persone, uitgesonderd blankes.

29. The provisions of regulations 28 (1) (a), 30 (4), 32 (3), 33 (3), 35 (2), 38 (3) and (5), 39 (2) and 40 (2) (a) shall not apply in respect of a mine or works situate in a Native reserve, the Rehoboth *Gebiet*, or any area reserved or set apart under any law for the sole use and occupation by persons other than Europeans.

*Aanstelling en verantwoordelikheid van bestuurder se assistente.*

*Appointment and responsibility of manager's assistants.*

30. (1) Die bestuurder van 'n myn kan een of meer persone wat houers van toepaslike skietsertifikate moet wees en ook sodanige sertifikate moet hou en/of sodanige praktiese ondervinding moet hê wat, na die Direkteur meen, voldoende is, aanstel om hom in die bestuur by te staan, soos 'n assistent-, afdelings- of ondergrondse bestuurder, en so 'n persoon dra dieselfde verantwoordelikheid ingevolge hierdie regulasies as die bestuurder vir daardie deel van die myn of werke wat in sy aanstellingsbrief genoem word, maar die aanstelling van so iemand onthef die bestuurder nie van sy persoonlike verantwoordelikheid ingevolge hierdie regulasies nie.

30. (1) The manager of a mine may appoint one or more persons who shall be holders of the appropriate blasting certificates and who shall hold such certificates and/or be possessed of such practical experience as in the opinion of the Director constitutes sufficient qualification, to assist him in the management, such as an assistant, sectional, or underground manager, and such person shall have the same responsibility under these regulations as the manager for such portion of the mine or works as his letter of appointment shall specify, but the appointment of such person shall not be taken to relieve the manager of his personal responsibility under these regulations.

(2) Elke aanstelling ingevolge hierdie regulasie moet skriftelik geskied en die aanstellingsbrief moet die deel van die myn wat aan so 'n aangestelde persoon toegewys word, duidelik bepaal.

(2) Any appointment made in terms of this regulation shall be in writing and the letter of appointment shall clearly define the portion of the mine assigned to the person so appointed.

(3) Die bestuurder moet 'n afskrif van die aanstellingsbrief, wat deur die aangestelde persoon mede-onderteken moet word, binne sewe dae na die aanstelling aan die Direkteur besorg.

(3) A copy of the letter of appointment countersigned by the person appointed shall be forwarded by the manager to the Director within seven days of the date of appointment.

(4) Behoudens die bepalings van regulasie 29, moet elke assistent-, afdelings- of ondergrondse bestuurder 'n blanke wees as die bestuurder 'n blanke is.

(4) Subject to the provisions of regulation 29 every assistant, sectional or underground manager shall be a European if the manager is a European.

*Bestuurder: Ander pligte.*

*Other duties of manager.*

31. Buiten sy ander pligte en verantwoordelikhede ingevolge hierdie regulasies moet die bestuurder —

31. In addition to his other duties and responsibilities under these regulations the manager shall —

*Sanitasie.*

*Sanitation.*

(1) bo-op die grond en by 'n myn ook by die ondergrondse werkplekke, voldoende en behoorlike sanitasiegeriewe soos volg verskaf:

(1) provide on the surface, and in the case of a mine in the underground workings, sufficient and suitable sanitary conveniences as follows:—

(a) Waar hoogstens eenhonderd persone werk, moet daar een sanitêre gemak vir elke vyf-en-twintig persone of breuk daarvan wees;

(a) Where the number of persons employed does not exceed one hundred there shall be one sanitary convenience for every twenty-five persons or portion thereof;

(b) waar daar meer as eenhonderd persone maar hoogstens vyfhonderd aldus werk, moet daar een bykomende sanitêre gemak vir elke veertig persone of breuk daarvan, bo die eerste honderd wees;

(b) where the number of persons so employed exceeds one hundred but does not exceed five hundred there shall be one additional sanitary convenience for every forty persons or portion thereof exceeding the first one hundred;

(c) waar daar meer as vyfhonderd persone aldus werk, moet daar 'n bykomende sanitêre gemak vir elke sestig persone of breuk daarvan bo die eerste vyfhonderd wees;

(c) where the number of persons so employed exceeds five hundred there shall be one additional sanitary convenience for every sixty persons or portion thereof exceeding the first five hundred;

- (d) op elke werkvlak moet daar vir blankes en nie-blankes afsonderlik 'n goedbelugte en afgeskorte latrine verskaf word, by die vervaardiging waarvan daar geen hout gebruik mag word nie wat 'n ondeurdringbare vloer moet hê wat hel en dreineer na 'n put, en wat gerieflik naby die werkplekke moet wees.
  - (e) alle emmers vir ondergrondse sanitêre geriewe moet goed-passende deksels hê wat vasgeklamp kan word om uitloop te verhoed by verwydering na die oppervlakte;
  - (f) alle verlate werkplekke moet afgeskort word om die moontlikheid van fekale besoedeling te voorkom;
  - (g) in elke myn moet die verwydering van emmers, die skoonmaak en ontsmetting van sanitêre geriewe, gangvloere, dwarsgange en blinde gange stelselmatig deur 'n skoonmaakspan onder die toesig van 'n betroubare persoon uitgevoer word;
- (2) sorg dat alle latrines voldoende belug, ontsmet en skoongehou word;
  - (3) (a) sorg dat alle latrines so ingerig en gehou word dat dit gerieflik en maklik toeganklik is vir elke werknemer by die myn of werke;
  - (b) sorg dat alle latrines en die inhoud van alle sanitêre emmers daagliks voor verwydering met gewone sout behandel word;
  - (c) sorg dat alle latrines sover moontlik so gemaak en gehou word dat hulle bestand bly teen knaagdiere sodat hulle nie die inhoud van die emmers kan bereik nie;
  - (d) sorg dat sit- en hurkplekke in elke latrine eenvoudig van bou is, gerieflik vir gebruik is, en maklik skoon gehou kan word;
  - (e) waar dit onprakties sou wees om 'n permanente latrine binne redelike afstand van 'n werkplek in te rig of waar die werk van tydelike aard is, draagbare latrines, binne redelike afstand en in verhouding tot die getal werkers, laat aanbring: Met dien verstande dat die Direkteur die bestuurder van 'n myn kan gelas wat die maksimum afstand van 'n latrine van 'n werkplek af moet wees en hoeveel geriewe daar ingerig moet word, as die Direkteur meen dat so 'n lasgewing in die belang van die gesondheid nodig is;

#### *Skiettyd.*

- (4) sorg dat die tye vir werkspanne en vir skietwerk in elke deel van die myn so gereël word dat die werksmense nie blootgestel word aan dampe en stof weens die skietwerk nie;

#### *Uitrusting en materiaal moet opgeknop bly.*

- (5) sorg dat alle uitrusting, materiaal en ander dinge wat die nakoming van die regulasies vereis, verskaf word en in goeie bruikbare toestand bly;

#### *Drinkwater.*

- (6) 'n voorraad gesonde drinkwater verskaf op plekke wat maklik van uit werkplekke bereikbaar is;

#### *Wagplekke.*

- (7) (a) wagplekke verskaf vir gebruik deur werknemers voordat hulle hul werkplekke binne-

- (d) at each working level a well-ventilated, screened latrine, in the construction of which no wood shall be used, with impervious floor, graded and drained to a sump, shall be provided for Europeans and non-Europeans separately and within convenient distances of the working places;
  - (e) all pails used in connection with underground sanitary conveniences shall have close-fitting lids, which can be clamped on to prevent spillage during removal to the surface;
  - (f) all disused workings shall be barricaded off so as to prevent liability to faecal pollution;
  - (g) in every mine, the removal of pails, the cleaning and disinfecting of sanitary conveniences, floors of drives, cross-cuts, and dead-ends shall be carried on systematically by a scavenging squad under the supervision of a reliable person;
- (2) cause all latrines to be sufficiently ventilated and disinfected, and to be kept clean.
  - (3) (a) cause all latrines to be so arranged and maintained as to be conveniently accessible to all persons employed in the mine or works;
  - (b) cause all latrines and the contents of all sanitary buckets before removal to be treated daily with common salt;
  - (c) cause all latrines as far as possible to be made and kept rodent-proof, so as to prevent rodents from gaining access to the pail contents;
  - (d) cause the seat or squatting place at every latrine to be simple in construction, comfortable in use, and easily kept clean;
  - (e) where it is impracticable to erect a permanent latrine within reasonable distance from any working place, or where the work is of a temporary nature, cause portable latrines, proportional to the number of persons engaged at work at such place, to be provided within reasonable distances: Provided that the Director may issue instructions to the manager of any mine, fixing the maximum distance of a latrine from a working place and the number of conveniences thereat, if the Director considers such instructions necessary in the interests of health;

#### *Time for blasting.*

- (4) cause the times of the working shifts and of blasting operations in every section of the mine to be so arranged that workmen shall not be exposed to fumes and dust from blasting;

#### *Plant and material to be kept in good order.*

- (5) cause all plant, material and other things necessary for compliance with the requirements of the regulations to be provided and maintained in good order and repair;

#### *Drinking water.*

- (6) provide a supply of wholesome drinking water, at points reasonably accessible to working places;

#### *Waiting places.*

- (7) (a) Provide waiting places for the use of persons prior to entering their working places and

gaan, en behoorlike maatreëls tref om te verhoed dat werknemers hul werkplekke binnegaan voordat hulle opdrag daartoe verkry het van 'n spanbaas of mynwerker wat verantwoordelik is vir die veiligheid van hul werkplekke wanneer hulle daarin gaan, en voorts moet hy, deur middel van weeklikse verslae van verantwoordelike persone, hom oortuig dat hierdie regulasie ten volle nagekom word;

- (b) sorg dat alle wagplekke behoorlik ontsmet en in 'n sindelike en veilige toestand onderhou word;

*Onbekwame werkmante: Veiligheid.*

- (8) geensins toelaat dat 'n onbekwame of onervare werksman by gevaarlike werk gebruik word nie, of gebruik word by werk waar die veiligheid van persone afhang van die behoorlike uitvoering daarvan;

*Toesig oor spanne.*

- (9) (a) nie toelaat dat enige spanbaas of myner belas word met toesig oor 'n span of spanne werksmense nie wat, met die oog op die getal persone daarin betrokke en die aard en posisie van hulle werkplekke, dit onmoontlik vir die spanbaas of myner maak om ooreenkomstig die vereistes van hierdie regulasies behoorlike toesig uit te oefen;
- (b) in geen geval die spanbaas of myner toelaat om toesig te hê oor werksmante wat versprei is oor meer plekke as wat sonder buitengewone inspanning binne veertig minute in die algemeen besoek kan word nie;
- (c) geen spanbaas of myner toelaat om toesig te hê oor meer werkplekke of masjienbore of werksmense as wat deur die Administrateur vir enige myn of afdeling van 'n myn vasgestel of goedgekeur word nie, waar sodanige vasstelling of goedkeuring, na die oordeel van die Administrateur, veiligheids- of gesondheidsalwe nodig is: Met die verstande dat ingeval van nood hy 'n spanbaas kan toelaat om oor twee spanne toesig te hou vir hoogstens drie opeenvolgende skofte;

*Toesig by sink van skag.*

- (10) in die geval van 'n skag wat gesink word, voorsiening maak vir die aanwesigheid van 'n mynwerker op die bodem van sodanige skag, wat te alle tye toesig moet hou as daar werksmense teenwoordig is;

*Voorkoming van oorstroming.*

- (11) slote en walle vir vloedwater aanbring en in goeie toestand hou ter beskerming teen oorstroming van ondergrondse delfplekke waar werksmense besig is;
- (12) die kraag van elke skag of ander dergelyke opening vanaf die oppervlakte op laaggeleë terrein, wat verbind is met ondergrondse delfplekke, waar werksmense werksaam is, verhoog, sodat dit doeltreffende beskerming teen oorstroming bied;

*Behoorlike waghou.*

- (13) toesien dat behoorlik wag gehou word by alle enigszins bereikbare bronne wat gevaar van oorstroming van 'n myn of bedryf kan inhou, en dat hy of sy verteenwoordiger onmiddellik verwittig word van elke moontlikheid van sodanige gevaar;
- (14) toesien dat behoorlik wag gehou word by alle kunstmatige bouwerke by sy myn of bedryf wat vir

shall take effective means to prevent persons from proceeding to their working places until they have been instructed to enter by the ganger or miner who is responsible for the safety of their working place when they enter it and shall further satisfy himself by weekly reports from responsible persons that this regulation is being strictly observed;

- (b) cause all waiting places to be adequately disinfected and kept in a clean and safe condition;

*Incompetent workmen: Safety.*

- (8) 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;

*Supervision of gangs.*

- (9) (a) not allow any ganger or miner to be placed in charge of a gang or gangs or workmen which, regard being had to the number of persons therein or 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;
- (b) 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 forty minutes;
- (c) 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 Administrator at any mine, or section of a mine where such determination or approval is in the Administrator's opinion necessary, in the interests of safety or health: Provided that in emergency he may allow a ganger to take charge of two gangs for not more than three consecutive shifts;

*Supervision in sinking.*

- (10) in the case of a shaft in the course of sinking, provide for the presence at the bottom of the said shaft of a miner in charge at all times when workmen are there present;

*Prevention of flooding.*

- (11) establish and keep in good order stormwater trenches and embankments for the protection from flooding of all underground workings, where men are employed;
- (12) raise the collar of every shaft or other similar opening from the surface, situated in low lying ground, which connects with underground workings where men are employed, so as to afford efficient protection against flooding;

*Watch to be kept.*

- (13) 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;
- (14) provide for adequate watch to be kept on all artificial constructions on his mine or works, for con-

bewaring van water bestem is of wat water kan laat saamvloei of opgaan, en dat die bestuurder of sy verteenwoordiger, van alle myne of bedrywe, wat onderkant sulke bouwerke geleë is, sonder verwittig word van enige moontlikheid van oorstroming weens sodanige bouwerke;

*Slykdamkonstruksie.*

- (15) enige slykdam in die buurt van enige gebou, deurgang of ander publieke pad of spoorweg, so bou dat daardeur geen gevaar vir lyf of lede, of skade aan eiendom veroorsaak kan word nie;

*Kennisgewing van ongelukke.*

- (16) toesien dat as enige persoon wat in of by 'n myn of bedryf werk, weens 'n ongeluk of andersins beseer word, dit onmiddellik by hom aangemeld word;

*Direkteur se opdrag.*

- (17) by oorname van 'n myn of bedryf hom vertrou maak met alle kennisgewings wat die Direkteur aan sy voorganger of voorgangers mag uitgereik het, welke kennisgewings die Direkteur aan hom, op versoek, moet verskaf;

*Ophysreëlings.*

- (18) reëlings tref dat alle persone wat in vertikale of hellende skagte, daalgange of ander werkplekke na bowe moet gaan, opgehys word wanneer die loodregte hoogte wat hulle moet opgaan meer as vyfhonderd voet is;

*Ondersoek van platforms.*

- (19) toesien dat alle platforms in of bokant plekke waar mense werk of gaan, minstens eenmaal per week geïnspekteer word, en teweens in 'n veilige toestand onderhou word, en dat hulle behoorlik belaa is;

*Deursoek van persone.*

- (20) wanneer hy dit ook al nodig of wenslik ag, enige nie-blanke werknemer op die myn of bedryf te laat deursoek deur iemand wat hy skriftelik daartoe gemagtig het.

*Mynopsigter: Aanstelling.*

32. (1) Die bestuurder van 'n myn kan een of meer bevoegde persone as mynopsigters aanstel om hom met die beheer, bestuur en leiding daarvan behulpsaam te wees. Waar die getal persone wat ondergronds in diens is, op enige tydstip driehonderd te bowe gaan, is die aanstelling van so 'n persoon verpligtend.

(2) Geen sodanige persoon mag aangestel word nie tensy hy die houër is van 'n toepaslike skietsertifikaat en sodanige ander sertifikate hou en/of praktiese ervaring het wat hom, na die mening van die Direkteur, laat kwalifiseer om die betrekking van mynopsigter te beklee.

(3) Behoudens die bepalings van regulasie 29, moet die mynopsigter 'n blanke wees as die bestuurder 'n blanke is.

(4) Enige aanstelling ingevolge hierdie regulasie moet skriftelik geskied en die aanstellingsbrief moet die gedeelte van die myn wat aan die aangestelde persoon toegewys is duidelik omskryf. 'n Afskrif van die aanstellingsbrief, deur die aangestelde persoon mede-onderteken, moet binne sewe dae na die aanstellingsdatum aan die Direkteur gestuur word.

*Verantwoordelikheid.*

(5) So 'n persoon het al die pligte en verantwoordelikhede van die bestuurder ten opsigte van daardie deel van die myn wat aan hom toegewys is: Met dien ver-

serving 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;

*Slimes dams.*

- (15) so construct any slimes dam in the neighbourhood of any building, thoroughfare or other public road or railway that no danger to life or limb or damage to property can result therefrom;

*Reports of accidents.*

- (16) 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;

*Director's instructions.*

- (17) on taking over a mine or works acquaint himself with such notices as may have been issued to his predecessor or predecessors by the Director, who shall on his request supply him with copies of such notices;

*Arrangements for hoisting, etc.*

- (18) provide arrangements for hoisting all persons who have to ascend in vertical or inclined shafts, winzes or other workings when the height ascended exceeds five hundred feet vertically;

*Examination of stulls.*

- (19) cause all stulls in or above places where persons work or travel to be examined at least once a week, and maintained in a safe condition and adequately loaded;

*Search of persons.*

- (20) whenever considered necessary or desirable by him, cause any non-European person employed on the mine or works to be searched by any person whom he has authorised in writing to do so.

*Mine overseer: Appointment.*

32. (1) The manager of a mine may appoint one or more competent persons as mine overseers to assist him in the control, management and direction thereof. Where the number of persons employed underground exceeds three hundred at any one time, the appointment of such person is compulsory.

(2) No such person shall be appointed unless he is the holder of an appropriate blasting certificate and is the holder of such other certificates and/or possessed of such practical experience as in the opinion of the Director may qualify him to hold the position as mine overseer.

(3) Subject to the provisions of regulation 29, the mine overseer shall be a European if the manager is a European.

(4) Any appointment made in terms of this regulation shall be in writing and the letter of appointment shall clearly define the portion of the mine assigned to the person so appointed. A copy of the letter of the appointment countersigned by the person appointed shall be forwarded to the Director within seven days of the date of appointment.

*Responsibility.*

(5) Such person shall have all the duties and responsibilities of the manager so far as the portion of the mine assigned to him is concerned: Provided that such an ap-

stande dat so 'n aanstelling die bestuurder geensins onthef van sy persoonlike verantwoordelikheid ingevolge hierdie regulasies nie.

*Skofbaas: Aanstelling.*

33. (1) Op elke myn waarin meer as driehonderd mense ondergronds werk, moet een of meer bevoegde persone wat in besit is van toepaslike skietsertifikate en minstens twee jaar praktiese ervaring van mynwerk gehad het, aangestel word deur die bestuurder om gedurende elke werkskof as skofbaas of skofbase op te tree. Die bestuurder of mynopsigter mag nie die pligte van 'n skofbaas aanvaar nie, uitgesonderd met die skriftelike toestemming van die Direkteur: Met dien verstande dat enige persoon wat die leerplan van 'n mynskool wat deur die Direkteur erken word, met sukses deurloop het, van een van die gemelde twee jare praktiese ervaring vrygestel kan word.

(2) Die Direkteur kan die aanstelling van addisionele skofbase vereis, indien hy dit in belang van veiligheid en gesondheid nodig ag.

(3) Behoudens die bepalings van regulasie 29, moet die skofbaas 'n blanke wees as die bestuurder 'n blanke is.

(4) Elke skofbaas moet gedurende 'n skof die toesig oor 'n gedeelte van die ondergrondse delfplekke van die myn op hom neem.

(5) Elke skofbaas moet alle redelike maatreëls tref om die behoorlike nakoming van die vereistes van hierdie regulasies deur spanbase of myners, wat onder hom werk, te verseker, en moet so gou doenlik enige oortreding daarvan aan die bestuurder of mynopsigter rapporteer.

(6) Die aanstelling van enige skofbaas of skofbase moet nie beskou word dat dit die bestuurder of mynopsigter van enige persoonlike verantwoordelikheid ingevolge hierdie regulasies onthef nie.

(7) Elke skofbaas moet minstens een keer gedurende sy skof inspeksie doen by elke gedeelte van die afdeling van die myn wat aan hom toegewys is en waarin mense werk of waardeur hulle mag gaan en moet seker wees van die toestande ten opsigte van ventilasie, sanitasie, die aanwesigheid van gasse, toestand van die dak, vloer en wande, en in die algemeen wat die veiligheid en gesondheid van die mense betref, en hy moet onmiddellik besonderhede van enige onbevredigende toestande in sy aantekenboek opskryf, asook opdragte wat hy moontlik in verband daarmee gegee het.

(8) Elke skofbaas moet na afloop van sy skof in 'n skofbaaslogboek, vir die doel deur die bestuurder verskaf en in 'n plek wat deur die bestuurder aangewys is, gehou word, die besonderhede met inks opskrywe ten opsigte van:

- (a) enige oortreding van die regulasies wat gedurende die skof plaasgevind het;
- (b) enige instruksie wat hy gedurende die skof uitgereik het met die doel om die veiligheid en gesondheid van mense te verseker; en
- (c) sodanige sokke wat deur hom gedurende die skof ondersoek is.

(9) Sodanige verslae moet deur die bestuurder of die mynopsigter minstens een keer elke dag nagesien en mede-onderteken word en moet op alle redelike tye ter insae beskikbaar wees vir enige beampste van die Afdeling Mynwese en vir enige persoon wat in genoemde myn werk.

(10) Niemand, wat aangestel is om as skofbaas op te tree, mag buite sy ander pligte regstreekse toesig oor 'n span werkers aanvaar nie, uitgesonderd in geval van nood en dan net tydelik.

pointment shall not relieve the manager of any personal responsibility under these regulations.

*Appointment of shift boss.*

33. (1) On every mine in which more than three hundred persons are employed underground one or more competent persons who shall be holders of appropriate blasting certificates and who shall have had not less than two years practical experience in mining shall be appointed by the manager to act as shift boss or shift bosses during each working shift. The manager or mine overseer shall not assume the duties of a shift boss except with the written permission of the Director: Provided that any person who has successfully passed through the curriculum of a mining school recognised by the Director may be exempted from one of the two years of practical experience.

(2) The Director may require the appointment of additional shift bosses if he thinks it necessary in the interests of safety and health.

(3) Subject to the provisions of regulation 29, the shift boss shall be a European if the manager is a European.

(4) Each shift boss shall take charge during a shift of a section of the workings of the mine.

(5) Each shift boss shall take all reasonable measures to ensure the proper observance of the requirements of these regulations by the gangers or miners working under him and shall as soon as practicable report to the manager or mine overseer any contraventions thereof.

(6) The appointment of any shift boss or bosses shall not be taken to relieve the manager or mine overseer of any personal responsibility under these regulations.

(7) Each shift boss shall at least once during his shift inspect every portion of the section of the mine assigned to him in which persons are working or through which they may have occasion to pass and shall ascertain the condition thereof as regards ventilation, sanitation, the presence of gasses, the state of the hanging-wall, foot-wall, and side and generally in so far as the safety and health of persons working there is concerned, and he shall then and there enter in his note book particulars of any unsatisfactory conditions, and any instructions he may have issued in these respects.

(8) Each shift boss at the completion of his shift shall record in ink in a shift-boss logbook provided by the manager for the purpose and kept in a place appointed by the manager the particulars of:—

- (a) any breach of the regulations which occurred during such shift;
- (b) any instructions for the purpose of securing the safety and health of persons that he has given during such shift;
- (c) such sockets as he has examined during the shift.

(9) Such records shall be examined and countersigned by the manager or mine overseer at least once in every day and shall be open to inspection at all reasonable hours by any official of the Department of Mines and by any person employed on the said mine.

(10) No person appointed as shift boss shall take immediate charge of a gang of workmen in addition to his other duties except temporarily in case of emergency.

(11) 'n Skofbaas of ander beampte wat minstens 'n gelyke rang beklee moet met skiettyd ondergronds by elke werkende skag teenwoordig wees, en mag nie na die oppervlakte gaan voordat hy hom cortuig het dat die reëlings gemaak ingevolge regulasie 31 (4) uitgevoer word en hy moet daaglik in die skofbaaslogboek opteken of enige persoon of persone as gevolg van skietwerk aan stof of dampe blootgestel was.

*Spanbaas: Aanstelling.*

34. Die bestuurder moet sorg dra dat persone wat by prospektering of by 'n myn of 'n bedryf werk, onder die toesig en bevel verkeer van 'n spanbaas wat aangestel moet word om toesig te hou oor die mense in sy span vir die volle duur van die werkskof. Elke spanbaas wat toesig hou oor 'n span wat ondergronds in 'n myn prospekter- of mynbedrywighede uitvoer, moet 'n toepaslike skiet-sertifikaat hê, wat deur die Direkteur uitgereik is.

*Spanbaas: Kwalifikasies.*

35. (1) Niemand mag as spanbaas aangestel word tensy hy —

- (a) minstens agtien jaar oud is;
- (b) minstens een van die amptelike tale kan lees en skryf.

(2) Behoudens die bepalings van regulasie 29, moet die spanbaas 'n blanke wees as die bestuurder 'n blanke is.

(3) 'n Spanbaas wat skietwerk verrig, moet die houer wees van 'n skietsertifikaat, deur die Direkteur uitgereik, vir die soort werk wat sodanige spanbaas moet doen.

(4) 'n Spanbaas wat in bevel is van meer as twintig werksmense wat prospekterwerk doen, in teenstelling met werksaamhede by 'n bedryf, moet die houer wees van 'n toepaslike skietsertifikaat wat deur die Direkteur uitgereik is.

*Spanbaas: Pligte.*

36. Die spanbaas moet alle redelike maatreëls tref om almal wat onder sy toesig werk teen ongelukke te vrywaar.

*Spanbaas moet veilig maak.*

37. (1) Elke skag, ontsluitingstonnel en nawinningsgebied, afbouplek, dagbouwerkplek of ander werkplek waarin daar vir meer as ses uur nie gewerk is nie, of wat moontlik gedurende die skof gevaarlik geword het, en elke werkplek waarin daar skietwerk gedoen is moet ondersoek en veilig gemaak word deur die toesighoudende spanbaas, wat die houer moet wees van 'n skietsertifikaat uitgereik ingevolge regulasie 252 (d), en werk mag nie in enige gedeelte van sodanige werkplek hervat word, voordat sodanige gedeelte ondersoek en veilig gemaak is nie.

Niemand mag enige gedeelte van sodanige werkplek binnegaan of daarin bly of verplig of toegelaat word om dit binne te gaan of daarin te bly voordat sodanige gedeelte geïnspekteer en veilig gemaak is nie: Met dien verstande dat hierdie verbod nie geld vir daardie persone wat nodig is om sodanige ondersoek en beveiliging te reël uit te voer of daarby behulpsaam te wees nie.

(2) Die inspeksie en veiligmaking, soos vereis by subregulasie (1) hiervan, moet uitgevoer word deur die spanbaas wat ingevolge regulasie 34 aangestel is; hy moet alle los of losgemaakte klippe, delfstof of grond verwyder of laat verwyder. In hierdie werk kan hy bygestaan word deur persone wat onder sy persoonlike toesig en beheer en, waar hy dit vir die veiligheid van sodanige persone nodig ag in sy werklike teenwoordigheid werksaam is. Hy moet alle redelike voorsorgmaatreëls tref om persone, wat nie

(11) A shift boss or other official of at least equal rank shall be present underground at each working shift at blasting time and shall not travel to the surface until he has satisfied himself that the arrangements made in terms of regulation 31 (4) are being carried out and he shall report daily in the Shift Boss Log-book whether or not any person or persons were exposed to dust and fumes from blasting.

*Appointment of ganger.*

34. The manager shall provide that workmen engaged in any prospecting operations or in any work on or in a mine or works shall be under the charge and supervision of a ganger who shall be appointed to supervise the workmen under his charge for the full duration of the working shift. Any ganger in charge of a gang underground in a mine carrying out prospecting or mining operations shall be the holder of an appropriate blasting certificate issued by the Director.

*Qualifications of ganger.*

35. (1) No ganger shall be appointed unless:

- (a) he is at least eighteen years old;
- (b) he can read and write at least one of the official languages.

(2) Subject to the provisions of regulation 29, the ganger shall be a European if the manager is a European.

(3) A ganger conducting blasting operations shall be the holder of a blasting certificate issued by the Director for the class of work in which such ganger is engaged.

(4) The ganger in charge of any workmen engaged in prospecting operations, as distinct from operations on a works, shall be the holder of an appropriate blasting certificate issued by the Director, if the number of persons under his charge exceeds twenty.

*Duties of ganger.*

36. The ganger shall take all reasonable measures to safeguard all persons working under his charge against accident.

*Ganger to make safe.*

37. (1) Every sinking shaft, development and reclamation area, stope, opencast working or other working place which has remained idle for more than six hours, or which may have become dangerous during the shift and every working place in which blasting has taken place, shall be examined and made safe by the ganger in charge who shall be the holder of a blasting certificate issued in terms of regulation 252 (d), and work shall not be resumed in any part of such working places until such part has been examined and made safe.

No person shall enter or remain or be caused or permitted to enter or remain in any part of such working place until such part has been examined and made safe: Provided that this prohibition shall not apply to such persons as are necessary to direct, carry out or assist in such examination and making safe.

(2) The examination and making safe required under subregulation (1) shall be carried out by the ganger appointed in terms of regulation 34 and he shall remove or cause to be removed all loose or loosened rock, mineral or ground. He may be assisted in this work by persons working under his personal supervision and control and, when deemed by him necessary for the safety of persons working under his personal supervision and control in his actual presence. He shall take all reasonable precautions



nodig is om hom te help nie, te belet om die werkplek binne te gaan, voordat hy dit ondersoek en veilig gemaak het, en voordat hy die persone uitdruklik verlot gegee het om in te gaan.

(3) Die spanbaas wat die werk van inspeksie en veiligmaking van 'n werkplek uitvoer, moet alle redelike voorsorgmaatreëls tref vir die veiligheid van persone wat na sy wete in so 'n werkplek teenwoordig is, sowel as vir die veiligheid van enige lid van sy span, en sodanige voorsorgmaatreëls moet gehandhaaf word solank as hy enige sodanige persoon toelaat om in die werkplek te bly, of totdat hy van sy verantwoordelikheid daarvoor onthef is deur 'n ander spanbaas. Die eerste plig van sodanige aflosspanbaas is om die werkplek te herinspekteer en, waar nodig, veilig te maak.

(4) Indien die werkplek gedurende die skof onveilig word, of onveilig gevind word, moet die spanbaas wat toesig hou, maatreëls tref om dit veilig te maak en om die persone wat in die werkplek is te beveilig, terwyl dit veilig gemaak word.

#### *Spanbaas moet waarsku.*

(5) Die toesighoudende spanbaas mag nie toelaat dat enigiemand op of onder grond werk wat enige persoon probeer het om af te breek of te verwyder nie, tensy daardie grond op voldoende wyse met timmerwerk of andersins gestut is, en ingeval dit nie so gestut is nie, moet hy alle persone wat in die nabyheid daarvan werk persoonlik waarsku of laat waarsku om nie onderkant daardie grond te werk of te wees nie, en hy moet die gevaarlike toestand daarvan rapporteer aan enige beampete wat die plek, waar die grond geleë is, binnegaan.

(6) As enige persoon, wat onder die toesig van 'n spanbaas werk, kla dat sy werkplek gevaarlik is, mag die spanbaas hom nie bewoog of toelaat om in die plek waarvoor hy gekla het te bly of te werk nie, totdat hy die plek veilig gemaak het of dit deur 'n ander spanbaas laat ondersoek het en so 'n persoon sy instemming betuig het dat so 'n plek veilig is.

(7) Die spanbaas wat toesig hou, moet alle redelike voorsorgmaatreëls tref teen die besering van persone deur vallende of rollende klippe, los werktuie of ander materiaal.

#### *Gevaarlike grond — voorsorg.*

(8) Voordat onder gevaarlike grond draholtes gekap word, hokstutte, steunhokke of pakke gebou word, of voordat hy toelaat dat in gevaarlike grond, vir die doel om dit af te skiet, geboor word, moet die spanbaas wat toesig hou, deur middel van stutpale of andersins, enige persoon, wat die boorwerk of werk moet verrig, behoorlik teen gevaar beveilig.

#### *Reddingstou.*

(9) Geen lid van 'n span of enige ander persoon mag werk of verplig of toegelaat word om werk te verrig —

(a) naby die rand van, of binne enige uitgraving, waar die helling van die uitgraving sodanig is dat, as hy onverwags sou glij of val, hy na benede kan gly of val, tensy hy aan 'n reddingstou vas is of andersins behoorlik beveilig is: Met dien verstande dat daar in die sink, betimmering en reparasie van 'n skag geen reddingstou gebruik hoef te word nie, as die persoon wat hierdie werk doen onder die regstreekse toesig van die toesighoudende spanbaas werk;

(b) in enige bak, glybaan, ertsbaan of ander plek waar daar gevaar mag bestaan dat so iemand deels of geheel bedek kan word deur verskuiwing van rots of ander materiaal na of in so 'n bak, glybaan, erts-

to prevent persons not required to assist him from entering the working place until he has examined and made safe and until he has given them definite permission to enter.

(3) The ganger carrying out the examination and making safe of a working place shall take all reasonable precautions for the safety of persons present to his knowledge in such working place and for the safety of any member of his gang, and such precautions shall continue as long as he allows any such person to remain in the working place or until he is relieved of responsibility thereof by another ganger. It shall be the first duty of such relieving ganger to re-examine and, where necessary, make safe the working place.

(4) If the working place becomes or is found to be unsafe during the shift, the ganger in charge shall take measures for making it safe and for safeguarding the persons in the working place while it is being made safe.

#### *Ganger to give warning.*

(5) No ganger in charge shall allow any person to work on or beneath ground which any person has attempted to take down or remove unless such ground is adequately supported by timbering or otherwise, and if not so supported, he shall personally warn or cause to be warned all persons working in the vicinity thereof against working or being beneath such ground and shall report the dangerous condition to any mine official entering the place in which such ground is situate.

(6) If any person working under the supervision of a ganger complains that his working place is dangerous the ganger shall not cause or permit him to remain or work in the place complained of until he has made the place safe or has had it examined by another ganger, and has obtained his concurrence as to the safety of the place.

(7) The ganger or miner in charge shall take all reasonable precautions against the injury of persons from the falling or rolling of stones, loose implements or other material.

#### *Dangerous ground precautions.*

(8) Before cutting hitches, building pigstyes, cogs or packs under dangerous ground, or allowing dangerous ground to be drilled into with the object of blasting it down, the ganger in charge shall by props or otherwise adequately safeguard any person carrying out the drilling or work.

#### *Life line.*

(9) No member of a gang or any other person shall work or be caused or permitted to work —

(a) near the edge of or within any excavation where the inclination of the excavation is such that inadvertent slipping or falling may result in his falling or sliding down the excavation unless he is secured by a life line or otherwise adequately safeguarded: Provided that in sinking, timbering and repair operations in a shaft the use of a life line may be dispensed with if such person when engaged in such operations is working under the direct supervision of the ganger in charge;

(b) in any bin, chute, ore-pass or other place where there may be danger of such person being covered or partly covered by the movement of rock or other material into or within such bin, chute, pass or

baan of ander plek, tensy hy aan 'n reddingstou vas is;

- (c) naby 'n gevaarlike opdamming van water, tensy hy aan 'n reddingstou van geskikte lengte vas is of andersins beveilig is, en geen persoon mag verplig of toegelaat word om water binne te gaan vir ondersoekdoeleindes of ander werk nie, tensy geskikte voorsorgmaatreëls geneem word om die veiligheid van so 'n persoon te verseker.

Gemelde voorsorgmaatreëls moet in alle gevalle stapte insluit om die aard en hoeveelheid van die opdamming vas te stel, voordat enige ingang toegelaat word.

Uitgesonderd in gevalle van geringe opdamming van water, mag niemand ingaan of verplig of toegelaat word om in te gaan nie, tensy hy vasgemaak is aan 'n reddingstou.

*Gasvergiftiging moet onmiddellik aangemeld word.*

(10) Die spanbaas moet enige geval van gasvergiftiging, hoe gering ook al, sonder versuim rapporteer aan die bestuurder, mynopsigter of skofbaas wat, in die geval van 'n nie-blanke persoon, onmiddellik 'n beampte van 'n kampong of Bantoe-hospitaal in kennis daarvan moet stel.

*Aanmelding van persone wat onwettig by werkplek of verby wagplek is.*

(11) Die spanbaas moet enige persoon wat, voor sy aankoms, onwettig in die werkplek aanwesig is, of wat onwettig aangetref word anderkant die wagplek wat ingevolge regulasie 31 (7) (a) verskaf is, aan die skofbaas van sy afdeling van die myn rapporteer.

*Ingenieur verantwoordelik waar meer as 500 Pk opgewek word.*

38. (1) (a) By elke myn of bedryf waar die ontwerpvermoë van masjinerie wat gebruik word by die primêre ontwikkeling van krag, en die krag wat uit buitebronne verskaf word, gesamentlik die ekwivalent van vyfhonderd perdekrag te bowe gaan, moet alle masjinerie by so 'n myn of bedryf onder die algemene toesig staan van 'n persoon wat 'n bevoegde ingenieur moet wees en wat skriftelik deur die bestuurder aangestel is.

(b) Een of meer persone, wat bevoegde ingenieurs moet wees, kan deur die bestuurder aangestel word as ondergrondse-, afdelings- of assistent-ingenieur, om die algemeen toesighoudende bevoegde ingenieur, wat in subregulasie 1 (a) hiervan genoem word, behulpsaam te wees.

Elke sodanige aangestelde het in 'n mate wat in sy aanstellingsbrief duidelik omskryf moet wees, dieselfde verantwoordelikheid ingevolge die regulasies as die ingenieur wat algemene toesig hou.

(2) Geen ingenieur mag by 'n myn of bedryf ingevolge regulasie 38 (1) (a) aangestel word nie tensy —

- (a) hy 'n meganiese of 'n elektrotegniese ingenieursbevoegdheidssertifikaat besit, wat erken word ten opsigte van die Wet op Myne en Bedrywe van die Republiek van Suid-Afrika; of
- (b) hy 'n graad besit in die meganiese of elektrotegniese ingenieurswese van 'n Suid-Afrikaanse universiteit, of 'n graad in die ingenieurswese wat die Departement van Onderwys van die Republiek van Suid-Afrika erken as gelyk aan die eersgenoemde graad, en minstens twee jaar nagraadse praktiese ondervinding gehad het in die instandhouding en veilige bestuur van die soort masjinerie waaroor hy toesig moet hou of wat hy moet ondersoek; of

other working place unless he is secured by a life line;

- (c) near a dangerous accumulation of water unless he is secured by a life line of suitable length or otherwise protected and no person shall be caused or permitted to enter into water for the purposes of examination or other work unless adequate precautions are taken to ensure the safety of such person. The said precautions shall in every case include the taking of steps to ascertain the nature and extent of the accumulation before entry is permitted. Except in the case of insignificant accumulations of water, no person shall so enter or be caused or permitted so to enter, unless he is secured by a life line.

*Gassing to be reported immediately.*

(10) The ganger shall report without delay any case of gassing, however slight, to the manager, mine overseer or shift boss, who shall in the case of a non-European person, immediately give notice of the occurrence to a compound or native hospital official.

*Report as to persons before arrival at working place.*

(11) The ganger in charge shall report to the shift boss of his section of the mine any person unlawfully present in the working place before his arrival, or found to be unlawfully beyond the waiting place provided in regulation 31 (7) (a).

*Responsibility for machinery. Engineer where over 500 H.P. is generated.*

38. (1) (a) At every mine or works where the designed rating of machinery used in the primary generation of power and the power supplied from outside sources together exceed the equivalent of five hundred horsepower, all machinery at such mine or works shall be under the general charge of a person who shall be a competent engineer and who shall be appointed in writing by the manager.

(b) One or more persons who shall be competent engineers may be appointed to posts such as underground, sectional or assistant engineer, to assist the competent engineer in general charge referred to under subregulation 1 (a) hereof.

Every such person so appointed shall, to an extent to be clearly defined in his letter of appointment, have the same responsibility under these regulations as the engineer in general charge.

(2) No engineer shall be appointed, in terms of regulation 38 (1) (a), at a mine or works, unless:—

- (a) He is a person who holds a mechanical or electrical engineer's certificate of competency recognised by the Mines and Works Act of the Republic of South Africa; or
- (b) has obtained a degree in mechanical or electrical engineering from a South African university or a degree in engineering recognised by the Department of Education of the Republic of South Africa as equivalent to the first mentioned degree, and has had not less than two years post-graduate practical experience in the maintenance and safe operation of the class of machinery of which he is required to take charge or which he is required to examine; or

(c) 'n vakleerlingskap in die ingenieursbedryf uitgedien het wat die bestuur en instandhouding van masjinerie insluit; of wat minstens vier jaar praktiese ondervinding gehad het in die bestuur en instandhouding van masjinerie en wat na sodanige vakleerlingskap of tydperk van praktiese ondervinding, na gelang, onderskeidelik minstens twee en drie jaar ondervinding gehad het in die instandhouding en veilige bestuur van die soort masjinerie waarvoor hy toesig moet hou, of wat hy moet ondersoek.

Sodanige aanstelling is onderhewig aan die voorafverkreë goedkeuring van die Direkteur.

(3) Behoudens die bepalings van regulasie 29, moet die bevoegde ingenieur 'n blanke wees as die bestuurder 'n blanke is.

(4) By elke myn of bedryf met masjinerie wat minder as 500 perdekrag ontwikkel, moet 'n bevoegde persoon, wat skriftelik aangestel is, oor alle stoomketels, enjins en ander masjinerie, algemene toesig hou.

(5) Behoudens die bepalings van regulasie 29, moet sodanige bevoegde persoon 'n blanke wees as die bestuurder 'n blanke is.

(6) Geen myn of bedryf, wat ingevolge hierdie regulasies 'n bevoegde ingenieur moet hê, mag vir 'n langer tydperk as dertig dae sonder so 'n ingenieur bedryf word nie. Hierdie tydperk kan na goedgeskonde van die Direkteur skriftelik verleng word.

(7) Vir so 'n tydperk moet die bestuurder 'n bevoegde persoon skriftelik aanstel om toesig te hou oor alle stoomketels, enjins en ander masjinerie en om al die pligte en verantwoordelikhede van 'n bevoegde ingenieur, ingevolge hierdie regulasies, te onderneem: Met dien verstande dat die aanstelling van so 'n bevoegde persoon nie die bevoegde ingenieur wat voor hom toesig gehou het vrystel van enige persoonlike verantwoordelikheid ingevolge hierdie regulasies nie.

#### *Kennisgewing van aanstelling.*

(8) Binne sewe dae na 'n aanstelling kragtens subregulasies (1), (4) of (7) hiervan, moet die bestuurder die Direkteur skriftelik daarvan verwittig en terselfdertyd 'n afskrif van die aanstellingsbrief, mede-onderteken deur die aangestelde persoon, aanstuur.

#### *Goedkeuring om toesig te hou oor meer as een myn of bedryf.*

(9) Geen bevoegde ingenieur of ander persoon mag algemene toesig oor stoomketels, enjins of ander masjinerie op meer as een myn of bedryf hou nie, uitgesonderd met die skriftelike goedkeuring van die Direkteur.

#### *Groot myne of bedrywe: Meer as een ingenieur.*

(10) Die Direkteur kan die aanstelling van meer as een bevoegde ingenieur gelas, as die grootte van die myn of bedryf en die hoeveelheid masjinerie so 'n aanstelling, sins insiens, noodsaak. Elk so 'n ingenieur moet aangestel word ten opsigte van 'n bepaalde gedeelte van die masjinerie wat onder sy toesig sal wees, maar in geen geval mag twee of meer ingenieurs algemene toesig oor masjinerie gesamentlik uitoefen nie.

#### *Ondergrondse masjinerie: Bestuur, oprigting, weeklikse ondersoek.*

(11) 'n Mynopsigter kan, in 'n mate wat deur die bestuurder duidelik en skriftelik bepaal is, beheer uitoefen oor die bestuur van ondergrondse masjinerie, maar die oprigting en her-oprigting van sodanige masjinerie moet onder die beheer van die bevoegde ingenieur staan, wat hoofsaaklik verantwoordelik sal wees vir die behoorlike

(c) has served an apprenticeship in an engineering trade which included the operation and maintenance of machinery; or who has had at least four years practical experience in the operation and maintenance of machinery and who subsequent to such apprenticeship or period of practical experience, as the case may be, has had not less than two years and three years experience respectively in the maintenance and safe operation of the class of machinery of which he is required to examine.

Such appointment shall be subject to the prior approval of the Director.

(3) Subject to the provisions of regulation 29, the competent engineer shall be a European if the manager is a European.

#### *Less than 500 H.P.*

(4) At every mine or works having plant developing less than 500 horse-power, all boilers, engines and other machinery shall be placed under the general charge of a competent person who shall be appointed in writing.

(5) Subject to the provisions of regulation 29, such competent person shall be a European if the manager is a European.

(6) No mine or works requiring a competent engineer under these regulations shall be worked without such engineer for a longer period than thirty days. Such period may in writing be extended at the discretion of the Director.

(7) The manager shall appoint in writing a competent person to take charge during such period of all boilers, engines and other machinery and undertake all the duties and responsibilities of a competent engineer under these regulations: Provided that the appointment of such competent person shall not relieve the competent engineer in charge before him of any personal responsibility under these regulations.

#### *Notice of appointment.*

(8) The manager shall within seven days of any appointment made under subregulation (1), (4) or (7) hereof report such appointment to the Director in writing and shall send at the same time a copy of the letter of appointment countersigned by the person appointed.

#### *Permission to be in charge of two or more mines.*

(9) No competent engineer or other competent person shall be in general charge of boilers, engines or other machinery on more than one mine or works except with the written permission of the Director.

#### *Large Mines, Works: More than one engineer at Director's discretion.*

(10) The Director may require the appointment of more than one competent engineer if in his opinion the size of the mine or works and amount of machinery renders such appointment necessary. Each such engineer shall be appointed for a particular portion of such machinery, which shall be under his general charge, and joint general charge of any machinery shall in no case be exercised by two or more engineers.

#### *Underground machinery: Running, erection weekly examination.*

(11) A mine overseer may, to an extent clearly defined in writing by the manager, exercise control over the running of underground machinery, but the erection and re-erection of such machinery shall be under the control of the competent engineer who shall be more particularly responsible for the proper arrangement of

reëling van vervoer- en hysmasjinerie en toue in verband daarmee en die verbindings tussen sodanige toue en vervoermiddels en wat die bevoegdheid van die persoon, wat aangestel word vir die gereelde ondersoek van sodanige masjinerie toue en verbindings moet goedkeur.

Die ondersoek moet minstens een keer elke week geskied, en die ondersoeker moet sy bevindings oor die ondersoek onverwyld opskryf in die boek wat vir daardie doel aangehou moet word.

*Mynopmeter: Aanstelling waar persone meer as 200 tel. Kwalifikasies.*

39. (1) By elke myn waar meer as tweehonderd persone ondergronds in diens is, moet die bestuurder 'n opmeter skriftelik aanstel, wat 'n sertifikaat hou en/of in so 'n mate ervaring van opmetingswerk het, wat, na die mening van die Direkteur, hom vir mynopmetingswerk bevoeg maak, en wat daadwerklik besig moet wees met die voorbereiding van mynplanne en ook verantwoordelik moet wees vir die behoorlike nakoming van regulasie 55, so ver dit van toepassing is, en van regulasies 119, 121, 122, 123, 124, 127, 130 en 131, dermate die Direkteur die nakoming van daardie regulasies beveel het.

(2) Behoudens die bepalinge van regulasies 29, moet die opmeter 'n blanke wees as die bestuurder 'n blanke is.

(3) Die bestuurder moet die Direkteur, binne sewe dae na die aanstelling van so 'n opmeter, skriftelik daarvan verwittig, en tegelykertyd 'n afskrif van die aanstellingsbrief, mede-onderteken deur die aangestelde opmeter, aan hom besorg.

(4) Die opmeter wat ingevolge subregulasie (1) hiervan aangestel is, moet al die planne wat hy moontlik ingevolge regulasie 119 moet voorberei en alle afdrukke waaroor regulasie 125 gaan, wanneer hulle vir die eerste keer gemaak word en telkens wanneer hulle op datum gebring word, onderteken, en hy moet sorg dra dat hulle noukeurig is, dit wil sê, dat hulle die foutgrense wat regulasie 130 bepaal, nie oorskry nie.

*Minder as 200 persone — mynbestuurder.*

(5) By 'n myn waar minder as tweehonderd mense ondergronds in diens is, kan die bestuurder mynplanne, wat ingevolge regulasie 119 nodig is, onderteken, en in so 'n geval aanvaar hy die opmeter se verantwoordelikheid wat subregulasie (1) hiervan bepaal.

*Vrywaring teen andere se onnoukeurigheid.*

(6) Niks in hierdie regulasie vervat moet so uitgelê word dat die mynbestuurder of die opmeter wat hy aangestel het, verantwoordelik is vir die akkuraatheid van werk wat gedoen is voordat hulle hul pligte ingevolge hierdie regulasie aanvaar het nie.

*Hysmasjinië wat mense vervoer moet 'n permit hê.*

40. (1) (a) Niemand mag 'n hysmasjien vir die vervoer van mense by 'n myn dryf nie of toegelaat word om 'n hysmasjien te dryf nie, tensy hy die houër is van 'n geskrewe permit, aan hom uitgereik deur die Direkteur, wat hom magtig om so 'n hysmasjien te drywe.

(b) Die masjinië moet 'n ware en leesbare afskrif van so 'n permit, mede-onderteken deur die bestuurder, in die masjienkamer opgeplak hou.

all haulage and winding machinery and ropes in connection therewith and the connections between such ropes and any conveyances, and who shall approve the competency of the person appointed for the periodical examination of such machinery, ropes and connections. Such examination shall be made at least once in each week and the results of such examination shall be forthwith recorded by the person making the examination in a book to be kept for the purpose.

*Appointment of surveyor if persons exceed 200 in number: Qualifications.*

39. (1) On every mine where more than two hundred persons are employed underground, the manager shall appoint a surveyor in writing who shall be the holder of a certificate and/or be possessed of survey experience as in the opinion of the Director qualifies him to undertake the duties of a mine surveyor and who shall be actively engaged in the preparation of the mine plans and who shall be responsible for the due observance of regulation 55, as far as it is applicable, and of regulations 119, 121, 122, 123, 124, 127, 130 and 131 in so far as the Director may have required such regulations to be observed.

(2) Subject to the provisions of regulation 29, the surveyor shall be a European if the manager is a European.

*Notification of appointment.*

(3) The manager shall notify the Director in writing of the appointment of such surveyor within seven days of date of such appointment and shall at the same time furnish the Director with a copy of the letter of appointment countersigned by the person appointed.

*Duties of surveyor.*

(4) All the plans as may be required in terms of regulation 119 and copies referred to in regulation 125 when they are first made and also on each occasion when they are brought up to date shall be signed by the surveyor appointed in terms of subregulation (1) hereof who shall be responsible for their accuracy within the limits of error prescribed in regulation 130.

*Fewer than 200 persons mine manager.*

(5) In the case of a mine on which fewer than two hundred persons are employed underground the mine plans as may be required in terms of regulation 119 may be signed by the manager who in such case shall assume the responsibility of the surveyor as specified in subregulation (1) hereof.

*Indemnity for other's inaccuracy.*

(6) Nothing in this regulation shall be taken to mean that the manager of the mine or the surveyor appointed by him shall be responsible for the accuracy of the work done before they assumed their duties in terms of this regulation.

*Driver of hoist used for conveyance of persons to hold permit.*

40. (1) (a) No person shall operate or be permitted to operate a winding engine used for the conveyance of persons on any mine unless he is the holder of a permit in writing issued to him by the Director authorising him to operate such winding engine.

(b) A true and legible copy of such permit, countersigned by the manager, shall be posted up by the engine driver in the engine room.

*Kwalifikasies vir permit.*

(2) Die Direkteur mag geen permit aan iemand uitreik wat hom magtig om 'n hysmasjien vir vervoer van mense te dryf nie, tensy so iemand —

- (a) behoudens die bepalings van regulasie 29 'n blanke is, as die bestuurder 'n blanke is;
- (b) minstens een-en-twintig jaar oud is;
- (c) uit gewoonte matig is, en hom algemeen goed gedra;
- (d) aan geen gebrek van gesig en gehoor, en geen ander gebrek, hetsy geestelik of liggaamlik, wat die bekwame uitvoering van sy pligte kan belemmer, ly nie;
- (e) toereikende kennis dra van hysmasjienbestuur, hyswerk en hysseine en van ander masjinerie ondergeskikte toerusting wat in verband staan met hyswerk, en van die Ordonnansie op Myne, Bedrywe en Minerale 1968 en die daaruitvloeiende regulasies;
- (f) minstens tien maande lank reeds toesig gehou het oor omkeerbare hystoestelle wat uitgerus is met koppelaars en dieptemeters en wat met 'n normale hysnelheid van minstens 500 voet per minuut loop. Die tien maande ondervinding met hystoestelle moet minstens ses maande se toesig oor hystoestelle van die soort wat so iemand moet bedien, insluit.

(3) Iemand wat 'n opleidingskursus vir hysmasjiniere onder die beskerming van 'n opleidingskool wat die Direkteur goedkeur, voltooi het, kan aanvaar word as iemand wat opleiding en ervaring geniet het gelyk aan dié vereis by paragraaf (2) (f) hiervan.

(4) Die houder van 'n permit wat uitgereik is in ingevolge regulasie 42 of 43 of van 'n sertifikaat deur die Direkteur goedgekeur, as masjiniere van 'n vaste masjien of lokomotief, kan vrystelling verkry van vier uit die tien maande as toesighouer oor omkeerbare hystoestelle, asook van die twee maande ondervinding met stoomketels wat vereis word by paragraaf (2) (f) hiervan.

(5) Iemand wat 'n sertifikaat van 'n mynbestuurder kan toon waarvolgens hy 'n kontrak van agt maande voltydse diens voltooi het as leerling-masjiniere onder die toesig van 'n toegelate hysmasjiniere, kan aangeneem word asof hy wel die opleiding en ondervinding gehad het wat vereis word by paragraaf (2) (f) hiervan, mits hy bevoegdheid verwerf het in die bestuur van beide stoom- en elektriese hystoestelle, en dit wel ten genoë van die ingenieur wat ingevolge regulasie 38, aangestel is, en van die toegelate hysmasjiniere onder wie se toesig hy sy opleiding ontvang het.

(6) Iemand wat op die inwerkingtredingsdatum van hierdie regulasies reeds gedurende die voorafgaande negentig dae 'n hysmasjien vir mensevervoer voltydse gedryf het, kan aangeneem word asof hy wel die opleiding en ondervinding vereis by paragraaf (2) (f) hiervan ontvang het.

*Pligte en verantwoordelikhede van hysmasjiniere: Wanneer masjien aan die gang gesit kan word.*

41. (1) Geen masjiniere mag sy masjien aan die gang sit nie voordat hy 'n duidelike en behoorlike sein ontvang het om dit te doen, tensy die mynbestuurder of die ingenieur wat ingevolge regulasie 38 aangestel is, of die mynopsigter, hom daartoe gelas het, of tensy hy die klaarsein ontvang het, of tensy hy alleenbeheer oor die hysbak, of ander vervoermiddel het; in so 'n geval kan hy die hysbak, hysbok of ander vervoermiddel in beweging bring.

(2) Geen masjiniere mag op 'n sein reageer, waar dit vir hom onmoontlik was om binne een minuut na ont-

*Qualifications necessary before permit issued.*

(2) The Director shall not issue a permit to a person authorising him to operate a winding engine used for the conveyance of persons unless such person:

- (a) subject to the provisions of regulation 29, is a European if the manager is a European;
- (b) is at least twenty-one years old;
- (c) is of sober habits and of general good conduct;
- (d) is not defective as to sight and hearing and is not subject to any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties;
- (e) possesses a sufficient knowledge of the working of winding plants, winding operations and winding signals and of other machinery and ancillary equipment used in connection with winding and of the Mines, Works and Minerals Ordinance, 1968, and of the regulations framed thereunder;
- (f) has had charge for at least ten months of reversible hoist fitted with clutches and depth indicators and operating on a normal winding speed of not less than 500 feet per minute. The ten months of experience on hoists shall include at least six months in charge of the type of hoist which such person shall be required to operate.

(3) A person who has completed a course of training for winding engine drivers under the auspices of a training school approved by the Director may be accepted as having had training and experience equivalent to that stipulated under paragraph (2) (f) hereof.

(4) A person who holds a permit issued in terms of regulation 42 or 43 or who holds a certificate approved by the Director as an engine driver, or a stationary engine driver, or a locomotive engine driver, may be exempted from four of the ten months in charge of reversible hoists as well as the two months of experience on boilers called for under paragraph (2) (f) hereof.

(5) A person who produces a certificate from a mine manager to the effect that he has completed a contract of eight months of full time service as a learner driver under the supervision of a permitted winding engine driver, may be accepted as having had training and experience equivalent to that called for under paragraph (2) (f) hereof, provided he has acquired competency in the handling of both steam and electrical hoists to the satisfaction of the engineer appointed in terms of regulation 38 and of the permitted winding engine driver under whose supervision he received his training.

(6) A person who on the date of coming into force of these regulations had operated a winding plant used for the conveyance of persons, on full time employment in that capacity during the preceding 90 days may be accepted as having had training and experience equivalent to that called for under paragraph (2) (f) hereof.

*Duties and responsibilities of winding engine driver: When driver may start engine.*

41. (1) No engine driver shall start his engine before he has received a distinct and proper signal so to do, unless instructed to do so by the mine manager, engineer appointed under regulation 38, or mine overseer, or unless he has received the "clear" signal, or unless he has sole control of the skip, cage or other means of conveyance, in which case he may move such skip, cage or other means of conveyance.

(2) No engine driver shall act on any signal if he has been unable to do so within one minute after receiving

vangs daarvan op te tree nie, maar moet dan wag op 'n nuwe sein: Met dien verstande egter dat waar hy die klaarsein 2 pouse 2 ontvang, die masjinië na eie goed-dunke sy masjien te eniger tyd gedurende die skof in beweging kan bring, maar indien daar 'n tydperk van meer as vyf minute verloop het na ontvangs van 'n klaarsein, moet hy eers die klokke lui en dan die vervoermiddel baie stadig laat wegtrek.

(3) Die masjinië —

- (a) mag so 'n masjien nie teen 'n hoër snelheid laat loop as wat die Direkteur bepaal het nie;
- (b) moet, buiten in noodtoestande, by die aansit, loop en stilhou van die masjien, skokke vermy;
- (c) moet elke moontlike toestel of middel tot sy beskikking aanwend om te voorkom dat die vervoermiddel die geseinde bestemming verby gaan.

*Ontkoppeling van die hystrom.*

(4) Die masjinië mag nie 'n trom van sy masjien ontkoppel nie, voordat hy hom onmiddellik van te vore oortuig het, deur die tromrem teen die volle krag van die masjien te toets, dat die rem behoorlik in staat is om die wag wat van die betrokke trom afhang, teen te hou.

(5) Wanneer die trom ontkoppel is, mag die rem alleenlik gebruik word om die trom te laat stilstaan. Elkeen wat laat neerlaat onderwyl die trom ontkoppel is, is skuldig aan oortreding.

(6) Waar 'n hysmasjien 'n wrywingskoppelaar het, moet die masjinië, wanneer hy inkoppel, die remkrag van die koppelaar toets, voordat hy die rem van die ooreenstemmende trom vrylaat; die rem van die ander trom moet dan los wees. By 'n stoom- of lughyser moet die toets teen die volle krag van die masjien uitgevoer word, en by 'n elektriese hyser teen die gebruiklike aansitstroom.

*By kruiskopgids moet stilgehou word.*

(7) In 'n vertikale skag wat nog gesink word, moet, uitgesonderd wanneer skietwerk plaasvind, die hyssemmer of hysvat, wanneer dit van die bodem af opgehef word, deur die masjinië gestop word wanneer met die kruiskopgids ingeskakel is, en moet dit nie verder gehys word voordat minstens tien sekondes verstryk het nie.

*Stilhou voor bodem bereik word by sinking.*

(8) Waar 'n hysmasjien gebruik word in 'n skag wat nog gesink word, moet die hysbok, hysbak, hyssemmer of ander vervoermiddel nie direk tot op die bodem neergelaat word as mense daar is nie, maar moet tot stilstand gebring word minstens vyftien voet vanaf vermeldde bodem, totdat die sein om dit verder neer te laat deur een van die skagsinkers daaronder gegee is; altyd met dien verstande dat hierdie subregulasie nie van toepassing is nie in skagte waarin die skagsinkers nie meer as vyftig voet van die bo-ent van die skag af is nie.

(9) 'n Masjinië mag nie handel in antwoord op enige ander sein op die oproepklokstelsel nie as die een lang lui wat 'n ongeluk in die skag aandui.

*Pouse van tien sekondes.*

(10) 'n Masjinië mag nie, nadat hy 'n sein om persone te hys of te laat sak, ontvang het, sy masjien aan die gang sit voordat minstens tien sekondes, nadat hy sodanige sein ontvang het, verstryk het nie: Altyd met dien verstande dat die vereistes van hierdie regulasie nie van toepassing is wanneer skietwerk gereed is om uitgevoer te word in 'n skag wat gesink word nie: Voorts met dien verstande dat die Direkteur toestemming kan verleen om die tydsduur van tien sekondes te verkort of te verontag-

it, but he shall await a fresh signal; provided that in the case of the clear signal 2 pause 2 the engine driver may at his discretion move his engine at any time during his shift, but if a period of more than five minutes has elapsed since receiving such clear signal, he shall ring the bell and then move the conveyance away very slowly.

(3) The driver of a winding engine —

- (a) shall not run such engine at a greater speed than that fixed by the Director;
- (b) shall, except in the case of emergency, avoid shocks in starting, running and in stopping the said engine;
- (c) shall apply every possible device or means at his disposal in order to prevent the conveyance over-running the signalled destination.

*Unclutching drums.*

(4) The driver of a winding engine shall not unclutch a drum of his engine until he has assured himself immediately beforehand by testing the brake of the drum against the full power of the engine, that the brake is in proper condition to hold the load suspended from the said drum.

(5) When the drum is unclutched the brake shall only be used for the purpose of maintaining such drum stationary. Any person who lowers from an unclutched drum shall be guilty of an offence.

(6) When a winding engine is fitted with a friction clutch the engine driver shall when clutching in, test the holding power of the clutch before releasing the brake of the corresponding drum, the brake of the other drum being kept off. In the case of a steam or air hoist the test shall be made against the full power of the engine and in the case of an electric hoist against the normal starting current.

*Stop at crosshead.*

(7) In a vertical shaft in the course of sinking, except at time of blasting, the bucket or kibble when being raised from the bottom shall be stopped by the engine driver when the crosshead guide has been picked up, and shall not be further raised until a period of at least ten seconds has elapsed.

*Stopping before bottom in sinking.*

(8) Where a winding engine is used at a shaft in the course of sinking, the cage, skip, bucket or other means of conveyance shall not be lowered directly to the bottom of the said shaft if there are men present, but shall be stopped at least fifteen feet from the said bottom until the signal to further lower it has been given by one of the shaft sinkers thereat provided always that this sub-regulation shall not apply to shafts in which the shaft sinkers are not more than fifty feet from the shaft top.

(9) An engine driver shall not act in response to any signal on the "call-bell" system other than the one long ring indicating accident in shaft.

*Ten seconds pause.*

(10) An engine driver, after receiving a signal to raise or to lower persons, shall not start his engine until the expiry of at least ten seconds after receiving such signal: Provided always that the requirements of this regulation shall not apply when blasting is about to take place in a shaft in the course of sinking: Provided further that the Director may grant permission to shorten or omit the period of ten seconds. Written notice of such permission shall be posted up on the notice board in the

saam. Skriftelike kennisgewing van sodanige toestemming moet op die kennisgewingsbord in die masjienkamer en op die bank opgeplak word. Die masjinië moet egter altyd die tydsduur van tien sekondes in ag neem wanneer die persoon wat sein op die punt staan om te ry.

(11) Die masjinië moet in die masjinië se logboek, wat ingevolge regulasie 81 gehou moet word, die inskrywings doen wat daardie regulasie voorskryf.

*Aanstelling van lokomotiefmasjinië.*

42. (1) Niemand mag beheer uitoefen, of verplig of toegelaat word om beheer uit te oefen, oor 'n lokomotief wat by of in 'n myn gebruik word terwyl dit vir die vervoer van persone, buiten dié wat nodig is vir die bestuur van die lokomotief of trein, gebruik word nie, tensy hy 'n skriftelike permit het, wat die Direkteur aan hom uitgereik het en wat hom magtig om so 'n lokomotief te bestuur.

(2) Die bestuurder mag geen permit aan iemand uitreik, wat magtiging verleen om 'n lokomotief vir die vervoer van mense te bestuur, tensy so iemand —

- (a) minstens een-en-twintig jaar oud is;
- (b) uit gewoonte matig en van goeie gedrag is;
- (c) minstens ses maande ondervinding gehad het op die voetplaat van 'n lopende lokomotief, in die geval van 'n stoomlokomotief, en drie maande soortgelyke ondervinding op 'n ander soort lokomotief, en toereikende kennis dra van die werking van lokomotiewe en van die Ordonnansie op Myne, Bedrywe en Minerale 1968 en die regulasies daarop opgestel.
- (d) aan geen gebrek van gesig en gehoor ly nie, nòg aan 'n ander gebrek, hetsy geestelik of liggaamlik, wat die bekwame uitvoering van sy pligte kan belemmer nie.

*Aanstelling van masjinië vir vaste masjië.*

43. (1) 'n Mynbestuurder kan 'n skriftelike permit uitreik wat 'n bevoegde persoon magtig om by sy myn 'n vaste masjinië, buiten 'n hysmasjinië wat vir mensevervoer gebruik word, te dryf.

(2) So 'n permit word net uitgereik aan iemand wat —

- (a) minstens negentien jaar oud is;
- (b) uit gewoonte matig en van goeie gedrag is;
- (c) minstens 'n jaar lank toesig gehou het oor die werking van een of meer masjiëenhede, soos byvoorbeeld stoommasjië, stoomturbines, stoom- of elektriese turbo- of suier-kompressors, van altesame minstens eenhonderd perdekrags; of minstens een jaar lank voltyds daarmee gewerk het;
- (d) 'n stoomketel-oppasserspermit hou of minstens een jaar ondervinding as voltydse opsigter of bediener van stoomketels het;
- (e) oor toereikende praktiese kennis beskik van die werking van kompressors, stoommasjië, turbines, stoomketels en elektriese motore en oor toereikende kennis beskik van die Ordonnansie op Myne, Bedrywe en Minerale 1968 en die regulasies daarop opgestel.
- (f) aan geen gebrek van gesig en gehoor ly nie, nòg aan 'n ander gebrek, hetsy geestelik of liggaamlik, wat die bekwame uitvoering van sy pligte kan belemmer nie.

engine room and on the bank. The engine driver shall, however, always observe the period of ten seconds when the person giving signals is about to travel.

(11) An engine driver shall record in the drivers' log book kept in terms of regulation 81 the entries he is required to make in terms of that regulation.

*Appointment of locomotive engine driver.*

42. (1) No person shall take or be caused or permitted to take charge of a locomotive used on or in a mine or works, whilst used for the conveyance of persons other than those required for the working of the locomotive or train, unless he is the holder of a permit in writing issued to him by the Director authorising him to operate such locomotive.

(2) The manager shall not issue a permit to a person authorising him to operate a locomotive for the conveyance of persons unless such person:—

- (a) is at least twenty-one years old;
- (b) is of sober habits and of general good conduct;
- (c) has had at least six months experience on the footplate of a running locomotive in the case of a steam locomotive and three months of equivalent experience in the case of any other locomotive, and possesses a competent knowledge of the operation of locomotives and of the Mines, Works and Minerals Ordinance, 1968, and of the regulations framed thereunder;
- (d) is not defective as to sight and hearing and is not subject to any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties.

*Appointment of stationary engine driver.*

43. (1) A manager of a mine may issue a permit in writing authorising a competent person to drive on such mine any stationary engine, other than a winding engine used for the conveyance of persons.

(2) Such permit shall not be issued to any person unless such person:—

- (a) is at least nineteen years old;
- (b) is of sober habits and of general good conduct;
- (c) has been in charge of, or employed on a full time the working of one or more units of machinery, basis for not less than a year in connection with such as steam engines, steam turbines, steam or electrically driven turbo or reciprocating compressors, totalling not less than one hundred horsepower;
- (d) is the holder of a boiler attendant's permit or has had not less than one year of experience, on a full time basis, in charge of, or in the working of, steam boilers;
- (e) possesses a sufficient practical knowledge of the working of compressors, steam engines, turbines, boilers and electrical motors and has sufficient knowledge of the Mines, Works and Minerals Ordinance, 1968, and the regulations framed thereunder;
- (f) is not defective as to sight and hearing and is not subject to any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties.

*Aanstelling van stoomketeloppasser.*

44. 'n Mynbestuurder kan 'n skriftelike permit uitreik waarin hy 'n bevoegde persoon magtig om tcesig te hou oor stoomketelmasjinerie by daardie myn, of om sodanige stoomketelmasjinerie te bedien. So 'n permit kan net uitgereik word aan iemand wat —

- (a) minstens negentien jaar oud is;
- (b) uit gewoonte matig en van goeie gedrag is;
- (c) minstens 'n jaar lank voltyds toesig gehou het oor stoomketelmasjinerie of gehelp het by die bediening daarvan;
- (d) oor toereikende praktiese kennis beskik van stoomketels en ondergeskikte toerusting en hul werking, en oor toereikende kennis beskik van die Ordonnansie op Myne, Bedrywe en Minerale 1968 en die regulasies daaronder opgestel.
- (e) aan geen gebrek van gesig en gehoor ly nie, nóg aan 'n ander gebrek, hetsy geestelik of liggaamlik, wat die bekwame uitvoering van sy pligte kan bemlemmer nie.

*Aanstelling en pligte van bankwagters en skagwagters, en ander persone wat gemagtig is om seine te gee.*

45. (1) Niemand mag seine gee vir die ophys of neerlaat van persone in 'n myn, of daartoe verplig of toegelaat word nie, tensy —

- (a) hy 'n bankwagter- of skagwagtersertifikaat het, wat deur die bestuurder van daardie myn onderteken is; en
- (b) hy 'n blanke is waar die bestuurder 'n blanke is: Met dien verstande dat waar die bankwagter of skagwagter nie beskikbaar is nie, verantwoordelike persone aan wie die bestuurder skriftelike toestemming daartoe verleen het, seine kan gee vir hul eie vervoer en dié van persone wat saam met hulle ry: Met dien verstande voorts dat die mynwerker wat toesig hou in 'n skag wat gesink word, of iemand wat regstreeks onder sy toesig staan 'n sein kan gee om persone te hys.

(2) Die bestuurder mag niemand as bankwagter of skagwagter aanstel nie nóg 'n bankwagters- of skagwagtersertifikaat aan iemand uitreik nie, nóg iemand magtig om seine te gee nie, tensy hy met 'n ondersoek vasgestel het dat so iemand toereikende kennis dra van die skagwerk wat hy moet beheer, van die seine wat in verband met sodanige werk gegee moet word, en van die regulasies wat vir sodanige werk en seine en vir die pligte van bankwagters en skagwagters, voorgeskryf word.

(3) Elke aanstelling van 'n bankwagter of skagwagter moet skriftelik geskied.

(4) 'n Bankwagter -of skagwagtersertifikaat geld net vir die myn waarvoor dit uitgereik is, en dit moet uitgereik word in die vorm wat die Direkteur voorskryf.

(5) Geen bankwagter of skagwagter nóg iemand anders wat gemagtig is om seine te gee, mag —

- (a) 'n sein gee vir ophys of neerlaat van 'n hyshok of hysbak vir mensevervoer nie, tensy elke deur of hek van die hok en al die hekke en versperrings by die stasies of uittreplekke behoorlik toe is, of waar moontlik die deksel van die hysbak behoorlik vas is, na gelang, en die passasiers behoorlik binne die vervoermiddel staan of almal daarbuite is en nêrens daaraan raak nie;
- (b) enigiemand toelaat om in 'n hyshok, -bak of ander vervoermiddel te ry, wat aangedryf word deur 'n enjin wat gelyktydig minerale hys of neerlaat nie;

*Appointment of boiler attendant.*

44. The manager of a mine may issue a permit in writing authorising a competent person to be in charge of or operate a boiler plant on that mine.

Such permit shall not be issued to any person unless such person:—

- (a) is at least nineteen years old;
- (b) is of sober habits and general good conduct;
- (c) has been in charge of, or assisted to operate, a boiler plant on a full time basis for not less than a year;
- (d) possesses sufficient practical knowledge of boilers and ancillary equipment and their operation, and sufficient knowledge of the Mines, Works and Minerals Ordinance, 1968, and of the regulations framed thereunder;
- (e) is not defective as to sight and hearing and is not subject to any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties.

*Appointment and duties of banksmen, onsetters and other persons authorised to give winding signals.*

45. (1) No person shall give or cause or permit any signals to be given for the raising or lowering of persons in a mine unless:—

- (a) he is the holder of a banksman's or onsetter's certificate signed by the manager of that mine; and
- (b) he is a European if the manager is a European: Provided that, when the banksman or onsetter is not available responsible persons to whom the manager has given written permission to do so may give signals for their own conveyance and that of persons travelling with them and provided further that the miner in charge in a shaft in the course of sinking, or a person under his immediate superintendence may give a signal to raise persons.

(2) The manager shall not appoint or issue a certificate to any person as banksman or onsetter or authorise any person to give signals unless he has on examination found that such person has a competent 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 prescribed for such operations and signals and for the duties of banksmen and onsetters.

(3) Every appointment of a banksman or onsetter shall be made in writing.

(4) A banksman's or onsetter's certificate shall be available only for the mine on which it is issued and shall be on the form prescribed by the Director.

(5) No banksman or onsetter or other person authorised to give signals:

- (a) shall give any signal to raise or lower a cage or skip for the conveyance of persons unless all doors or gates of such cage and all gates or barriers at the stations or landing platforms are properly shut or where possible the cover of such skip is properly fixed as the case may be, and the passengers properly placed in the conveyance or all out of the conveyance and clear of it;
- (b) shall allow any person to travel in a cage, skip or other means of conveyance operated by an engine which is simultaneously used for the winding of mineral or material;



en onbedekte steierwerk en deurgange moet stewig omhein bly of andersins beskut word.

*Vergiftigde water, ens.*

49. (1) Water wat giftige of ander skadelike onopgeloste of opgeloste stof bevat, moet doeltreffend afgekamp word om onopsetlike toegang daartoe te voorkom, en kennisgewingborde moet op geskikte plekke opgestel word ter waarskuwing aan mense dat hulle die water nie moet gebruik nie.

(2) Die bestuurder moet alle moontlike doeltreffende stappe doen om te verhoed dat water wat giftige of skadelike stowwe bevat, opgelos al dan nie, te eniger tyd uit die myngebied afloop.

*Ondergrondse beskerming.*

50. (1) Elke ingang tot iedere vertikale of steilhellende skag of daalgang, en elke ingang tot iedere kuil, ertsglybaan, ertsbaan, skuifgat of ander gevaarlike plek, moet behoorlik afgesluit gehou word met 'n versperring of hek, of moet andersins behoorlik bedek word, en elke skagstasie moet behoorlik van die skag afgekamp word: Met dien verstande steeds dat so 'n versperring, hek, heining of bedekking tydelik verwyder kan word met die oog op herstelwerk of ander bedrywigheid as daar behoorlike voorsorg vir die veiligheid van mense getref word.

(2) By die oenderent van elke vertikale skag wat gebruik word vir die ophys en neerlaat van materiaal of mense moet daar horisontale stawe hoogstens vier voet ses duim en minstens twee voet ses duim bokant die vloervlak aangebring word, of moet daar ander goedgekeurde maat-reëls getref word om te keer dat mense vry onder of deur die hyshok of ander vervoermiddels by so 'n skag kan beweeg.

(3) Waar so 'n skag, daalgang, kuil, ertsglybaan, skuifgat of steilhellende delfplek regstreeks uitgaan op 'n verkeerspad, moet so 'n pad en enige werkplek wat aan sy onderste of „hellende” kant geleë is, stewig afgekamp word sodat mense wat daarin werk of daarlangs loop, beskerm is teen die gevaar van klippe of ander materiaal wat in die krag, daalgang, kuil, ertsglybaan, skuifgat of delfplek afval.

(4) By dagboumynwerk moet elkeen, wat op 'n lys werk waar daar voertuigverkeer is en wat meer as tien voet bokant die onderkantse vlak is, en 'n wydte het wat minder as die som van een-tiende van die hoogte plus vyf voet is, beskerm word deur 'n toereikende veiligheidsreling of -tou, of moet met veiligheidsstoue voorsien word.

*Dagmynbou.*

(5) By dagmynbou in spoelgrond, gruis, klei, uitskot, slyk, puin of ander soortgelyke grond, mag niemand die werkfront ondergrawe nie, of dit veroorsaak of toelaat nie, en geen vertikale front mag meer as tien voet hoog wees nie, maar moet in terrasse of teen 'n veilige hellingshoek gewerk word: Met dien verstande dat die Direkteur na goeë dunnke 'n vertikale front van hoër as tien voet kan toelaat. By so 'n dagmynfront en by elke steengroef moet alle puin en ander los materiaal of klippe op die oppervlakte tot op 'n afstand van minstens tien voet van die rand van die oop werkfront of steengroef weggeruim word.

*Omheining van verlate skagte, ens., ondergrond.*

51. Alle ondergrondse ingange na skagte of ander gevaarlike plekke, wat tydelik of permanent verlaat is, moet veilig oor die hele wydte van sulke ingange afgekamp word, sodat niemand onopsetlik daarin kan gaan nie. Niemand mag oor so 'n versperring klim, tensy hy daartoe gemagtig is nie.

elevated and exposed platforms and gangways shall be kept securely fenced or otherwise protected.

*Poisonous water etc.*

49. (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.

(2) The manager shall take all effective steps to prevent any water containing any poisonous or injurious matter in suspension or solution from escaping from the mining property at any time.

*Underground protection.*

50. (1) Every entrance to every vertical or steeply inclined shaft or winze, and every entrance to every sump, chute, orepass, sliding hole or other dangerous place shall be kept properly fenced off by means of a barrier or gate or otherwise adequately covered, and every shaft station shall be properly fenced off from the shaft: Provided always that such barrier, gate, fence, or cover may be temporarily removed for the purposes of repairs or other operations if proper precautions are taken for the safety of persons.

(2) At the bottom of every vertical shaft used for the raising or lowering of material or persons, horizontal bars, not more than four feet six inches nor less than two feet six inches above the floor level, or other approved arrangements, shall be provided, so as to check the free passage of persons underneath or through the cage or other conveyance in use at such shaft.

(3) Where any such shaft, winze, sump, chute, orepass, or sliding hole or any steeply inclined stope opens directly into a travelling road, such road and any working place situated on its lower or “dip” side shall be securely fenced off so that persons working or travelling therein shall be protected against danger from stones or material falling down such shaft, winze, sump, chute, orepass, sliding hole, or stope.

(4) In open work mining, any person working on a ledge on which there is vehicular traffic with a drop of more than ten feet to the level below, and a width which is less than the sum of the height plus five feet, shall be safeguarded by an adequate guard rail or rope, or be provided with safety ropes.

*Open face working.*

(5) In open face working in alluvial soil, gravel, clay, tailings, slimes, debris or other similar ground, no person shall undercut the face, or cause or permit such undercutting of the face to take place, and no vertical face shall have a height of more than ten (10) feet, but such open face shall be worked in terraces, or at an angle of safety: Provided that the Director in his discretion may allow a vertical height greater than 10 feet. At such open face working and at every quarry, all debris and other loose matter, or stones on the surface, shall be cleared to a distance of at least ten feet from the edge of such open face working or quarry.

*Fencing abandoned shafts.*

51. All underground entrances to shafts or other dangerous places which are temporarily or permanently abandoned shall be securely fenced across the whole width of such entrances, so that no person can unintentionally enter the same. No person shall cross any such fencing unless authorised to do so.

*Gevaarlike skagte, ens.: Ondergrondse beveiliging.*

52. (1) Elke skag, gang, afbouplek of ander uitgraving hoegenaamd, wat in verband met die werk van 'n myn gebruik word, moet veilig gemaak en gehou word vir die persone wat daarin werk, en niemand mag daarin gaan of werk, of verplig of toegelaat word om daarin te gaan of te werk nie, totdat dit veilig gemaak is, uitgesonderd met die doel om dit te verken, te herstel of veilig te maak.

Die spanbaas wat toesig hou oor die ondersoek, herstelwerk of beveiliging van die plek, moet alle redelike voorsorg tref dat persone, wat onder sy toesig is, beveilig word teen die val van dak en teen ander gevare, onderwyl hulle die werk uitvoer.

*Timmerhout, ens.*

(2) Bo en behalwe die beveiliging wat subregulasie (1) hiervan vereis, moet 'n voldoende reserwevoorraad geskikte timmerhout gerieflik byderhand wees, saam met alle nodige materiaal en gereedskap, sodat werksmense dit onmiddellik kan gebruik vir die vinnige en doelmatige oprigting van mynstutte.

(3) Alle timmerhout, muurwerk- en skermmateriaal en ander materiaal of gereedskap om enige plek veilig te maak, of om die ventilasie te verbeter, moet geheel en al kosteloos aan die werksmense verskaf word.

(4) As die Direkteur van mening is dat die stelsel wat in gebruik is om die dak of wande in 'n myn of deel van 'n myn te stut gevaarlik is, omdat die bepaalde tussenruimtes te groot is, of om ander redes, kan hy die bestuurder gelas om kleiner tussenruimtes te bepaal of om die stelsel in gebruik andersins te wysig.

(5) Waar die dak bros is, moet alle stutte kopplanke kry, of moet daar kappe oor aanliggende stutte aangebring word.

*Geen los artikels mag by skagingange, ens., gelaat word.*

(6) Geen gereedskap, hout of los artikels mag so naby die ingang van 'n skag, daling of afbouplek, hetsy vertikaal of steilhellend, neergesit of gelaat word, dat hulle moontlik daarin kan val nie.

*Geen toegang tot werkplek sonder spanbaas se opdrag nie.*

(7) Niemand buiten 'n skofbaas of 'n beampte van hoër rang mag aan die begin van 'n skof of na skietwerk, 'n werkplek binnegaan nie, voordat hy definitiewe opdrag of toestemming daartoe gekry het van die spanbaas wat op daardie tydstip verantwoordelik is vir die veiligheid van so 'n werkplek.

*Vervoer van karbide.*

(8) Niemand mag kalsium-karbide ondergrond dra of iemand anders verplig of toelaat om dit ondergrond te dra nie, buiten in lampe wat die bestuurder verskaf of goedgekeur het, of in 'n waterdigte houër van 'n soort wat die Direkteur goedgekeur het en wat die bestuurder moet verskaf. Niemand mag kalsium-karbide ondergronds bêre of dit daar laat wanneer sy skof verby is nie.

*Geen werk waar gas is nie.*

53. (1) Uitgesonderd waar hierdie regulasies anders bepaal, mag niemand toegelaat word om te begin werk in enige gedeelte van 'n myn waarin, of binne 'n afstand van eenhonderd voet vanwaar, dit bekend is dat daar genoeg ontvlambare gas is om 'n duidelike sigbare kappie te vorm op die kleingedraaide vlam van 'n veiligheidslamp, wat van 'n konstruksie is wat die Direkteur goedgekeur het, en mag niemand toegelaat word om in so 'n gedeelte van 'n myn aan te hou werk nadat daar ontdek is dat gas in so 'n hoeveelheid, as hierbo gemeld, aanwesig is nie.

*Unsafe shafts, etc.: Measure for securing.*

52. (1) Any shaft, drive, stope or other excavation of any kind whatsoever, which is in use in connection with the working of a mine shall be made and kept safe for the persons working in such mine, and no person, except for the purpose of exploring or repairing or making safe, shall travel or work, or be caused or permitted to travel or work in any such shaft or working until it is made secure.

The ganger in charge of exploring or repair work or in making the place safe, shall take all reasonable precautions that the persons under his charge are secured against the falling of hanging and other dangers whilst carrying out such work.

*Timbering etc.*

(2) In addition to such making safe as required in subregulation (1) hereof a sufficient reserve of suitable timber shall be provided conveniently for the immediate use of the workmen, together with all other materials and tools necessary for setting props quickly and efficiently.

(3) All timber, walling material, brattice cloth, and other material or tools for making any place safe on improving the ventilation, shall be provided free of any charge to the workmen.

(4) If the Director considers that the system of supporting the roof and sides adopted in any mine or part of a mine is unsafe, either by reason of the distances fixed being excessive or otherwise, he may require the manager to fix some lesser distance or otherwise to modify the system in use.

(5) Where the hanging is friable all props shall be provided with head-boards or with caps between adjacent timbers.

*No loose articles at shaft entrances etc.*

(6) Tools, wood, or any loose articles shall not be placed or laid down or be allowed to remain in such proximity to the entrance of a shaft, winze, or stope, whether vertical or steeply inclined, which may result in their falling into them.

*No entering working place except by ganger's instruction.*

(7) No person other than a shift boss or an official of a higher rank shall, either at the beginning of a shift or after blasting, enter a working place until he has received definite instructions or permission so to do from the ganger who, for the time being, is responsible for the safety of such working place.

*Transport of carbide.*

(8) No person shall carry or cause or permit to be carried any calcium carbide underground except in lamps provided or approved by the manager, or in a watertight receptacle of a type approved by the Director and to be provided by the manager. No person shall store or leave calcium carbide underground on coming off shift.

*Employment of persons where gases.*

53. (1) No person shall, except as hereinafter provided, be allowed to commence work in any part of a mine in or within one hundred feet of which there is known to be sufficient inflammable gas to show a distinct cap on the reduced flame of a safety lamp of construction approved by the Director, or to continue such work after the discovery of the existence of gas in such quantity as aforesaid.

*Hysmajinis se aandag mag nie afgetrek word nie.*

58. Niemand mag met iemand wat 'n hysmasjien dryf praat of enigsins sy aandag aftrek nie, terwyl die masjien in beweging is, buiten 'n gesaghebbende en dan net in geval van nood.

*Verbinding tussen tou en vervoermiddels, ens.*

59. Die verbinding tussen die hystou en die emmer, hysbak of ander vervoermiddel moet van so 'n aard wees dat dit nie toevallig los kan raak nie.

In die geval van hyshokke en -bakke, moet die hystou daaraan gekoppel word op 'n manier wat die Direkteur goedgekeur het. In elke geval waar die Direkteur dit vereis, moet veiligheidskettings of ander soortgelyke toestelle, wat hy goedgekeur het, bykomend tot enige ander manier van koppeling, so voorsien word dat dit in werking kom indien die hoofverbinding faal.

*Toue — gehalte, sterkte.*

60. (1) Geen tou, trekstang, skakel, ketting of ander verbinding mag vir hysdoeleindes gebruik word nie, tensy dit van goeie gehalte en fabrikaat is en vry van enige sigbare gebrek en volgens berekening, sterk genoeg.

(2) Elke tou wat vir hysdoeleindes gebruik word in skagte of daalgange van oor die honderd voet diep, gemeet langs 'n helling of vertikaal, na gelang van die geval, moet van staaldraad gemaak wees, en die dikte van die drade wat vir die samestelling van die tou gebruik word, moet geskik wees vir die diameter van die katrolle en tromme waarvan die toestel voorsien word.

(3) Op versoek van die Direkteur moet 'n geskikte monster van die end van enige tou aan hom verskaf word.

*By hysing moet gereedskap vasgemaak word.*

61. Wanneer gereedskap, hout of ander materiaal in 'n skag of daalgang gehys of neergelaat word en dit steek bokant die hyshok, hysbak, hysemmer, hysvat of ander vervoermiddel uit, moet die deel of dele wat uitsteek, veilig aan die hystou of aan die beuel van die vervoermiddel vasgemaak word.

*Emmers, ens., moet tot stilstand gebring word.*

62. (1) Geen hysemmer of ander vervoermiddel mag die bek of onderent van 'n skag of daalgang verlaat, voordat die werksman wat daarvoor verantwoordelik is, dit eers tot stilstand gebring of laat bring het nie.

(2) Met die sink van skagte of daalgange mag die hysemmer of ander vervoermiddel nie met los klippe of grond tot bokant die rand gevul word nie.

*Leispore en balke vir vertikale skagte.*

63. Vertikale skagte wat dieper as honderd voet is, moet voorsien word van leispore vir hysbakke tensy die Direkteur skriftelike vrystelling daarvan verleen het.

Sulke leispore moet ondertoe strek tot by die laagste balkstel en die kruiskop moet tot by die tweedelaaste stutstel beweeg, maar die laagste stutstel mag geensins meer as vyftig voet van die skagbodem af wees nie.

*Skagsink-beskutting.*

64. (1) Wanneer 'n hysmasjien gebruik word by 'n skag wat nog gesink word, mag geen persoon toegelaat word om op die bodem van so 'n skag te werk nie, tensy hy beskerm is deur 'n doelmatige beskutting wat oor die hele oppervlakte van die skag strek, met net voldoende ruimte daarin vir die deurgang van enige hyshok, hysbak, hysemmer of ander vervoermiddel.

*Driver's attention not to be distracted.*

58. No person shall speak to or in any way distract the attention of the person operating a winding engine whilst it is in motion, except a person in authority, and then only in cases of emergency.

*Connections between ropes and cages, buckets etc.*

59. The connection between the winding rope and the bucket, kibble or other means of conveyance shall be of such a nature that no accidental disconnection can take place.

In the case of cages and skips, the winding rope shall be connected thereto in such manner as is approved of by the Director. In every case in which the Director so requires, safety chains or other similar appliances to be approved by him, shall, in addition to any other mode of connection, be so provided as to come into operation in the event of the failure of the main connection.

*Ropes — quality, strength.*

60. (1) No rope, bar, link, chain, or other connection shall be used for winding purposes unless it is of good quality and manufacture and free from any patent defect and of adequate calculated strength.

(2) Every rope used for winding purposes in shafts or winzes over one hundred feet in depth, measured on an incline or vertical as the case may be, shall be made of steel wire, and the gauge of the wires used in the construction of such ropes shall be suited to the diameter of the sheaves and drums fitted.

(3) At the request of the Director an adequate sample from the end of any winding rope shall be supplied to him.

*Raising tools, etc., Fastening.*

61. When tools, wood or other material are being raised or lowered in a shaft or winze and they project above the top of the cage, bucket, skip, kibble or other means of conveyance, the projecting portion or portions shall be securely fastened to the winding rope or to the bow of the conveyance.

*Buckets, etc., must be steadied.*

62. (1) No bucket or other means of conveyance 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.

(2) In shafts or winzes in the course of sinking, the bucket or other means of conveyance shall not be filled with loose rock or ground above the level of the brim.

*Guides and timbers in vertical shafts.*

63. Vertical shafts exceeding one hundred feet in depth shall be provided with guides for kibbles, unless exempted in writing by the Director.

Such guides shall always be kept extended down to the lowest set of timbers, and the crosshead shall be allowed to travel to the lowest set but one, but in no case shall the lowest set of timbers be more than fifty feet from the shaft bottom.

*Shaft sinking covering.*

64. (1) Where a winding engine is used at a shaft in the course of sinking, no person shall be allowed to work at the bottom of such shaft unless he is protected by an adequate covering extending over the whole area of such shaft, sufficient space only being left therein for the passage of any sinking cage, skip, bucket or other means of conveyance.

In die geval van vertikale skagte mag hierdie beskutting nie meer as vyf-en-sewentig voet van die skagbodem of geleë wees nie. In die geval van hellende skagte mag hierdie beskutting nie meer as honderd voet van die skagbodem geleë wees nie.

*Harde hoede.*

(2) (a) Niemand mag in 'n vertikale of steilhellende skag of daalgang werk nie, tensy hy 'n harde hoed dra van 'n tipe wat deur die Direkteur goedgekeur is.

(b) Niemand wat belas is met toesig oor ander werkers in 'n vertikale of steilhellende skag of daalgang mag enigeen van die werkers toelaat om te werk as hy nie 'n hoed, soos genoem, dra nie.

(c) In die geval van 'n nie-blanke moet sodanige hoed deur die bestuurder kosteloos verskaf word.

*Hysafdelings. Voorsiening teen deurkruising.*

65. (1) By elke skagstasie waar dit vir werkers nodig is om van die een kant na die ander kant van die skag te loop, moet voorsiening gemaak word dat hulle dit kan doen sonder om 'n hysafdeling te betree of te deurkruis; so 'n deurgang moet veilig afgekamp wees van bewegende dele van masjinerie.

(2) Niemand mag 'n hysafdeling van 'n skag betree of deurkruis nie, of veroorsaak of toelaat dat dit gedoen word nie, behalwe ten einde 'n hyshok, -bak of ander vervoermiddel in daardie hysafdeling binne te gaan of te verlaat, of om herstel- of timmer- of inspeksiewerk in daardie skag uit te voer.

*Hyswerk tydens herstel en andersom.*

66. (1) Niemand mag in 'n hysafdeling van 'n skag of skagtoring herstel-, inspeksie-, ondersoek- of enige ander werk verrig terwyl daar in so 'n afdeling hyswerk aan die gang is nie; en geen hyswerk mag gedoen of toegelaat word in enige hysafdeling van 'n skag nie terwyl persone besig is met herstelwerk in, of met ondersoek of inspeksie van, sodanige skag of hysafdeling van 'n skag of skagtoring, of met enige werk daarin, buiten —

(a) waar persone aldus besig is onderkant die laagste punt vanwaar hyswerk gedurende sodanige herstel-, inspeksie-, ondersoek- of ander werk gedoen moet word; of

(b) waar persone met sodanige werk besig is in 'n afdeling waar hyswerk nie nodig is nie: Met dien verstande dat sodanige werksmense in elke so 'n geval veilig beskerm moet wees teen gevaar van enige hysbak, -hok of ander hysapparaat, sowel as teen vallende klippe en materiaal; of

(c) waar hyswerk nodig is ten einde sodanige herstel-, ondersoek- of ander werk uit te voer; of

(d) waar so iemand besig is om hysbakke by ertskaste te vul, as hy veilig beskerm word in 'n skuilplek wat groot genoeg is en wat 'n seintoestel het na die skagwagter of ander gemagtigde persoon, en wat so ingerig is dat daar geen sein op die toestel gegee kan word nie, tensy die operateur geheel en al binne so 'n skuilplek verkeer.

(2) Nadat enige herstelwerk in 'n hysafdeling van 'n skag of skagtoring uitgevoer is, mag so 'n hysafdeling nie vir die gewone vervoer van mense gebruik word nie, tensy daar eers twee proefritte ingevolge regulasie 82 uitgevoer is.

Voordat sodanige proefritte uitgevoer word in 'n skag wat gesink word, moet al die werksmense die skag verlaat, en mag niemand daarin bly of daarin gaan of ver-

In the case of vertical shafts, such covering shall be situated not more than seventy-five feet from the shaft bottom. In the case of inclined shafts, such covering shall be situated not more than one hundred feet from the shaft bottom.

*Hard hats.*

(2) (a) No person shall work in a vertical or steeply inclined shaft or winze unless he wears a hard hat of a type approved by the Director.

(b) No person in charge of other workmen in a vertical or steeply inclined shaft or winze shall allow any such workmen to work therein unless they wear hard hats as aforesaid.

(c) In the case of a non-European person such hat shall be provided by the manager free of cost.

*Winding compartments. Provision against crossing.*

65. (1) At every shaft station where it is necessary for workmen to pass from one side of the shaft to the other, provision shall be made for them to do so without entering or crossing a winding compartment and such passage shall be securely fenced off from moving parts of machinery.

*When crossing permitted.*

(2) No person shall enter or cross, or be caused or permitted to enter or cross, a winding compartment of a shaft except for the purpose of entering or leaving a cage, skip or other means of conveyance in that compartment or effecting repairs or timbering or inspection in the said shaft.

*Winding during repairs and vice versa.*

66. (1) No person shall effect repairs, conduct any inspection or examination, or do any work in a compartment of a shaft or of a headgear whilst winding operation are being carried on in such compartment, and no winding shall be carried on or permitted in any compartment of a shaft whilst persons are engaged in effecting repairs in or in inspecting or examining such shaft or compartment of shaft or headgear, or in performing any other work therein, except —

(a) where persons are so engaged below the lowest point from which it is required that winding shall take place during such repairs, inspection, examination or work; or

(b) where persons are so engaged in a compartment other than that in which it is required that winding shall take place: Provided that in either of such cases such persons are securely protected from any skip, cage, or other winding apparatus, as well as from falling stones and falling material; or

(c) where winding is necessary for the purpose of such repairs, examination, or work; or

(d) where such person is engaged in filling skips at ore boxes, if securely protected in a refuge place of adequate dimensions fitted with a signalling device to the onsetter or other authorised person so arranged that no signal can be given on such device unless the operator is completely inside such refuge place.

(2) After any repairs have been conducted in a compartment of a shaft or headgear such compartment shall not be used for the ordinary transport of persons until two trial trips as specified in regulation 82 have been run.

In the case of a shaft in the course of sinking before such trial trips are run all persons shall be withdrawn from the shaft and no person shall remain or enter or be

plig of toegelaat word om daarin te gaan nie, voordat die proefritte afgelê is nie.

(3) Die persoon of persone wat regstreeks toesig moet hou oor herstel-, ondersoek- of ander werk in 'n skag moet die hysmasjini of hysmasjiniste wat op daardie tyd stip by so 'n skag diens doen, waarsku dat daar met sodanige herstel-, ondersoek- of ander werk begin gaan word, en moet waar doenlik so 'n waarskuwing onverwyld aanteken in die masjini se logboek waaroor subregulasie (5) van regulasie 81 gaan, en die masjini wat dan diens doen in die skag, en sy aflosmasjini moet die aantekening mede-onderteken. Wanneer die toesighouer(s) oor sodanige herstel-, ondersoek- of ander werk dit ondoenlik bevind om so 'n waarskuwing aan te teken, moet die diensdoende masjini dit inskryf. By voltooiing van die werk moet die onmiddellike toesighouer oor die herstel-, ondersoek- of ander werk die inskrywing rojeer.

In hierdie regulasie en in regulasie 65 (2) omvat die uitdrukking „herstelwerk“ die smering van rollers en katrolle.

#### *Skagseine: Voorsiening vir.*

67. Tensy die Direkteur skriftelik sy vrystelling verleen —

- (1) moet elke hyskag wat meer as vyftig voet diep is, ingerig word met 'n doeltreffende middel vir die wisseling van duidelike en bepaalde seine tussen die masjini en elke vasgestelde punt vanwaar hyswerk uitgevoer word, maar dit moet vir die bankwagter onmoontlik wees om met enigiemand behalwe die masjini seine te wissel;
- (2) moet elke hellende skag onderwyl dit nog gesink word, ingerig word met 'n doeltreffende middel vir die wisseling van duidelike en bepaalde seine tussen die masjini en 'n punt hoogstens eenhonderd-entwintig voet van die skagbodem af, en wanneer so 'n punt meer as vyftig voet van die skagbodem geleë is, moet daar ook 'n doeltreffende middel ingerig en gebruik word om van die skagbodem na so 'n punt te sein;
- (3) moet elke vertikale skag onderwyl dit nog gesink word, ingerig word met twee afsonderlike middels ten opsigte van iedere masjini, waardeur diegene wat met die sinkwerk besig is, van enige diepte in die skag doeltreffend na die masjini kan sein;
- (4) moet daar, bo en behalwe die seinreëlings wat subregulasie (1) hiervan vereis, in elke hysafdeling van elke skag 'n seinapparaat ingerig word waarmee duidelik na die masjini van enige plek af in die hysafdeling gesein kan word.

#### *Wie mag sein.*

68. (1) Geen ongemagtigde persoon mag enige sein behalwe 'n ongeluksein gee nie, nóg hom enigszins hoegenaamd met die seinapparaat bemoei wat vir hyswerk-saamhede ingerig is nie.

(2) Niemand buiten die bankwagter of skagwagter mag seine vir die hysing of neerlating van materiaal of minerale gee nie, tensy die bestuurder of mynopsigter hom behoorlik daartoe gemagtig het. Waar die hystoestel ook vir mensevervoer gebruik word, moet sodanige magtiging skriftelik wees.

(3) Behoudens die bepalings van regulasie 45 mag niemand buiten die houder van 'n bankwagter- of skagwagtersertifikaat seine gee vir die hysing of neerlating van persone, of daartoe verplig of toegelaat word nie.

#### *Elektriese seine.*

69. In die geval van skagte waar persone gereeld vervoer word en waar die seintoestelle met elektrisiteit

caused or permitted to remain or enter the shaft until such trial trips have been run.

(3) The person or persons in immediate charge of any repairs, examination, or other work in a shaft shall warn the engine driver or drivers who may be on duty at the time at such shaft that such repairs, examination, or other work is about to be undertaken, and shall, where practicable, forthwith enter such warning in the driver's log-book provided under subregulation (5) of regulation 81 and such entry shall be countersigned by the driver on duty at the time at such shaft and by the driver relieving him. Where it is not practicable for the person or persons in charge of such repairs, examination or work to enter such warning the entry shall be made by the engine driver on duty. The entry shall be cancelled by the person or persons in immediate charge of such repairs, examination, or work, on completion thereof.

In this regulation and in regulation 65 (2) the expression "effecting repairs" shall include the oiling of rollers and pulleys.

#### *Shaft Signals: Provision for.*

67. Unless exempted in writing by the Director —

- (1) every winding shaft exceeding fifty feet in depth shall be provided with some efficient means for interchanging distinct and definite signals between the engine-driver and every established point from which winding is carried out, but it shall not be possible for the banksman to signal to anyone but the engine driver;
- (2) every incline shaft which is in process of being sunk shall be provided with some efficient means for interchanging distinct and definite signals between the engine driver and a point not more than one hundred and twenty feet from the bottom of the shaft, and when this point is more than fifty feet from the bottom of the shaft, some efficient means shall also be provided and used for signalling from the bottom of the shaft to this point;
- (3) every vertical shaft which is in process of being sunk shall be provided with two separate means in respect of each engine whereby persons employed in connection with such process can signal effectively from any depth in the shaft to the engine driver.
- (4) In addition to the signalling arrangements required by subregulation (1) hereof, a signalling device shall be installed in each winding compartment of every shaft, whereby distinct signals can be transmitted to the driver from any point in the winding compartment.

#### *Who may give signals.*

68. (1) No unauthorised person shall give any signal other than an accident signal, or in any manner whatsoever interfere with the signalling arrangements provided for winding operations.

(2) No person other than the banksman or onsetter shall give any signal for the winding of material or minerals 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.

(3) Except as provided for in regulation 45 no person other than the holder of a banksman's or onsetter's certificate shall give or shall be caused or permitted to give any signals for the raising or lowering of persons.

#### *Electrical signals.*

69. In the case of shafts where persons are regularly allowed to ride and where the signalling arrangements are

werk, moet die volgende bepalings nagekom word ten opsigte van elke hysmasjien wat vir die ophys of neerlaat van persone gebruik word:

- (1) Daar moet twee afsonderlike, onafhanklike en doeltreffende seintoestelle voorsien word om seine mee te stuur.
- (2) Die handvatsels of drukknoppe van die een toestel wat regulasie 67 (1) voorskryf en hierna genoem die sluitklokstelsel, vir die stuur van seine tussen —
  - (a) die masjins en die bankwagter;
  - (b) die masjins en die laagste punt vanwaar hyswerk gedoen word en die verskeie tussenstasies wat gebruik word;

moet in 'n stewiggeboude geslote kassie wees. So 'n geslote kassie moet gesluit gehou word en die bankwagter en skagwagter of ander gemagtigde persoon moet die sleutel(s) hou wanneer hulle nie gebruik word nie.

*Oproepklokstelsel.*

- (3) Die ander stelsel (hierna genoem die „oproepklokstelsel”) moet maklik bereikbaar wees, maar mag nie gebruik word nie behalwe deur 'n bankwagter of skagwagter, of deur iemand wat die bestuurder behoorlik daartoe gemagtig het, en dan net om die stasie aan te dui waar die hyshok, -bak of ander vervoermiddel nodig is: Met dien verstande steeds dat hierdie regulasie nie so uitgelê moet word dat dit enigiemand belet om die ongeluksein oor die oproepklokstelsel te gee nie.
- (4) Al die klokke in die oproepklokstelsel moet 'n toon gee wat maklik onderskei kan word van die toon van die gesloteklokstelsel.
- (5) Alle hystoestelle vir die ophys of neerlaat van persone moet voorsien word van 'n toestel wat outomaties verhinder dat die masjins sy hysmasjien in beweging bring voordat beide bankwagter en skagwagter seine daarvoor gegee het: Met dien verstande steeds dat hierdie regulasie nie so uitgelê moet word dat dit die gebruik van ander seinreëlings, wat die Direkteur goedgekeur het, verbied nie.

*Seinkode.*

70. (1) By die gee van seine in skagte waarin persone gereeld toegelaat word om te ry, moet die onderstaande seinkodes gebruik en stiptelik in ag geneem word:

- (a) In die geval van die sluitklokstelsel:

**KLOPPE OF LUIE:**

- 1 . . . . . Hys wanneer masjien stilstaan.
- 1 . . . . . Stop wanneer masjien beweeg.
- 2 . . . . . Laat sak.
- 3 . . . . . Persone gereed om te ry.
- 3 . . . . . In antwoord: persone mag aanhou ry of mag die hyshok of ander vervoermiddel binnegaan met die doel om te ry.
- 3 . . . . . Vanaf masjins wanneer hyshok of ander vervoermiddel wat persone bevat by 'n stasie tot stilstand gebring word: persone mag die hys-hok of ander vervoermiddel verlaat.

operated by electricity, the following provisions shall be observed in respect of each winding engine used for the raising or lowering of persons:—

- (1) There shall be provided two separate, independent and efficient arrangements for transmitting signals.
- (2) The handles or push-buttons of the one arrangement as prescribed in regulation 67 (1), and hereinafter called the “locked-bell” system, for the exchange of signals between the —
  - (a) engine driver and banksman; and
  - (b) engine driver and the lowest point from which winding is carried on and the various intermediate stations in use;

*Locked bell system: Who may use.*

shall be enclosed in a locked box of substantial construction. Such locked box shall be kept locked and the key or keys shall be retained by the banksman or onsetter or other authorised person when not in use.

*Call-bell system.*

- (3) The other arrangement (hereinafter called the “call-bell” system), shall be easily accessible, but shall not be used except by a banksman or onsetter or by persons duly authorised by the manager, and then only to indicate the station at which the cage, skip or other means of conveyance is required: Provided always that this regulation shall not be taken to prohibit any person from giving the accident signal on the “call-bell” system.
- (4) The bells throughout the “call-bell” system shall be of such a tone as to be easily distinguishable from that of the bells of the “locked-bell” system.
- (5) There shall be fitted at all winding plants used for raising or lowering persons a device which will automatically prevent the driver from moving his hoist until signals to do so have been received from both the banksman and onsetter: Provided always that this regulation shall not be taken to prohibit the use of any other signalling arrangements which have been approved of by the Director.

*Code of Signals.*

70. (1) In signalling in shafts where persons are regularly allowed to ride, the following codes of signals shall be used and strictly observed:—

- (a) In the case of the “locked bell” system: 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 pouse 2 . . . .	Aan masjinis: Klaarsein: Masjinis mag na goeddunke wegtrek.	2 pouse 2 . . . .	To driver: clear signal. Driver may move at his discretion.
2 pouse 2 pouse 2	Vanaf masjinis: persone moet vervoermiddel verlaat.	2 pouse 2 pouse 2	From driver: persons must leave conveyance.
2 pouse 2 pouse 2	In antwoord: geen persone in vervoermiddel nie.	2 pouse 2 pouse 2	In reply: no persons in conveyance.
2 pouse 2 pouse 2 pouse 2 . . . .	Kanselleer of herhaal sein.	2 pouse 2 pouse 2 pouse 2 . . . .	Cancel or repeat signal.
3 pouse 3 pouse 3	Persoon wat sein gereed om te ry.	3 pouse 3 pouse 3	Person giving signal about to travel.
3 pouse 3 pouse 3	In antwoord: erkenning deur masjinis dat persoon wat sein, gereed staan om te ry.	3 pouse 3 pouse 3	In reply: acknowledgement by driver that person signalling is about to travel.
4 pouse 1 . . . .	Hys stadig.	4 pouse 1 . . . .	Raise slowly.
4 pouse 2 . . . .	Laat sak stadig.	4 pouse 2 . . . .	Lower slowly.
4 pouse 4 . . . .	Aan masjinis: „merksein”.	4 pouse 4 . . . .	To driver: “Mark” signal.
4 pouse 4 . . . .	In antwoord: erkenning deur masjinis van „merksein”.	4 pouse 4 . . . .	In reply: acknowledgement by driver of “Mark” signal.
4 pouse 4 pouse 4	Aan masjinis: Koppelsein.	4 pouse 4 pouse 4	To driver: clutching signal.
4 pouse 4 pouse 4	In antwoord: klaar gekoppel.	4 pouse 4 pouse 4	In reply: clutching operations completed.
5 pouse 5 . . . .	Aan masjinis: springstowwe gereed om in vervoermiddel vir vervoer geplaas te word.	5 pouse 5 . . . .	To driver: explosives about to be placed in conveyance for transportation.
5 pouse 5 . . . .	In antwoord: springstowwe mag in vervoermiddel geplaas word om vervoer te word.	5 pouse 5 . . . .	In reply: explosives may be placed in conveyance for transportation.
6 pouse 6 . . . .	Aan masjinis: hys-kompartement deur masjien bedien, gesluit.	6 pouse 6 . . . .	To driver: winding compartments served by engine locked.
6 pouse 6 . . . .	In antwoord: erkenning deur masjinis van sein „kompartement gesluit”.	6 pouse 6 . . . .	In reply: acknowledgement by driver of “compartments locked” signal.
6 pouse 6 gevolg deur stasiesein	Aan masjinis: hyskompartemente deur masjien bedien, onderkant aangeduide stasie gesluit.	6 pouse 6 followed by station signal	To driver: winding compartments served by engine locked below station designated.
6 pouse 6 gevolg deur stasiesein	In antwoord: erkenning deur masjinis van sein: „Kompartemente onderkant aangeduide stasie gesluit”.	6 pouse 6 followed by station signal	In reply: acknowledgement by driver of “compartments locked below station designated” signal.
6 pouse 6 pouse 6	Aan masjinis: kompartemente deur masjien bedien, heropen.	6 pouse 6 pouse 6	To driver: compartments served by engine re-opened.
6 pouse 6 pouse 6	In antwoord: erkenning deur masjinis van sein: „kompartemente deur masjien bedien heropen”.	6 pouse 6 pouse 6	In reply: acknowledgement by driver of “compartment served by engine re-opened” signal.
6 pouse 6 pouse 6 pouse 6 . . . .	Aan masjinis: skag-onderzoek en herstelwerk op die punt om uitgevoer te word.	6 pouse 6 pouse 6 pouse 6 . . . .	To driver: shaft examination and repairs about to take place.
6 pouse 6 pouse 6 pouse 6 . . . .	In antwoord: erkenning deur masjinis van sein „skagondersoek en herstelwerk”.	6 pouse 6 pouse 6 pouse 6 . . . .	In reply: acknowledgement by driver of “shaft examination and repairs” signal.
7 . . . . .	Aan masjinis: persone gereed om toegang tot hyshok of ander vervoermiddel te kry vir 'n ander doel as om te ry.	7 . . . . .	To driver: persons about to have access to cage or conveyance for a purpose other than travelling.

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|-------------------------------------|---|---|--|
| 7 . . . . .                         | In antwoord: persone mag toegang tot hyshok of ander vervoermiddel hê vir 'n ander doel as om te ry.                              | 7 . . . . .                             | In reply: persons may have access to cage or other conveyance for a purpose other than travelling.                         |
| 7 pause 7 . . . . .                 | Aan masjins: alle persone wat tot die hyshok of ander vervoermiddel toegang gehad het vir 'n ander doel as om te ry, is daar weg. | 7 pause 7 . . . . .                     | To driver: cage or other conveyance is clear of all persons who have had access to it for a purpose other than travelling. |
| 7 pause 7 . . . . .                 | In antwoord: erkenning deur masjins van sein „persone weg”.   | 7 pause 7 . . . . .                     | In reply: acknowledgement by driver of “persons clear” signal.   |
| 15 . . . . .                        | Elektrisiën toets klokke.   | 15 . . . . .                            | Electrician testing bells.   |
| 15 . . . . .                        | In antwoord: erkenning deur masjins van kloктоetssein.  | 15 . . . . .                            | In reply: acknowledgement by driver of bell testing signal.  |
| 15 pause 2 pause 2                  | Elektrisiën klaar met toets.  | 15 pause 2 pause 2                      | Electrician has completed test.  |
| 10 gevolg deur stasiesein . . . . . | Persone in ongeluk betrokke. Stasie waar vervoermiddel nodig is.  | 10 followed by station signal . . . . . | Accident to persons: Station where conveyance is required.   |
| 1 lang lui . . . . .                | Skag in ongeluk betrokke. Hyswerk in alle kompartemente van die skag moet onmiddellik gestaak word.                               | 1 long ring . . . . .                   | Accident to shaft. Winding operations to be suspended immediately in all compartments of the shaft.                        |

(b) In die geval van die „oproepklokstelsel”:

**KLOPPE OF LUIE:**

- 10 gevolg deur stasiesein . . . . . Persone in ongeluk betrokke. Stasie waar vervoermiddel nodig is.
- 1 lang lui . . . . . Skag in ongeluk betrokke. Hyswerk in alle kompartemente van die skag moet onmiddellik gestaak word.

(c) In die geval van enige suiwer meganiese seinstelsel:

Die sluitklokkode in subregulasie 1 (a) hierbo aangedui, sover dit van toepassing en uitvoerbaar is, maar met 'n „aanhoudende gelui” in plaas van 1 lang lui om die sein „skag in ongeluk betrokke” te gee.

*Toelating tot vervoermiddel.*

(2) Uitgesonderd soos later hierin bepaal, mag niemand, vir watter doel ook al, 'n hyshok of ander vervoermiddel binnegaan of toegang daartoe hê of toegelaat word om dit binne te gaan of toegang daartoe te hê nie en mag niemand in so 'n hyshok of ander vervoermiddel aanhou ry nie, voordat en tensy die betrokke seine wat ooreenkomstig bovermelde kode vereis word, oor en weer gegee is, of as 'n sein nie deur middel van die klokstelsel gegee kan word nie, die een of ander gepaste en duidelike sein van die drywer ontvang is.

*Skag wat gesink word.*

(3) In die geval van 'n skag wat gesink word, mag niemand die vervoermiddel op die skagbodem binnegaan nie, voordat dit gehys en laat sak is of voordat 'n ander duidelike sein van die masjins ontvang is. Die Direkteur kan vrystelling van die bepalings van hierdie subregulasie verleen en skriftelike kennisgewing van sodanige vrystelling moet op die kennisgewingbord in die masjienkamer en op die bank opgeplak word.

*Skietsein.*

(4) Die toesighouer by skietwerk in 'n skag wat gesink word, moet die masjins kort voordat die skietwerk

(b) In the case of the “call bell system”:

**Knocks or Rings —**

- 10 followed by station signal . . . . . Accident to persons. Station where conveyance is required.
- 1 long ring . . . . . Accident to shaft. Winding operations to be suspended immediately in all compartments of the shaft.

(c) In the case of any purely mechanical signalling system —

The “locked-bell” code given under subregulation (1) (a) above, as far as it is applicable and practicable, but with the substitution of “continued ringing” for “1 long ring” for the “accident to shaft” signal.

*Access to conveyance.*

(2) Except as is hereinafter provided, no person shall enter or have access to or be permitted to enter or to have access to a cage or other conveyance for any purpose whatsoever, or shall continue to travel in such cage or other conveyance unless and until the appropriate signals required in terms of the above code 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 driver.

*Sinking shafts.*

(3) In the case of a shaft in the course of sinking no person shall enter the conveyance at the shaft bottom until it has been raised and lowered or until some other distinct signal has been received from the driver. Exemption from the provisions of this subregulation may be granted by the Director and written notice of such exemption shall be posted up on the notice board in the engine room and on the bank.

*Blasting signal.*

(4) The person in charge of blasting operations in a shaft in the course of sinking shall notify the engine



begin, deur middel van 'n spesiale sein, naamlik vyf kloppe of luie, daarvan in kennis stel, en die masjins moet uitgesonderd in die geval van skiet deur elektrisiteit, antwoord deur die vervoermiddel 'n paar voet te hys en te laat sak.

*Spesiale seine.*

(5) Benewens die voorafgaande kan spesiale seine gebruik word mits die Direkteur dit goedgekeur het.

*Kodestelsels moet opgeplak staan.*

71. (1) (a) die seinkodes wat in regulasie 70 genoem word, of 'n verkorte opgaaf daarvan wat die Direkteur goedgekeur het sowel as alle spesiale seine wat moontlik in 'n myn gebruik word, moet behoorlik vertoon word by wyse van duidelik leesbare kennisgewings waarvan die letters en syfers minstens 'n halfduim hoog moet wees. Die Direkteur besluit of sodanige kennisgewings behoorlik vertoon en duidelik leesbaar is.

(b) Sodanige kennisgewings moet in die hysmasjienkamer op die bank van die skag en by al die skagstasies wat in gebruik is, opgeplak staan.

(c) By 'n myn waar net party van die seine in die bogenoemde kodes gebruik word, hoef net daardie gedeeltes van die kodes opgeplak staan wat in daardie myn gebruik word.

(2) Elkeen wat 'n kodestelsel, waaroor regulasie 70 gaan, of die spesiale seine wat in 'n myn gebruik word, verontagsaam, is skuldig aan 'n oortreding.

*Die hysing en neerlating van mense, ens.*

72. Niemand mag 'n hysmasjien vir vervoer van persone gebruik nie, tensy hy 'n permit hou wat ingevolge regulasie 40 aan hom verleen is.

*Toestemming om hysmasjien te gebruik.*

73. Buiten waar vrystelling ingevolge regulasie 85 verleen is, mag geen hysmasjien gebruik word vir vervoer van persone nie, tensy die bepalings van regulasies 67, 71, 74, 77, 78 en 79, dermate hulle toepaslik is deur werklike toetsing ten genoë van die Direkteur behoorlik nagekom is, en die spesiale skriftelike verlof van die Direkteur of 'n gewaarmerkte en leesbare afskrif daarvan, in die masjienkamer opgeplak staan.

*Hysmasjientoestand.*

74. (1) Die hysmasjien moet van so 'n aard wees dat —

(a) terwyl dit teen afwisselende snelhede met ligte en swaar vragte loop, dit maklik vertraag en gestop kan word, en nadat dit tot stilstand gekom het, onmiddellik weer in een van beide rigtings deur die masjins in beweging gebring kan word;

(b) dit die maksimum ongebalanseerde vrag op een trom vanaf die bodem tot die bo-ent van die skag of daalgang kan hys. Hierdie bepaling is nie van toepassing nie ingeval daar ander middele voorhande is waardeur persone wat onder werk, in staat gestel word om die bo-ent van sodanige skag of daalgang te bereik;

(c) elke hystrom moet van 'n geskikte onderling-grendelende toestel voorsien wees, sodat dit onmoontlik is om enige trom te ontkoppel tensy die remme van die trom aan is, en dat dit onmoontlik

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 a few feet.

*Special signals.*

(5) In addition to the foregoing, special signals may be used provided they have been approved by the Director.

*Codes to be posted up.*

71. (1) (a) The codes of signals referred to in regulation 70 or an abridged form thereof approved by the Director, as well as any special signals that may be in use on a mine, shall be suitably displayed in the form of distinctly legible notices in letters and figures not less than half an inch in height.

The decision whether such notices are suitably displayed and distinctly legible shall rest with the Director.

(b) Such notices shall be posted up in the winding engine room, at the bank and at all shaft stations for the time being in use.

(c) In the case of a mine where only some of the signals in the aforementioned codes are used it shall be necessary to display only those portions of the codes which are used on such mine.

(2) Any person acting in conflict with any code of signals referred to in regulation 70 or the special signals used on a mine shall be guilty of an offence.

*Raising and lowering of persons etc.*

72. No person shall operate a winding engine used for the conveyance of persons unless he is the holder of a permit issued in terms of regulation 40.

*Permission to use winding plant.*

73. Except where exemption has been granted in terms of regulation 85 no winding plant shall be used for the conveyance of persons unless the requirements of regulations 67, 71, 74, 77, 78 and 79 so far as they are applicable have been proved to the satisfaction of the Director by actual test to have been complied with and the special written permission of the Director or a certified and legible copy thereof, is posted up in the engine room.

*Winding plant condition.*

74. (1) The winding engine shall be such that —

(a) when running at various speeds with light and heavy loads it can be readily slowed and stopped, and after stopping can be immediately started again in either direction by the engine driver;

*Lift of engine.*

(b) it can lift from bottom to top of shaft or winze the maximum unbalanced load on one drum. This provision shall not apply in cases where other means exist enabling persons employed below to reach the top of such shaft or winze.

*Interlocking device.*

(c) each winding drum shall have a suitable interlocking device fitted so that it is impossible to unclutch the drum unless the brakes of the drum are on, and it shall be impossible to release the brakes

is om die remme los te laat, voordat die koppelaar heeltemal ingeskakel en veilig gesluit is.

*Mate van glipping.*

(d) Elke hystrom, wanneer dit van die masjien ont-koppel is, in russtand gehou kan word deur middel van sy eie rem of remme sonder om meer as een voet te glijp wanneer die voertuig met die maksimum geoorloofde gewig aan delfstof of dubbel die maksimum geoorloofde gewig aan persone, naamlik die swaarste, gelaai is. By die berekening van die totale gewig van persone vir die toepassing van hierdie subregulasie, en van regulasie 77, moet honderd-en-vyftig pond vir elke persoon toegelaat word.

(e) waar geen deel van die tou stewig aan die hystrom geheg is nie, daar onder alle moontlike bedryfstoe-stande geen gevaarlike glipping van die tou op sodanige trom plaasvind nie.

*Vestiging van tou.*

(2) Daar moet aan die trom van die hysmasjien sodanige flense of horings aangebring word, en ook wanneer die trom keël- of spiraalvormig is, sodanige ander toestelle wat die afgly of onegalige opwen van die tou genoegsaam sal voorkom.

(3) In die geval van hysmasjiene, uitgesonderd die katrolwieltipe, moet die tou nie minder as drie slae om die trom gewikkel wees, wanneer die hyshok, hysbak of ander vervoermiddel op die laagste punt van die skag of daal-gang is, vanwaar hyswerk uitgevoer word.

Die end van die tou moet, waar dit doenlik is, be-hoorlik om 'n arm of die as van die trom vasgemaak wees.

*Diepteaanwyser.*

(4) Elke hysmasjien moet, buite en behalwe enige merke aan die tou, op gerieflike plekke voorsien wees van betroubare diepteaanwysers, wat vir die masjien op sy bestuursitplek te alle tye duidelik en noukeuring aan-toon —

(a) die posisie, van die hyshok, hysbak of ander ver-voermiddel; en

(b) op watter plekke in die skag veranderings van helling vermindering van spoed nodig maak.

Aan elke nuwe hysmasjien moet die wyser van die wyserplaat aan die regterkant van die masjien by neer-lating regsom beweeg, en in die geval van 'n paal- en spiraalwyserplaat moet die wyser op en af beweeg wan-neer die vervoermiddel op en af gaan. In die geval van Whiting-hysmasjiene, enkeltromhysmasjiene en hysmasjiene met twee tromme permanent aan een as vasgeheg, hoef net een aanwyser aanwesig te wees.

(5) In elke skag wat dieper as driehonderd voet is, moet voldoende voorsiening gemaak word waardeur die masjien verwittig word van die aankoms van die hyshok, hysbak of ander vervoermiddel by 'n plek in die skag vanwaar die afstand na die boonste uitreplek die ekwivalent is van minstens drie omwentelings van die trom of katrol-wiel van die hysmasjien.

(6) Op elke hysmasjien wat gebruik word vir die vervoer van persone, moet daar 'n geskikte oorhyswee-toestel of -toestelle, wat die Direkteur goedgekeur het, aangebring word, wat die oorhysing van hyshokke, -bakke of ander vervoermiddels sal voorkom.

*Toestelle teen oorhysing: Ondersoek.*

(7) Die toestelle ter voorkoming van oorhysing moet wekeliks ondersoek word, en, waar doenlik, periodiek ge-toets word, en die persoon wat kragtens regulasie 81 (1)

until the clutch is fully engaged and securely locked;

*Amount of slipping.*

(d) each winding drum when unclutched from the engine can be maintained in a position of rest by means of its own brake or brakes, with no more slipping than one foot, when the conveyance is loaded to the maximum permitted weight of mineral or to double the maximum permitted weight of persons, whichever is the greater;

In estimating the total weight of persons for the purpose of this subregulation and of regula-tion 77, one hundred and fifty pounds shall be al-lowed for each person;

(e) where no part of the rope is rigidly fixed to the drum there shall be no dangerous slipping of the rope on the drum under any possible working conditions.

*Fixing of rope.*

(2) There shall be on the drum of the winding engine such flanges or horns, and also, if the drum is conical or spiral, such other appliances as may be sufficient to pre-vent the rope from slipping off or coiling unevenly.

(3) In the case of winding engines other than those of the sheave type there shall be not less than three rounds of rope upon the drum when the cage, skip or other means of conveyance is at the lowest point of the shaft or winze from which hoisting is effected.

The end of the rope shall, where applicable, be pro-perly fastened round an arm or the shaft of the drum.

*Depth Indicator.*

(4) Every winding engine shall, in addition to any marks on the rope, be provided with reliable depth indica-tors, conveniently situated, which will clearly and accu-rately show to the engine driver at his driving seat at all times:—

(a) the position of the cage, skip, or other means of conveyance; and

(b) at what places in the shaftchanges of gradient necessitate reduction in speed.

On any new engine the point of the dial indicator on the driver's right hand shall move in a clockwise direc-tion when lowering, and in the case of a post and spiral indicator the pointer shall move up or down as the con-veyance moves up or down.

In the case of Whiting hoists, single drum hoists and hoists having two drums permanently fixed on one shaft, only one indicator need be provided.

(5) In every shaft exceeding three hundred feet in depth, adequate provision shall be made whereby the engine driver is warned of the arrival of the cage, skip or other means of conveyance at a point in the shaft, the distance of which from the top landing place is not less than the equivalent of three revolutions of the drum or sheave of the winding engine.

(6) On every hoist used for the conveyance of per-sons, such suitable device or devices as may be approved by the Director shall be fitted to provide against the over-winding of the cages, skips, or other conveyances.

*Overwind devices: Examination.*

(7) The overwinding prevention devices shall be examined weekly and, where practicable, tested periodi-cally and a record shall be kept by the person deputed

daartoe aangesê is, moet aantekeninge hou van hierdie ondersoek en toetse in die masjinerie-verslagboek wat regulasie 81 (4) vereis.

*Spoedwyser.*

(8) Aan alle hysmasjiene met 'n veroorloofde snelheid van meer as eenduisend voet per minuut, moet 'n registreerde tagograaf en 'n spoedwyser, wat in doeltreffende werkende toestand in stand gehou moet word, aangebring en gebruik word.

*Prospekteerwerk — Hande- of dierekrag.*

75. Die bepalings van regulasies 73, 74, 78 en 79 is nie van toepassing by prospekterskagte of -daalgame wat nie dieper as eenhonderd voet is nie en waar hyswerk met hande- of dierekrag uitgevoer word.

*Spoed van hysmasjiene.*

76. (1) Die Direkteur stel die maksimum spoed vas waarmee die hysmasjiene mag werk, en hierdie maksimum spoed moet in die skriftelike vergunning van die Direkteur aangedui en in die masjienkamer ooreenkomstig regulasie 73 opgeplak word.

*Maksimum skoftyd.*

(2) Die Direkteur stel die maksimum duur van die skof vas wat die masjien moet werk, en moet in so 'n geval hierdie voorwaarde op die vergunningsertifikaat invul.

*Verhouding: Breekbelasting/maksimum vrag.*

77. (1) Tensy die Direkteur, weens die groot diepte van die skag of die lae hysnelheid, vrystelling verleen het, mag geen hystou gebruik word vir die ophys of neerlaat van persone of materiaal, wanneer die breekbelasting by enige punt daarin verminder het tot onder ses keer die gesamentlike gewig van die tou (wanneer die vervoermiddel by sy laagste werkpunt is), die vervoermiddel en sy toebehore en die toelaatbare maksimum vrag aan persone of materiaal.

*Verhouding: Mensevrag/ander vrag.*

(2) Wanneer die hystou vir die vervoer van persone of materiaal of vir die vervoer van minerale gebruik word, bepaal die Direkteur die maksimum gewig wat aan die tou onder enige omstandigheid geheg mag word.

Die aldus bepaalde gewig mag hoegenaamd nie oorskry word nie. Die totale gewig wat aan die tou geheg is wanneer mense of materiaal vervoer word, mag .85 van die gewig wat aan die tou geheg is wanneer delfstof vervoer word, nie oorskry nie.

*Gebruik van gesplitste tou.*

(3) (a) In geen geval mag 'n gesplitste hystou, sonder die skriftelike vergunning van die Direkteur, gebruik word nie.

(b) In geen geval mag 'n hystou gebruik word waarvan 'n swak of defekte stuk afgesny en die gesnyde ente weer gesplits is nie.

*Gebruik van ou tou — toestemming.*

(4) Geen hystou wat voorheen by enige plek, buite die beheer van die bestuurder, in gebruik was, mag opnuut as hystou gebruik word nie, buiten met die Direkteur se goedkeuring.

*Reserwehystou beskikbaar.*

(5) Minstens een geskikte reserwehystou, vir iedere hysmasjiene wat in gebruik is, moet by elke myn in voorraad gehou word, en moet te alle tye gereed vir gebruik wees, uitgesonderd wanneer daar twee masjiene vir dieselfde skag is, of wanneer die Direkteur vrystelling van die bepalings van hierdie regulasie skriftelik verleen het.

under regulation 81 (1), of these examinations and tests, in the machinery record book required in terms of regulation 81 (4).

*Speed indicator.*

(8) To all winding engines with a permitted speed of over 1,000 feet per minute, there shall be fitted and used a recording tachograph and a speed indicator, which shall be maintained in good working order.

*Prospecting shafts manual or animal power.*

75. The provisions of regulations 73, 74, 78 and 79 shall not apply in the case of prospecting shafts or winzes not exceeding one hundred feet in depth where winding is done by manual or animal power.

*Speed of winding engines.*

76. (1) The Director shall fix the maximum speed at which the winding engine shall run, and such maximum speed shall be entered on the written permission of the Director, which is to be posted up in the engine room in accordance with regulation 73.

*Maximum duration of shift.*

(2) The Director shall fix the maximum duration of the shift to be worked by the engine driver, and shall in such case insert this condition on the certificate of permission.

*Relation of breaking load to maximum working load.*

77. (1) Unless exemption has been obtained from the Director because of the great depth of the shaft or the low winding speed, no winding rope shall be used for the raising and lowering of persons or material when the breaking load at any one point therein has become reduced to less than six times the combined weight of the rope (when the conveyance is at its lowest working point), the conveyance and its attachments, and the total permitted weight of persons or material.

*Ratio of man load to other load.*

(2) In the case of a winding rope that is used for the conveyance of persons or material and for the conveyance of mineral, the Director shall fix the maximum weight to be attached to the rope in any circumstances. In no case shall such weight be exceeded. The total weight attached to the rope when persons or material are conveyed shall not exceed .85 of the weight attached to the rope when mineral is conveyed.

*Spliced rope use of.*

(3) (a) In no case shall a spliced winding rope be used without the written permission of the Director.

(b) In no case shall a winding rope be used from which a weak or defective portion has been cut and the cut ends spliced.

*Use of old rope: Permission.*

(4) No winding rope which has previously been in use in any place outside the control of the manager, shall be put into use as such, except with the permission of the Director.

*Spare rope.*

(5) At least one spare winding rope suitable for each winding engine in use shall be kept in reserve on every mine, and shall be at all times ready for use, except when there are two engines for the same shaft or when the Director has in writing granted exemption from the requirements of this section.

*Toutoets.*

78. (1) Wanneer 'n nuwe hystou nie vergesel gaan van 'n toetsertifikaat uit die land waar dit vervaardig is en wat aantoon wat sy breekbelasting is en dat daardie breekbelasting deur 'n werklike toets bepaal is nie, kan daardie tou eers gebruik word nadat 'n stuk daarvan, minstens tien voet, afgesny en getoets is.

*Touverslagboek.*

(2) Die uitslag van die toets moet opgeteken word in 'n boek wat die bestuurder moet verskaf en wat die „touverslagboek” heet.

Hierdie verslagboek moet, afgesien van die werklike breekbelasting van die tou wat met die toets vasgestel is, ook nog die volgende besonderhede oor hystoue bevat:

- (i) die vervaardiger se gegewens oor die tou toe dit nuut was of 'n afskrif daarvan wat die bestuurder gesertifiseer het:

Fabrikant se naam en adres,  
rolnommer,  
datum van vervaardiging,  
datum van aankoop,  
lengte van tou (voet),  
deursnee en omtrek van tou (duim),  
of waar die tou plat is, breedte en dikte van tou (duim),  
pondgewig per voet.

*Samestelling van tou —*

getal stringe,  
deursnee van stringe (desimale van 'n duim),  
soort kern,  
klas staal waarvan die draad gemaak is,  
breekbelasting van staal waaruit draad gemaak is (2,000 lb.-ton per vierkante duim),  
breekbelasting van tou (2,000 lb.-ton),

- (ii) Geskiedenis van tou in gebruik —

naam van skag waarin tou gebruik word,  
hysafdeling waarin tou gebruik word,  
datum waarop tou gebruik word,  
datum waarop tou aangesit is,  
datum van inkorting,  
datums van herkoppeling,  
datums waarop die tou end vir end omgedraai is,  
datums van toetse na inkorting,  
breekklas van drade by hierdie toetse,  
datum waarop tou afgehaal is,  
datum van uitgloeiing of hernuwing van tou-verbindinge.

Elke verslag moet onderteken word deur die persoon wat die vereiste ondersoek moet uitvoer.

*Vry beweging in skagtoring.*

79. (1) Die skagtoring moet, buiten in gevalle waar die Direkteur skriftelike vrystelling van die bepalings van hierdie regulasie verleen het, tot op so 'n hoogte, sonder belemmering in die hyshokbaan of hysbakbaan gevoer word, dat daar vry beweging van minstens vyf-en-twintig voet toegelaat word vir die hyshok, -bak of ander vervoermiddel bokant die hoogste landingsplek vir passasiers, ingeval van oorhysing.

*Vry beweging by skagbodem.*

(2) Die laagste landingsplek vir passasiers in 'n skag, wat dieper as eenduisend voet is, buiten 'n skag wat gesink word, moet minstens vyf-en-twintig voet onbelemmerde oorhysruimte daaronder hê, waarin die vervoermiddel vryelik kan beweeg.

*Test of rope.*

78. (1) When a new winding rope is not accompanied by a test certificate from the country of manufacture showing the amount of its breaking load and that such amount has been ascertained by actual test, such rope shall not be used unless a portion thereof, not less than ten feet in length, has been cut off and tested.

*Rope record book: Contents.*

(2) The result of the test shall be recorded in a book which shall be supplied by the Manager and which shall be termed the Rope Record Book and which shall in addition to the actual breaking load of the rope obtained in the test contain the following particulars of winding ropes:—

- (i) Maker's data of rope when new or copy thereof certified by the manager:—

Name and address of manufacturer;  
coil number;  
date of manufacture;  
date of purchase;  
length of rope in feet;  
diameter and circumference of rope in inches or (in the case of flat ropes) width and thickness of rope in inches;  
weight per foot in pounds.

*Construction of Rope:—*

Number of wires;  
diameter of wires (decimals of an inch);  
class of core;  
class of steel of which wire is made;  
breaking stress of steel of which wire is made (tons of 2,000 lb. per square inch);  
breaking load of rope (tons of 2,000 lb.)

- (ii) History of rope in use:—

Name of shaft in which rope is used;  
compartment in which rope is used;  
date on which rope was put on;  
date of shortening;  
dates of recapping;  
dates of turning end for end;  
dates of tests after shortening;  
breaking stresses of wires at these tests;  
date when rope was taken off;  
dates of annealing or renewing connections between ropes and conveyances.

Each record shall be signed by the person responsible for the required examination.

*Headgear clearance.*

79. (1) The headgear shall, except in such cases as may be exempted in writing by the Director from the requirements of this regulation, be carried without obstruction to the cage or skip-way to such a height as to allow a clearance of at least twenty-five feet in which the cage, skip or other means of conveyance can travel freely above the highest passenger stopping place in case of an overwind.

*Overrun space.*

(2) The lowest passenger landing place in any shaft exceeding one thousand (1,000) feet in depth other than a sinking shaft, shall have at least twenty-five feet of unobstructed overrun space below it in which the conveyance can freely travel.

*Stutwerktuie.*

(3) In alle vertikale skagte moet daar ontkoppelhake en veerruste of klinkgrepe of ander doeltreffende toestel wees om 'n voertuig wat ontkoppel mag word, te steun.

*Konstruksie van hyshok.*

80. (1) Geen hyshok, -bak of ander voertuig mag vir die ophys of neerlaat van persone in 'n vertikale of steilhellende skag gebruik word nie, tensy dit voorsien is van 'n behoorlike dak of oordekking aan die kant naaste aan die oppervlakte, en waar toepaslik met veiligheidshake deur die Direkteur goedgekeur, uitgesonderd vir die persone wat met sink-, herstel- of ondersoekwerk in die skag besig is.

*Deure.*

(2) Geen hyshok mag gebruik word vir die ophys of neerlaat van persone nie, tensy dit so gebou is dat dit verhoed dat enige gedeelte van die liggaam van enige persoon wat daarin ry, per ongeluk in aanraking kom met die betimmering of die kante van die skag, en deure moet so gemonteer word dat hulle nie per ongeluk oopgemaak kan word nie.

*Toelaatbare getal passasiers.*

(3) Die Direkteur stel die getal persone vas wat gelyktydig in enige hyshok, hysbak, hysemmer of ander vervoermiddel toegelaat mag word om te ry; en kennisgewing wat hierdie getal duidelik aantoon, moet by elke uittreplek opgeplak gehou word.

*Gelyktydige vervoer persone en delfstof.*

(4) Geen persoon mag ry of toegelaat word om te ry in 'n hyshok of hysbak of ander vervoermiddel wat deur 'n hysmasjien bedien word wat gelyktydig gebruik word vir die vervoer van delfstof of materiaal nie.

*Uitsonderings.*

(5) Niemand mag in 'n hyshok, -bak, -emmer, trok of ander vervoermiddel saam met springstowwe ry of toegelaat word om te ry nie, uitgesonderd doppies, veiligheidslont en lontaanstekers; ook nie saam met bore, gereedskap of swaar artikels nie, behalwe wanneer dit nodig is vir herstelwerk in die skag: Met dien verstande altyd dat hierdie regulasie nie geld vir bankwagters of skagwagters nie; ook nie vir ander persone nie wat die bestuurder of mynopsigter spesiaal gemagtig het om saam met sodanige springstowwe, bore, gereedskap of ander artikels te ry; ook nie vir iemand wat toesig hou oor skag-sinkwerk nie.

*Buitevervoermiddel ry.*

(6) Niemand mag bo-op 'n hyshok of op die kant, rand, beul of raamwerk van 'n hysbak, -vat, -emmer, trok of ander soortgelyke vervoermiddel in 'n skag of daalgang op of af ry nie, of iemand anders beveel of toelaat om dit te doen nie, ongeag of sodanige hyshok, -bak, -vat, -emmer, trok of ander vervoermiddel gelaai, leeg of deels gelaai is: Met dien verstande dat diegene wat skagsink-, -ondersoek of -herstelwerk doen wel bo-op 'n leë of deels gelaai hyshok, -bak of -emmer mag ry wanneer die bestuurder of mynopsigter, met die oog op die doeltreffende uitvoering van hul pligte, dit magtig.

81. Wanneer die Direkteur sy toestemming verleen het vir die gebruik van hysmasjinerie ooreenkomstig die bepalings van regulasie 40 of 73 geld die volgende voorwaardes:

*Ondersoek van hysmasjinerie.*

(1) Die bestuurder moet 'n bevoegde persoon of persone skriftelik aanstel wie se plig dit is om sorgvuldig te ondersoek —

*Supporting contrivances.*

(3) In all vertical shafts there shall be fitted detaching hooks and spring keps or jack catches or other effective contrivance to support a detached conveyance.

*Construction of cages — Cover.*

80. (1) No cage, skip or other means of conveyance shall be used for the raising or lowering of persons in vertical or steeply inclined shafts except for the persons engaged in sinking operations, repairs, or examination of the shaft, unless it is provided with a proper roof or cover on the end nearest to the surface and where applicable with safety catches approved by the Director.

*Doors.*

(2) No cage shall be used for the raising or lowering of persons unless it is so constructed as to prevent any portion of the body of any person riding therein from accidentally coming into contact with the timbering or sides of the shaft, and doors shall be so fitted that they cannot accidentally be opened.

*Number to be carried.*

(3) The Director shall fix the number of persons to be allowed to ride at any one time in a cage, skip, bucket or other means of conveyance, and a notice clearly showing the number so fixed shall be kept posted up at each landing place.

*Simultaneous hauling of men and materials.*

(4) No person shall travel or be permitted to travel, in a cage, or skip or other means of conveyance operated by an engine which is being simultaneously used for the winding of mineral or material.

*Exceptions.*

(5) No person shall travel or be permitted to travel in a cage, skip, bucket, kibble, truck or other means of conveyance together with any explosives other than detonators, safety fuse, and fuse igniters or with any drills, tools, or heavy articles, except when the same are required for the purpose of effecting repairs in the shaft: Provided always that this regulation shall not apply to any banksman, onsetter, or any other person who shall be specially authorized by the manager or mine overseer to travel with such explosives, drills, tools, or other articles, nor to any person in charge of sinking operations.

*Travelling outside conveyance.*

(6) No person shall descend or ascend or order or permit any other person to descend or ascend a shaft or winze on the top of a cage or on the side, bow, rim, bale, or carriage of any skip, bucket, kibble, truck or other similar means of conveyance, whether loaded or unloaded or in a partially loaded skip, bucket, kibble, truck or other similar means of conveyance, provided that persons engaged in sinking operations, shaft examinations, or shaft repairs may ride on the top of an unloaded or partially loaded cage, skip, or bucket, when authorised to do so by the manager or mine overseer, if this is necessary for the efficient carrying out of their duties.

81. Whenever the permission of the Director for the use of winding plant has been obtained in accordance with the requirements of regulation 40 or 73 the following conditions shall apply:—

*Examination of winding plant.*

(1) The manager shall appoint in writing some competent person or persons whose duty it shall be to examine carefully —

*Toue, vervoermiddels, ens.*

- (a) minstens een keer per dag die hystoue en die verbindings daarvan aan die tromme en aan die hysbokke, -bakke of ander vervoermiddels, die remme en dieptemeters, die hysbokke, -bakke of ander vervoermiddels self en alle veiligheidshake daaraan gevestig, en die katrolwiele en elke uitwendige deel van die hystoerusting, van die behoorlike werking waarvan die veiligheid van persone afhang;

*Leistawe: Hysafdelings.*

- (b) minstens een keer per week die leistawe of spore en die hysafdelings in die algemeen, asook die seinreëlings.
- (2) Die ingenieur wat ingevolge regulasie 38 aangestel word, moet —

*Masjien: Ondersoek.*

- (a) minstens een keer elke week die uitwendige dele van die hysmasjien ondersoek;
- (b) minstens een keer elke jaar die hysmasjien, wat die werktoestande van sy inwendige dele betref, ondersoek;

*Toue struktuur.*

- (c) minstens een keer elke kalendermaand, met tussenpose van hoogstens 45 dae, die struktuur van die hystou ondersoek, om vas te stel in watter mate dit verswak het. Vir die doel van hierdie ondersoek moet die tou deeglik skoonmaak word op plekke wat deur die ingenieur gekies is, en die ingenieur moet kennis neem van enige vermindering in die omtrek van die tou, van die uitwendige toestand van die drade wat slytasie betref, van verroesting, breekplekke en brosheid, en alle ander data wat nodig is om vas te stel hoeveel, in hoe verre en waar die tou verswak het;

*Touverbindinge.*

- (d) minstens een keer in elke kalendermaand met tussenpose van hoogstens 45 dae, moet die ingenieur of ander bevoegde persoon wat ingevolge regulasie 38 aangestel is, die verbinding tussen die tou en die hysbok, -bak of ander vervoermiddel ondersoek.

*Pligte waar gebreke blyk.*

- (3) As daar by 'n ondersoek soos hierbo vereis 'n swaakteit of gebrek blyk wat die veiligheid van mense in gevaar stel, moet hierdie swaakteit of gebrek onmiddellik skriftelik by die bestuurder aangemeld word, en voordat die swaakteit of gebrek herstel is, mag die hysmasjinerie nie gebruik word nie. As die ondersoek kenmerke openbaar van oormatige of vinnige slytasie, of breekplekke in die drade wat, hoewel nie genoegsame rede om die tou ongeskik te verklaar nie, tog buitengewone aandag vereis, moet die ingenieur meer dikwels ondersoek uitvoer as wat subregulasie (2) hiervan voorskryf.

*Masjinerieverslagboek.*

- (4) Die bestuurder moet 'n boek, wat die „masjinerieverslagboek” heet, by die myn aanhou of laat aanhou, waarin die onderstaande besonderhede aangeteken moet word:

- (a) die name van die persone aangestel ingevolge subregulasie (1) van hierdie regulasie;

*Ropes, cages, etc.*

- (a) at least once in each day the winding ropes and the attachments thereof to the drums and to the cages, skips or other means of conveyance, the brakes and the depth indicators, the cages, skips, or other means of conveyance, and any safety catches attached thereto, and the pulley wheels and all and every external part of the winding arrangements, upon the proper working of which the safety of persons depends;

*Guides: Compartments.*

- (b) at least once in each week the guides rails and the winding compartments generally and the signalling arrangements.
- (2) The Engineer appointed under regulation 38 shall examine —

*Engine.*

- (a) at least once in each week the external parts of the winding engine;
- (b) at least once in each year the winding engine as to the working conditions of the internal parts;

*Structure of ropes.*

- (c) at least once in each calendar month at intervals not exceeding 45 days the structure of the winding rope, with a view to ascertaining the amount of deterioration thereof. For the purposes of this examination the rope must be thoroughly cleansed at places to be selected by the said engineer, who shall note any reduction in the circumference 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 the rope;

*Rope connections.*

- (d) at least once in each calendar month at intervals not exceeding 45 days, the engineer or competent person appointed under regulation 38 shall examine the connection between the rope and the cage, skip or other means of conveyance.

*Duty where defect discovered.*

- (3) If on any such examination as is hereinbefore required there is discovered any weakness or defect by which the safety of persons may be endangered, such weakness or defect shall be immediately reported to the manager in writing, and until such weakness or defect be remedied the winding plant shall not be used. 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 the usual attention, the engineer shall make more frequent examinations that are prescribed in subregulation (2) hereof.

*Machinery record book.*

- (4) The manager shall keep or cause to be kept at the mine a book to be termed the Machinery Record Book in which shall be recorded —

- (a) the names of the persons deputed under subregulation (1) of this regulation;

- (b) 'n ware verslag van die uitslag van elke ondersoek wat hierbo genoem word, wat die ondersoeker moet onderteken.

*Masjins se logboek.*

- (5) Die bestuurder moet 'n boek wat die „masjins se logboek” heet, in die hysmasjienkamer aanhou of laat aanhou, waarin die onderstaande besonderhede tweevoudig aangeteken moet word:

- (a) 'n ware verslag van die toestand van die hysmasjien insluitende die remme, koppelaars, omkeermeganisme, dieptemeters, en alle ander toebehore. So 'n verslag moet bygehou en onderteken word deur die masjins ten opsigte van elke toesigtydperk waarvan die tyd en duur aangeteken moet word;
- (b) 'n ware verslag van die toestand van die sein- inrigting as ook 'n aantekening van alle seine wat die masjins ontvang het, waarvan hy die juistheid in twyfel getrek het. So 'n verslag moet bygehou en onderteken word deur die masjins ten opsigte van elke toesigtydperk;
- (c) alle spesiale opdragte aan die masjins betreffende die veiligheid van persone. So 'n inskrywing moet onderteken word deur die persoon wat die opdrag gegee het.

*Logboek moet mede-onderteken word.*

- (6) Hierdie inskrywings in die logboek moet elke dag ondersoek en mede-onderteken word deur die persoon wat aangestel is om die pligte uit te voer wat in subregulasie (1) van hierdie regulasie genoem word. Die duplikaat moet elke dag ondersoek en geteken word deur die ingenieur wat ingevolge regulasie 38 aangestel is.

*Herbeslaan van tou.*

- (7) (a) Minstens een keer in elke ses maande moet die hystou herbeslaan word, en 'n gedeelte daarvan minstens ses (6) voet lank aan die onderste end afgesny word.
- (b) Die deel van die tou wat aldus afgesny is, moet behoorlik by die punte met binddraad vasgemaak word om te verhinder dat die stringe los raak, en moet dan getoets word. Die uitslag van die toets moet in die touverslagboek aangeteken word.

*Uitgloeïing.*

- (c) Minstens een keer elke ses maande moet die verbinding tussen die tou en die hyshok, -bak of ander vervoermiddel, en die verbinding tussen vervoermiddels waar daar meer as een vervoermiddel gebruik word, uitgloeï of vervang word.

*Aantekening van uitgloeïing.*

- (d) Daar moet behoorlike aantekeninge gehou word van die uitgloeïing van alle kettings, skakels, stawe en boue wat gebruik word om die tou aan die hyshok, -bak of ander vervoermiddel te heg. Hierdie aantekeninge moet 'n persoonlike verslag bevat deur die persoon wat ingevolge regulasie 38 aangestel is, waarin hy melding maak van die prosedure wat gevolg is en sy kommentaar oor die uitslag.

*Proefritte na herstel of vervanging van toerusting.*

82. (1) Waar 'n nuwe of pas herstelde kruiskop, hysemmer, -hok, -bak of ander vervoermiddel of 'n nuwe of pas herstelde losbreekhaak, staaf, skakel, ketting, tou- buis of ander verbindingsmiddel tussen 'n hystou en so-

- (b) a true report of the result of every such examination as is hereinbefore referred to, signed by the person making the examination.

*Driver's log book.*

- (5) The manager shall keep or cause to be kept in the winding engine room a book to be termed the Driver's Log Book, in which shall be recorded in duplicate:—

- (a) 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 engine driver for each period of charge, the time and duration of which are to be recorded;
- (b) a true report of the condition of the signalling arrangements and a notation of any signals received by the driver, the accuracy of which he has questioned; such report to be made and signed by the engine driver for each period of charge;
- (c) any special instructions involving the safety of persons given to the engine driver; such entry shall be signed by the person giving instructions.

*Log book to be countersigned.*

- (6) These entries in the log book shall be inspected and countersigned daily by the person appointed to carry out the duties specified in subregulation (1) of this regulation. The duplicate shall be inspected and signed daily by the engineer appointed under regulation 38.

*Re-capping of rope.*

- (7) (a) At least once in six months the winding rope shall be recapped, a portion thereof not less than six (6) feet in length being at the same time cut off the lower end.
- (b) The portion of the rope so cut off shall have the ends adequately fastened with binding wire to prevent disturbance of the strands and shall be tested. The results of the test shall be entered in the Rope Record Book.

*Annealing.*

- (c) At least once in six months, the connection between the rope and the cage, skip or other means of conveyances, if more than one conveyance is used, shall be annealed or re-placed.

*Record of annealing.*

- (d) A proper record shall be kept of the annealing of all chains, links, bars and bolts used in connecting the rope to the cage, skip or other means of conveyance. This record shall contain a personal report by the person appointed in terms of regulations 38 on the procedure and his comments on the results.

*Trial runs after repair or replacement of equipment.*

82. (1) When any new or newly repaired crosshead, bucket, cage, skip or other means of conveyance or new or newly serviced detaching hook, bar, link chain, capel, or other means of connection between a winding rope

- (b) 'n ware verslag van die uitslag van elke ondersoek wat hierbo genoem word, wat die ondersoeker moet onderteken.

*Masjins se logboek.*

- (5) Die bestuurder moet 'n boek wat die „masjins se logboek” heet, in die hysmasjienkamer aanhou of laat aanhou, waarin die onderstaande besonderhede tweevoudig aangeteken moet word:

- (a) 'n ware verslag van die toestand van die hysmasjien insluitende die remme, koppelaars, omkeermeganisme, dieptemeters, en alle ander toebehore. So 'n verslag moet bygehou en onderteken word deur die masjins ten opsigte van elke toesigtydperk waarvan die tyd en duur aangeteken moet word;
- (b) 'n ware verslag van die toestand van die sein-irigting as ook 'n aantekening van alle seine wat die masjins ontvang het, waarvan hy die juistheid in twyfel getrek het. So 'n verslag moet bygehou en onderteken word deur die masjins ten opsigte van elke toesigtydperk;
- (c) alle spesiale opdragte aan die masjins betreffende die veiligheid van persone. So 'n inskrywing moet onderteken word deur die persoon wat die opdrag gegee het.

*Logboek moet mede-onderteken word.*

- (6) Hierdie inskrywings in die logboek moet elke dag ondersoek en mede-onderteken word deur die persoon wat aangestel is om die pligte uit te voer wat in subregulasie (1) van hierdie regulasie genoem word. Die duplikaat moet elke dag ondersoek en geteken word deur die ingenieur wat ingevolge regulasie 38 aangestel is.

*Herbeslaan van tou.*

- (7) (a) Minstens een keer in elke ses maande moet die hystou herbeslaan word, en 'n gedeelte daarvan minstens ses (6) voet lank aan die onderste end afgesny word.
- (b) Die deel van die tou wat aldus afgesny is, moet behoorlik by die punte met binddraad vasgemaak word om te verhinder dat die stringe los raak, en moet dan getoets word. Die uitslag van die toets moet in die touverslagboek aangeteken word.

*Uitgloeing.*

- (c) Minstens een keer elke ses maande moet die verbinding tussen die tou en die hyshok, -bak of ander vervoermiddel, en die verbinding tussen vervoermiddels waar daar meer as een vervoermiddel gebruik word, uitgloeï of vervang word.

*Aantekening van uitgloeïing.*

- (d) Daar moet behoorlike aantekeninge gehou word van die uitgloeïing van alle kettings, skakels, stawe en boue wat gebruik word om die tou aan die hyshok, -bak of ander vervoermiddel te heg. Hierdie aantekeninge moet 'n persoonlike verslag bevat deur die persoon wat ingevolge regulasie 38 aangestel is, waarin hy melding maak van die prosedure wat gevolg is en sy kommentaar oor die uitslag.

*Proefritte na herstel of vervanging van toerusting.*

82. (1) Waar 'n nuwe of pas herstelde kruiskop, hysemmer, -hok, -bak of ander vervoermiddel of 'n nuwe of pas herstelde losbreekhaak, staaf, skakel, ketting, tou-buis of ander verbindingsmiddel tussen 'n hystou en so-

- (b) a true report of the result of every such examination as is hereinbefore referred to, signed by the person making the examination.

*Driver's log book.*

- (5) The manager shall keep or cause to be kept in the winding engine room a book to be termed the Driver's Log Book, in which shall be recorded in duplicate:—

- (a) 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 engine driver for each period of charge, the time and duration of which are to be recorded;
- (b) a true report of the condition of the signalling arrangements and a notation of any signals received by the driver, the accuracy of which he has questioned; such report to be made and signed by the engine driver for each period of charge;
- (c) any special instructions involving the safety of persons given to the engine driver; such entry shall be signed by the person giving instructions.

*Log book to be countersigned.*

- (6) These entries in the log book shall be inspected and countersigned daily by the person appointed to carry out the duties specified in subregulation (1) of this regulation. The duplicate shall be inspected and signed daily by the engineer appointed under regulation 38.

*Re-capping of rope.*

- (7) (a) At least once in six months the winding rope shall be recapped, a portion thereof not less than six (6) feet in length being at the same time cut off the lower end.
- (b) The portion of the rope so cut off shall have the ends adequately fastened with binding wire to prevent disturbance of the strands and shall be tested. The results of the test shall be entered in the Rope Record Book.

*Annealing.*

- (c) At least once in six months, the connection between the rope and the cage, skip or other means of conveyances, if more than one conveyance is used, shall be annealed or re-placed.

*Record of annealing.*

- (d) A proper record shall be kept of the annealing of all chains, links, bars and bolts used in connecting the rope to the cage, skip or other means of conveyance. This record shall contain a personal report by the person appointed in terms of regulations 38 on the procedure and his comments on the results.

*Trial runs after repair or replacement of equipment.*

82. (1) When any new or newly repaired crosshead, bucket, cage, skip or other means of conveyance or new or newly serviced detaching hook, bar, link chain, capel, or other means of connection between a winding rope



*Toue, vervoermiddels, ens.*

- (a) minstens een keer per dag die hystoue en die verbindings daarvan aan die tromme en aan die hysbokke, -bakke of ander vervoermiddels, die remme en dieptemeters, die hysbokke, -bakke of ander vervoermiddels self en alle veiligheidshake daaraan gevestig, en die katrolwiele en elke uitwendige deel van die hystoerusting, van die behoorlike werking waarvan die veiligheid van persone afhang;

*Leistawe: Hysafdelings.*

- (b) minstens een keer per week die leistawe of spore en die hysafdelings in die algemeen, asook die seinreëlings.
- (2) Die ingenieur wat ingevolge regulasie 38 aangestel word, moet —

*Masjien: Ondersoek.*

- (a) minstens een keer elke week die uitwendige dele van die hysmasjien ondersoek;
- (b) minstens een keer elke jaar die hysmasjien, wat die werktoestande van sy inwendige dele betref, ondersoek;

*Toue struktuur.*

- (c) minstens een keer elke kalendermaand, met tussenpose van hoogstens 45 dae, die struktuur van die hystou ondersoek, om vas te stel in watter mate dit verswak het. Vir die doel van hierdie ondersoek moet die tou deeglik skoonmaak word op plekke wat deur die ingenieur gekies is, en die ingenieur moet kennis neem van enige vermindering in die omtrek van die tou, van die uitwendige toestand van die drade wat slytasie betref, van verroesting, breekplekke en brosheid, en alle ander data wat nodig is om vas te stel hoeveel, in hoe verre en waar die tou verswak het;

*Touverbindinge.*

- (d) minstens een keer in elke kalendermaand met tussenpose van hoogstens 45 dae, moet die ingenieur of ander bevoegde persoon wat ingevolge regulasie 38 aangestel is, die verbinding tussen die tou en die hysbok, -bak of ander vervoermiddel ondersoek.

*Pligte waar gebreke blyk.*

- (3) As daar by 'n ondersoek soos hierbo vereis 'n swakheid of gebrek blyk wat die veiligheid van mense in gevaar stel, moet hierdie swakheid of gebrek onmiddellik skriftelik by die bestuurder aangemeld word, en voordat die swakheid of gebrek herstel is, mag die hysmasjinerie nie gebruik word nie. As die ondersoek kenmerke openbaar van oormatige of vinnige slytasie, of breekplekke in die drade wat, hoewel nie genoegsame rede om die tou ongeskik te verklaar nie, tog buitengewone aandag vereis, moet die ingenieur meer dikwels ondersoek uitvoer as wat subregulasie (2) hiervan voorskryf.

*Masjinerieverlagboek.*

- (4) Die bestuurder moet 'n boek, wat die „masjinerieverlagboek” heet, by die myn aanhou of laat aanhou, waarin die onderstaande besonderhede aangeteken moet word:

- (a) die name van die persone aangestel ingevolge subregulasie (1) van hierdie regulasie;

*Ropes, cages, etc.*

- (a) at least once in each day the winding ropes and the attachments thereof to the drums and to the cages, skips or other means of conveyance, the brakes and the depth indicators, the cages, skips, or other means of conveyance, and any safety catches attached thereto, and the pulley wheels and all and every external part of the winding arrangements, upon the proper working of which the safety of persons depends;

*Guides: Compartments.*

- (b) at least once in each week the guides rails and the winding compartments generally and the signalling arrangements.
- (2) The Engineer appointed under regulation 38 shall examine —

*Engine.*

- (a) at least once in each week the external parts of the winding engine;
- (b) at least once in each year the winding engine as to the working conditions of the internal parts;

*Structure of ropes.*

- (c) at least once in each calendar month at intervals not exceeding 45 days the structure of the winding rope, with a view to ascertaining the amount of deterioration thereof. For the purposes of this examination the rope must be thoroughly cleansed at places to be selected by the said engineer, who shall note any reduction in the circumference 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 the rope;

*Rope connections.*

- (d) at least once in each calendar month at intervals not exceeding 45 days, the engineer or competent person appointed under regulation 38 shall examine the connection between the rope and the cage, skip or other means of conveyance.

*Duty where defect discovered.*

- (3) If on any such examination as is hereinbefore required there is discovered any weakness or defect by which the safety of persons may be endangered, such weakness or defect shall be immediately reported to the manager in writing, and until such weakness or defect be remedied the winding plant shall not be used. 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 the usual attention, the engineer shall make more frequent examinations that are prescribed in subregulation (2) hereof.

*Machinery record book.*

- (4) The manager shall keep or cause to be kept at the mine a book to be termed the Machinery Record Book in which shall be recorded —

- (a) the names of the persons deputed under subregulation (1) of this regulation;

danige vervoermiddel, of enige hystou ingerig is, moet sodanige vervoermiddel, verbinding of tou sorgvuldig ondersoek word deur 'n bevoegde en betroubare persoon wat die bestuurder daartoe gemagtig het, en sodanige vervoermiddel, verbinding of tou mag nie vir die gewone vervoer van mense gebruik word nie, totdat die vervoermiddel met sy maksimum toelaatbare vrag aan materiaal of minerale twee proefritte deurgemaak het op en neer in die skag tussen die hoogste en die laagste gebruiklike landingsplekke. Die eerste rit op en neer in die skag moet teen minder as die helfte van die maksimum toelaatbare hysnelheid geskied en die tweede proefrit op en neer teen die volle toelaatbare hysnelheid.

(2) Die uitslag van die bogenoemde ondersoek moet onmiddellik in die touverslagboek opgeteken word, en die touverslagboek moet te alle tye vir 'n beampte van die Afdeling Mynwese ter ondersoek lê.

(3) Waar 'n skag gesink word voordat so 'n vervoermiddel, verbinding of tou geïnstalleer is, moet almal buiten diegene wat noodsaaklik aan die installering moet werk, die skag verlaat, en niemand mag daar bly of daar binnekam of verplig of toegelaat word om daar te bly of daar binne te kom of om die skag na die installering binne te gaan nie, voordat die proefritte geskied het.

#### *Proefrit na stilstand.*

83. Telkens wanneer hyswerk langer as 'n uur gestaak is, mag die hysmasjien nie vir die ophys of neerlaat van persone gebruik word nie, voordat die hysbok, -bak of ander vervoermiddel minstens een volle rit op en af in die werkgedeelte van die skag afgelê het.

#### *Toetse deur die inspekteur van masjinerie.*

84. Die Direkteur kan, na beraad met die bestuurder, gelas dat die inspekteur van masjinerie alle hysmasjiene wat vir die gereelde vervoer van mense goedgekeur is, spesifiek en periodiek getoets of ondersoek moet word.

#### *Vrystellings vir hysmasjiene.*

85. Die Direkteur kan, wanneer die eienaar of bestuurder daarom by hom aansoek doen, skriftelik vrystelling verleen van een of elk van die bepalings van regulasies 73, 74, 79 en 81, maar niemand buiten skag-sinkers, of mense wat 'n skag of daalgang herstel of ondersoek mag gehys of neergelaat word met 'n hysmasjien waarvoor sodanige vrystelling verleen is.

#### *Spoor- en tremweë.*

86. Niemand mag belas word met die toesig oor 'n lokomotief wat by of in 'n myn of bedryf gebruik word, onderwyl die lokomotief gebruik word vir die vervoer van persone (behalwe dié wat die lokomotief of trein bestuur) nie, tensy hy 'n permit hou wat ooreenkomstig regulasie 42 uitgereik is.

#### *Ondergrondse vervoer. Bepalings vir seine en veiligheids-toestelle.*

87. Die volgende bepalings geld vir ondergrondse vervoer:

(1) (a) Waar vervoer plaasvind deur middel van masjinerie anders as lokomotiewe, moet daar 'n seintoe-stel aangebring word, deur middel waarvan duidelike seine vanuit geskikte plekke langs die koekepanweg aan die masjinis gegee kan word.

(b) Waar vervoer deur swaartekrag plaasvind en die hellende vlak meer as eenhonderd-en-vyftig voet lank is, moet voorsiening gemaak word vir een of ander doeltreffende toestel vir die wisseling van duidelike seine tussen die stopplekke.

(c) Langs elke hellende vlak moet voorsiening gemaak word vir een of meer doeltreffende toestelle wat

and such conveyance, or any winding rope is installed, such conveyance, connection or rope shall be carefully examined by some competent and reliable person authorised thereto by the manager and such conveyance, connection or rope shall not be used for the ordinary transport of persons until the conveyance containing its maximum permitted weight of material or mineral has been run through two trial trips up and down the shaft between the highest and lowest stopping places ordinarily in use. The first such trip up and down the shaft shall be run at less than half the permitted maximum winding speed and the second such trip up and down the shaft at the full permitted winding speed.

(2) The result of the above examination shall be immediately recorded in the Rope Record Book which shall always be open to the inspection of any officer of the Mines Division.

(3) In the case of a shaft in the course of sinking before such conveyance, connection or rope is installed, all persons other than those necessarily required to effect the installation shall be withdrawn from the shaft and no person shall remain or enter or be caused or permitted to remain or enter the shaft after such installation until such trial trips have been run.

#### *Trial run after stoppage.*

83. After any stoppage of winding exceeding one hour in duration, the winding engine shall not be used for raising or lowering persons until the cage, skip or other means of conveyance has been run at least one complete trip up and down the working portion of the shaft.

#### *Tests by inspector of machinery.*

84. The Director shall, after consultation with the manager, have the power to order specific or periodic tests or inspections by the Inspector of Machinery of all hoists permitted regularly to convey persons.

#### *Exemptions for hoists.*

85. Exemption in writing from some or all of the provisions of regulations 73, 74, 79 and 81 may be given by the Director on application being made to him by the owner or manager, but no persons other than sinkers or persons engaged in repairing or examining a shaft or winze shall be raised or lowered by a hoist, for which such exemption has been granted.

#### *Railways and Tramways.*

86. No person shall be placed in charge of a locomotive engine used on or in a mine or works whilst used for the conveyance of persons other than those required for the working of the locomotive or train unless he is the holder of a permit issued in accordance with regulation 42.

#### *Underground Tramways: Provisions for signals and safety devices.*

87. The following provisions shall apply to underground traction:—

(1) (a) Where traction is operated by machinery other than locomotives, a signalling apparatus shall be provided by which distinct signals can be given to the engine driver from convenient places along the tramway;

(b) where traction is operated by gravity and the inclined plane exceeds one hundred and fifty feet in length, some efficient means of communicating distinct signals between the stopping places shall be provided;

(c) on every inclined plane one or more effective contrivances shall be provided and used to

gebruik word om trokke en ander voertuie te keer, ingeval hulle buite beheer langs sodanige hellende vlak sou beweeg: Met dien verstande dat hierdie subregulasie nie van toepassing is op hellende vlakke waar die helling van so 'n aard is dat trokke nie uit beheer kan raak nie. Waar trokke deur middel van 'n tou getrek word, moet hulle behoorlik aan die tou vasgemaak word voordat hulle beweeg of in 'n posisie geplaas word vanwaar hulle buite beheer kan raak.

(d) Wanneer voormelde doeltreffende toestelle met die hand gewerk word, moet aan elke persoon wat sodanige toestel werk, genoegsame beskerming verskaf word teen enige trok of voertuig wat buite beheer raak.

(e) Die skofbaas moet persoonlik in die afdeling van die myn onder sy toesig, alle persone aanstel wat nodig is om 'n toestel wat in subregulasie 1 (c) van hierdie regulasie genoem word, te werk, en sodanige skofbaas moet sodanige persoon persoonlik onderrig in verband met die behoorlike en veilige manier waarop hy sy dienste moet verrig; indien daar geen skofbaas is nie, moet die toesighoudende mynwerker of spanbaas 'n persoon aanstel om sodanige toestel te bedien en hom persoonlik onderrig in die behoorlike en veilige wyse waarop hy sy pligte moet uitvoer.

#### *Skuilplekke.*

(2) (a) As persone toegelaat word om te gaan langs 'n vervoerweg of hellende vlak, waar vervoer deur middel van masjinerie of swaartekrag plaasvind en waar die trekspoed meer as vier myl per uur is, of waar die helling meer as een in twaalf is, moet daar, ingeval daar nie voldoende ruimte vir 'n persoon is om tussen die bewegende trokke en die kant van die vervoerweg of hellende vlak te staan nie, voorsiening gemaak word vir skuilplekke, wat nie meer as vyftig voet van mekaar af moet wees nie.

As die Direkteur dit verlang, moet voorsiening vir afgeskorte verkeersweë gemaak word.

(b) Iedere sodanige skuilplek moet voortdurend oopgehou word.

#### *Ry op trokke of hystoue.*

88. (1) Niemand mag op of in enige trok of op die hystou ry nie, tensy hy daartoe deur die bestuurder of mynopsigter gemagtig is.

(2) Die bestuurder of mynopsigter mag geen gereelde vervoer van persone in of op enige trok of ander vervoermiddel op 'n vervoerweg of hellende vlak, waar vervoer deur masjinerie plaasvind, toelaat nie, voordat skriftelike vergunning van die Direkteur verkry is, wat sodanige voorwaardes kan opleë as wat hy nodig ag vir die veiligheid van persone wat vervoer word.

#### *Vry ruimte.*

89. Waar 'n hoofverkeersweg tussen twee spoorlyne geleë is, moet daardie spoorlyne so ver van mekaar af gehou word dat daar tussen twee trokke wat mekaar op afsonderlike spore verbygaan, 'n vry ruimte van minstens twee voet moet wees: Met dien verstande dat hierdie regulasie nie van toepassing is op vervoerweë waar die snelheid van die trokke minder as vier myl per uur en die helling onder een in twaalf is nie.

#### *Publieke oorgange.*

90. (1) Waar 'n koekepanweg 'n publieke spoorlyn, 'n elektriese, stoom- of ander koekepanweg by 'n gelykgrondse oorgang kruis, moet daar 'n sinjaalwagter met 'n rooi vlag by die oorweg geplaas word om mense te waarsku teen die nadering van trokke, en om te verhoed dat sulke trokke die spoorlyn oorgaan terwyl 'n trein in aantog is.

arrest trucks or other vehicles should they run or move out of control down such inclined plane, provided that this subregulation shall not apply to inclined planes where the gradient is such that trucks cannot run out of control.

Where trucks are operated by a rope, they shall be properly attached to the rope before being moved into, or placed in a position from which a runaway can occur;

(d) where the aforementioned effective contrivances are hand-operated, every person operating any such contrivance shall be afforded adequate protection from any truck or vehicle moving out of control;

(e) the shift boss in the section of the mine under his charge shall personally appoint every person required to operate a contrivance such as referred to in subregulation (1) (c) hereof, and such shift boss shall personally instruct such person in the proper and safe way of performing his duties; if there is no shift boss the miner or ganger in charge shall appoint a person to operate such contrivance and shall personally instruct such person in the proper and safe way of performing his duties.

#### *Manholes.*

(2) (a) If persons are allowed to travel on any haulageway or inclined plane where traction is operated by machinery or gravity and where the speed of traction exceeds four miles per hour or where the gradient exceeds one in twelve, places of refuge at intervals of not more than fifty feet shall be provided, if there is not ample room for a person to stand between moving trucks and the side of the haulageway or inclined plane. If the Director requires it, fenced travelling ways shall be provided.

(b) Every such place of refuge shall be constantly kept clear.

#### *Riding on haulage gear.*

88. (1) No person shall travel on or in any truck or on the haulage rope unless authorised to do so by the manager or mine overseer.

(2) The manager or mine overseer shall not authorise the regular conveyance of persons in or on any truck or other means of conveyance on any haulage or inclined plane where traction is operated by machinery until written permission has been obtained from the Director, who may impose such conditions as he considers necessary for the safety of the persons conveyed.

#### *Clearance.*

89. Where a main travelling-way lies between a double line of rails, such lines shall be kept sufficiently far apart to allow a clearance of not less than two feet between any two trucks passing each other on the respective lines: Provided that this regulation shall not apply to haulageways in which the speed of the trucks is less than four miles per hour and the gradient less than one in twelve.

#### *Public crossings.*

90. (1) Where a tramway passes over a public railwayline, electric, steam or other tramway at a level crossing, a signalman bearing a red flag shall be stationed at the crossing to warn people of the approach of the tramway trucks, and to prevent such trucks crossing a railway line while a train is approaching.

(2) Geen trok of trein van trokke mag oor 'n gelykgrondse oorgang soos hierbo omskrywe, of oor enige gelykgrondse oorgange van 'n verkeersweg of pad, teen 'n groter snelheid as vier myl per uur getrek word nie.

*Uitgange na die oppervlakte, verkeersweë en lere.*

91. (1) Elke myn moet voorsien wees van skagte of uitgange na die oppervlakte sodat, uitgesonderd soos vergun by regulasie 93, elke persoon wat ondergronds in so 'n myn werk, minstens twee afsonderlike en onafhanklike skagte of uitgange tot sy beskikking het wat uitgang uit die myn na die oppervlakte bied.

(2) Sulke twee afsonderlike en onafhanklike skagte of uitgange na die oppervlakte —

*Afstande uitmekaar.*

(a) mag op geen punt nader as dertig voet van mekaar wees nie;

*Vervoerreëlings.*

(b) moet van behoorlike fasiliteite voorsien wees, wat voortdurend vir gebruik beskikbaar gehou moet word ten einde persone in staat te stel om van en na die oppervlakte te gaan;

*Instandhouding.*

(c) moet in 'n veilige toestand gehou word en deurgaans 'n dwarsdeursnee-oppervlakte hê wat voldoende is om die vrye deurgang van persone toe te laat.

*Verantwoordelikheid.*

(3) Die mynbestuurder moet sorg dat sodanige uitgange na die oppervlakte in stand bly. As daar in so 'n uitgang 'n versperring voorkom of enigiets in die myn gebeur wat die veilige gebruik van so 'n uitgang belemmer, moet die versperring of gebeurtenis onmiddellik by die bestuurder aangemeld word, en moet hy die Direkteur daarvan verwittig.

*Twee verbindingsweë met skagte of uitgange.*

92 (1) Behoudens die vergunnings ingevolge regulasie 94 mag niemand 'n werkplek in 'n myn betree of daar toegelaat word nie, tensy hy twee uitweë uit so 'n werkplek — een na elk van die twee skagte of uitgange na die oppervlakte — tot sy beskikking het. Hierdie uitweë moet so ingerig word, dat as die een, op die een of ander plek, ontoeganklik raak, die ander nog 'n uitweg verleen uit so 'n werkplek na 'n skag of uitgang na die oppervlakte.

(2) Die verbindings wat uitweë verskaf na die skag of uitgange wat subregulasie (1) van hierdie regulasie vereis moet —

*Beweegfasiliteite.*

(a) van behoorlike fasiliteite voorsien wees, wat voortdurend vir gebruik beskikbaar gehou moet word, ten einde persone in staat te stel om van en na die oppervlakte te gaan;

*Instandhouding.*

(b) in 'n veilige toestand gehou word en deurgaans 'n dwarsdeursnee-oppervlakte hê wat voldoende is om die vrye deurgang van persone toe te laat.

*Verantwoordelikheid.*

(3) Die mynbestuurder is verantwoordelik vir die verbindingsweë wat by subregulasie (1) hiervan vereis word. Ontstaan daar 'n versperring in so 'n verbindingsweg, of gebeur daar iets in die myn wat die veilige gebruik van die verbindingsweg belemmer, moet so 'n versperring of gebeurtenis onverwyld by die bestuurder aangemeld word.

(2) No tramway truck may be run over any level crossing as specified above or over any level crossing of a road or pathway at a greater speed than four miles an hour.

*Outlets, travelling ways and ladders.*

91. (1) Every mine shall be provided with shafts or outlets to surface such that except as permitted in terms of regulation 93 every person employed underground in such mine shall have available to him not less than two separate and independent shafts or outlets affording means of egress from underground to surface.

(2) Such two separate and independent shafts or outlets to surface —

*Distance apart.*

(a) shall not at any point be nearer to each other than thirty feet;

*Travelling arrangements.*

(b) shall be provided with proper arrangements, which shall be kept constantly available for use, to enable persons to travel to and from the surface;

*Maintenance.*

(c) shall be maintained in a safe condition and at a sufficient cross-sectional area throughout to allow the free passage of persons.

*Responsibility.*

(3) The manager of the mine shall be responsible for such outlets to surface. Should any obstruction arise in such outlet or anything occur in the mine to affect the safe use of such outlet such obstruction or occurrence shall be immediately reported to the manager and by him to the Director.

*Two connecting ways to shafts or outlets.*

92. (1) Except as permitted in terms of regulation 94 no person shall enter or be permitted to enter any working in a mine unless he has available to him at least two ways of egress from such working, one to each of two shafts or outlets to surface. Such ways shall be so arranged that should either become unavailable at any point the other will afford means of egress from such working to a shaft or outlet to surface.

(2) The connecting ways providing ways of egress to the shaft or outlets required under subregulation (1) hereof, shall:—

*Travelling arrangements.*

(a) be provided with proper arrangements which shall be kept constantly available for use to enable persons to travel to and from the shafts or outlets;

*Maintenance.*

(b) be maintained in a safe condition and at a sufficient cross-sectional area throughout to allow the free passage of persons.

*Responsibility.*

(3) The manager of the mine shall be responsible for the connecting ways required under subregulation (1) hereof. Should any obstruction arise in such connecting way or anything occur in the mine to affect the safe use of such connecting way such obstruction or occurrence shall be immediately reported to the manager.

die bepalings van regulasie 93, die enigste uitgang na die oppervlakte bied vir persone wat in ondergrondse delfplekke werk;

*Installing van lere in verbindingsweg na skag of uitgang.*

- (b) in 'n verbinding of gedeelte daarvan vanaf enige gedeelte van die ondergrondse delfplekke na 'n skag of uitgang na die oppervlakte, indien sodanige verbinding of gedeelte daarvan die enigste uitgang na 'n skag of uitgang na die oppervlakte bied vir persone wat in enige werkplek werk;

*Installing van lere in skagte wat gesink word.*

- (c) in 'n skag of daalgang wat gesink word. In dié geval moet die leerinstallasie verskaf word tot binne so 'n afstand vanaf die bodem van die skag of daalgang as wat die minimum is wat nodig is om die leerinstallasie gedurende skietwerk teen beskadiging te vrywaar.

Vanaf die onderent van sodanige leerinstallasie tot op die bodem van die skag moet daar ketting- of draad-touere verskaf word.

*Twee hysmasjiene in plaas van leerinstallasie.*

(2) Die bepalings van subregulasie (1) van hierdie regulasie is nie van toepassing nie waar minstens twee hysinstallasies van voldoende kapasiteit vir onmiddellike gebruik beskikbaar gehou word om persone te vervoer, en indien voldoende krag vir hysdoeleindes van twee onafhanklike bronne by die hysinstallasies verskaf word, sodat die kragtoevoer een bron maklik beskikbaar is ingeval die toevoer vanaf die ander bron faal.

*Loopweë in skagte.*

96. (1) In elke skag met 'n hellingshoek van vyf-en-veertig grade of meer met die horisontale, moet elke afdeling, wat as 'n loopweg gebruik word, veilig van die ander afdelings afgeskort word met geskikte middels om persone in die loopweg te beskerm teen vallende voorwerpe wat in die loopweg geprojekteer of gedeflekteer mag word. So 'n afdeling moet met 'n behoorlike leer voorsien word.

(2) In elke skag met 'n hellingshoek van meer as tien grade en minder as vyf-en-veertig grade, moet elke afdeling, wat as loopweg gebruik word, veilig van die ander afdelings afgeskort word tot op 'n hoogte van minstens vyf voet bokant die leer, reghoekig met die helling gemeet.

(3) Die Direkteur kan skriftelike vrystelling verleen van die bepalings van subregulasies (1) en (2) hiervan, waar skagte nie vir hysdoeleindes gebruik word nie.

*Leerweë.*

97. Die volgende bepalings is van toepassing op leerinstallasies in 'n myn:

(1) Waar die hellingshoek met die horisontale meer as vyftien grade en minder as sewentig grade is, moet die lere nie vir 'n afstand van meer as vyftig voet aaneenlopend wees nie.

(2) Waar die hellingshoek met die horisontale sewentig grade of meer is, moet rusplekke (platforms) verskaf word op afstande van hoogstens dertig voet van mekaar, en die lere moet so geplaas word dat hulle die inklingate van die rusplekke dek.

(3) Waar die hellingshoek met die horisontale meer as vyf-en-dertig grade is, moet die lere minstens drie voet bokant die bek van die skag of ander uitgraving en bokant elke rusplek verbystek, uitgesonderd waar sterk handrelings by sodanige bek of rusplek aangebring is.

is allowed to afford the only means of egress to surface for persons employed in underground workings;

*Installation of ladders in connecting way to shaft or outlet.*

- (b) in a connecting way, or part thereof, from any part of the underground workings to a shaft or outlet to the surface if such connecting way, or part thereof, affords the only means of egress to a shaft or outlet to surface for persons employed in any working place;

*Installation of ladders in sinking shafts.*

- (c) in a shaft or winze in the course of sinking.

In this case the ladderway shall be provided to such a distance from the bottom of such shaft 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 there shall be provided chain or wire rope ladders.

*Two winding plants in lieu of ladderway.*

(2) The provisions of subregulation (1) hereof 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 such source the supply from the other will be readily available.

*Foot travelling ways in shafts.*

96. (1) In every shaft that has an inclination of forty-five degrees or more from the horizontal, any compartment used as a foot travelling way shall be securely partitioned off from the other compartments by suitable means to protect persons in the travelling way against danger from falling objects that may be projected or deflected into the travelling way. Such compartment shall be equipped with a proper ladder.

(2) In every shaft that has an inclination of more than ten degrees but less than forty-five degrees, any compartment used as a foot travelling way shall be securely partitioned off from the other compartments to a height of at least five feet above the ladder, measured normal to the dip.

(3) Shafts not used for winding purposes may be exempted in writing from the provisions of subregulations (1) and (2) hereof by the Director.

*Ladderways.*

97. The following provisions shall apply to ladderways in a mine:—

(1) Where the inclination from the horizontal is more than fifteen degrees and less than seventy degrees the ladder shall not be continuous over a greater distance than fifty feet.

(2) Where the inclination from the horizontal is seventy degrees or more resting platforms shall be provided at distances apart of not more than thirty feet and the ladders shall be so placed as to cover the manholes of the resting platforms.

(3) Where the inclination from the horizontal is more than thirty-five degrees the ladders shall project at least three feet above the mouth of the shaft or other excavation and above every resting place, except when strong rails are fixed at such mouth or resting place.

(4) Geen leer mag met 'n hellingshoek van meer as tagtig grade met die horisontale opgerig word nie, uitgesonderd met die skriftelike toestemming van die Direkteur.

(5) Geen leer mag in 'n oorhangende posisie opgerig word nie of so dat dit beweegruimte in 'n verkeersweg belemmer nie.

(6) Elke leer moet —

- (a) stewig gemaak wees;
- (b) stewig aan die betimmering of muur van die leerweg geheg word; en
- (c) in goeie toestand gehou word.

*Gereedskap en materiaal mag nie op leerweë gedra word nie.*

98. Niemand mag enige boor, stuk gereedskap of enige los materiaal op 'n leerinstallasie in 'n vertikale of steilhellende skag of daalgang dra of toegelaat word om dit te dra nie, uitgesonderd vir sover dit nodig is vir die uitvoer van herstelwerk aan sodanige vertikale of steilhellende skag of daalgang.

*Hoogte van hoofverkeersweë.*

99. 'n Hoogte van minstens ses voet, of sodanige minder hoogte as wat die Direkteur toelaat, moet in elke hoofverkeersweg in 'n myn gehandhaaf word.

By die toepassing van hierdie regulasie beteken „hoofverkeersweg” 'n weg wat deur die oorgrote meerderheid skofwerkers van enige skof, wat in die myn werk, gebruik word om van en na hulle werkplekke te gaan, en, waar die myn in seksies of distrikte ingedeel is, beteken dit die weg wat gebruik word deur die meerderheid skofwerkers wat in sodanige seksie of distrik werk.

*Ventilasie en vure. Skagboord moet skoon gehou word.*

100. (1) Die omgewing van die boorde van intrek-skagte moet sover doenlik, skoon gehou word van rook en stof.

(2) Die lugstroom in die intrekskag moet paslik verdeel word om te verseker dat elke ventilasiewyk in 'n myn te alle tye voorsien word van vars lug, wat nooit minder as 'n hoeveelheid van sewentig kubieke voet per minuut mag wees nie vir elke persoon wat in so 'n wyk werk en wat 'n minimum snelheid van vyftig voet per minuut by die werkfront het.

(3) Die lugstroom in 'n ventilasiewyk moet eweredig verdeel word sodat elke werkplek in die myn minstens sewentig kubieke voet lug per minuut per werker daarin kry, en dat die katatermometerstandaard, wat die Direkteur na beraad met die mynbestuurder stel, volgehou word.

*Werktuiglike hulpmiddels.*

(4) Waar die natuurlike lugstroom in 'n myn of werkplek van 'n myn ontoereikend is, moet daar geskikte meganiese ventilasietoestelle ingerig en aan die gang gehou word by of in daardie myn of werkplek ter versekering van 'n voldoende lugstroom.

*Aanleg moet geskik wees.*

(5) Waar die Direkteur meen dat 'n ventilasiestelsel nie paslik aangelê is nie kan hy die bestuurder skriftelik gelas om die aanleg te verbeter.

*Selfsluitende deure.*

(6) Elke deur wat regstreeks of onregstreeks die ventilasie van 'n myn beïnvloed, moet so ingerig word dat

(4) No ladder shall be erected at an inclination of more than eighty degrees from the horizontal except with the written permission of the Director.

(5) No ladder shall be fixed in an overhanging position or so as to obstruct the travelling space in any roadway.

(6) Every ladder shall be —

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

*Tools and material not to be carried on ladder ways.*

98. 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 connecting way except so far as may be necessary in executing repairs to such ladderway, vertical or steeply inclined shaft or connecting way.

*Height of Main Travelling roads.*

99. Every main travelling road in a mine shall be maintained at a height of at least six feet or at a lesser height as the Director may permit in writing.

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 men employed in such section or district.

*Ventilation and fires: Collar of shaft to be kept clear.*

100. (1) The vicinity of the collars of downcast shafts shall so far as practicable be kept clear of smoke and dust.

*Splitting of current: Quantity of air per person.*

(2) The ventilating current from the downcast shaft shall be suitably split to provide that each ventilating district in a mine shall be supplied at all times with fresh air, never less in quantity than seventy cubic feet per minute for each person employed in such district and at a minimum velocity of fifty feet per minute at the working face.

(3) The ventilating current in a ventilating district shall be suitably split to provide that each working place in a mine shall receive not less than seventy cubic feet of air per minute per person employed therein, and such Kata thermometer standard shall be maintained as the Director after consultation with the manager may require.

*Mechanical aid.*

(4) Where the natural ventilating current is insufficient in any mine or in any working place in a mine, suitable mechanical appliances for ventilating shall be installed and operated at or in such mine or working place to provide a sufficient ventilating current.

*Suitable layout of arrangements.*

(5) If any ventilating arrangement in a mine is, in the opinion of the Director, not suitably laid out he may direct the manager in writing to amend the arrangement.

*Self-closing doors.*

(6) Every door directly assisting or in any way affecting the ventilation of a mine shall be so adjusted as

dit vanself toegaan of deur 'n deurwagter beman word, tensy so 'n deur maar selde en onder spesiale omstandighede toegemaak moet word.

#### *Planne.*

(7) Die rigtings van hooflugstrome en die liggings van deure, afsluitings, lugkruisings en hoofbelugtingstoestelle moet op die planne waaroor regulasie 119 gaan, aangedui word.

#### *Onrein lug: ondersoek van ou werkplekke; vlamveiligheidslampe.*

101. Ondergrondse werkplekke, veral skagte, mynputte en daalgange wat 'n tyd lank in onbruik was, moet ondersoek word voordat hulle weer gebruik word om vas te stel of onrein lug of ander gevaarlike gasse daar geakkumuleer het, en net die werksmense wat vir so 'n ondersoek nodig is, mag toegelaat word om daarheen te gaan, totdat die plekke weer geskik is vir werk of verkeer. As so 'n plek waarskynlik ontvlambare gas bevat, mag daar geen vlam, buiten 'n vlamveiligheidslamp, by die ondersoek gebruik word nie.

#### *Ventilasie van doodlopers.*

102. (1) Nadat skietwerk in 'n tunnel of ontwikkelingsend soos 'n rifgang, dwarsgang, styggang, hellende skag of daalgang of enige ander werkplek waar daar geen deurventilasiestroom is nie, geskied het, mag niemand verplig of toegelaat word om daarin te gaan nie, totdat vars lug van minstens die volume van sodanige tunnel of ontwikkelingsend of sodanige ander werkplek verby die laaste deurgaande ventilasieverbinding, of minstens 'n kleiner hoeveelheid wat die Direkteur moontlik skriftelik vir daardie besondere werkplek veroorloof het, verskaf is om die lug te vervang wat bederf is weens stof of dampe van die skietwerk.

(2) By 'n myn moet elke tunnel en ontwikkelingsend soos 'n gang, dwarsgang, styggang, hellende skag of daalgang, waar druklug gebruik word vir die boor van skietgate, voorsien word met 'n watersproeier wat die Direkteur goedgekeur het. So 'n watersproeier moet binne 'n afstand van hoogstens vyftig voet vanaf die front wat ontwikkel word, spuit, en moet so toegepas word dat die front en gebreekte klippe vir minstens vyftien minute lank onmiddellik na skietwerk natgemaak word, en weer vir vyftien minute lank onmiddellik voordat iemand daar binnegaan: Met dien verstande dat die Direkteur die bestuurder skriftelik verlof kan gee om hierdie voorwaardes in enige myn of deel van 'n myn te wysig.

#### *Blootstelling aan onrein lug moet verhoed word.*

103. (1) Elke moontlike redelike voorsorg moet getref word om te verhoed dat iemand ooit in 'n myn blootgestel word of kan word aan die gevaar van gas of rook van 'n brand, en niemand mag in enige plek in 'n myn werk, bly of toegelaat of beveel word om daar te werk of te bly nie, as die lug dermate stof, rook of dampe bevat dat dit met die oog, reukorgane of ander sintuie waargeneem kan word.

(2) Die bestuurder moet —

- (a) tensy die Direkteur hom vrystelling verleen, 'n standhoudende voorraad skoon water by elke ertsbak, ertsglybaan of roostersif verskaf en laat gebruik, en die water moet gedurende werkure by die openings van sodanige ertsbakke, ertsglybane en roostersiwwe gespuit word deur doeltreffende fynsproeiers wat te alle tye in goeie orde gehou moet word;
- (b) toestelle soos suigwaaiers, fynsproeiers en ander sproeiers wat vir die doelmatige voorkoming van stof wat weens die bedrywighede op sulke plekke

to either be self-closing or to be operated by an attendant, unless any such door is required to be closed only occasionally and under special circumstances.

#### *Plans.*

(7) Directions of main air currents and positions of doors, stoppings, crossings and main ventilating appliances shall be shown on the plans referred to in regulation 119.

#### *Foul air examination of old workings, flame safety lamps.*

101. Underground workings, especially shafts, sumps and winzes which have been in disuse for some time, shall be examined before again being used in order to ascertain whether foul air or other dangerous gases have accumulated there, and only such workmen as may be necessary to make such examination shall be allowed to proceed to such places until such places are in a fit state to work or travel in. If such places are likely to contain any explosive gas no flame other than that of a flame safety lamp shall be used for purposes of such examination.

#### *Ventilation of dead ends.*

102. (1) No person shall be caused or permitted to enter after blasting has taken place therein any tunnel or development end such as a drive, cross-cut, raise, incline shaft, or winze or any other working place in which there is no through ventilating current, until a quantity of fresh air not less than the volume of such tunnel or development end or such other working place, beyond the last through ventilation connection, or not less than a smaller quantity sanctioned by the Director in writing for that particular working place has been supplied so as to replace the air vitiated by dust or fumes from blasting.

(2) At any mine, every tunnel and development end such as a drive, cross-cut, raise, incline shaft or winze where compressed air is used for the drilling of shot holes, shall be furnished with a water blast approved by the Director. Such water blast shall discharge within a distance of not more than fifty feet of the face being advanced and shall be applied so as effectively to wet the face and broken rock for at least fifteen minutes immediately after blasting and again for a further period of fifteen minutes immediately prior to entry by any person, provided that the Director may give written permission to the manager to vary these conditions on any mine or part thereof.

#### *No exposure to foul air.*

103. (1) Every reasonable precaution shall be taken that at no time is any person in a mine exposed or likely to be exposed to danger from gas or smoke from any fire and no person shall work or remain or be permitted or ordered to work or remain in any place in a mine if the air contains dust, smoke or fumes perceptible by sight, smell or other senses.

(2) The manager shall —

- (a) provide and cause to be used at every ore-bin, ore-pass or grizzly, unless exempted by the Director, a constant supply of clean water which shall be applied during working hours at the opening of such ore-bins, ore-passes and grizzlies by means of efficient atomisers which shall be kept at all times in good working order;
- (b) provide and cause to be used in every crushing station and ore treating plant appliances such as suction fans, atomisers and sprays which may be

ontstaan, nodig is, by elke ertsbrekery en ertsbe-  
werkingsaanleg verskaf en laat gebruik.

(3) Niemand mag in myn gebreekte rots of grond verskuif of iemand anders verplig of toelaat om dit te doen nie, as die rots of grond stowwerig is, tensy en totdat dit behoorlik nat gemaak is en nat gehou word om die verspreiding van stof in die lug te verhoed.

#### *Brande.*

104. (1) Wanneer ook al daar 'n ondergrondse brand ontstaan wat nie onmiddellik onder beheer gebring kan word nie, moet die toesighoudende mynbeamptes alle persone onttrek uit die ventilasiewyk of -wyke wat deur die brand aangetas is, tensy die bestuurder die teenoorgestelde beveel.

(2) Die bestuurder mag niemand toelaat of gelas om in 'n ventilasiewyk te bly of daarheen te gaan nie, as daar 'n brand woed wat nie onder beheer gebring kan word nie, tensy en voordat hy hom oortuig het dat so iemand se veiligheid nie daardeur bedreig sal word nie: Met dien verstande dat hierdie verbod nie geld vir persone wat nodig is om die brand onder beheer te bring en om ondersoek in te stel of om ander nodige werk daar te verrig nie.

#### *Brandvoorkoming.*

(3) Niemand mag in 'n myn 'n oop lig soos 'n brandende kers, onbedekte lamp, sigaret of fakkelstok op of naby hout, 'n houtstruktuur, of ander ontvlambare materiaal, waar so 'n oop lig die gevaar van brand kan skep, plaas of gooi, of veroorsaak of toelaat dat dit op so 'n plek geplaas of gegooi word nie.

#### *Beligting.*

105. (1) Elkeen wat hom bevind in 'n myn wat nie met vaste ligte bellig word nie, moet 'n toereikende lig by hom dra.

#### *Masjinerie moet bellig word.*

(2) Oral waar hys-, dryf-, pomp- of ander masjinerie naby die werk- of beweegplekke van persone ingerig staan, moet daar ligte skyn solank die masjinerie aan die werk is, en wel so dat die uitwendige bewegende dele daarvan duidelik gewaar kan word.

#### *Waar en wanneer vaste ligte ingerig moet word.*

(3) Gedurende werkure moet daar toereikende vaste ligte skyn by alle stasies, landings- en laai-plekke en op ander soortgelyke plekke in vertikale en hellende skagte, daalgange en trekvlakke wat op daardie tydstip werklik gebruik word, en snags by alle werkplekke op die oppervlakte.

#### *Springstowwe en skietwerk.*

106. (1) Die bewaring, gebruik en vervoer van springstowwe op die oppervlakte in myngebiede word gereël by die Ordonnansie op Ontploffbare Stowwe 1962 (Ordonnansie 31 van 1962) en die daaruitvloeiende regulasies.

#### *Ondergrondse magasyn: Direkteur se verlof.*

(2) Wanneer toestemming vir die oprigting van 'n magasyn nie ooreenkomstig artikel 22 van die genoemde Ordonnansie op Ontploffbare Stowwe verkry kan word nie, kan die Direkteur toestemming tot die oprigting van 'n ondergrondse springstof-magasyn verleen op voorwaardes wat hy in elke geval skriftelik kan stel.

#### *Verstryking van toestemming.*

(3) Elk so 'n toestemming verval vanself as die houder daarvan 'n jaar lank nie meer springstowwe in die magasyn bewaar nie, en word nietig sodra die magasyn gebruik word vir enigiets buiten springstofbewaring.

necessary for the effective prevention of dust arising from the operations conducted in such places.

(3) No person shall move any broken rock or ground or cause or allow the same to be moved in a mine if such rock or ground is in a dusty condition, unless and until it has been effectively wetted and kept wet so as to prevent the escape of dust into the air.

#### *Fires.*

104. (1) Whenever an underground fire occurs which cannot be immediately got under control the mine officials in charge shall withdraw all persons from the ventilating district or districts affected by the fire unless the manager directs to the contrary.

(2) The manager shall not permit or direct any person to remain in or proceed to any ventilating district where there is a fire which cannot be got under control, unless and until he has satisfied himself that such person's safety will not be endangered thereby: Provided that this prohibition shall not apply to such persons as are required to get the fire under control, and to conduct investigations or to do other necessary work.

#### *Fire Prevention.*

(3) In a mine no person shall place or throw or cause or permit to be placed or thrown any naked light such as a burning candle, unenclosed lamp, cigarette or lighting torch on or near any timber, wooden structure, or other combustible material, where such naked light may cause danger from fire.

#### *Lighting.*

105. (1) Every person in any part of a mine not illuminated by fixed lights shall carry an adequate light.

#### *Machinery to be illuminated.*

(2) All places where winding, driving, pumping or other machinery is erected in the proximity of which persons are working or moving about, shall be so lighted whilst in operation that the external moving parts of such machinery can be clearly distinguished.

#### *Where and when stationary lights to be provided.*

(3) Adequate stationary lights shall be provided during working hours at all stations, landing and loading places and other similar places in such vertical and inclined shafts, winzes and haulage planes as are for the time being in actual use and, at night, at all working places on the surface.

#### *Explosives and blasting.*

106. (1) The storage, use and transport of explosives on the surface in mining areas shall be governed by the Explosives Ordinance, 1962 (No. 31 of 1962) and the regulations framed thereunder.

#### *Underground magazines. Permission by Director.*

(2) Whenever permission for the establishment of a magazine cannot be obtained in accordance with section 22 of the said Explosives Ordinance, the Director may grant permission for the establishment of underground explosives magazines under such conditions as he may prescribe in each case.

#### *Lapse of permission.*

(3) Every such permission shall *ipso facto* expire if the holder thereof has ceased to store explosives in the magazine for a period of one year and shall become void if the magazine is used for any purpose other than the storage of explosives.



*Bewaring van klein hoeveelhede.*

107. Vir 'n springstofvoorraad vir hoogstens vier-en-twintig uur se waarskynlike verbruik in die myn, kan die Direkteur die oprigting van 'n ondergrondse bewaarplek veroorloof op voorwaardes wat hy skriftelik kan stel.

*Intrekking van toestemming.*

108. As die voorwaardes waarop toestemming ingevolge regulasie 106 of 107 verleen is, te eniger tyd na die uitreiking daarvan verontagsaam word, kan die Direkteur die toestemming intrek, en daarop mag die magasyn of die veroorloofde bewaarplek nie meer gebruik word vir die bewaring van springstowwe nie.

*Bewaring in magasyn of ondergrondse bewaarplekke.*

109. Die onderstaande bepalings geld vir die bewaring van springstowwe in magasyn of ondergrondse bewaarplekke:

*Gebruik van ligte.*

(1) Geen oop lig mag binne 'n magasyn of bewaarplek gebring word nie, nóg mag enige lig hoegenaamd daar binne gebring of ingerig word nie, tensy die Direkteur die lig goedgekeur het.

*Rook verbode.*

(2) Niemand mag in 'n magasyn of bewaarplek rook nie, nóg mag hy iets by hom dra wat kan ontbrand nie.

*Stelselmatige bewaring.*

(3) Springstowwe moet volgens 'n stelsel bewaar word wat verseker dat daar telkens vernuwing van voorrade is.

*Doppies moet apart bewaar word.*

(4) Doppies mag nie saam met ander springstowwe, uitgesonderd veiligheidslont, gehou of bewaar word nie.

*Sindelikheid.*

(5) Geen brokkies of stukkie gebreekte patrone mag op die vloer van die magasyn of bewaarplek geplaas of gelaat word nie, en die vloer moet te alle tye skoon gehou word.

*Toesighouer: Pliete.*

(6) (a) Elke ondergrondse springstofmagasyn of bewaarplek wat ingevolge regulasie 107 opgerig is, moet onder die toesig staan van 'n bevoegde persoon wat vertrou is met die aard van springstowwe en wie se naam geskryf moet word in 'n boek wat die „springstofbewareboek” heet, en die boek moet in so 'n magasyn of bewaarplek gehou word. So iemand is verantwoordelik vir die behoorlike ontvangs, bewaring en uitdeling van die springstowwe en hy moet volledige besonderhede van alle inkomende en uitgaande springstowwe in gemelde boek aanteken.

(b) die toesighouer oor so 'n magasyn of bewaarplek mag net springstowwe ontvang en aflewer wat in goeie orde en toestand is.

(c) So iemand mag nie toelaat dat springstowwe uit so 'n magasyn of bewaarplek uitgereik word nie, buiten op grond van 'n skriftelike opdrag van 'n gemagtigde persoon.

(d) So iemand mag net die hoeveelheid springstowwe uitgee, wat waarskynlik vir elke werkplek oor 'n tydperk van vier-en-twintig uur nodig sal wees.

(e) So iemand moet duidelik en noukeurig die daaglikse uitgifte van springstowwe aan elke spanbaas in die springstofbewareboek aanteken.

*Storage of small quantities.*

107. For quantities of explosives not exceeding twenty-four hours probable consumption in the mine, the Director may sanction the establishment of underground stores subject to such conditions as he may prescribe in writing.

*Cancellation of permission.*

108. If at any time after the issue of any permission granted under regulations 106 or 107 the conditions under which it was granted are no longer complied with, the permission may be cancelled by the Director and the magazine or sanctioned storage place shall thereupon cease to be used for storing explosives.

*Storage in magazines or stores underground.*

109. The following provisions shall apply to the storage of explosives in magazines and stores underground —

*Use of lights.*

(1) No naked light shall be taken into a magazine or store nor shall any light whatever be so taken or fixed in a magazine or store unless approved by the Director.

*No smoking.*

(2) No person shall smoke while in a magazine or store nor shall he carry anything which might cause ignition.

*Systematic storing.*

(3) Explosives shall be stored in such system that will ensure that regular turnover is achieved.

*Detonators separate.*

(4) Detonators shall not be kept or stored with any other explosives, safety fuses excepted.

*Cleanliness.*

(5) No scraps or portions of broken cartridges shall be placed in or left lying on the floor of the magazine or store, which shall be kept clean at all times.

*Person in charge: Duties.*

(6) (a) Every underground explosive magazine, or store established in terms of regulation 107 shall be in charge of a competent person acquainted with the nature of explosives whose name shall be entered in a book to be called the “Explosives Storage Book” which shall be kept in such magazine or store. Such person shall be responsible for the proper receipt, storing and distribution of the explosives and shall keep full particulars of all receipts and deliveries in the said book.

(b) The person in charge of such magazine or store shall only receive and deliver explosives which are in good order and condition.

(c) Such person shall not allow explosives to be issued from such magazine or store except upon the written order of an authorised person.

(d) Such person shall only issue the probable quantity of explosives required for twenty-four hours for each working place.

(e) Such person shall clearly and accurately record in the Explosives Storage Book the daily delivery of explosives to each ganger.

*Hoeveelheid op een plek.*

110. Behoudens die bepalings van regulasies 106 en 107 mag hoogstens eenhonderd pondgewig aan springstowwe op enige plek in 'n myn bewaar word.

*Skietsertifikaathouer se pligte i.v.m. versorging van springstowwe.*

111. (1) Die spanbaas of mynwerker —

- (a) moet alle springstowwe buiten doppies onder sy toesig in 'n afsonderlike kis wat daarvoor op 'n droë plek op 'n veilige afstand van werkplekke en ander springstofkiste geplaas is, hou, en moet so 'n kis te alle tye, buiten wanneer hy springstowwe daarin sit of daaruit haal, behoorlik toegesluit hou, en die sleutel of sleutels by hom dra;
- (b) moet alle doppies en doppie-lonte in 'n aparte kis wat daarvoor op 'n droë plek op 'n veilige afstand van werkplekke en ander springstofkiste geplaas is, hou, en moet so 'n kis te alle tye, buiten wanneer hy doppies of doppie-lonte daarin sit of daaruit haal, behoorlike toegesluit hou, en die sleutel of sleutels by hom dra;
- (c) mag in die vermelde aparte kiste geen ander materiaal, of gereedskap of werktuie sit nie;
- (d) mag die sleutels van sy springstofkiste aan niemand anders afgee nie, tensy die skofbaas of ander toesighoudende beampste hom daartoe gelas;
- (e) moet alle springstowwe in ontvangsorde uitreik, en moet verhoed dat stukke springstof of los patrone in die springstofkiste ophoop;
- (f) mag geen oop lig nader as drie voet van die springstowwe onder sy beheer laat kom nie, en mag nie, wanneer hy springstowwe hanteer, rook nie;
- (g) moet springstowwe, afgesien van houers wat nog toe is, net in houers vervoer wat die Direkteur goedgekeur het en die bestuurder verskaf het;
- (h) mag geen springstof, wat hy nie van die magasyn van die myn waarby hy werk verkry het, in 'n werkplek gebruik nie;
- (i) mag niemand onder sy toesig toelaat om springstof in sy besit te hou of om dit uit die myn na die oppervlakte te verwyder nie, en is daarvoor verantwoordelik dat alle redelike voorsorg getref moet word sodat die springstowwe onder sy toesig nie aldus behou of verwyder word nie.

(2) Niemand buiten 'n spanbaas of 'n mynwerker met 'n skietsertifikaat wat ingevolge hierdie regulasies uitgereik is, of 'n amptenaar wat die bestuurder daartoe gemagtig het, mag in enige myn hoegenaamd 'n houer met springstof oop maak, of hom enigins daarmee bemoei nie.

*Vervoer van springstowwe.*

112. (1) Onmiddellik voordat enigiemand springstowwe in 'n skag deur middel van masjinerie vervoer, moet hy die masjinis en die bankwagter sowel as die skagwagter daarvan kennis gee.

(2) Die masjinis moet die vervoermiddel wat die springstowwe bevat versigtig ophys of neerlaat, en niemand mag springstowwe in die skagvervoermiddel sit of uitneem nie, behalwe onder die regstreekse toesig van iemand wat die bestuurder of mynopsigter behoorlik daartoe gemagtig het.

*Quantity in any one place.*

110. Except as provided in regulations 106 and 107 not more than one hundred pounds of explosives shall be stored at any one place in a mine.

*Duties of holder of blasting certificate and care of explosives.*

111. (1) The ganger or miner —

- (a) shall keep all explosives other than detonators under his charge in a separate box provided for that purpose, in a dry place at a safe distance from working places and at least fifty feet from other explosives boxes, and shall keep the said box securely locked at all times when he is not actually placing explosives therein or removing them therefrom and shall retain the key or keys thereof on his person;
- (b) shall keep all detonators and capped fuses in a separate box provided for that purpose in a dry place at a safe distance from working places and at least fifty feet from other explosives boxes, and shall keep the said box securely locked at all times when he is not actually placing detonators or capped fuses therein or removing them therefrom and shall retain the key or keys thereof on his person;
- (c) shall not place in the said separate boxes any other materials, implements or tools;
- (d) shall not hand the keys of his explosives boxes to any person unless he has been instructed to do so by the shift boss or other official in charge;
- (e) shall use all explosives in the same rotation as they are issued to him and shall not allow pieces of explosive or odd cartridges to accumulate in the explosives box;
- (f) shall not allow any naked light to be nearer than three feet to explosives under his charge and, when handling explosives, shall not smoke;
- (g) shall convey explosives, other than unopened cases, only in receptacles approved by the Director, and provided by the manager;
- (h) shall not use at any working places any explosive which is not supplied to him from the magazine of the mine where he is employed;
- (i) shall not permit any person working under his charge to retain any explosive in his possession or to remove it from the mine to surface, and shall be responsible that all reasonable precautions are taken so that the explosives under his charge are not so retained or removed.

(2) No person other than a ganger or miner holding a blasting certificate issued in accordance with these regulations, or official authorised by the manager, shall in any mine whatever open or tamper in any manner whatsoever with any box containing explosives.

*Transport of explosives.*

112. (1) Immediately before any person conveys explosives in a shaft by means of machinery he shall give notice to the engine driver, banksman and onsetter.

(2) The engine driver shall gently lower or raise the conveyance containing explosives and no person shall place in or take out of the shaft conveyance any explosives except under the immediate supervision of the person duly authorised thereto by the manager or mine overseer.

*Pligte van diegene wat springstowwe vervoer en aflewer.*

(3) Geen bankwagter of skagwagter, nóg iemand anders wat gemagtig is om springstowwe te vervoer of dit uit te deel, mag enige springstowwe op 'n stasie of ander stilhouplek laat nie, maar moet sodanige springstowwe self aan die spanbaas of mynwerker of ander gemagtigde ontvanger van springstowwe aflewer, en daarop is die ontvanger verantwoordelik vir sodanige springstowwe.

*Tydlike toesig.*

(4) Net iemand wat die bestuurder of mynopsigter daartoe gemagtig het, of iemand onder die regstreekse toesig van so 'n gemagtigde, kan springstowwe hanteer of verplig of toegelaat word om dit te doen, of om oor springstowwe toesig te hou, en niemand onder wie se beheer springstowwe wettig gelaat is, mag sy beheer staak voordat 'n ander gemagtigde wettig die beheer aanvaar nie, tensy die springstowwe in 'n magasyn, bewaarplek, of kis wat daarvoor dien, gesit is en die magasyn, bewaarplek of kis behoorlik toegesluit is.

*Houers.*

(5) Niemand mag springstowwe buiten lontaanstekers in of by 'n myn vervoer of die vervoer daarvan veroorsaak of toelaat nie, tensy sodanige springstowwe in kiste wat nog toe is of in houers wat die Direkteur goedgekeur het, gehou word.

(6) Doppies mag nooit in dieselfde vervoermiddel of in dieselfde houer as enige ander springstof buiten veiligheidslont vervoer word nie: Met dien verstande dat voorbereide doppiepatrone gedra kan word in 'n houer wat die Direkteur ingevolge subregulasie (5) hiervan goedgekeur het.

*Voorsorg met ligte.*

(7) (a) Niemand mag, terwyl hy springstowwe buiten veiligheidslont of lontaanstekers dra, enige lig buiten 'n bedekte lig dra nie, tensy die springstowwe in onoepgemaakte houers is.

(b) Niemand mag in enige myn hoegenaamd 'n lig plaas op 'n kis waarin daar springstowwe is nie.

(8) Niemand mag rook terwyl hy springstowwe hanteer of dra of behulpsaam is by die voorbereiding van ladings in 'n myn nie.

*Aansteekkoord: Gebruik van.*

(9) (a) Waar aansteekkoord gebruik word by die voorbereiding van ladings wat afgeskiet moet word, moet die bestuurder die prosedure en rangskikking, wat gevolg moet word met die aanlê en verbinding van die aansteekkoord, skriftelik voorskrywe, en moet die spanbaas of mynwerker, wat toesig hou oor skietwerk, van 'n afskrif van sodanige voorskrifte voorsien.

(b) Nieteenstaande enigiets behels in paragraaf (a) van hierdie subregulasie, moet aansteekkoord wat gebruik word in die voorbereiding van ladings wat afgeskiet moet word, so na as moontlik aan die front aangelê word en nie op, of in aanraking met, hout of ander brandbare materiaal of ontvlambare stof wat nie deel van die ladings uitmaak nie.

*Verwydering.*

113. Niemand mag sonder die bestuurder se skriftelike verlof springstowwe van 'n myn verwyder of probeer verwyder nie.

*Besit.*

114. Niemand mag springstowwe in of by 'n myn wegsteek of in sy besit hou nie, tensy hierdie regulasies dit veroorloof.

*Persons travelling with and delivering explosives: Duty.*

(3) No banksman, onsetter or other person authorised to travel with or distribute explosives shall leave any explosives at any station or other stopping place but shall personally deliver such explosives to the ganger or miner or some person authorised to receive such explosives who shall then be responsible for such explosives.

*Temporary charge.*

(4) No person other than a person authorised thereto by the manager or mine overseer or a person or persons under the direct supervision of such authorised person shall handle, or be caused or permitted to handle or be in charge of any explosives and, no person in whose charge explosives have been lawfully left, shall relinquish such charge until some other authorised person lawfully accepts charge thereof or unless such explosives have been placed in a magazine or store or a box provided for the purpose and such magazine, store or box securely locked.

*Receptacles.*

(5) No person shall convey or cause or permit to be conveyed in or about a mine any explosives other than fuses or fuse igniters unless such explosives are contained in unopened cases or in a receptacle approved by the Director.

*Transport of detonators.*

(6) In no case shall detonators be transported in the same conveyance or carried in the same receptacle with any other explosive, safety fuse excepted: Provided that made up primers may be carried in the receptacle approved by the Director in terms of subregulation (5) hereof.

*Care of lights.*

(7) (a) No person shall carry a light other than an enclosed light while carrying explosives other than safety fuse or fuse igniters unless such explosives are contained in unopened cases.

(b) No person shall in any mine whatever place any light on a box in which there are explosives.

*Smoking.*

(8) No person when handling or carrying explosives or assisting in the preparation of charges in any mine shall smoke.

*Ignitor cord. Use of.*

(9) (a) Where ignitor cord is used in connection with the firing of charges the manager shall prescribe in writing the procedure and arrangements to be followed in laying and connecting the ignitor cord and shall provide the ganger or miner in charge of blasting operations with a copy of such prescriptions.

(b) Notwithstanding anything contained in paragraph (a) of this subregulation igniter cord used in the preparation of charges for firing shall be laid as close as practicable to the face and shall not be laid on or in contact with timber or other combustible material or inflammable substance not forming part of the charges.

*Removal.*

113. No person shall take away or attempt to take away from a mine any explosives without the written permission of the manager.

*Possession.*

114. No person shall secrete or be in possession of explosives in or about a mine except as provided for in these regulations.

*Beskikking oor springstowwe by mynsluiting.*

115. By die sluiting van 'n myn moet alle springstowwe weggedoen word, en geen springstowwe mag in of by so 'n geslote myn bewaar word nie, tensy die Direkteur verlof daartoe gee op voorwaardes wat hy skriftelik stel.

*Wie skietwerk mag doen.*

116. (1) Niemand mag toegelaat word om in of by 'n myn skietwerk te doen nie, tensy hy 'n skietsertifikaat besit wat ingevolge die bepalings van hierdie regulasies, of 'n daaropvolgende wysiging daarvan, uitgereik is.

(2) By indienstreding moet 'n mynwerker sy skietsertifikaat toon.

(3) Die mynbestuurder moet die skietsertifikaat behou van elke mynwerker of spanbaas wat by sy myn werk, en wat so 'n sertifikaat hou, totdat so 'n mynwerker of spanbaas se dienstyd verstryk het.

*Wie gate mag laai.*

117. (1) Niemand buiten die houer van 'n skietsertifikaat mag 'n boorgat in 'n myn met springstof laai of toegelaat word om dit te laai nie.

(2) 'n Spanbaas of mynwerker wat 'n skietsertifikaat het, kan by die voorbereiding en afskiet van ladings bygestaan word deur betroubare persone wat nie skietsertifikate besit nie: Met dien verstande steeds dat hy nie aldus bygestaan mag word nie, tensy die persone regstreeks onder sy toesig optree: Met dien verstande voorts dat hy alle redelike voorsorg moet tref teen ongelukke wat kan ontstaan weens die onkunde, onervarendheid of nalatigheid van so 'n persoon.

*Doppies aansit.*

Andersluidende bepalings in hierdie subregulasie desnieteenstaande, mag niemand buiten die houer van 'n skietsertifikaat die lont se doppie aansit nóg 'n doppie in 'n doppiepatroon sit nie, nóg die springstof vasdruk nie, of verplig of toegelaat word om dit te doen nie.

*Skietwerk by ontvlambare gas verbode.*

(3) Niemand mag 'n gat waaruit daar ontvlambare gas kom, skiet of toegelaat word om dit te doen nie, nóg mag hy dit doen op enige plek waar daar genoeg ontvlambare gas is om op die kleingedraaide vlam van 'n veiligheidslamp 'n duidelike kappie te gee nie.

*Gate mag nie ontlaai word nie.*

(4) (a) Niemand mag springstowwe uit reeds gelaaide gate haal of probeer haal nie; die houer van 'n skietsertifikaat kan egter sodanige springstowwe uitspuit met water onder toereikende druk deur 'n pyp waarvan die Direkteur die ontwerp en materiaal goedgekeur het, of as daar geen water beskikbaar is nie, deur 'n koperskraper wat desgelyks goedgekeur is.

(b) Niemand mag 'n blaaspyp vir enige doel hoognaamd ondergrond neem of gebruik nie, tensy die Direkteur die ontwerp en materiaal daarvan goedgekeur het.

*Gateverdieping.*

(5) (a) Niemand mag 'n gat wat oorgestaan het of 'n sok dieper maak, of die dieper maak daarvan gelas of toelaat nie; maar die bepalings van hierdie subregulasie verbied nie die dieper maak van gate wat aan die einde van 'n skof nog nie klaar is nie en wat nog nie met springstowwe gelaai is nie: Met dien verstande dat die spanbaas of mynwerker wat toesig hou oor die span wat hul werk

*Disposal of explosives on mine closing down.*

115. When any mine is closed down all explosives shall be disposed of, and no explosives may be stored on or in any such closed down mine without permission of the Director and under such conditions as he may prescribe in writing.

*Who may blast.*

116. (1) No person shall be allowed to conduct blasting operations in or about a mine unless he holds a blasting certificate issued in accordance with the provisions of these regulations or any subsequent amendment thereof.

(2) Upon engagement a miner shall produce his blasting certificate.

(3) The manager of the mine shall retain the blasting certificate of every miner or ganger employed on such mine who holds such certificate until the termination of the employment of such miner or ganger.

*Who may charge holes.*

117. (1) No person who is not the holder of a blasting certificate shall charge or be permitted to charge with explosives any drill-hole in a mine.

(2) A ganger or miner who is the holder of a blasting certificate may be assisted in the preparation and firing of charges by reliable persons who are not the holders of blasting certificates: Provided always that he shall not be so assisted unless such persons are acting under his direct supervision: Provided further that he shall take all reasonable measures to prevent any accident occurring through the ignorance, inexperience, or carelessness or any such person.

*Fuse Capping.*

Notwithstanding anything contained in this subregulation no person other than the holder of a blasting certificate shall or shall be caused or permitted to cap a fuse, insert a detonator in a primer cartridge or press home explosives.

*No blasting where inflammable gas.*

(3) No person shall blast or be permitted to blast any hole if inflammable gas is being given off from such hole, nor in any place where there is sufficient inflammable gas present to show a distinct cap on the reduced flame of a safety lamp.

*Extraction from charged hole.*

(4) (a) No person shall extract or attempt to extract explosives from a hole which has once been charged, except that the holder of a blasting certificate may extract such explosives by means of water under adequate pressure applied through a pipe of design and material approved by the Director, or where water is not available, by means of a copper scraper similarly approved.

*Blowpipe.*

(b) No person shall take or use underground a blowpipe for any purpose whatsoever unless it be of a design and material approved by the Director.

*Deepening hole.*

(5) (a) No person shall deepen or cause or permit to be deepened a hole which has been left standing or any socket, but the provisions of this subregulation shall not be taken to prohibit the deepening of any holes which are not finished at the conclusion of a shift and which have not yet been charged with explosives: Provided such holes are clearly described by the ganger or miner in

staak sodanige gate duidelik moet beskryf aan die spanbaas of mynwerker wat toesig hou oor die span wat dan begin werk.

*Weiergate.*

(b) Niemand mag in 'n myn in 'n skag, rifgang, dwarsgang, daalgang, styggang of ander soortgelyke beperkte ruimte waar daar 'n weiergat is, 'n gat boor nie, of veroorsaak of toelaat dat so 'n gat geboor word nie, totdat so 'n weiergat weer geskiet is nie, of totdat die springstof uit die weiergat gehaal is nie, en dit wel ooreenkomstig die bepalings van subregulasie (4) (a) hiervan.

(c) Niemand mag 'n gat binne ses voet van 'n weiergat in 'n delfplek boor of toelaat dat dit geboor word nie.

*Boorvoorsorg naby sokke.*

(d) Niemand mag 'n gat boor of veroorsaak of toelaat dat so 'n gat geboor word nie, tensy so 'n gat meer as ses duim van 'n sok af is en die rigting daarvan so loop dat dit nie nader aan die sok of sokrigting kom as ses duim nie. Elk so 'n sok moet deur 'n mynwerker ondersoek word, wat die rigting en diepte daarvan moet vasstel en ook of dit springstof bevat. Laasgenoemde moontlikheid moet uitgemaak word met behulp van 'n pyp, waarvan die Direkteur die ontwerp en materiaal goedgekeur het, wat water onder voldoende druk spuit, en waar water onder druk ontbreek, moet die proefneming geskied met 'n skraper waarvan die Direkteur die ontwerp en materiaal goedgekeur het.

(e) Niemand mag 'n gat in of by 'n myn boor nie, tensy die werklike ligging en rigting van so 'n gat aan hom gewys is en waar moontlik gemerk is met kryt, verf of ander materiaal, deur die houer van 'n skietsertifikaat of deur 'n blanke wat die bestuurder, mynopsigter of skofbaas daartoe gemagtig het, en niemand mag, wanneer hy boor, van die aangewese ligging en rigting afwyk nie.

*Verwydering van prop.*

(6) Niemand buiten die houer van 'n skietsertifikaat mag die houtprop waarmee 'n weiergat of die sok van 'n gat toegestop is, verwyder of probeer verwyder nie: Met dien verstande dat wanneer die mynwerker aan die einde van sy skof gate moet laai hy 'n lid van sy span kan gelas om dit te doen.

*Afspoel voor boorwerk.*

(7) (a) Voordat boorwerk in 'n skag wat gesink word mag begin, moet die mynwerker of spanbaas (wat 'n skietsertifikaat moet besit) al die grond binne 'n omtrek van drie (3) voet om 'n gat wat geboor moet word, afspoel met water onder druk van minstens 30 lb. per vierkante duim, of as die grond wat ondersoek moet word, onder water is, dit oorblaas met druklug om alle moontlike weiergate en sokke bloot te lê, en moet hy 'n kaart maak wat die ligging van alle sodanige weiergate en sokke aandui.

(b) In vertikale skagte moet die afspoel of oorblasing en die voorbereiding van die kaart onder die onmiddellike toesig van die bestuurder of mynopsigter of 'n skofbaas of ander behoorlik aangestelde beampte geskied, tensy die Direkteur vrystelling daarvan verleen het; ten opsigte van hellende skagte moet so 'n beampte hom deur persoonlike ondersoek in die loop van die skof oortuig dat die oorblasing en die kaart behoorlik uitgevoer is. Elke kaart wat ingevolge subregulasie (a) van hierdie regulasie ontwerp is, moet minstens sewe dae lank in die mynkantoor gehou word.

*Waar daar gas is.*

118. Die spanbaas —

(1) mag nie skietwerk in 'n myn verrig waar die teenwoordigheid van ontvlambare gas in die afgelope

charge of the shift leaving off work, to the ganger or miner in charge of the shift about to commence work.

*Misfired holes.*

(b) No person shall deepen or cause or permit to be drilled any hole in any shaft, drive, cross-cut, winze, raise, or other similar confined space where there is a misfired hole until such misfired hole has been again blasted, or until the explosives have been extracted from such misfired hole in accordance with the provisions of subregulation (4) (a) hereof.

(c) No person shall drill or cause or permit to be drilled any hole within six feet of a misfired hole in a stope.

*Sockets, drilling, precaution in vicinity.*

(d) No person shall drill or cause or permit to be drilled any hole unless such hole is placed more than six inches from any socket and given such a direction that it will not come nearer to any socket or the line of direction thereof than six inches. Every such socket shall be examined by a miner who shall ascertain its direction and depth and whether it contains explosives, by means of water under adequate pressure applied through a pipe of a design and material approved by the Director, where water under pressure is not available, by means of a scraper of a design and material approved by the Director.

(e) No person shall drill a hole in or about a mine unless the exact position and direction of such hole has been pointed out and where possible marked with chalk, paint or other material, by the holder of a blasting certificate or by a European person authorised to do so by the manager, mine overseer or shift boss and no person shall in drilling deviate from the position and direction indicated.

*Removal of plug.*

(6) No person other than the holder of a blasting certificate shall remove or attempt to remove the wooden plug with which a misfired hole or socket of a hole has been plugged: Provided that when the miner charges up at the end of the shift he may instruct a member of his gang to do so.

*Washing over before drilling.*

(7) (a) Before drilling is commenced in any shaft in the course of sinking, the miner or ganger, who shall be the holder of a blasting certificate, shall thoroughly wash over all the ground within three (3) feet of any hole to be drilled with water under a pressure of not less than 30 lb. per square inch, or, if the ground to be examined is under water, blow over with compressed air, so as to expose the presence of all misfires and sockets, and shall make a sketch showing the position of such misfires and sockets.

(b) In vertical shafts, washing or blowing over and the preparation of the sketch shall be done under the immediate supervision of the manager or mine overseer or of a shift boss or other duly appointed official, unless exempted by the Director, and in incline shafts such official shall satisfy himself by personal inspection during the shift that the blowing over and the sketch have been properly done.

Every sketch made in terms of subregulation (a) of this regulation shall be kept in the mine office for at least seven days.

*Where gas is present.*

118. The ganger or miner —

(1) shall not blast in any mine where inflammable gas has been reported to be present during the past

vier-en-twintig uur in die ventilasiewyk aangemeld is waarin die skoot gevuur moet word nie, totdat hy die plek waar die gas, volgens die aanmelding is, ondersoek het, en gevind het dat die gas reeds genoegsaam verwyder is, en dat daar op of naby so 'n plek nie meer genoeg gas ontstaan of geakkumuleer het, om die skietwerk gevaarlik te maak nie;

*Ondersoek na weiergate.*

- (2) moet, voordat hy gate met kryt of ander materiaal merk, of andersins aan die boorders wat onder hom werk, die ligging aandui van die gate wat geboor moet word, alle los of losgeraakte klippe, delfstof van die front en onmiddellik nabyheid van die werkplek verwyder of laat verwyder en die werkfront in die onmiddellike nabyheid sorgvuldig ondersoek om uit te vind of daar weiergate en sokke is;

*Toestop van weiergate.*

- (3) moet, voordat hy die ligging van elke gat wat geboor moet word, aandui of merk, alle weiergate en sokke binne minstens ses voet van die punt wat aangedui of gemerk moet word, met houtproppe toestop, en sodanige proppe mag nie weer verwyder word nie voordat hy aan die einde van die skof die boorgate begin laai, buiten tydelik en vir ondersoekdoeleindes: Met dien verstande dat die spanbaas by die toepassing van hierdie subregulasie in sy werk bygestaan kan word deur persone wat onder sy regstreekse toesig werk;
- (4) moet 'n toereikende voorraad houtprope byderhand hou ter nakoming van die bepalings van subregulasie (3);

*Ligging en rigting van gate.*

- (5) moet die juiste ligging en rigting van elke gat wat geboor gaan word aan elke boorder wat onder hom werk, wys, en so 'n gat telkens, waar moontlik, met kryt, verf of ander merkstof duidelik merk, en nie later as aan die einde van die skof enigiemand wat 'n gat boor wat nie aldus aangewys is nie, of wat afwyk van die aangewese ligging of rigting, rapporteer aan die skofbaas in sy afdeling van die myn, of as daar nie 'n skofbaas is nie, aan 'n ander verantwoordelike beampte;
- (6) moet elkeen wat onder hom werk, wys op die gevaar wat verontagsaming van regulasies 114, 117 en 118 meebring;
- (7) mag net springstowwe in die vorm van patrone gebruik, en mag nie die omslae om die springstowwe verwyder nie of daaraan peuter nie buiten in die geval van doppiepatrone en mag verder ook nie springstofpatrone breek of sny nie;

*Laaityd.*

- (8) mag eers binne 'n redelike tyd voor skiettyd met springstowwe laai, en eers wanneer alle persone, wat nie nodig is om hom met die laaiwerk behulpzaam te wees nie, hulle tot op 'n afstand van minstens vyftien voet verwyder het;

*Vorbereiding van lading.*

- (9) moet al die saagsels uit die knaldoppie skud en moet die lont aan die knaldoppie heg deur middel van 'n behoorlike ontwerpde knyptang of ander werktuig om te verhoed dat water in die knaldoppie kom, en mag nie, wanneer hy met dinamiet of ander brisante springstowwe skiet, die lont met knaldoppie daaraan geheg in die sogenaamde doppiepatron steek nie, buiten eers kort voordat dit gebruik gaan word;

twenty-four hours in the ventilating district in which the shot is to be fired, until he has examined the place where gas has been reported to be present and has found that such gas has been sufficiently cleared away and that there is not at or near such place sufficient gas issuing or accumulated to render it unsafe to fire the shot;

*Examination for misfires.*

- (2) shall before marking off holes with chalk or other material or before otherwise indicating to the drillers working under him the positions of the holes to be drilled, removed or cause to be removed all loose or loosened rock, mineral or ground from the face and immediate vicinity of the working place, and shall carefully examine such face and its immediate vicinity with a view to discovering misfired holes and sockets of holes;

*Plugging of misfires, etc.*

- (3) shall before indicating or marking the position of each hole to be drilled plug all misfired holes and sockets of holes with wooden plugs within a distance of at least six feet from the point to be indicated or marked, and no such plug shall be again removed until he commences to charge the drill holes at the end of the shift except temporarily for the purpose of inspection: Provided that for the purposes of this subregulation the ganger may be assisted in this work by persons working under his immediate supervision;
- (4) shall keep on hand a sufficient supply of wooden plugs for the purpose of complying with the provisions of subregulation (3);

*Position and direction of hole.*

- (5) shall point out to each driller working under him and wherever possible, clearly mark with chalk, paint or other material the exact position and direction of any hole to be drilled, and shall report not later than the end of the shift to the shift boss, or other responsible official if there is no shift boss in his section of the mine, any person drilling a hole not so indicated or deviating from the position or direction indicated;
- (6) shall acquaint every person working under him of the danger attending a contravention of regulations 114, 117 and 118;
- (7) shall use no explosives except in the form of cartridges, and shall not, except in the case of primer cartridges, remove or interfere with the wrappers round explosives; and shall not break or cut any blasting cartridge;

*Time for charging up.*

- (8) shall not charge up until within a reasonable time of blasting and until all persons not required to assist him in the charging up have removed to a distance of at least fifteen feet;

*Preparation of charge.*

- (9) shall shake all the sawdust out of the detonator and shall attach the fuse to the detonator by means of a properly designed pliers or other instrument so as to prevent the entrance of water into the detonator; and shall not when blasting with dynamite or other high explosives insert the fuse with the attached detonator in the so-called primer cartridge except shortly before use;

- (10) moet by die lading nadat die lont met die aangehegte knaldoppie in die doppiepatroon gesteek is, dit stewig aan die genoemde patroon heg met 'n tou of ander geskikte materiaal sodat die lont en die knaldoppie nie onopsetlik losgetrek kan word nie, en mag geen ander knaldoppie in die springstof steek nie, nóg in die gat nie, buiten die knaldoppie wat aan die lont geheg is: Met dien verstande dat waar die werkplek nat is, twee lonte en knaldoppies gebruik kan word, maar hulle moet in dieselfde doppiepatroon gesteek word en vasgemaak word soos hierin bepaal;

*Gereedskap.*

- (11) mag, wanneer hy gate vir skietwerk laai of vasstop, net werktuie van hout, geelkoper, of koper daarvoor gebruik;
- (12) mag geen springstof met geweld in 'n gat wat te klein is, stop nie, en mag geen springstof in 'n gat inslaan, instamp of met geweld indruk nie;

*Alle gate moet vasgestop word.*

- (13) (a) mag nie 'n lading springstof afskiet nie en geen persoon mag verplig of toegelaat word om so 'n lading af te skiet nie, tensy die springstowwe bevat is in 'n skietgat wat behoorlik met nie-ontvlambare materiaal vasgestop is; buiten wanneer ladings afgeskiet word wat nie in skietgate bevat is nie in welke geval voorsorgmaatreëls, deur die bestuurder bepaal, nagekom moet word;

*Stopsel.*

- (b) mag net die materiaal wat die bestuurder daarvoor verskaf of goedkeur as stopsel vir ladings van dinamiet of ander brisante springstowwe gebruik, en geen stopsel of ander ontplofbare materiaal mag tussen patrone ingevoeg word nie: Met dien verstande dat stopsel net in die spesiale omstandighede, wanneer knallont gebruik word in opdrag van die bestuurder tussen dele van die springstoflading in 'n skietgat gevoeg mag word as alle redelike voorsorg getref word ter versekering dat elke deel van die lading in aanraking met so 'n lont is;

*Waarskuwing voor skietwerk.*

- (14) moet, voordat hy springstofladings afskiet, behoorlike waarskuwings in alle rigtings gee of laat gee, deur te skree „skiet”, en hy moet hom oortuig dat niemand, buiten diegene wat hom met die afskiet van die ladings behulpsaam moet wees, op 'n plek bly waar hy moontlik blootgestel sal wees aan gevaar weens die afskiet van die ladings, en hy moet alle redelike voorsorg tref om sy helpers teen ongeluk weens skietwerk te beskerm;

*Toegange moet bewaak word.*

- (15) moet, voordat hy ladings afskiet alle toegange na die plek of plekke waar die ladings afgeskiet gaan word of waar mense in gevaar kan verkeer, laat bewaak, ten einde onopsetlike toegang daarbinne te belet onderwyl die lading afgeskiet word;

*Fakkelstok.*

- (16) mag net die lantaanstekers gebruik wat die bestuurder verskaf, en die Direkteur goedgekeur het;

*Skote moet getel word voor hertoegang.*

- (17) moet, buiten waar met elektrisiteit geskiet word, saam met minstens een ander persoon die aantal skote wat ontplof, tel, en tensy hy en die ander

- (10) shall in making up a charge after the fuse with attached detonator has been inserted in the primer cartridge securely fasten it to the said cartridge by means of a string or other suitable material, so that the fuse and detonator cannot be inadvertently withdrawn, and shall not insert any other detonator into the explosives or into the hole except the one attached to the fuse: Provided that in wet workings two fuses and detonators may be used but they must be inserted into the same primer cartridge and tied as prescribed herein;

*Tools.*

- (11) shall not in charging or in stemming holes for blasting use any implement other than of wood, brass or copper;
- (12) shall not forcibly press any explosive into a hole of insufficient size and shall not hit, ram or forcibly press any explosive into any hole;

*All holes to be tamped.*

- (13) (a) shall not fire a charge of explosives and no person shall be caused or permitted to fire such a charge, unless the explosives are contained in a shot hole properly tamped with non-inflammable material; except when firing charges which are not contained in blast holes when precautions laid down by the manager must be observed;

*Tamping materials.*

- (b) shall use as tamping for charges of dynamite or other high explosive only such materials as are supplied or approved for that purpose by the manager, and no tamping material or other non-explosive material shall be inserted between cartridges: Provided that in the special circumstances only when an instantaneous detonating fuse is being used on the instruction of the manager, tamping may be inserted between portions of the explosives charge in a shot hole, if all reasonable precautions are taken to ensure that every portion of such charge will be in contact with such fuse;

*Warning before firing.*

- (14) shall before firing charges, give or cause to be given due warning in every direction by shouting "Fire" and he shall satisfy himself that no person, except those required to assist him in firing charges remains where he might be exposed to danger from the firing of such charges and shall take all reasonable precautions to safeguard those assisting him from accident due to blasting operations;

*Entrances to be guarded.*

- (15) shall before firing charges cause all entrances to the place or places where such charges are to be fired, or where the safety of persons may be endangered to be guarded so as to prevent inadvertent access to such place or places, whilst such charges are being fired;

*Lighting torch.*

- (16) shall only use lighting torches supplied by the manager and approved by the Director;

*Counting of shots. Time to expire before re-entering.*

- (17) shall, except in the case of firing by means of electricity, count in conjunction with at least one other person the number of shots exploding, and

persoon daarvan oortuig is dat al die skote ontplof het, mag hy nie die plek of plekke waarin die skote afgeskiet is binnegaan nie, ook mag niemand anders toegelaat word om daarin te gaan nie, voor 'n tydsverloop van dertig minute na die lonte aan die brand gesteeke is: Met die verstande dat waar weiergate weer geskiet word, niemand in die werkplek mag gaan nie, voordat dertig minute verstreke het na die lonte aan die brand gesteeke is;

*Aanmelding van weiergate.*

- (18) moet by die wisseling van skofte alle weiergate en enige ander aangeleentheid wat aandag vereis, onverwyld by sy skofbaas of mynopsigter, asook by die spanbaas of mynwerker wat oor die volgende skof toesig hou, aanmeld;

*Waar met elektrisiteit geskiet word.*

- (19) (a) moet, waar daar met elektrisiteit geskiet word, die plowwer of, waar daar geen plowwer gebruik word nie, die klemme en skietskakelaar van enige ander elektrisiteitsbron vir skietdoel-eindes, in 'n geslote kis hou, en die handvat van die plowwer en die sleutel van die kis by hom hou, onderwyl die laaiwerk, die aanskakeling en die toets van enige skoot of skote plaasvind;
- (b) mag nie die afskietkabel aan die klemme van die afskietmasjien of enige ander elektriese kragbron vir skietwerk verbind nie, tot onmiddellik voordat daar 'n skoot of skote afgeskiet moet word nie;
- (c) mag nie nadat die afskietkabel aan 'n skoot of skote verbind is die plek of plekke waar die kabel van sodanige skote verbind is binnegaan nie, nóg iemand anders toelaat om daar binne te gaan, ongeag of die skoot of skote afgegaan het of nie, tensy hy die kabel geheel en al losgemaak het van die klemme van die afskietmasjien of ander elektriese kragbron vir skietwerk;
- (d) mag geen elektriese stroombaan wat 'n elektriese knaldoppie insluit toets om sy geslotenheid te verseker nie, tensy hy dit deur die afskietkabel en van 'n veilige plek doen;
- (e) moet, nadat hy ladings deur middel van elektrisiteit afgeskiet het, die plek of plekke waar die ladings afgeskiet is, sorgvuldig ondersoek vir weiergate voordat hy mense toelaat om daarin te werk, en moet diegene wat los grond verwyder, aansê om hom onmiddellik te verwittig as hulle daar drade vind wat moontlik na 'n weiergat kan lei, en waar daar sodanige drade gevind word, moet hy alle werk op so 'n plek laat staak totdat daar ooreenkomstig hierdie regulasies met moontlike weiergate gehandel is;

*Geen hertoegang voordat dampe verdwyn het nie.*

- (20) mag, waar ladings afgeskiet is, hetsy deur elektrisiteit of andersins, die plek waar die ladings afgeskiet is, nie binnegaan nie, nóg iemand anders toelaat om dit binnegaan te gaan, voordat die dampe wat deur die ontploffing veroorsaak is, verdryf is, die lug vry is van stof, rook en dampe, vir sover dit met die oog, reukorgane of ander sinuie waargeneem kan word, en totdat hy die plek ondersoek en dit veilig gemaak het.

*Bestuurder moet skiettyd bepaal.*

*Afskiet van weiergate.*

- (21) moet by 'n myn skietwerk uitvoer net op tye wat die bestuurder bepaal het, uitgesonderd vir die ver-

unless both he and such other person are certain that all the shots have exploded shall not enter nor allow any person to enter the place or places in which the shots have been fired, until the expiry of thirty minutes from the time of lighting the fuses: Provided that when misfires are reblasted no person shall enter the working place until the expiry of thirty minutes from the time of lighting the fuses;

*Reports of misfires, etc.*

- (18) shall at the change of shift forthwith report any misfires and any other matter requiring attention to his shift boss or the mine overseer and to the ganger or miner in charge of the next following shift;

*Firing by electricity.*

- (19) (a) shall when the firing takes place by means of electricity, keep the shot-exploder or, where a shot-exploder is not used, the terminals and firing switch of any other source of electricity for firing shots in a locked box and shall retain the handle of the shot-exploder and the key of such box on his person during the charging, connecting and testing of any shot or shots;
- (b) shall not connect the firing cable to the terminals of the shot exploding machine or any other source of electricity for firing shots until immediately before the shot or shots are to be fired;
- (c) shall not, once the firing cable has been connected to any shot or shots, enter or allow any person to enter the place or places where the cable has been connected to such shots, irrespective whether the shot or shots have exploded or not, unless he has disconnected entirely the cable from the terminals of the shot exploding machine or other source of electricity for firing shots;
- (d) shall not test for continuity any electrical circuit that includes any electric detonator except through the firing cable and from a place of safety;
- (e) shall after firing charges by electricity carefully examine the place or places where the charges have been fired for misfires, before permitting persons to work therein, and shall instruct the persons engaged in clearing the broken ground to report immediately the finding of any wires that may lead to a misfired charge, and should such wires be found he shall cause all work in such place to cease until any misfired charge has been dealt with in accordance with these regulations;

*No re-entry until fumes dissipated.*

- (20) shall not after firing has taken place whether by electricity or in any other manner enter or allow any person to enter the place in which such firing has occurred until the fumes caused by the explosion shall have been dissipated and the air is free from dust, smoke and fumes perceptible by sight, smell or other senses, and until he has examined such place and made it safe;

*Blasting at a time to be fixed by the manager.*

*Blasting misfires.*

- (21) shall in any mine only blast at a time to be fixed by the manager, except for removing obstructions



wydering van verstoppings in ertsstortbane of laai-gate of om die dak veilig te maak of om weiergate in ontwikkelingsfronte af te skiet, en dan slegs met die toestemming in elke geval van die bestuurder, mynopsigter of skofbaas: Met dien verstande dat wanneer weiergate geskiet moet word hy voorsorg moet tref wat subregulasies (17) en (20) hiervan voorskryf. Geen sodanige toestemming mag verleen word nie, tensy redelike voorsorgmaatreëls getref is om te verhoed dat enige persoon blootgestel word aan rook en dampe wat deur sodanige skietwerk veroorsaak word;

*Uithaal van stopsel.*

- (22) mag, behoudens die bepalings van regulasie 117 (4), nie stopsel uit 'n gat wat eenmaal gelaai is, verwyder nie, maar hy kan stopsel verwyder om hom in staat te stel om 'n weiergat weer af te skiet;

*Gebruik van watersproeier.*

- (23) moet, by alle ontwikkelingsfronte, waar 'n druklugwatersproeier, ingevolge regulasie 102 (2) voorsien is, onmiddellik nadat hy aan die brand gestek het, die watersproeier, wat hy vooraf moes getoets het, in werking bring: Met dien verstande dat as sodanige toets toon dat die druklugwatersproeier nie behoorlik werk nie, mag daar geen skietwerk plaasvind nie.

- (24) moet, benewens ander regulasies, vir soverre hulle van toepassing is, ook die volgende bepalings op groewe, slote en ander dagbouplekke nakom:

*Voorsorg: Donderstorm.*

- (a) Waar afskietwerk deur middel van elektrisiteit plaasvind, mag die verrigtings in verband met die voorbereiding of afskiet van springstowwe nie in aanvang neem of voortgesit word by die nadering van of gedurende 'n donderstorm nie, en niemand mag agterbly of verplig of toegelaat word om agter te bly binne 'n gebied waar hy deur die toevallige detonasie van springstowwe beseer kan word nie;

*Waar meer as een myner gate laai.*

- (b) waar meer as een spanbaas of myner besig is om gate te laai, mag hulle nie gate wat binne twintig voet van mekaar af is, gelyktydig laai nie, en onderwyl die laai van gate aan die gang is, mag die springstofhouders van die een spanbaas of mynwerker nie nader as twintig voet van dié van die ander spanbaas of myner wees nie;

*Slegs persone wat by werk betrokke is, mag naby bly.*

- (c) niemand wat nie met die laai van gate behulpsaam is nie, mag nader as vyftig voet van enige gat wat gelaai word, vertoef of kom of verplig of toegelaat word om nader as dit te vertoef of te kom nie;

*Wanneer springstowwe na werksplek gebring word.*

- (d) springstowwe mag nie na die delfplek, waar skietwerk verrig gaan word, gebring word, voordat die gate gereed is om gelaai te word nie, en die hoeveelheid mag nie die geskatte behoeftes te bowe gaan nie;

*Plofstowwe by een gat.*

- (e) nie meer as vyf-en-sewentig pond patrone en een rol knallont mag gelyktydig aanwesig wees by 'n gat wat gelaai word;

in ore-passes or box-holes, or for the purpose of making the hanging safe, or for blasting misfired holes in development faces, and then only with the permission in each case of the manager, mine overseer, or shift boss: Provided that when blasting misfires, he shall observe the precautions prescribed in subregulations (17) and (20) hereof. No such permission shall be given unless reasonable precautions have been taken to prevent any person being exposed to smoke and fumes from such blasting;

*Withdrawal of tamping.*

- (22) except as provided in regulation 117 (4) shall not withdraw the tamping from a hole that has once been charged, but he may withdraw the tamping to allow of a missed shot being reblasted;

*Use of Waterblast.*

- (23) shall, in all development faces where in terms of regulation 102 (2) a water blast has been provided, immediately after lighting up put into action the water blast which he shall previously have tested: Provided that if such test shows that the water blast is not in proper working order, no blasting shall take place;

*Quarries and trenches.*

- (24) shall, in addition to other regulations in so far as they are applicable, observe the following provisions in quarries, trenches and other open cast workings;

*Precaution — Thunderstorm.*

- (a) where firing takes place by means of electricity, operations in connection with the preparation or firing of explosives charges shall not be started or continued on the approach of or during a thunderstorm and no person shall remain or be caused or permitted to remain within an area where he may be injured by the accidental detonation of explosives;

*Where more than one miner charges holes.*

- (b) where more than one ganger or miner are engaged in charging holes they shall not charge holes simultaneously within twenty feet of one another and while the charging of holes is in progress, the explosives receptacles of one ganger or miner shall not be nearer than twenty feet to those of any other ganger or miner;

*Only those engaged to be in vicinity.*

- (c) no person, not assisting in the charging of holes, shall remain or approach or be caused or permitted to remain or approach within fifty feet of any hole that is being charged;

*When explosives brought to working place.*

- (d) explosives shall not be brought to a working place where blasting is to be carried out until the holes are ready to be charged and the quantity shall not exceed the estimated requirements;

*Explosives at one hole.*

- (e) not more than seventy-five pounds of blasting cartridges and one reel of detonating fuse shall at any one time be at a hole being charged;

*Skietgat dieper as tien voet.*

- (f) in enige skietgat wat dieper as tien voet is, moet die lading deur middel van knallont ontsteek word, wat tot by die bodem van die lading strek en wat lank genoeg is om minstens ses duim buitekant die gat uit te steek. Onmiddellik nadat die knallont in die gat geplaas is, moet die nodige lengte van so 'n lont van die rol afgesny word. Die slagdoppie of doppies, wat vir die afskiet van die lading nodig is, mag nie na die delfplek gebring word voordat alle sodanige skietgate gelaai is nie;

*Afstand vanaf geboue, ens.*

- (g) uitgesonderd met die skriftelike toestemming van die Direkteur, mag nie meer as een skietgat op 'n keer binne vyfhonderd jaarts vanaf enige gebou, openbare deurgang, spoorweg, kraglyn of enige plek waar mense vergader, afgeskiet word nie;

*Voorsorg voor afskiet.*

- (h) (i) voordat enige lading afgeskiet word, moet die spanbaas of mynwerker toereikende maatreëls tref om die besering van persone en skade aan eiendom deur skietwerk, te verhoed;
- (ii) minstens drie minute voordat 'n lading afgeskiet word, moet die spanbaas of mynwerker behoorlike waarskuwing van die afskieting gee, en moet hy 'n bevoegde persoon wat 'n rooi vlag dra, by elke toegangsweg plaas op 'n veilige afstand van die plek af waar die ladings op die punt staan om afgeskiet te word. So 'n persoon moet 'n waarskuwing van die afskieting gee en op sy pos bly totdat die afskieting plaasgevind het en hy deur die spanbaas of mynwerker teruggeroep word;
- (iii) niemand wat aldus gewaarsku is, mag binne die onveilige gebied rondom die plek waar afskieting verrig gaan word, vertoef of dit binnegaan nie;

*Persoonlike ondersoekspanbaas.*

- (i) na die lading afgeskiet is, moet die spanbaas of mynwerker persoonlik 'n ondersoek van die delfplek vir weierskote, sokke en gevaarlike grond uitvoer, en tot tyd en wyl hy dit gedoen het en die plek veilig gemaak het, mag niemand uitgesonderd persone wat nodig is om hom te help om die plek veilig te maak, sodanige plek binnegaan of nader of verplig of toegelaat word om dit binne te gaan of te nader nie;

*Weiergate: Dagbou.*

- (25) moet, in geval van weiergate in slote, groewe en dagboudelfplekke, as volg te werk gaan:
- (a) die stopsel uit die weiergat haal deur middel van 'n skraper van 'n ontwerp en materiaal wat deur die Direkteur goedgekeur is, 'n ander doppiepatroon in aanraking met die lading bring en die lading weer afskiet; of
- (b) 'n hulpgat boor of in sy teenwoordigheid laat boor, wat minstens ses duim dieper as die weiergat is en wat ewewydig daarmee en nie nader as drie voet daarvandaan is nie. Hy moet hierdie hulpgat laai en afskiet en die springstowwe wat uit die weiergat vrygestel is, terugvind; of

*Shot holes deeper than ten feet.*

- (f) in any shot hole deeper than ten feet, the charge shall be primed by means of detonating fuse which shall extend to the bottom of the charge and be of a length sufficient to extend at least six inches outside the hole. Immediately after the detonating fuse has been placed in the hole, the required length of such fuse shall be cut off from the reel. The detonator or detonators required for setting off the blast shall not be brought to the working place until all such shot holes have been charged;

*Distance from buildings.*

- (g) except with the written permission of the Director not more than one shot hole at a time shall be fired within five hundred yards of any building, public thoroughfare, railway, powerline or any place where people congregate;

*Precautions before firing.*

- (h) (i) before any charge is fired the ganger or miner shall take adequate measures to prevent injury to persons and damage to property by blasting operations;
- (ii) at least three minutes before a charge is fired the ganger or miner shall give due warning of the firing and shall station a competent person, carrying a red flag, at a safe distance at each avenue of approach to the place where the charges are about to be fired. Such person shall give warning of the firing and shall remain at his station until the firing is completed and he is recalled by the ganger or miner;
- (iii) no person so warned shall remain in, or enter the unsafe area surrounding the place where the firing is to take place;

*Personal examination by ganger.*

- (i) after the charges have been fired the ganger or miner shall personally make an examination of the working place for misfires, sockets and dangerous ground and until he has done so and has made the place safe, no persons except those necessary to assist him in making safe shall enter or approach or be caused or permitted to enter or approach such place.

*Misfired holes: Surface mining.*

- (25) shall in the case of misfired holes in trenches, quarries and opencast workings deal with the misfires as follows:—
- (a) withdraw the tamping from the misfired hole by means of a scraper of design and material approved by the Director. Place a fresh primer in contact with the charge and refire the charge; or
- (b) drill or cause to be drilled in his presence a relieving hole not less than six inches deeper than the misfired hole and so drilled that it will be parallel to and not nearer than three feet to it. He shall charge and fire this relieving hole and recover the explosives liberated from the misfired hole; or

(c) die springstowwe ooreenkomstig die bepalings van regulasie 117 (4) (a) verwyder.

*Mynplanne.*

119. Soos die Direkteur dit vereis, moet die onderstande planne of dié daarvan wat hy noem, in die kantoor van elke myn gehou word:

*Kleim- en myngebiedplanne.*

(1) 'n Plan, of 'n ware afdruk daarvan, op natreklynne, van die myneiendom met aanduiding van die grense, die naam en nommer van elke myngebied en die grense en geregistreerde nommer van elke kleim en van die plase en onderverdelings van plase waarop die besittings geleë is met die name van sodanige plase of onderverdelings van plase en die name van die eienaars, asook die sye, hoeke en koördinate van die myngebiede soos hulle aangedui word op myngebiedplanne en die koördinate van die myngebiedbakens wat verwys na dieselfde as en oorsprong as die koördinate van die plaasbakens.

So 'n plan moet geteken word volgens dieselfde skaal as die algemene oppervlakteplan wat subregulasie (2) hiervan noem, en moet te alle tye tot binne hoogstens ses maande vanaf datum korrek wees.

*Bogronde plan.*

(2) 'n Algemene bogronde plan of 'n ware afdruk daarvan op natreklynne, van die myneiendom, met aanduiding van die grense van die verskillende myne, plaasname, die dagsome en die hellingsgraad van die rif of riuwe of ander mineraal- of alluviale ertslae, alle oop bogronde werkplekke, skagopenings, boorgate, geboue, waterlope, bewaardamme, uitskotterreine, mynhope, publieke paaie, spoorweë, vliegvelde, permanente tremweë, elektriese kraglyne, openbare telegraaf- en telefoonlyne, kabelweë, hooftoevoerpylyne, omheinings en alle voorwerpe op die oppervlakte wat teen ondergrawing beskerm moet word.

By eiendomme waarvan die grense te uitgestrek is om op 'n gerieflike plan aangedui te word, moet slegs daardie deel van die eiendom waarop die bogronde uitrusting staan getoon word, met 'n redelike groot ruimte vir byvoegings en in so 'n geval moet daar ook 'n gidsplan van gerieflike grootte gemaak word waarop die hele eiendom en die vernaamste oppervlaktevoorwerpe aangetoon word. So 'n kaart moet te alle tye tot binne hoogstens een jaar vanaf datum korrek wees.

*Ondergrondse plan.*

(3) 'n Ondergrondse plan, of ware afdruk daarvan, op natreklynne, waarop die grense van die grond, ten opsigte waarvan die ondermyningsregte gehou word, duidelik aangetoon word, waar sodanige grense op 'n plan van gerieflike grootte aangedui kan word; en ook skagte, gange, daalgange, styggange, dwarsgange, afbouplekke, veiligheidspilare, permanente pakke, stasies, ondergrondse springstofmagasynne, uitlopers of leiers wat ontgin word, verskuiwings, rotsgange en belangrike veranderinge in die hellingsgraad van die rif, ertsspleet of mineraallaag.

*Mynplanne vir onedele metale.*

By eiendomme waar die grense van die grond, ten opsigte waarvan die ondermyningsregte gehou word, te uitgestrek is om op 'n plan van gerieflike grootte aan te dui, is dit net nodig om daardie deel van die eiendom waarop die ondergrondse werkplekke geleë is, aan te dui, met 'n redelike groot ruimte vir die aanduiding van moontlike uitbreidings van die werkplekke.

Waar verskillende riuwe of minerale mekaar oordek, moet die werkplekke op elke rif of mineraallaag op 'n afsonderlike plan aangedui word, as die Direkteur dit vereis.

(c) extract the explosives from the misfired hole in accordance with the provisions of regulation 117 (4) (a).

*Mine plans.*

119. As required by the Director the following plans or as many as may be specified by him shall be kept in the office of every mine:—

*Claim and mining area plan.*

(1) A plan or true copy thereof on tracing cloth of the property appertaining to the mine showing the boundaries, name and number of each mining area and the boundaries and registered number of each claim and of the farms and subdivisions of farms on which the holdings are situated with the names of such farms or subdivisions of farms and the names of the owners, also the sides, angles and co-ordinates of the mining areas as shown on the mining area diagrams and the co-ordinates of the mining area beacons referred to the same axis and origin as the co-ordinates of the farm beacons.

This plan shall be drawn to the same scale as the general surface plan mentioned in subregulation (2) hereof, and shall at all times be correct to within at most six months from date.

*Surface plan.*

(2) A general surface plan or true copy thereof on tracing cloth of the property appertaining to the mine showing the boundaries of the various holdings, names of farms, the outcrops and dip of the reef or reefs or other mineral or deposits, all open surface workings, shaft openings, boreholes, buildings, watercourses, reservoirs, tailings sites, dumps, public roads, railways, airfields, permanent tramways, electric power lines, public telegraph and telephone lines, cable ways, main pipe lines, fences and all surface objects which it is needful to protect against undermining.

In the case of properties whose boundaries are too extended to be shown on a plan of a convenient size it shall be necessary to show only that portion of the property on which the surface equipment is situated, leaving a reasonable margin for extension, and in such cases a key plan on any convenient scale shall also be made showing all the property and the principal surface objects.

This plan shall at all times be correct to within at most one year from date.

*Underground plan.*

(3) An underground plan or true copy thereof on tracing cloth showing clearly the boundaries of the ground over which the undermining rights are held where such boundaries can be shown on a plan of convenient size; also all shafts, drives, winzes, raises, cross-cuts, stopes, safety pillars, permanent packs, stations, underground explosives magazines, spurs or leaders that are being exploited, faults, dykes, and important changes in the dip of the reef, lode or mineral bed.

*Base metal mine plans.*

In the case of properties where the boundaries of the ground on which the undermining rights are held are too extended to be shown on a plan of a convenient size, it shall be necessary to show only that portion of the property on which the underground workings exist, leaving a reasonable margin for the extension of the workings to be shown.

Where different reefs or mineral deposits overlie the one or the other, the workings on each reef or mineral deposit shall be shown on a separate plan when so required by the Director.

Die plan moet te alle tye tot binne hoogstens drie maande vanaf datum korrek wees.

(4) Ingeval die plan, wat in subregulasie (3) hiervan genoem word, nie op dieselfde skaal is as die algemene bogronde plan nie, 'n algemene ondergrondse plan, of ware afdruk daarvan op natreklinne, soos die een wat in subregulasie (3) hiervan genoem word, maar geteken volgens dieselfde skaal as die algemene bogronde plan wat in subregulasie (2) hiervan genoem word, maar met weglating van minder belangrike besonderhede.

Hierdie kaart moet te alle tye tot binne hoogstens ses maande vanaf datum korrek wees.

*Plan van dwarsprofiel van werkplekke.*

(5) 'n Plan, of ware afdruk daarvan op natreklinne, waarop die dwarsprofiel of -profiel van die werkplekke aangetoon word, getrek deur die skag of skagte en hoofingange van die eiendom, en met duidelike aanwysing van die oppervlakte en die hellingsgraad van die strata en rif, sowel as van verplasings van strata, intrusiegesteentes, ens.

Hierdie plan moet ten alle tye tot binne hoogstens een jaar vanaf datum korrek wees.

*Plan van loodregte projeksie van werkplekke.*

(6) Waar die rif 'n gemiddelde helling van meer as sestig grade het, 'n plan of 'n ware afdruk daarvan op natreklinne waarop 'n loodregte projeksie van die mynwerkplekke aangetoon word.

Hierdie plan moet te alle tye tot binne hoogstens drie maande vanaf datum korrek wees.

*Skaal van planne.*

(7) Die planne wat subregulasies (1), (2) en (4) hiervan voorskryf, moet geteken word volgens een van die volgende skale: een in vyfhonderd, of een in eenduisend, of een in eenduisend vyfhonderd, of een in tweeduisend, of een in tweeduisend vyfhonderd, of een in drieduisend, en die ondergrondse planne wat subregulasies (3), (5) en (6) hiervan voorskryf, moet volgens die skaal een in vyfhonderd of een in eenduisend wees.

*Planne van groot eiendomme.*

(8) Waar die eiendom wat onder myntitel gehou word so groot is dat die planne wat hierdie regulasie vereis, onhanteerbaar sou wees as hulle op enkele velle aangebrenge word, kan die myneienaar na eie goeëdunke die plan in afdelings opstel: Met dien verstande dat elke afdeling van 'n plan wat ingevolge subregulasies (1), (2) en (4) hiervan gemaak word, dieselfde ooreenstemmende grense moet hê, en dat 'n gidsplan van al die afdelings op elke afsonderlike afdeling volgens 'n gerieflike skaal aangebrenge moet word.

(9) As deel van die eiendom wat uit bykomende werke bestaan, op 'n taamlike afstand geleë is van daardie deel van die eiendom wat kragtens myntitel of as kleims gehou word, is dit voldoende om sodanige bykomende werke aan te dui op 'n gidsplan van die hele eiendom volgens 'n gerieflike skaal.

*Vrystellings.*

120. In myne waar daar gemiddeld minder as tweehonderd werksmense ondergronds werk, word die Direkteur gemagtig om ten opsigte van die planne vereis by regulasie 119, na gelang van die omstandighede, vrystelling te verleen.

*Mate.*

121. By alle mynopmetings moet die mate of in meter en desimale van 'n meter, of in Engelse voet en desimale van 'n voet geneem word.

This plan shall at all times be correct to within at most three months from date.

(4) In the case when the plan mentioned in subregulation (3) hereof is not on the same scale as the general surface plan, a general underground plan or true copy thereof on tracing cloth similar to the one mentioned in subregulation (3) hereof but drawn to the same scale as the general surface plan mentioned in subregulation (2) hereof, and omitting minor details.

This plan shall at all times be correct to within at most six months from date.

*Plan of transverse sections of workings.*

(5) A plan or true copy thereof on tracing cloth showing the transverse section or sections of the workings drawn through the shaft or shafts and main adits of the property and indicating clearly the surface and the dip of the strata and reef and any dislocation of strata, intrusive rock, etc.

This plan shall at all times be correct to within at most one year from date.

*Plan of vertical projection of workings.*

(6) Where the reef has an average dip of more than sixty degrees a plan or true copy thereof on tracing cloth, showing a vertical projection of the mine workings.

This plan shall at all times be correct to within at most three months from date.

*Scale of Plans.*

(7) The plans provided in subregulations (1), (2) and (4) hereof shall be laid down on a scale of either one in five hundred, one in one thousand, one in one thousand five hundred, one in two thousand, one in two thousand five hundred, or one in three thousand and the underground plans provided for in subregulations (3), (5) and (6) hereof on a scale of one in five hundred or one in one thousand.

*Plans of big properties.*

(8) In the event of a property held under mining title being so large that the plans required under this regulation if made on single sheets, would be of an unwieldy size, mine managers may in their discretion construct the plans in sections: Provided that any sections of the plans made under subregulations (1), (2) and (4) hereof shall have the same corresponding boundaries, and a key plan of all the sections be made on each section on any convenient scale.

(9) In the event of portion of the property consisting of accessory works being situated at some distance from that portion of the property held under mining title or as claims, it shall be sufficient to show any such accessory works on a key plan of the whole property to any convenient scale.

*Exemptions.*

120. In mines where less than two hundred workmen on an average are employed underground the Director shall be authorised with respect to the plans required under regulation 119 to grant exemption according to the circumstances.

*Measurements.*

121. In all mine surveys measurements shall be made either in metres and decimals of a metre or in English feet and decimals of a foot.

*Koördinate.*

122. Die koördinate van die bopgrondse- en ondergrondse opmetings moet, waar doenlik, verwys na dieselfde asse as die koördinate van die opmeting van die plaas waarop die eiendom geleë is.

Die koördinate van die plaasbakens is by die Landmeter-generaal verkrygbaar.

*Onverenigbare koördinate.*

123. Waar die myneiendom twee of meer myngebied-diagramme insluit, waarvan die koördinate numeriek onverenigbaar is, moet die saak onder die aandag van die Direkteur gebring word voordat daar met die planne voortgegaan word.

*Hoogtemerk.*

124. (1) Op alle myneiendomme moet daar 'n permanente hoogtemerk aangebring word. Waar daar geen geskikte klipstruktuur is nie, moet een daarvoor gebou word.

'n Volledige beskrywing van die hoogtemerk, met sy hoogte bo die gemiddelde seespieël en sy diepte benede die uitgangsvlak moet aangegee word op die planne wat ingevolge subregulasies (3), (4), (5) en (6) van regulasie 119 vereis word.

*Uitgangsvlak.*

(2) Alle hoogtes wat bo en onder die grond bepaal word moet verwys na 'n vlak bokant die hoogtemerk. Die hoogte van hierdie vlak moet in elke distrik deur die Direkteur bepaal word, en alle hoogtes moet in meter en desimale daarvan in voet en desimale daarvan, onderkant die vlak aangegee word.

*Afskrifte aan Direkteur.*

125. Mynbestuurders moet ware afdrukke, op natreklynne, van die planne wat in regulasie 119 genoem word, by die Direkteur inlewer.

Die bestuurder moet die afdruk van die plan wat ooreenkomstig subregulasie (2) van regulasie 119 gehou word, een keer per jaar op datum bring, nie later as die eerste dag van Junie elke jaar nie, en by die Direkteur inlewer; ook moet hy die afdrukke van die kaarte genoem in subregulasies (1), (3), (4), (5) en (6) van regulasie 119 een keer elke ses maande op datum bring en nie later as die eerste dag van Desember en die eerste dag van Junie van elke jaar by die Direkteur inlewer.

Vir hierdie doel moet die Direkteur, op skriftelike versoek van die bestuurder, sodanige afdrukke te eniger tyd na 1 September en 1 Maart onderskeidelik aan hom terugstuur.

*Planne is vertroulik.*

126. Die kantoor van die Direkteur mag geen afdrukke van die planne wat in hierdie deel genoem word, nóg enige inligting in verband daarmee aan ongemagtigdes verskaf nie, nóg is sodanige kaarte vir enigeen, sonder die toestemming van die bestuurder, ter insae.

*Ondergrondse planne by sluiting van myn.*

127. (1) Voordat 'n myn of 'n deel van 'n myn verlaat of gesluit word of ontoeganklik gemaak word, moet alle ondergrondse planne bygebring word, en die afdrukke wat in regulasie 125 genoem word, moet by die Direkteur ingelewer word.

(2) Wanneer 'n myn gesluit word moet die berekeningboeke en opmetingsaantekeningboeke by die Direkteur ingelewer word.

*Straf by oortreding.*

128. Die bestuurder of eienaar van 'n myn wat versuim om planne aan te hou ingevolge die regulasies, of

*Co-ordinates.*

122. The co-ordinates of the surface and underground surveys shall be referred, where practicable, to the same axes as the co-ordinates of the farm survey on which the property is situated.

The co-ordinates of the farm beacons are obtainable from the Surveyor-General.

*Inconsistent co-ordinates.*

123. Where the mining property includes two or more mining area diagrams, the co-ordinates of which are numerically inconsistent, the matter shall be brought to the notice of the Director before the plans are proceeded with.

*Bench mark.*

124. (1) On all mining properties a permanent bench mark shall be established; should there be no suitable stone structure one shall be built for this purpose.

A full description of this bench-mark, together with its height above mean sea-level and depth below datum, plane, shall be given on the plans required in terms of sub-regulations (3), (4), (5) and (6) of regulation 119.

*Datum plane.*

(2) All levels taken above and below ground shall be referred to a plane above this bench mark; the height of this plane shall be fixed in each district by the Director and all elevations shall be stated either in metres and decimals of a metre or in feet and decimals of a foot below the plane.

*Copies to Director.*

125. Mine managers shall deposit with the Director true copies on tracing cloth of the plans referred to in regulation 119.

The copy of the plan kept in accordance with sub-regulation (2) of regulation 119 shall be brought up to date once every year by the manager and delivered to the Director not later than the 1st day of June each year, and the copies of the plans mentioned in sub-regulations (1), (3), (4), (5) and (6) of regulation 119 shall be brought up to date once every six months by the manager and delivered to the Director not later than the first day of December and the first day of June each year.

For this purpose the Director shall, at the written request of the manager, return to him such copies at any time subsequent to first September and first March respectively.

*Plans confidential.*

126. No copies of the plans referred to in this part or any information concerning them shall be given by the office of the Director to any unauthorised person, nor shall such plans be open to inspection by any such person without the permission of the mine manager.

*Underground Plans, etc., on closing.*

127. (1) Before a mine or any part of a mine is abandoned or closed down or rendered inaccessible all underground plans shall be brought up to date and the copies referred to in regulation 125 shall be handed in to the Director.

(2) When a mine is closed down the calculation books and survey note books shall be handed in to the Director.

*Penalty on breach.*

128. The manager or owner of a mine who fails to keep plans as prescribed in the regulations or neglects to

wat nalaat om ware afdrucke van sodanige planne ingevolge hierdie regulasies binne die voorgeskrewe tydperk by die Direkteur in te lewer, is by skuldbevinding strafbaar met 'n boete van hoogstens honderd-en-vyftig rand of, by wanbetaling, met tronkstraf vir 'n tydperk van hoogstens ses maande. Die Direkteur kan na goeddunke sodanige plan of planne van die myn ten koste van die myneienaar laat opstel.

*Straf vir terughouding of versteking van planne. Foutiewe planne.*

129. Die bestuurder van 'n myn wat enige gedeelte van 'n mynplan terughou of wat enige gedeelte van die werkplekke weggesteek hou of wat willens en wetens toelaat dat sodanige mynkaarte onjuis is of bly, is by skuldigbevinding strafbaar met 'n boete van hoogstens driehonderd rand of, by wanbetaling, met gevangenisstraf vir 'n tydperk van hoogstens een jaar.

*Foutgrense.*

130. (1) Die onderstaande foutgrense is toelaatbaar in 'n opmeting ooreenkomstig regulasie 119 en in die planne wat op grond van so 'n opmeting opgestel word —

- (a) die lengte van die lyn wat die liggings van 'n gegewe punt soos vasgestel deur die begin en einde van 'n trekmeting verbind, mag hoogstens 1/1,000ste wees van die som van die lyne wat in so 'n trekmeting gebruik word;
- (b) die lengtefout tussen enige twee punte van 'n trekmeting langs die trekmeting afgemeet of sy voorstelling op 'n kaart mag hoogstens 1/1,000ste van die ware lengte wees;
- (c) die fout met die meting van 'n lyn tussen enige twee opeenvolgende punte van 'n trekmeting of sy voorstelling op 'n kaart mag hoogstens 1/1000ste van sy ware lengte wees, ook mag die fout by die meting van sy rigting met verwysing na die asse van koördinate hoogstens vier boogminute wees;
- (d) die fout in hoogte tussen enige punte mag hoogstens 1/2,000ste van die lengte daartussen wees;
- (e) in spesiale metings wat gedoen word om die liggings van skagte wat gesink moet word, en die verbindings te bepaal, is die toelaatbare fout hoogstens die helfte van die foutgrense wat hierbo aangegee word;
- (f) die fout in die ligging van enige punt wat op 'n plan voorgestel word, buiten 'n trekmetingsbaken, mag hoogstens vyf voet buiten en behalwe die bogenoemde toelaatbare foute by die naaste trekpunt wees;
- (g) waar die moeilikhede verbonde aan die juiste weergawe op planne van werkplekke van so 'n aard is dat die opmeter nie verantwoordelikheid vir die juistheid daarvan binne die grense wat in hierdie regulasie bepaal word, kan aanvaar nie, moet sodanige werkplekke aangedui word met stippellyne in 'n geskikte kleur.

*Kontrole-opmeting.*

(2) Die Direkteur kan telkens wanneer hy dit nodig ag, 'n kontrole-opmeting deur 'n opmeter laat doen.

*Koste.*

(3) Wanneer daar bewys word dat 'n fout by die opmeting of by die planne wat op grond van so 'n opmeting opgestel is, die bogenoemde foutgrense oorskry, dra die eienaar van die betrokke myn die koste van so 'n kontrole-opmeting.

*Ventilasietekens.*

131. Sodra die rigting van enige lugstrome of die ligging van ventilasietoestelle as permanent beskou kan

deposit with the Director within the prescribed periods true copies of such plans in accordance with these regulations shall be liable on conviction to a fine not exceeding one hundred and fifty rand or in default of payment to imprisonment for a period not exceeding six months. The Director shall in his discretion have power to cause such plan or plans of the mine to be made at the expense of the owner of the mine.

*Penalty for withholding or concealing plans.*

*Faulty plans.*

129. The manager of a mine who withholds any portion of a mine plan or conceals any part of the workings or knowingly and wilfully allows these mine plans to be or remain incorrect, shall be liable on conviction to a fine not exceeding three hundred rand or in default of payment to imprisonment for a period not exceeding one year.

*Limits of error.*

130. (1) The following shall be the limits of error allowable in a survey made in compliance with regulation 119 and in the plans constructed as the result of such surveys:—

- (a) the length of the line joining the positions of any given point as determined by the beginning and closing of a traverse shall not exceed 1/1,000th of the sum of the lines used in such traverse;
- (b) The error in length between any two points of a traverse measured along the traverse or its representation on plan shall not exceed 1/1,000th of the true length;
- (c) the error in the measurement of a line between any two consecutive points of a traverse or its representation on plan shall not exceed 1/1,000th of its true length, nor shall the error of the measurement of its direction in reference to the axes of co-ordinates exceed four minutes of arc;
- (d) the error in level between any two points shall not exceed 1/2,000th of the length between them;
- (e) in special measurements that have for their object the fixing of the positions of shafts to be sunk and the establishment of connections, the allowable error shall not exceed half of the limits of error given above;
- (f) the error in the position of any point represented on the plan other than a station of a traverse, shall not amount to more than five feet in addition to the above allowable error at the nearest traverse point;
- (g) where the difficulties incidental to the accurate representation of any workings on a plan are such, that the surveyor cannot accept responsibility for their accuracy within the limits laid down in his regulation, such workings shall be indicated by dotted lines of a suitable colour.

*Check survey.*

(2) The Director may in any case where he deems it necessary cause a check survey to be made by a surveyor.

*Cost.*

(3) The cost of such survey shall be borne by the owner of the mine where it is proved that any error in the survey or in the plans constructed as the result of the survey exceeds the above-mentioned limits of error.

*Ventilation signs.*

131. As soon as the direction of any air currents or the position of any ventilating appliances can be con-

word, moet hulle met ink aangedui word op die planne en afdelings wat in subregulasie (3) van regulasie 119 genoem word, maar voor die tyd moet hulle met potlood aangetoon word.

*Opgawe van myne en werke vir statistiese doeleindes.  
Maandopgaaf.*

132. (1) Elke myneienaar, agent of bestuurder en elke prospekterder moet elke maand na die kantoor van die Direkteur volledige en juiste opgawes stuur oor die voorafgaande maand, en wel van die werk wat in daardie maand verrig is, van die werksmense wat in diens was, van die lone uitbetaal, van die resultate verkry en van die waarde en hoeveelheid van die erts wat uitgevoer of verkoop is.

(2) Elkeen in die Gebied wat as prinsipaal of agent minerale wat in die Gebied ontgin is, van 'n prospekterder of myneienaar aankoop, en elkeen in die Gebied wat sodanige minerale uitvoer moet elke maand volledige en juiste opgawes vir die voorafgaande maand na die kantoor van die Direkteur instuur waarin by die hoeveelheid minerale wat aangekoop is, die pryse wat daarvoor betaal is, en die waarde, hoeveelheid en bestemming van die erts wat uitgevoer of verkoop is, aangee.

(3) Die opgawes wat in subregulasies (1) en (2) hiervan genoem word, moet die kantoor van die Direkteur nie later nie as die vyftiende dag van die maand bereik en moet leesbaar geskryf word op die vorms wat die Direkteur van tyd tot tyd daarvoor voorskryf.

(4) Diegene wat ingevolge die voorafgaande subregulasies van hierdie regulasie maandelikse opgawes moet instuur, kan die nodige vorms vir een of meer maande vooruit verkry by die kantoor van die Direkteur, of deur persoonlik aansoek te doen of by wyse van 'n skriftelike versoek.

(5) Diegene wat ingevolge die voorafgaande subregulasies van hierdie regulasie die opgawes daarin genoem moet instuur, moet ook op versoek van die Direkteur alle ander opgawes en inligting aan hom verstrekk wat na die Direkteur se mening redelik vereis kan word: Met dien verstande dat sodanige ander opgawes en inligting op of voor die datum wat die Direkteur bepaal, in die vorm wat hy vereis of voorskryf, verstrekk moet word.

*Balansstaat: Likwidateursverslag.*

133. Die eienaar, agent of plaaslike verteenwoordiger van elke mynonderneming of maatskappy wat myneienendom besit, moet onmiddellik na publikasie 'n afskrif van elke jaarverslag insluitende die balansstaat en die wins- en verliesrekening wat die direkteure van so 'n onderneming uitreik, asook 'n afskrif van die likwidateursverslag oor likwidasie by die Direkteur inlewer.

*Inligting i.s. boorgate waar daar na steenkool, torbaniet, olieskalie en olie geprospekter word.*

134. (1) Elkeen wat voornemens is om 'n gat te boor of ander prospekterwerk te doen na steenkool, torbaniet, olieskalie of olie, moet voordat hy met werksaamhede begin, kennis gee van sy voornemens aan die Direkteur, en elkeen wat 'n gat boor of ander prospekterwerk uitvoer vir genoemde doel moet aan die Direkteur al die inligting en aantekeninge oor die boorgat en ander prospekterwerk verskaf, wat hy vereis, en wel op die wyse en tye wat hy verlang.

(2) Elkeen wat 'n gat geboor het om te prospekter na steenkool, torbaniet, olieskalie of olie moet, voor die datum van inwerkingtreding van hierdie regulasie, alle beskikbare aantekeninge oor die boorgat wat die Direkteur vereis, aan hom verskaf, en wel op die wyse en tye wat hy verlang.

sidered as permanent, they shall be shown in ink on the plans and sections referred to in subregulation (3) of regulation 119, but until such time they shall be shown in pencil.

*Returns from mines and works for statistical purposes.  
Monthly return.*

132. (1) Every mine owner, agent or manager and every prospector shall forward monthly to the office of the Director complete and correct returns for the preceding month of the work accomplished during that month, the workmen employed, the wages paid, the results obtained and the value and quantity of the ore exported or sold.

(2) Every person in the Territory who as principal or agent purchases from any prospector or mine owner any minerals produced in the Territory and every person in the Territory who exports such minerals shall forward monthly to the office of the Director complete and correct returns for the preceding month showing the quantity of minerals purchased, the prices paid and the value, quantity and destination of the ore exported or sold.

(3) The returns referred to in subregulations (1) and (2) hereof shall reach the office of the Director not later than the fifteenth of the month and must be written intelligibly in such forms as may from time to time be prescribed for that purpose by the Director.

(4) Persons who, in terms of the preceding subregulations hereof have to make monthly returns, may obtain the necessary forms for one or more months in advance at the office of the Director, either by personal application or on written request.

(5) Persons required in terms of the foregoing subregulations hereof to make the returns therein specified shall also provide the Director, at his request, with such other returns and data as may in the opinion of the Director be reasonably required: Provided that such other returns and data shall be furnished on or before a date to be fixed by the Director in such form as he may require or prescribe.

*Balance sheet: Liquidator's Report.*

133. The owner, agent or local representative of every mining concern or company holding mining property shall file with the Director immediately on publication a copy of each yearly 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.

*Information concerning boreholes for prospecting for coal, torbanite, oil shale and oil.*

134. (1) Every person intending to sink a borehole or to carry out other prospecting work for the purpose of prospecting for coal, torbanite, oil-shale or oil shall before commencing operations give notice of his intention to do so to the Director and every person sinking a borehole or carrying out other prospecting work for the said purpose shall supply to the Director such information and records regarding the borehole or other prospecting work in such manner and at such time as the Director may require.

(2) Every person who has sunk a borehole for the purpose of prospecting for coal, torbanite, oil-shale or oil prior to the date of coming into force of these regulations shall supply to the Director such available records regarding the borehole in such manner and at such times as the Director may require.

(3) Binne 'n jaar na die datum waarop die boorgat voltooi is, of daar met ander prospekterwerk na steenkool, torbaniet, olieskalie of olie begin is, moet die prospekterder alle inligting en aantekeninge oor die prospekterwerk waaroor hy beskik deur die kantoor van die Direkteur aan die Suid-Afrikaanse Instituut vir Brandstofnavorsing besorg.

*Straf.*

135. Elkeen wat in regulasies 132 en 134 genoem word, wat versuim om opgawes teen die genoemde datums in te stuur, of wat opgawes of inligting of gegewens instuur wat onvoltooi, vals, gebrekkig of onverstaanbaar is, is, by skuldbevinding, strafbaar met 'n boete van hoogstens driehonderd rand, of, by wanbetaling, met gevangenisstraf vir 'n tydperk van hoogstens twee maande.

*Eed i.s. juistheid.*

136. Die Direkteur kan vereis dat die juistheid van die opgawes of aantekenings wat in regulasies 132 en 134 genoem word, onder eed bevestig word.

*Straf — valse opgawe.*

137. Elkeen wat willens en wetens valse verklaring inlewer, of wat versuim om op versoek die juistheid van die opgawes ooreenkomstig die voorafgaande regulasie te bevestig is, by skuldbevinding, strafbaar met 'n boete van hoogstens driehonderd rand, of, by wanbetaling, met gevangenisstraf vir 'n tydperk van hoogstens vier maande.

*Werksmense: Verkleehuis.*

138. (1) (a) By alle hoofverkeerskagte of hoofingange, buiten waar die Direkteur vrystelling verleen het, moet geskikte verkleeplekke na verhouding met die getal blanke mynwerkers in diens, ingerig word, saam met toereikende geriewe vir bad, aantrek en kleredroogmaak, en met genoeg latrines.

*Verpligting om te verklee.*

(b) Elke blanke mynwerker wat ondergrond werk, moet hom in die verkleehuis gaan verklee wanneer sy skoftyd om is, en niemand mag 'n masjienkamer of stoomketelkamer vir verkleeding gebruik nie.

*Sluitkaste.*

(c) Sluitkaste, rakkaste, kettings, of ander geskikte sluitbare toestelle wat die Direkteur goedkeur, moet in elke verkleehuis aangebring word, en wel in so 'n mate dat elke blanke mynwerker sy klere afsonderlik kan weg-pak.

*Klagteboek.*

(2) (a) By elke skagkop of verkleehuis moet die bestuurder 'n verslagboek aanbring waarin persone klagtes kan inskryf wat hulle onder sy aandag wil bring. Die mynopsigter, of as daar nie 'n mynopsigter is nie, die bestuurder, moet elke dag so 'n verslagboek ondersoek en parafeer, en elke mynopsigter of bestuurder, na gelang, wat versuim of nalaat om sodanige klagteboek te ondersoek en te parafeer, is skuldig aan 'n oortreding.

(b) Elke gebrek aan 'n toestel wat vir die veiligheid of gesondheid van ondergrondse werkers verskaf word, moet deur die werker wat daarvan kennis dra, onmiddellik na sy skof in die verslagboek ingeskryf word. Elkeen wat versuim of nalaat om die bepalinge van hierdie subregulasie na te kom, is skuldig aan 'n oortreding.

(c) Elke persoon wat weet van dampe gedurende werkure in werkplekke of van defektiewe ventilasie of van

(3) Within one year after the date of completion of the borehole or commencement of other prospecting work for the purpose of prospecting for coal, torbanite, oil-shale or oil, the prospector shall supply through the office of the Director all information and records concerning his prospecting work to the Fuel Research Institute of South Africa.

*Penalty.*

135. Any of the persons mentioned in regulation 132 and in regulation 134 who fails to render returns on the date specified or sends in returns, information or data which are false, incomplete, defective or unintelligible shall be liable on conviction to a fine not exceeding one hundred and fifty rand or in default of payment to imprisonment for a period not exceeding two months.

*Oath as to accuracy.*

136. The Director may require that the accuracy of the returns or records mentioned in regulations 132 and 134 be verified on oath.

*Penalty — False returns.*

137. Any one who sends in false statements, knowing the same to be false, or who fails when requested to verify the accuracy of the returns as provided in the preceding regulations shall be liable on conviction to a fine not exceeding three hundred hand or in default of payment to imprisonment for a period not exceeding four months.

*Workmen change houses.*

138. (1) (a) At all main travelling shafts or main adits, except where exemption is granted by the Director, suitable change house accommodation proportionate in size to the number of European miners employed shall be provided together with adequate facilities for bathing and for changing and drying of clothing, and with adequate latrine accommodation.

*Duty to change clothing.*

(b) Every European miner employed underground when coming off shift shall change his clothing in such change house, and no person shall use any engine house or boiler house for this purpose.

*Lockers.*

(c) Lockers, cupboards, or chains, or other suitable appliances approved by the Director, capable of being locked, shall be provided in every such change house, and shall be sufficient to enable every European miner to store his clothes separately.

*Complaint record book.*

(2) (a) At each shaft-head or change house the manager shall provide a record book in which persons may enter any complaints which they wish to bring to his notice. Such record book shall be inspected and initialled daily by the mine overseer, or if there is no mine overseer, by the manager, and any mine overseer or manager as the case may be who fails or neglects to inspect and initial such complaint record book shall be guilty of an offence.

(b) Any defect in any appliances provided for the safety or health of persons working underground shall be recorded in the record book by the employee having knowledge of such defect, immediately on coming off shift.

Any person who fails or neglects to comply with the provisions of this subregulation shall be guilty of an offence.

(c) Any person who has knowledge of fumes in the workings during working hours or of defective ventila-



enige ander toestand of toestande wat vir die gesondheid of veiligheid gevaar kan skep, moet desgelyks die saak onverwyld in die verslagboek opskryf, en elkeen wat versuim of nalaat om die bepalings van hierdie subregulasie na te kom, is skuldig aan 'n oortreding.

(d) 'n Mondelingse verslag van so 'n gebrek of gebrekkige toestand moet, waar doenlik, aan 'n skofbaas of ander beampte gelewer word, veral in spoedeisende gevalle, maar so 'n mondelingse verslag is nie voldoende kennisgewing van so 'n gebrek of gebrekkige toestand nie.

(e) Niemand mag aan die verslagboek peuter of dit beskadig nie.

(f) 'n Afskrif van hierdie regulasie moet opgeplak staan in die nabyheid van die plek waar die verslagboek gehou word.

#### *Register van werknemers.*

139. (1) In die kantoor van elke myn of bedryf moet daar 'n register gehou word van alle blanke werknemers wat in of by die myn of bedryf in diens is, en van hul woonplekke.

(2) Elke blanke wat in of by 'n myn of bedryf in diens is, moet die korrekte adres van sy woonplek aan die bestuurder gee, en moet die bestuurder onverwyld van elke adresverandering verwittig.

#### *Lone mag nie in of naby kroë betaal word nie, ens.*

140. Geen lone mag by of in 'n hotel, kroeg, kantien of ander plek waar sterk of gegistê drank verkoop word, uitbetaal word aan enigiemand wat by 'n myn of bedryf in diens is nie.

#### *Beskonkenes by myne of werke.*

141. (1) Niemand in 'n beskonke of ander toestand wat hom onbekwaam maak of waarskynlik onbekwaam maak om vir homself of andere onder sy toesig verantwoordelik te wees, mag toegelaat word om 'n myn binne te gaan of om in die nabyheid van enige werkplek op die oppervlakte of naby bewegende masjinerie te wees nie; en enigeen wat 'n myn of werk binnegegaan het, of wat by 'n werkplek bo of onder die grond beskonke aangetref word, kan onmiddellik deur die bestuurder of iemand anders wat behoorlik deur hom daartoe aangestel is, in hegtenis geneem word en dadelik aan die polisie oorgelewer word, en so iemand word beskou as skuldig aan 'n oortreding van hierdie regulasie.

#### *Besit van sterk drank in myne of werke.*

(2) Niemand mag sterk drank na die werkplekke in myne of bedrywe of na enige plek waar daar gewerk word, neem nie, buiten met die spesiale toestemming van die bestuurder, en geen werksman mag sterk drank in sy besit hê terwyl hy werk of op 'n werkplek verkeer nie.

#### *Werksmense mag nie vertraag word nie.*

142. (1) Aan die einde van die skof moet elke persoon op daardie skof so gou moontlik na die oppervlakte gebring word, en hy mag nie by skagstasies of elders onnodig vertraag word nie.

#### *Merk van tydkaartjies.*

(2) Die tydkaartjies van nie-blankes, wat ondergrond werk, moet of ondergrond of waar dit ondoenlik is, in 'n beskutte kamer op die oppervlakte gemerk word.

#### *Vrystelling waar regulasies nie uitvoerbaar is nie.*

143. Waar die omstandighede by 'n myn of bedryf sodanig is dat bepalings van hierdie regulasies onuitvoerbaar is of 'n buitengewoon swaar las op so 'n myn of bedryf plaas, of waar ook al dit nodig is ter uitvoering van eksperimente of toetse om na te gaan of 'n regulasie doen-

tion or of any other condition or conditions prejudicial to health or safety shall similarly record the matter without delay in the record book, and any person who fails or neglects to comply with the provisions of this subregulation shall be guilty of an offence.

(d) A verbal report of any such defect or defective conditions shall be made to a shift boss or other official where practicable and especially in cases of immediate necessity, but such verbal report shall not be deemed sufficient notice of such defects or conditions.

(e) No person shall tamper with or damage the record book.

(f) A copy of this regulation shall be kept posted in a place near where the record book is kept.

#### *Record of employees.*

139. (1) A record shall be kept in the office of every mine or works of all persons, employed in and about the mine or works, and of their places of residence.

(2) Every European person employed in or about a mine or works shall communicate the correct address of his place of residence to the manager and shall forthwith notify the manager of any change in such address.

#### *Wages not to be paid at or within bars, etc.*

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

#### *Persons in state of intoxication in mines or works.*

141. (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 a mine or to be in the proximity of any working place on the surface or near to any machinery in motion, and any person who may have entered a mine or works or be found at any working place above or below ground in a state of intoxication may be immediately arrested by the manager or some person duly appointed by him and immediately handed over to the Police, and such person shall be deemed to be guilty of an offence against this regulation.

#### *Possession of intoxicating liquor in mines or works.*

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

#### *Workmen not to be kept waiting.*

142. (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 station or elsewhere.

#### *Marking of time tickets.*

(2) Time tickets of non-European persons employed underground shall either be marked underground, or, where this is impracticable, in a shelter-room at the surface.

#### *Exemption where regulations inapplicable.*

143. Whenever the circumstances at any mine or works are such as to render any provision of these regulations inapplicable or unduly onerous in such mine or works, or whenever it is necessary for the purpose of carrying out experiments or tests as to the expediency

lik is, kan die Direkteur vrystelling verleen van so 'n bepaling op voorwaardes wat hy vasstel.

*Bestuurder is verantwoordelik waar geen bepaalde persoon ingevolge hierdie regulasies verantwoordelik is nie.*

144. Waar daar in enige van hierdie regulasies geen bepaalde persoon aangewys word wat vir die nakoming van die bepalings daarvan verantwoordelik gehou word nie, en niemand ingevolge die bepalings van artikel 12 van die Ordonnansie op Myne, Bedrywe en Minerale 1968, of 'n wysiging daarvan, aldus verantwoordelik gehou word nie, word die bestuurder, of enigiemand wat skriftelik aangestel is om as bestuurder waar te neem, onderhewig aan die bepalings van regulasie 146 (2) beskou as aldus verantwoordelik.

#### *Ongehoorsaamheid.*

145. Elkeen wat versuim om 'n bevel wat aan hom ingevolge of ter behoorlike nakoming van die bepalings van hierdie regulasies gegee word, of enige bevel hoegenaamd wat gegee word in die belang van veiligheid of gesondheid deur enigeen wat wettig gemagtig is om so 'n bevel te gee, na te kom, is skuldig aan 'n oortreding van hierdie regulasies.

*Nakoming van regulasies — geen aanspreeklikheid nie.*

146. (1) Niemand mag uit hoofde van 'n ooreenkoms belet word tot optrede wat nodig is vir die nakoming van die bepalings van hierdie regulasies nie, nóg ingevolge 'n kontrak aanspreeklik gehou word vir skadevergoeding weens sodanige optrede nie.

(2) Enigiemand deur wie se agtelosigheid of onwettige handelwyse daar 'n oortreding van enige van hierdie regulasies plaasvind, of wat iemand anders toelaat aanhits, aanspoor, beveel of oorhaal om enige van hierdie regulasies te oortree, word beskou as skuldig aan so 'n oortreding, sonder vermindering egter van die verantwoordelikheid of aanspreeklikheid van die bestuurder of enigiemand anders.

#### *Kontrakteur.*

147. By elke myn moet die ooreenkoms tussen die bestuurder van die myn en elke kontrakteur wat in of by die myn in diens is, die voorwaarde bevat dat genoemde bestuurder toesig en beheer behou oor al die werk wat die genoemde kontrakteur uitvoer, en ten opsigte van sodanige werk moet hy beskou word as die bestuurder wat deur so 'n kontrakteur aangestel is, tensy die kontrakteur met die skriftelike toestemming van die Direkteur en van die eienaar, agent of bestuurder, van wie hy die kontrak gekry het, self 'n bestuurder wat die Direkteur goedgekeur het, aanstel om toesig te hou oor die werk, en sodanige bestuurder by die Direkteur laat registreer.

*Direkteur kan monsters wegneem.*

148. Die Direkteur het die reg om monsters van erts of ander minerale van die riuwe, lae of neerslae, of van die minerale wat uitgehaal is, wat hy by die uitvoering van sy pligte nodig ag, weg te neem, of te laat neem.

*Onwettige steuring van seevoëls.*

149. (1) Niemand behalwe 'n kleimhouer, myneienaar of betrokke toekeninghouer of die werknemer van so 'n kleimhouer, myneienaar of toekeninghouer mag 'n ghwano-eiland of -platform of ander bouwerk wat op 'n kleim, myngebied of gebied onderhewig aan 'n spesiale toekening ingevolge artikel 61 of 62 van die ordonnansie opgerig is, nader, of daarop land met die doel om daar ghwano te versamel nie, sonder die voorafverkreë skriftelike toestemming van sodanige kleimhouer, myneienaar of toekeninghouer.

of any regulation, the Director may grant exemption from such provision under such conditions as he may determine.

*Manager responsible where no particular person is herein made responsible.*

144. 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 12 of the Mines, Works and Minerals Ordinance 1968, or any amendment thereof, the manager, or any person appointed in writing to act as manager, shall, subject to the provisions of regulation 146 (2) be deemed to be so responsible.

#### *Disobedience.*

145. 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.

*Compliance with regulations — freedom from liability.*

146. (1) 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.

(2) Any person through whose neglect or wrongful act a contravention of any of these regulations shall occur or who permits, incites, instigates, commands or procures any person to contravene any of these regulations 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.

#### *Contractor.*

147. At every mine it shall be a condition of the agreement between the manager of the mine and every contractor employed in or about the mine that the said manager shall have supervision and control of all the work carried out by the said contractor, and in respect of such work shall be deemed to be the manager appointed by such contractor, unless the said contractor, with the consent in writing of the Director and of the owner, agent or manager, from whom the contract is taken, shall himself appoint and register with the Director, a manager, approved by the Director, to have charge of the work.

*Director may remove samples.*

148. The Director shall have the right to take, or cause to be taken, samples of ore of other minerals from such reefs, beds or deposits, or from the minerals extracted as he, in the execution of his duty, may deem necessary.

*Unlawful disturbance of sea birds.*

149. (1) No person other than the claim holder, mine owner, or grantee concerned, or the employee of such claim holder, mine owner or grantee shall approach or land on any guano island or on any platform or other construction erected on a claim, mining area or on an area covered by a special grant issued under section 61 or 62 of the ordinance for the purpose of collecting guano therefrom, without having first obtained the written consent of such claim holder, mine owner or grantee.

(2) Niemand mag binne die grense van so 'n klein, gebied of gebied onderhewig aan 'n spesiale toekenning wat afgepen, omgesit of toegeken is vir die winning van ghwano daaruit, 'n vuurwapen afskiet of enige opsetlike daad verrig wat die seevoëls wat op so 'n plek rus of s maak, sal steur nie.

*Kennisgewings i.s. behandeling van gasvergiftiging.*

150. Een of meer kennisgewings met leesbaar geredigeerde en eenvoudige voorskrifte ten opsigte van die goedgekeurde prosedure by die onmiddellike behandeling van gevalle van gasvergiftiging moet op 'n ooglopende plek op elke verkleehuis, ontspanningskamer en noodhulpstasie of in die myn opgeplak word.

*Sanitasie — bevuiling van werkplekke.*

151. Niemand mag die ondergrondse werkplekke met ontlasting of urine vuil maak nie, nóg die latrines met opset misbruik of bevuil nie.

*Sandopvulling — sianiedinhoud.*

152. Wanneer uitskot gebruik word om uitgewerkte ondergrondse plekke op te vul, mag die vog wat in hierdie uitskot aanwesig is, en die vloeistof wat daaruit syfer hoogstens .005 persent aan sianied, gereken as kaliumsianied, bevat.

*Stilstaande water.*

153. Geen stilstaande water mag gelaat word op die vloere van die myngange waar gewerk word nie.

*Veiligheidsmiddels mag nie beskadig of verwyder word nie.*

154. Niemand mag enigiets beskadig of onbruikbaar maak wat aangebring is vir die beskerming van ondergrondse werkplekke of van die oppervlakte, of vir die veiligheid of gesondheid van die werksmense nie, nóg mag enigiemand enige inrigting in of om 'n myn of bedryf wat vir enige van die bogenoemde doeleindes aangebring is, verander, verwyder, daarmee peuter of dit onbruikbaar maak nie, tensy die bestuurder of mynopsigter hom bevoegdaarlik daartoe gemagtig het: Met dien verstande egter dat waar 'n myn gesluit is, sodanige magtiging van die Direkteur verkry moet word.

*Oordrag van pligte.*

155. Niemand mag sy werk aan enigiemand anders oordra nie, tensy hy die goedkeuring verkry het van sy senior amptenaar, nóg mag iemand wat masjinerie hanteer sonder sodanige goedkeuring die masjinerie verlaat, of die toesig oor ander persone onder sy beheer staak nie.

*Geen toegang tot loodse met masjinerie, ens.*

156. Geen ongemagtigde mag 'n myn, of bedryf, of 'n skag, loods, plek of gebou waar masjinerie of stoomketels ingerig is, binnegaan nie, en die bestuurder moet 'n kennisgewing te dien effekte in beide amptelike tale by alle ingange na sodanige plekke opplak.

*Opplak van regulasies.*

157. (1) Ten einde die bepalinge van hierdie regulasies aan almal wat in of by 'n myn of bedryf in diens is, bekend te maak, moet 'n goedgekeurde uittreksel van daardie gedeeltes van hierdie regulasies wat regstreeks betrekking het op werksmense op geskikte plekke by die myn of bedryf opgeplak word, waar dit maklik gelees kan word, en 'n juiste eksemplaar van hierdie regulasies of sodanige uittreksel moet teen kosprys verskaf word aan elke werknemer, buiten die analfabete waaroor regulasie 158 gaan, wanneer die bestuurder of sy verteenwoordiger hom in diens neem, tensy hy dit alreeds besit.

Elke uittreksel moet in beide amptelike tale opgeplak word, asook ander tale wat die Administrateur voorskryf.

(2) No person shall discharge any firearm within the boundaries of any claim, mining area or area covered by a special grant which has been pegged, converted or granted for the purpose of winning guano from such place, or commit any wilful act therein which will disturb the sea birds resting or nesting on such place.

*Notices for treatment of gassing.*

150. One or more notices on which are legibly printed simple directions setting forth the approved procedure for the immediate treatment of cases of gassing shall be posted in a conspicuous place in every change-house, recreation room and accident emergency station on or in a mine.

*Sanitation — pollution of workings.*

151. No person shall pollute the underground workings with faeces or urine, nor wantonly misuse or foul the latrines.

*Sand-filling — cyanide content.*

152. When tailings are used for filling worked-out areas underground the moisture contained in such tailings and the liquid draining off therefrom shall not have a higher cyanide content than .005 per cent expressed as cyanide of potassium.

*Stagnant water.*

153. Stagnant water shall not be allowed to remain on the floors of any levels which are in use.

*Safety precautions not to be damaged or removed, etc.*

154. No person shall damage or render ineffective anything which has been provided for the protection of underground works or of the surface, or for the safety or health of the workmen, nor shall any person alter, remove or in any way interfere with or render ineffective any arrangement in or about a mine or works provided for any of the before-mentioned purposes, unless duly authorized thereto by the manager or mine overseer: Provided however, that in the case of a mine which is closed down, such authorization must be obtained from the Director.

*Deputing of work.*

155. No person shall depute any other person to do his work without the sanction of his official superior; nor shall any person, operating machinery, leave such machinery or cease to supervise persons under his charge, without such sanction.

*No admittance to machinery, etc., sheds.*

156. No unauthorized person shall enter a mine or works or any shaft, shed, place or building where machinery or steam boilers have been erected and notices to this effect shall be posted up by the manager in both official languages at all entrances to such places.

*Posting up of regulations.*

157. (1) For the purpose of making known the provisions of these regulations to all persons employed in and about a mine or works, an authorized extract of the portions of these regulations, directly concerning the workmen, shall be posted up in suitable places at the mine or works, where it can be conveniently read, and a correct copy of these regulations or of such extract shall be supplied at cost price to every employee (except to the illiterate persons contemplated in regulation 158) when engaged by the manager or his representative unless he is already in possession of same.

Every extract posted up shall be in both official languages and in such other languages as the Administrator may prescribe.

*Hernuwing van kennisgewings.*

(2) Wanneer ook al opgeplakte kennisgewings of afskrifte onleesbaar raak of uitgewis of vernietig word, moet hulle met redelike spoed vervang word.

*Straf vir bemoeiing met kennisgewings.*

(3) Elkeen wat die bogenoemde kennisgewings of afskrifte afskeur of andersins onleesbaar maak, nadat hulle opgeplak is, is skuldig aan 'n oortreding, en by skuldigbevinding, strafbaar met 'n boete van hoogstens dertig rand, of, by wanbetaling, met gevangenisstraf vir 'n tydperk van hoogstens dertig dae.

*Onderrig van werksmense i.s. regulasies.*

158. Waar 'n werksman, veral 'n nie-blanke, die regulasies nie kan lees nie moet die toesighouer sorg dat so 'n werksman op die hoogte gestel word van al die regulasies wat op hom of sy besondere werk of pligte betrekking het.

*Aanspreeklikheid ingevolge ander wette.*

159. Geen bepalinge in hierdie regulasies vrywaar enigeen van vervolging ooreenkomstig enige ander wet wat in die Gebied geld nie.

*Onkunde van regulasies onthef geen verantwoordelike persoon van sy verpligtings daaringevolge nie.*

160. Onkunde van die bepalinge van hierdie regulasies of 'n gedeelte daarvan by die eienaar, bestuurder of betrokke verantwoordelike persoon by 'n myn of bedryf, onthef hom geensins van enige verantwoordelikheid by 'n oortreding van hierdie regulasies of 'n deel daarvan nie.

## DEEL III.

## MASJINERIE.

*Verantwoordelikheid en pligte — toesig — masjinerie.*

161. (1) Die persone wat ingevolge regulasie 38 algemene toesig het oor masjinerie, moet te alle tye sorg dra dat alle veiligheidsstoestelle, -apparate en -skerms in goeie werkende toestand gehou en behoorlik gebruik word, en moet die werking van 'n apparaat of masjien staak as die gebruik daarvan weens 'n defek enigsins gevaarlik vir persone is: Met dien verstande dat sodanige persone nie voortdurend op die perseel hoef te verkeer terwyl masjinerie gewerk word nie, as hulle, voordat hulle die plek verlaat hul oortuig het dat daar heelwaarskynlik geen gevaar vir persone sal ontstaan onderwyl hulle afwesig is nie, en as hulle hul pligte ingevolge hierdie subregulasie vir die tydperk van hul afwesigheid oordra aan aangewese bevoegde skofmanne of ander persone.

(2) Geen gebruiker mag vereis of toelaat dat masjinerie bestuur of bedien word deur enigiemand (buiten 'n bevoegde persoon of 'n skofman) wat nie onder die algemene toesig staan van 'n bevoegde persoon wat te alle tye op die plek teenwoordig is wanneer die masjinerie in werking is nie.

(3) Niemand wat masjinerie bestuur wat ter voorkoming van ongelukke aanhoudende aandag vereis, mag om enige rede vir die tydperk waarin hy vir die werking daarvan verantwoordelik is, van sodanige masjinerie weggaan of sy aandag wegneem terwyl dit in werking is nie, tensy iemand anders hom vervang.

*Pligte van gebruiker.*

162. Elke gebruiker moet —

*Renewal of notices.*

(2) As often as the posted notices or copies become defaced, obliterated or destroyed, they shall be renewed with all reasonable despatch.

*Penalty for interfering with notices.*

(3) Any person pulling down or otherwise defacing the before-mentioned notices or copies, when so posted up, shall be guilty of an offence and on conviction be liable to a fine not exceeding thirty rand, or in default of payment to imprisonment for a period not exceeding thirty days.

*Instruction of workmen in regulations.*

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

*Liability under other laws.*

159. Nothing in these regulations contained shall prevent any person from being prosecuted under any other law in force in the Territory.

*Ignorance of regulations shall not exonerate responsible person.*

160. Ignorance of the provisions of these regulations or any portion of them on the part of the owner, manager or responsible person concerned on any mine or works, shall not in any way exonerate him from any responsibility in respect of any contravention of these regulations or any portion of them.

## PART III.

## MACHINERY.

*Responsibility and duties, supervision — machinery.*

161. (1) The persons who, in terms of regulation 38 are in general charge of machinery shall at all times ensure that all safety appliances, devices and guards are maintained in good working condition and properly used, and shall stop the working of any apparatus or machine, the using of which, due to any defect, is in any way dangerous to persons: Provided that such persons need not be continuously upon the premises while machinery is being worked if they have satisfied themselves before leaving the premises, that danger to persons is not likely to develop during their absence and if in respect of the periods during which they are not so present their duties under this subregulation are deputed by them to specified competent persons or shiftsmen.

(2) No user shall require or permit any machinery to be operated or attended to by any person (other than a competent person or a shiftsmen), who is not under the general supervision of a competent person who is present on the premises at all times when the machinery is in operation.

(3) No person operating any machinery, which for the avoidance of accidents requires constant attention, shall for any reason absent himself or cease to attend to such machinery while it is working during the periods he is responsible for the working of such machinery, unless he is replaced.

*Duties of users.*

162. Every user shall:—

- (a) alle redelike maatreëls tref om die vereistes van hierdie regulasies na te kom, en om te verseker dat elkeen wat op die plek werk waar die masjinerie gebruik word, hulle nakom;
- (b) die nodige persone aanstel om hom te help om te verseker dat die regulasies nagekom word;
- (c) sorg vir die veiligheid en behoorlike dissipline van diegene wat op die plek werk;
- (d) sorg dat elke onervare persoon wat aangesê word om 'n masjien te bedien wat moontlik besering kan veroorsaak, ten volle ingelig word oor die gevare wat uit die bediening daarvan kan ontstaan en die voorsorgmaatreëls wat getref moet word;
- (e) sorg dat alle uitrusting, materiaal en ander dinge wat nodig is ter voldoening aan die vereistes van hierdie regulasies verskaf word en in goeie werkende toestand bly;
- (f) sorg dat alle geboue, strukture, toestelle en masjinerie in goeie werkende orde en veilig gehou word.

*Toestand van veiligheidstoestelle en masjinerie.*

163. Elke gebruiker moet sorg dat alle veiligheidsstoestelle, -apparate of -skerms in goeie werkende toestand gehou en behoorlik gebruik word, en moet alle werkende masjinerie stopsit as die gebruik daarvan gevaarlik word of as dit lyk asof dit gevaarlik kan wees vir persone in die omtrek daarvan.

*Gehoorsaamheid aan bevele.*

164. Enige persoon op 'n plek waar masjinerie gebruik word, moet al die bevele uitvoer wat die gebruiker of iemand wat die gebruiker daartoe gemagtig het, ooreenkomstig met, of vir die behoorlike nakoming van, die bepalings van hierdie regulasies of in die belang van veiligheid, aan hom gee.

*Verslae aan toesighoudendes.*

165. Elkeen wat werksaam is op 'n plek waar masjinerie gebruik word, moet enigiets wat onder sy aandag kom, wat moontlik gevaar inhou vir mense of 'n ongeluk aan die masjinerie kan meebring, onmiddellik by die gebruiker aanmeld.

*Eksemplare en uittreksels van regulasies — kennisgewings. Vernietiging van kennisgewings — straf.*

166. Die gebruiker moet 'n gedrukte eksemplaar van hierdie regulasies in sy besit hê. Ten einde die bepalings van hierdie regulasies bekend te maak aan almal wat met, of in die omgewing van, masjinerie werk, moet 'n goedgekeurde uittreksel van daardie gedeeltes van hierdie regulasies wat regstreeks op die werksmense betrekking het op geskikte plekke op die gebruiker se perseel waar hulle maklik gelees kan word, opgeplak word, en moet 'n eksemplaar van die regulasies of van sodanige uittreksel teen kosprys verskaf word aan elke werknemer wat oor masjinerie toesig hou, wanneer die gebruiker of sy verteenwoordiger hom in diens neem, tensy hy dit reeds het. Telkens wanneer die opgeplakte eksemplaar geskend, uitgewis of vernietig word, moet hulle met redelike spoed vervang word. Elkeen wat die voornoemde kennisgewings, nadat hulle opgeplak is, afskeur of andersins skenk, uitgewis of vernietig word, moet hulle met redelike bevinding, strafbaar met 'n boete van hoogstens dertig rand, of, by wanbetaling, met gevangenisstraf vir 'n tydperk van hoogstens dertig dae.

*Algemene veiligheidsmaatreëls. Beligting van masjinerie.*

167. (1) Waar die natuurlike lig by masjinerie ontoereikend is, of waar masjinerie snags gebruik word, moet die gebruiker kunsmatige beligting aanbring, sodat die uitwendige bewegende dele duidelik sigbaar is.

- (a) take all reasonable measures to enforce the requirements of these regulations and to ensure that they are observed by every person working on premises where machinery is used;
- (b) appoint such persons as may be necessary to assist him in enforcing observance of the regulations;
- (c) provide for the safety and proper discipline of the persons working on the premises;
- (d) cause every inexperienced person called upon to operate a machine, which is liable to cause injury, to be fully instructed as to the dangers likely to arise from its operation and the precautions to be observed;
- (e) 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;
- (f) cause all buildings, structures, appliances, and machinery to be maintained in good order and repair and in a safe condition.

*Condition of safety appliances and machinery.*

163. Every user shall cause all safety appliances, devices or guards to be maintained in good working condition and properly used, and shall stop the working of any machinery, the using of which becomes or which appears likely to be dangerous to persons in the vicinity thereof.

*Obedience to orders.*

164. Any person on premises where machinery is used shall carry out any orders given to him by the user, or by persons authorised by the user, in accordance with, or for the proper observance of the provisions of these regulations, or in the interests of safety.

*Reports to persons in charge.*

165. A person working on premises where machinery is used shall forthwith report to the user anything which comes to his notice which is liable to cause danger to persons or accident to machinery.

*Copies and abstracts of regulations — notices.*

*Destruction of notices — penalty.*

166. The user shall have in his possession a printed copy of these regulations. For the purpose of making known the provisions of these regulations to all persons employed on or about machinery, an authorised abstract of the portions of these regulations directly concerning the workmen shall be posted up in suitable places on the premises of the user where it can be conveniently read, and a copy of the regulations or of such abstract shall be supplied at cost price to every employee in charge of machinery when engaged by the user or his representative, unless he is already in possession of the same. As often as the posted copies become defaced, obliterated or destroyed, they shall be renewed with all reasonable despatch. Any person pulling down or otherwise defacing the afore-mentioned notices when so posted up shall be guilty of an offence and on conviction be liable to a fine not exceeding thirty rand or in default of payment to imprisonment for a period not exceeding thirty days.

*General safety measures. Illumination of machinery.*

167. (1) Where the natural light at any machinery is deficient, or where machinery is used at night, the user shall install artificial lighting, so that the external moving parts can be clearly distinguished.

(2) Kunsmatige lig moet so geplaas of geskerm word dat daar nie regstreekse strale in die oë van die persoon wat 'n masjien bedien, op so 'n wyse skyn dat dit die doeltreffende, veilige of gerieflike verrigting van sy werk hinder nie.

#### *Los klere.*

168. Niemand wat in die onmiddellike nabyheid van bewegende masjinerie werk, mag lospassende bo-klere, gordels, juwele, versiersels, oorlosie- of sleutelkettings of -bande dra, nóg mag die gebruiker so iemand toelaat om hierdie dinge te dra.

#### *Aansit en stopsit van masjinerie.*

169. (1) Die gebruiker moet elke masjien met 'n geskikte aansit- en stopsitvoorsien, en die beheerapparaat van so 'n toestel moet op so 'n plek wees dat dit maklik en gerieflik gehanteer kan word.

(2) Die gebruiker moet band-aangedrewe masjinerie wat, indien nodig, stopgesit en aangesit moet kan word sonder om die snelheid van die dryfeenheid te onderbreek, permanent voorsien met 'n toereikende meganiese toestel vir daardie doel, en sodanige toestel moet so ingerig word dat dit die onopsetlike aansit van masjinerie uitskakel.

#### *Dryfbande.*

170. Niemand mag dryfbande aansit of afhaal terwyl die masjinerie loop nie: Met dien verstande dat ligte dryfbande op die keëlskywe van masjiengereedskap geskuif kan word ten einde die werksnelheid te verander: Met dien verstande voorts dat die Direkteur by ononderbroke prosesse 'n toestel vir die aansit en afhaal van bewegende dryfbande kan goedkeur.

#### *Dryfband beveiliging.*

171. Die gebruiker moet doeltreffende toestelle verskaf en sorg dat hulle gebruik word, om te verhoed dat enige dryfband wat afgegooi of verwyder is van 'n wiel, trom of dryfskyf met 'n bewegende dryfas in aanraking kom.

#### *Herstel en smering van masjinerie.*

172. (1) Geen gebruiker mag enige persoon verplig of toelaat om bewegende masjinerie skoon te maak, te herstel, te verstel of te smeer nie, nóg enige deel wat naby bewegende masjinerie is nie, en niemand mag sodanige werk verrig nie: Met dien verstande dat waar dit ondoenlik is om sodanige masjinerie tot stilstand te bring om dit skoon te maak, te herstel, te verstel of te smeer, sodanige skoonmaak-, herstelwerk, verstelling of smering deur 'n bevoegde persoon onderneem moet word.

(2) 'n Inspekteur kan 'n gebruiker gelas om, waar dit prakties moontlik is, outomatiese apparate te verskaf vir die smering van bewegende masjinerie.

(3) Geen gebruiker mag vereis of toelaat dat dryfbande met harpuiis of enige ander samestelling behandel word nie, en niemand mag dryfbande aldus behandel nie, tensy hulle stilstaan of daar spesiale apparate aangebring is waarmee die dryfbande veilig aldus behandel kan word.

#### *Lere.*

173. Die gebruiker moet sorg dat alle lere wat in verband met masjinerie of daarnaby gebruik word, doeltreffende glyvrye apparate het. In kamers waar persone kaalvoet werk, mag die lere nie metaalpenne aan hul onderente hê nie.

#### *Oop ruimte.*

174. Die gebruiker moet sorg dat daar voldoende oop en vry ruimte by elke masjien gehou word onderwyl dit beweeg, sodat die werk sonder onnodige gevaar verrig kan word.

(2) Artificial lights shall be so placed or shaded as to prevent direct rays from impinging on the eyes of the persons operating a machine, in a manner which interferes with the efficient, safe or convenient performance of his work.

#### *Loose clothing.*

168. No person working in close proximity to moving machinery shall wear, or be permitted by the user to wear, loose fitting outer clothing, belts, jewellery, ornaments, watch or key chains or straps.

#### *Starting and stopping machinery.*

169. (1) The user shall provide every machine with an efficient stopping and starting appliance and the control of this appliance shall be in such a position as to be readily and conveniently operated.

(2) The user shall provide belt-driven machinery, which can if necessary be stopped and started without interfering with the speed of the driving unit, permanently with a satisfactory mechanical appliance for the purpose and such appliance shall be constructed as to prevent accidental starting of machinery.

#### *Driving belts.*

170. No person shall ship or unship driving belts whilst the machinery is in motion: Provided that light belts may be shifted on the coned pulleys of machine tools for the purpose of alteration in the working speed: Provided further that in the case of continuous processes an Inspector may approve of an apparatus for shipping or unshipping driving belts whilst in motion.

#### *Belt perches or safety sleeves.*

171. The user shall provide, and cause to be used, efficient appliances to prevent any driving-strap thrown off or removed from a wheel, drum, or pulley, from coming in contact with any shaft in motion.

#### *Repairing and oiling machinery.*

172. (1) No user shall require or permit any person to, and no person shall clean, repair, adjust or lubricate machinery in motion or any parts adjacent to machinery in motion: Provided that where it is impracticable to stop such machinery for the purpose of cleaning, repairing, adjusting or lubricating, such cleaning, repairing, adjusting or lubricating shall be performed by a competent person.

(2) An inspector may require a user to provide automatic devices for oiling machinery whilst in motion where this is practicable.

(3) No user shall require or permit driving-straps to be treated and no person shall treat driving-straps with resin or any composition, unless at rest or unless special devices are provided for safe feeding.

#### *Ladders.*

173. The user shall cause all ladders used in connection with or adjacent to machinery to be fitted with effective non-skid devices. In rooms where persons work with bare feet, ladders shall not be fitted at the bottom with metal spikes.

#### *Clear space.*

174. The user shall cause sufficient clear and unobstructed space to be maintained at every machine while in motion to enable the work to be carried on without unnecessary risk.

*Toestand van vloere.*

175. Die gebruiker moet sorg dat die vloer om 'n masjien goed en gelyk gehou word, en sover doenlik mag daar geen spaanders of ander los materiaal op vloere lê nie, en hy mag nie toelaat dat die vloere glyerig word nie.

*Gevaarlike plekke.*

176. (1) Die gebruiker moet sorg dat alle verhoogde platforms, openings in vloere, gate, luikgate en ander gevaarlike plekke, deeglik omhein of andersins doeltreffend beskerm word om ongelukke aan persone te vermy.

(2) (a) Geen gebruiker mag enigiemand verplig of toelaat om 'n put, tenk, druk- of ander vat, klep- of pompkamer te herstel, of toegang daartoe te verkry nie, tensy —

(i) die gebruiker toereikende voorsiening gemaak het vir die verwydering van alle gevaarlike vloeistowwe, gasse of dampe;

(ii) daar minstens een ander persoon teenwoordig is.

(b) Waar iemand kunsmatige beligting nodig het om so 'n put, tenk, druk- of ander vat, klep of pompkamer te herstel of toegang daartoe te verkry —

(i) mag daar geen onbedekte ligte gebruik word nie;

(ii) moet vervoerbare elektriese ligte met vlamvrye toebehore wat teen 'n druk van hoogstens twee-entertig volt werk, gebruik word.

*Omheinings en skerms van kragtoevoermasjinerie.*

177. (1) Die gebruiker moet sorg dat die ondervermelde dele van kragtoevoermasjinerie deeglik omhein of beskut is —

(a) alle dryfaste, verbindingskoppelings en krae wat binne bereik is;

(b) alle ander askoppelings, buiten dié wat gemaak is met versinkte bonte en moere of bedekte flense, of ander ewe veilige aparate;

(c) alle stelskroewe aan dryfaskrae, buiten dié wat versink of andersins ewe veilig gemaak is;

(d) alle uitstekende speie binne bereik, buiten model-speie en glyspeie;

(e) alle gedeeltes van wiele, tromme en katrolle binne bereik, buiten dié wat weens konstruksie- of posisie vir elke persoon wat in diens is of wat werk, net so veilig is asof hulle deeglik beskut was;

(f) alle dryfbande met uitstekende metaalbinders of los punte, wat binne bereik is;

(g) die onderkant van elke boggrondse leerdryfband op die plekke waar iemand wat daar werk moontlik te eniger tyd sal moet staan of waaronder hy sal moet deurloop of om sy werk te doen, of andersins in verband met sy werk;

(h) alle metaal-dryfkettings wat binne bereik is en die onderkant van alle bogrendse metaaldryfkettings;

(i) alle dryfbande wat binne bereik is;

(j) alle dryfbande wat deur vloeropenings gaan.

(2) By die toepassing van hierdie regulasies beteken „kragtoevoermasjinerie” —

(a) elke as, wiel, trom of katrol, verbindingskoppeling, dryfband of ander toestel verbonde aan die oorbrengring van beweegkrag van 'n dryfeenheid na 'n ander masjien of toestel;

(b) enige wiel, verbindingskoppelingstelsel van vaste of los katrolle of ander toestel deur middel waarvan 'n masjien of toestel aangedryf word.

*Condition of floors.*

175. The user shall cause the floor surrounding every machine to be maintained in a good and level condition, and as far as practicable, free from chips or other loose material, and he shall not allow it to become slippery.

*Dangerous places.*

176. (1) The user shall cause all elevated platforms, openings in floors, trapholes and other dangerous places to be securely fenced, or otherwise adequately protected to prevent accidents to persons.

(2) (a) No user shall require or permit any person to repair or enter any pit, tank, pressure or any other vessel, valve, or pump chamber unless —

(i) he has made adequate provision for the clearing out of any dangerous liquids, gases or fumes;

(ii) at least one other person is present.

(b) Where artificial lighting is required by any person repairing or entering such pit, tank, pressure or other vessel, valve or pump chamber —

(i) no naked lights shall be used;

(ii) portable electric lights with flame-proof fittings shall be used, which shall be operated at a pressure not exceeding thirty-two volts.

*Fencing and guarding of transmission machinery.*

177. (1) The user shall cause the following parts of transmission machinery to be securely fenced or guarded:

(a) all shafts, couplings, and collars within reach;

(b) all other shaft couplings, except those constructed with countersunk bolts and nuts, shrouded flanges, or other equally safe devices;

(c) all set screws on shaft collars, except such as are counter-sunk or otherwise made equally safe;

(d) all projecting keys within reach, except pattern keys and sliding keys;

(e) all parts of wheels, drums and pulleys within reach, except such as are, by construction or position, equally safe to every person employed or working as they would be if securely fenced;

(f) all driving straps with projecting metal fasteners or loose ends, which are within reach;

(g) the underside of every overhead driving strap, at those parts where any person employed is liable to have to stand or pass under them at any time either in the course of his employment or incidentally thereto;

(h) all metal driving chains which are within reach, and the underside of all overhead metal driving chains;

(i) all other driving straps which are within reach;

(j) all driving straps which pass through floor openings.

(2) For the purpose of this regulation "transmission machinery" shall mean —

(a) every shaft, wheel, drum or pulley, coupling clutch, driving strap or other device incidental to the transmission of motion between any driving unit and any other machine or appliance;

(b) any wheel, clutch, system of fast and loose pulleys, or other device through which any machine or appliance receives its motion.

*Beskadigde sae.*

178. Geen gebruiker mag enigiemand verplig of toelaat om 'n kragssaag te gebruik wat enigszins beskadig is nie.

*Sirkelsae.*

179. (1) Die gebruiker moet sorg dat elke sirkelsaag soos volg omhein of beskerm is —

- (a) die gedeelte van die saag onderkant die bank moet behoorlik beskerm wees;
- (b) agter, en in 'n reguit lyn met die saag, moet daar 'n kloofyster wees met 'n gladde oppervlakte wat sterk en stewig en maklik verstelbaar moet wees, en wat ook aan die ondervermelde vereistes moet voldoen —
  - (i) die kant van die kloofyster wat naaste aan die saag is, moet in die vorm van 'n boog of 'n sirkel wees met 'n straal wat die straal van die grootste saag wat op die bank gebruik word, met hoogstens een-achtste duim oortref;
  - (ii) die kloofyster moet so naby as moontlik by die saag gehou word, met inagneming van die aard van die werk wat dan verrig word, en die afstand tussen die voorkant van die kloofyster en die tande van die saag mag by die hoogte van die bank hoogstens 'n halfduim wees;
  - (iii) vir 'n saag met 'n deursnit van minder as vier-en-twintig (24) duim, moet die kloofyster van die bank opwaarts strek tot binne een duim van die bopunt van die saag, en vir 'n saag met 'n deursnit van vier-en-twintig (24) duim of meer moet die kloofyster van die bank opwaarts strek tot 'n hoogte van minstens nege duim;
- (c) die bokant van die saag moet bedek wees met 'n sterk en maklik-verstelbare skerm met 'n sy-flens aan die kant van die saag wat die verste van die afsluiting is. Die skerm moet so gestel gehou word dat die genoemde flens tot onderkant die voet van die saag se tande kom. Die skerm moet van die bokant van die kloofyster tot op 'n punt so laag doenlik aan die snykant van die saag kom.

(2) Die gebruiker moet sorg dat 'n geskikte stootstok byderhand gehou word vir gebruik by die bank van elke sirkelsaag wat met die hand gevoer word sodat die werk sonder onnodige gevaar verrig kan word.

(3) Die gebruiker moet geskikte meganiese middels verskaf om ru timmerhout vas te hou wat met die sirkelsaag in repe gesaag word.

*Bewegende sae.*

180. Die gebruiker moet sorg dat elke slingersaag, hang- of ander saag (buiten 'n draagbare saag) wat in die rigting van hout of timmerhout beweeg word —

- (a) beskut word sodat net die snygedeelte van die saag ontbloot is;
- (b) outomaties weg gehou word van die snyposisie deur 'n ewewig of ander geskikte middel.

*Gewone bandsae.*

181. Die gebruiker moet sorg dat elke gewone bandsaag soos volg beskerm word —

- (a) die voorkant van die boonste katrol moet met geskikte materiaal toegemaak wees;
- (b) albei kante van die onderste katrol en elke bykomende katrol moet volkome omhul wees met geskikte materiaal;

*Damaged saws.*

178. No user shall require or permit any person to use a power-driven saw which is in any way damaged.

*Circular saws.*

179. (1) The user shall cause every circular saw to be fenced or guarded as follows —

- (a) the part of the saw below the bench table, shall be adequately protected;
- (b) behind and in a direct line with the saw there shall be a riving knife which shall have a smooth surface, shall be strong, rigid and easily adjustable, and shall also conform to the following conditions:—
  - (i) the edge of the knife nearer the saw shall be in the form of an arc or a circle, having a radius not exceeding by more than one-eighth of an inch, the radius of the largest saw used on the bench;
  - (ii) the knife shall be maintained as close as practicable to the saw, having regard to the nature of the work being done at the time, and at the level of the bench table the distance between the front edge of the knife and teeth of the saw, shall not exceed half an inch;
  - (iii) for a saw of a diameter of less than twenty-four (24) inches, the knife shall extend upwards from the bench table to within one inch of the top of the saw, and for a saw of a diameter of twenty-four (24) inches or over, shall extend upwards from the bench table to a height of at least nine inches;
- (c) the top of the saw shall be covered by a strong, easily adjustable guard, with a side flange at the side of the saw furthest from the fence. The guard shall be kept so adjusted that the said flange shall extend below the roots of the teeth of the saw. The guard shall extend from the top of the riving knife to a point as low as practicable to the cutting edge of the saw.

(2) The user shall cause a suitable push-stick to be kept available for use at the bench of every circular saw, which is fed by hand, to enable the work to be carried on without unnecessary risks.

(3) The user shall provide suitable mechanical means for holding rough timber which is to be slabbed by circular saw.

*Moving saws.*

180. The user shall cause every swing, pendulum or other saw (except a portable saw), which is moved towards wood or timber:—

- (a) to be guarded so that only the cutting portion of the saw is exposed;
- (b) to be automatically kept away from the cutting position by a balance weight or other suitable means.

*Plane bandsaws.*

181. The user shall cause every plane bandsaw to be guarded as follows:—

- (a) the front of the top pulley shall be covered with suitable material;
- (b) both sides of the bottom pulley and any additional pulleys shall be completely encased by suitable material;



- (c) alle gedeeltes van die lem moet ingesluit of andersins deeglik beskerm wees, behalwe die gedeelte van die lem tussen die bank en die boonste geleiding.

*Skaafmasjiene (houtbewerking).*

182. (1) Geen gebruiker mag vereis of toelaat dat 'n skaafmasjien wat nie meganies gevoer word nie, vir vlak-skaaf gebruik word nie, tensy dit met 'n silindervormige beitelblok ingerig is.

(2) Geen gebruiker mag vereis of toelaat dat 'n skaafmasjien wat nie meganies gevoer word nie, gebruik word om 'n stuk hout van minder as twaalf duim lank vlak te skaaf nie, tensy daar vir sodanige stuk hout 'n veilige houder gebruik word: Met dien verstande egter dat dit nie geld vir die skaaf van kante van plat stukke hout nie.

(3) Die gebruiker moet elke skaafmasjien wat vir vlak-skaaf gebruik word met 'n „brug”-skerm inrig wat die hele lengte en breedte van die beitelgleuf in die skaafbank kan oordek en wat so gemaak is dat dit maklik in 'n vertikale en horisontale rigting verstel kan word.

(4) Die gebruiker moet elke skaafmasjien wat vir dikteskaafwerk gebruik word, buiten die saamgestelde masjien vir vlak-skaaf- en dikteskaafwerk met 'n doeltreffende skerm vir die voerroller inrig.

*Vormmasjiene (houtbewerking).*

183. Die gebruiker moet sorg dat —

- (a) die beitel van elke vormmasjien met vertikale spil, waar doenlik, ingerig moet word met 'n doeltreffende skerm na gelang van die soort werk wat verrig word;
- (b) waar werk nie met 'n doeltreffende beitelskerm verrig kan word nie, die hout wat in 'n vormmasjien met vertikale spil gevorm moet word, waar doenlik, vasgehou word met 'n klemhout of houder wat so gemaak is dat dit die gevaar wat die werker loop om 'n ongeluk te kry, sover moontlik vermindert;
- (c) 'n geskikte „pen” of stootstok vir gebruik by die bank van elke vormmasjien met vertikale spil byderhand gehou word.

*Tapgatmasjiene.*

184. Die gebruiker moet die ketting van elke ketting-tapgatmasjien van 'n skerm voorsien wat die beitels sover moontlik omhul.

*Algemene beskerming teen masjinerie.*

185. (1) Die gebruiker moet sorg dat alle ontblote masjinerie wat nie spesifiek in hierdie regulasies genoem word nie, en wat, wanneer dit in beweging is, gevaarlik vir persons kan wees, deeglik afgeskort is, en dat doeltreffende skerms aangebring word aan daardie dele van die masjinerie wat moontlik gevaar vir persone inhou.

(2) Niemand mag, tensy sy werk dit vereis, binne veiligheidskerms of veiligheidsomheining kom, of deur die gebruiker toegelaat word om daarbinne te kom nie.

*Drukhouers.*

186. Geen drukhouer mag gebruik word nie, tensy dit —

- (a) goed ontwerp is, uit geskikte materiaal gebou is, en deeglik afgewerk is;
- (b) gebou is volgens die ontwerp van 'n goedgekeurde praktykkode onder die toesig van 'n goedgekeurde gesag en sodanige gesag se sertifikaat en stempel te dien effekte op die romp aangebring is;
- (c) 'n vervaardigersplaatjie het wat stewig aan die romp vasgemaak is met die onderstaande besonderhede:

- (c) all portions of the blade shall be enclosed, or otherwise securely guarded, except the portion of the blade between the bench table and the top guide.

*Planing machines (woodworking).*

182. (1) No user shall require or permit any planing machine which is not mechanically fed, to be used for overhand planing unless it is fitted with a cylindrical butterblock.

(2) No user shall require or permit any planing machine which is not mechanically fed to be used for planing overhand any piece of wood less than twelve inches in length, unless a safe holder is used for such piece or wood: Provided that this shall not apply to the operation of planing edges of flat pieces of wood.

(3) The user shall provide every planing machine used for overhand planing with a “bridge” guard capable of covering the full length and breadth of the cutting slot in the bench, and so constructed as to be easily adjusted in a vertical and horizontal direction.

(4) The user shall provide an efficient guard for the feed roller of every planing machine used for thicknessing, except the combined machine for overhand planing and thicknessing.

*Moulding machines (woodworking).*

183. The user shall cause —

- (a) the cutter of very vertical spindle moulding machine to be provided, when practicable, with an efficient guard, having regard to the nature of the work which is being performed;
- (b) for such work as cannot be performed with an efficient guard for the cutter, the wood, being moulded at a vertical spindle moulding machine, if practicable, to be held in a jig or holder of such construction as to reduce as far as possible the risk of accident to the worker;
- (c) a suitable “spike” or push stick to be kept available for use at the bench of every spindle moulding machine.

*Mortising machine.*

184. The user shall provide the chain of every chain mortising machine with a guard which shall enclose the cutters as far as practicable.

*General machinery protection.*

185. (1) The user shall cause all exposed machinery not specially referred to in these regulations which, when in motion, may be dangerous to persons, to be securely fenced off, and efficient guards to be provided to such parts of any machinery as may be a source of danger to persons.

(2) No person, unless his duty necessitates it, shall trespass, or be permitted by a user to trespass, within any safety guards or fences.

*Pressure vessels.*

186. No pressure vessel shall be used unless:

- (a) it is of sound design and constructed by good workmanship from suitable materials;
- (b) it has been constructed to the design of an approved code of practice, under the supervision of an approved authority and it is certified and stamped on the shell by such authority to this effect;
- (c) it has a manufacturer's plate securely fixed to the shell with the following particulars:

- (i) naam van vervaardiger;
  - (ii) land van herkoms;
  - (iii) fabrieksnommer;
  - (iv) jaar wanneer dit vervaardig is;
  - (v) watertoetsdruk in lb/vierkante duim;
  - (vi) bestemde veilige werkdruk in lb/vierkante duim.
- (d) buiten in die geval van 'n drukbottel, voorsien is van —
- (i) 'n doeltreffende mangat of ander goedgekeurde middel, waardeur die binnekant behoorlik skoongemaak en ondersoek kan word; of
  - (ii) minstens twee geskikte inspeksie- of skoonmaakgate.

*Skoonmaak en toets van drukhouers.*

187. (1) Die gebruiker moet sorg dat alle drukhouers en hul aansluitings skoon en vry gehou word van verkolde olie of ander ontvlambare materiaal of materiaal wat invreting kan veroorsaak, en dat hulle met tussenpose van hoogstens een jaar oopgemaak en ondersoek word deur 'n bevoegde ingenieur of ander bevoegde persoon, en deur so iemand met tussenpose van hoogstens twee jaar getoets word by waterdruk van een-en-een-derde maal die veilige werkdruk. 'n Skriftelike verslag van elke dergelike inspeksie en toets, onderteken deur diegene wat dit uitgevoer het, moet in die besit van die gebruiker en ter insae van die inspekteur gehou word.

(2) Die gebruiker moet sorg dat alle drukhouers deeglik skoongemaak word wanneer hulle vir ondersoek of inspeksie oopgemaak word.

(3) Die gebruiker moet sorg dat alle drukhouers toegerus is met —

- (a) 'n geskikte drukmeter wat ontwerp is om te alle tye die regte inwendige drukking in lb. per vierkante duim te toon, en gemerk met 'n duidelike rooi merk by die veilige werkdruk van die houer waarvan die wyserplaat so ingedeel moet word dat dit hoogstens twee maal en minstens een-en-'n-halwe maal die werkdruk van die houer aandui;
- (b) 'n verligtings- of veiligheidsklep wat gesluit is en waarvan die inwendige deursnit minstens 'n half-duim is en wat in staat is om outomaties enige te hoë drukking bo die veilige werking van die houer te voorkom, en aangebring is aan, of so na soos moontlik aan, die drukhouer, en geen tussenkomende afsluitkraan of -klep mag tussen sodanige verligtings- of veiligheidsklep en die drukhouer aangebring word nie; en
- (c) 'n geskikte aftapkraan of -klep aan die laagste gedeelte.

(4) Waar 'n drukhouer deur middel van stoom of lug werk en die druk van die stoom of lug hoër is as die veilige werkdruk van die houer, moet 'n afdoende verloop- en veiligheidsklep tussen die bron en die drukhouer aangebring word.

(5) (a) Ongeag die bepalings van hierdie regulasies kan die Direkteur op ontvangs van 'n skriftelike aansoek deur die gebruiker en ten opsigte van drukhouers wat gebruik word in gespesialiseerde prosesse waar die toepassing van die bepalings van hierdie regulasie na die mening van die Direkteur nie prakties uitvoerbaar is nie, die houer skriftelik onder sy hand of in die algemeen of op voorwaardes wat hy voorskryf vrystel van die vereistes van enigeen of al die bepalings van hierdie regulasies.

(b) 'n Vrystelling wat ooreenkomstig paragraaf (a) toegestaan is, kan te eniger tyd volgens die goeddunke van die Direkteur teruggetrek of gewysig word.

- (i) maker's name;
- (ii) country of origin;
- (iii) factory number;
- (iv) year of construction;
- (v) hydraulic test pressure in lbs. per square inch;
- (vi) designed safe working pressure in lbs/square inch;

(d) except in the case of a pressure bottle it is provided with:

- (i) a suitable manhole or other approved means which will allow the interior to be thoroughly cleaned and examined; of
- (ii) at least two suitable inspection or cleaning holes.

*Cleaning testing pressure vessels.*

187. (1) The user shall cause all pressure vessels and their connections to be kept clean and free from carbonised oil or material liable to ignition or to cause corrosion, and to be opened and examined by a competent engineer or competent person at intervals not exceeding one year, and to be tested by such a person at intervals not exceeding two years, by hydraulic pressure to the extent of one and one-third times the safe working gauge pressure. A written record of each such inspection and test, signed by the persons making it shall be in the user's possession and open to inspection by the Inspector.

(2) The users shall cause all pressure vessels to be thoroughly cleaned out when opened for examination or inspection.

(3) The user shall cause all pressure vessels to be fitted with —

- (a) a suitable pressure gauge designed to show at all times the correct internal pressure in lbs. per square inch, and marked with a prominent red mark at the safe working gauge pressure of the vessel, the dial of which shall be graduated to read not more than double and not less than one and one-half times the working pressure of the vessel;
- (b) a relief or safety valve which is locked and not less than half an inch in internal diameter, capable of automatically preventing any undue accumulation of pressure above the safe working pressure of the vessel, and attached to or attached as near as practicable to the pressure vessel, and no intervening stopcock or valve shall be placed between such relief or safety valve and the pressure vessel, and
- (c) a suitable drain cock or valve at the lowest part.

(4) Where a pressure vessel is worked by steam or air and the supply is at a pressure higher than the safe working gauge pressure of such vessel, an adequate reducing valve and a safety valve shall be inserted between the source of supply and the pressure vessel.

(5) (a) Notwithstanding the provisions of this regulation the Director may, upon written application by the user and in respect of pressure vessels used in specialised processes where the application of the provisions of this regulation is in the opinion of the Director not practicable, exempt by writing under his hand either generally or on such conditions as he may specify the user from the requirements of any or all the provisions of this regulations.

(b) Any exemption granted in terms of paragraph (a) may at any time be withdrawn or amended at the discretion of the Director.

- (c) alle gedeeltes van die lem moet ingesluit of andersins deeglik beskerm wees, behalwe die gedeelte van die lem tussen die bank en die boonste geleiding.

*Skaafmasjiene (houtbewerking).*

182. (1) Geen gebruiker mag vereis of toelaat dat 'n skaafmasjien wat nie meganies gevoer word nie, vir vlak-skaaf gebruik word nie, tensy dit met 'n silindervormige beitelblok ingerig is.

(2) Geen gebruiker mag vereis of toelaat dat 'n skaafmasjien wat nie meganies gevoer word nie, gebruik word om 'n stuk hout van minder as twaalf duim lank vlak te skaaf nie, tensy daar vir sodanige stuk hout 'n veilige houër gebruik word: Met dien verstande egter dat dit nie geld vir die skaaf van kante van plat stukke hout nie.

(3) Die gebruiker moet elke skaafmasjien wat vir vlakskaaf gebruik word met 'n „brug“-skerm inrig wat die hele lengte en breedte van die beitelgleuf in die skaafbank kan oordek en wat so gemaak is dat dit maklik in 'n vertikale en horisontale rigting verstel kan word.

(4) Die gebruiker moet elke skaafmasjien wat vir dikteskaafwerk gebruik word, buiten die saamgestelde masjien vir vlakskaaf- en dikteskaafwerk met 'n doeltreffende skerm vir die voerroller inrig.

*Vormmasjiene (houtbewerking).*

183. Die gebruiker moet sorg dat —

- (a) die beitel van elke vormmasjien met vertikale spil, waar doenlik, ingerig moet word met 'n doeltreffende skerm na gelang van die soort werk wat verrig word;
- (b) waar werk nie met 'n doeltreffende beitelskerm verrig kan word nie, die hout wat in 'n vormmasjien met vertikale spil gevorm moet word, waar doenlik, vasgehou word met 'n klemhout of houër wat so gemaak is dat dit die gevaar wat die werker loop om 'n ongeluk te kry, sover moontlik vermindert;
- (c) 'n geskikte „pen“ of stootstok vir gebruik by die bank van elke vormmasjien met vertikale spil byderhand gehou word.

*Tapgatmasjiene.*

184. Die gebruiker moet die ketting van elke ketting-tapgatmasjien van 'n skerm voorsien wat die beitels sover moontlik omhul.

*Algemene beskerming teen masjinerie.*

185. (1) Die gebruiker moet sorg dat alle ontblote masjinerie wat nie spesifiek in hierdie regulasies genoem word nie, en wat, wanneer dit in beweging is, gevaarlik vir persons kan wees, deeglik afgeskort is, en dat doeltreffende skerms aangebring word aan daardie dele van die masjinerie wat moontlik gevaar vir persone inhou.

(2) Niemand mag, tensy sy werk dit vereis, binne veiligheidskerms of veiligheidsomheinings kom, of deur die gebruiker toegelaat word om daarbinne te kom nie.

*Drukhouers.*

186. Geen drukhouer mag gebruik word nie, tensy dit —

- (a) goed ontwerp is, uit geskikte materiaal gebou is, en deeglik afgewerk is;
- (b) gebou is volgens die ontwerp van 'n goedgekeurde praktykkode onder die toesig van 'n goedgekeurde gesag en sodanige gesag se sertifikaat en stempel te dien effekte op die romp aangebring is;
- (c) 'n vervaardigersplaatjie het wat stewig aan die romp vasgemaak is met die onderstaande besonderhede:

- (c) all portions of the blade shall be enclosed, or otherwise securely guarded, except the portion of the blade between the bench table and the top guide.

*Planing machines (woodworking).*

182. (1) No user shall require or permit any planing machine which is not mechanically fed, to be used for overhand planing unless it is fitted with a cylindrical butterblock.

(2) No user shall require or permit any planing machine which is not mechanically fed to be used for planing overhand any piece of wood less than twelve inches in length, unless a safe holder is used for such piece or wood: Provided that this shall not apply to the operation of planing edges of flat pieces of wood.

(3) The user shall provide every planing machine used for overhand planing with a "bridge" guard capable of covering the full length and breadth of the cutting slot in the bench, and so constructed as to be easily adjusted in a vertical and horizontal direction.

(4) The user shall provide an efficient guard for the feed roller of every planing machine used for thicknessing, except the combined machine for overhand planing and thicknessing.

*Moulding machines (woodworking).*

183. The user shall cause —

- (a) the cutter of very vertical spindle moulding machine to be provided, when practicable, with an efficient guard, having regard to the nature of the work which is being performed;
- (b) for such work as cannot be performed with an efficient guard for the cutter, the wood, being moulded at a vertical spindle moulding machine, if practicable, to be held in a jig or holder of such construction as to reduce as far as possible the risk of accident to the worker;
- (c) a suitable "spike" or push stick to be kept available for use at the bench of every spindle moulding machine.

*Mortising machine.*

184. The user shall provide the chain of every chain mortising machine with a guard which shall enclose the cutters as far as practicable.

*General machinery protection.*

185. (1) The user shall cause all exposed machinery not specially referred to in these regulations which, when in motion, may be dangerous to persons, to be securely fenced off, and efficient guards to be provided to such parts of any machinery as may be a source of danger to persons.

(2) No person, unless his duty necessitates it, shall trespass, or be permitted by a user to trespass, within any safety guards or fences.

*Pressure vessels.*

186. No pressure vessel shall be used unless:

- (a) it is of sound design and constructed by good workmanship from suitable materials;
- (b) it has been constructed to the design of an approved code of practice, under the supervision of an approved authority and it is certified and stamped on the shell by such authority to this effect;
- (c) it has a manufacturer's plate securely fixed to the shell with the following particulars:

*Kompressors.*

188. (1) Die gebruiker moet sorg dat die lug wat vir kompressors bedoel is, uit die suiwerste en koelste beskikbare bron getrek word.

(2) By kompressors wat ontwerp is om meer as 240 kubieke voet lug per minuut saam te pers, moet die gebruiker sorg dat geskikte smeltproppe, sowel as termometers of hittemeters met tekens wat maklik leesbaar is, naby die uitlaatkleppe van die afvoerpype van alle lugsilinders en aan die uitlaatlugpype van tussenverkoelers van kompressors aangebring word: Met dien verstande dat 'n kompressor van die veelvoudige silindersoort (d.w.s. twee of meer silinders wat verbind is deur inlaat- en uitlaatverdeelpype) toegerus kan word met een smeltprop en een termometer of hittemeter. Die hoogste toelaatbare temperatuur moet met 'n rooi merk op die wyserplaat aangedui word, en die persoon wat toesig hou oor die kompressor, moet sorg dat hierdie temperatuur nie oorskry word nie. Hy moet ook minstens een keer per dag, wanneer die kompressor gebruik word, 'n aantekening maak van die termometer- of hittemeterstand.

(3) Die ontdekking van 'n swak plek of defek in 'n kompressor wat moontlik gevaar vir persone inhou, moet onverwyld by die gebruiker aangemeld word, en die gebruiker moet onmiddellik stappe doen om hierdie swak plek of defek te herstel en om gevaar aan persone te voorkom.

*Die opwekking, omsetting, verspreiding en gebruik van elektriese krag. Omheining of beskutting.*

189. Die gebruiker moet sorg dat alle persele waarop daar inrigtings vir die opwekking van elektrisiteit, omsettings-, skakel- of koppelapparaat is, behoorlik omhein of afgekamp is, en kennisgewings in albei amptelike tale wat toegang aan ongemagtigdes verbied, moet by alle aangewese ingange van sodanige persele vertoon word. Waar sodanige persele nie opgepas word nie, moet alle aangewese ingange toegehou word en deeglik gesluit wees.

*Veilige keuse en oprigting.*

190. Die gebruiker moet sorg dat —

- (a) alle elektriese apparaat en geleiers op so 'n wyse gekies, ingedeel, ingerig, beskerm, bewerk en in stand gehou word dat gevaar vir persone sover moontlik uitgeskakel is; en
- (b) alle elektriese masjinerie en geleiers op so 'n wyse geplaas en beskerm word dat niemand wat toevallig met 'n gedeelte daarvan in aanraking kom, beseer kan word nie.

*Kennisgewings.*

191. Die gebruiker moet sorg dat onderstaande kennisgewings in albei amptelike tale op geskikte plekke in elektriese opwekstasies en sub-stasies vertoon word —

- (a) 'n kennisgewing waarin ongemagtigdes verbied word om elektriese apparaat te hanteer of hul daarmee te bemoei;
- (b) 'n kennisgewing met opdragte oor die prosedure wat by brand gevolg moet word;
- (c) 'n kennisgewing met opdragte oor die bybring van persone wat aan die gevolge van elektriese skok ly.

*Skakelbord.*

192. Die gebruiker moet sorg dat alle skakelborde aan die agterkant 'n oop ruimte van minstens vier voet het. Hierdie ruimte moet toe en gesluit gehou word, behalwe vir inspeksie, verandering of herstel, en mag geensins versper word nie: Met dien verstande dat hierdie regulasie nie geld vir —

*Air compressors.*

188. (1) The user shall cause the supply of air for air compressors to be drawn from the purest and coolest source available.

(2) In the case of air compressors designed to compress more than 240 cubic feet of air per minute, the user shall cause suitable fusible plugs, as well as thermometers or pyrometers, the indications of which can be clearly read, to be fitted close to the outlet valves on the discharge pipes from all air cylinders, and on the outlet air pipes of intercoolers of air compressors: Provided that a compressor of the multiple cylinder type, that is, two or more cylinders connected by inlet and outlet manifolds, may be fitted with one fusible plug and one thermometer or pyrometer. The highest temperature allowed shall be indicated by a red mark on the scale, and the person in charge of the compressor shall see that this temperature is not exceeded. He shall also record the thermometer or pyrometer readings at least once on each day during which the compressor is in use.

(3) The discovery of any weakness or defect in a compressor which is likely to cause danger to any person shall be reported forthwith to the user, and immediate steps shall be taken by the user to remove such weakness or defect, and to prevent danger to persons.

*Generation, transformation, distribution and use of electrical energy. Fencing or enclosure.*

189. The user shall cause all premises on which is situated electricity generating plant, transforming, switching or linking apparatus to be fenced or enclosed adequately and notices in both official languages prohibiting unauthorised persons from entering, shall be displayed at all designated entrances to such premises, and where such premises are unattended, all designated entrances shall be kept closed and locked securely.

*Safe selection and erection.*

190. The user shall cause:

- (a) all electrical apparatus and conductors to be so selected, arranged, installed, protected, worked and maintained so as to prevent danger to persons so far as is practicable;
- (b) all electrical machinery and conductors to be placed and protected in such a manner that no person can be injured by inadvertent contact with any portion thereof.

*Notices.*

191. The user shall cause the following notices in both official languages to be exhibited at suitable places within electric generating stations and sub-stations:

- (a) a notice prohibiting any unauthorised person from handling or interfering with electrical apparatus;
- (b) a notice containing directions as to procedure in case of fire;
- (c) a notice containing directions as to restoration of persons suffering from effects of electric shock.

*Switchboard.*

192. The user shall cause all switchboards to have at the back a clear space of at least four feet. This space shall be kept closed and locked except for the purpose of inspection, alteration or repair; and shall not be obstructed in any manner: Provided that this shall not apply in the case of:

- (a) skakelborde waarvan die agterkante slegs van agter toeganklik is deur 'n opening in die muur of afskorting waarteen dit staan, in welke geval sodanige openinge toe en gesluit gehou moet word;
- (b) skakelborde wat geen ongeïsoleerde geleiers het wat van agter toeganklik is nie;
- (c) skakelborde vir spanning wat nooit meer as laagspanning is nie;
- (d) skakelborde waarvan die skakeltoerusting van algehele ingeslote konstruksie is.

#### *Ondersoek en herstelwerk.*

193. Geen gebruiker mag vereis of toelaat dat enige ondersoek, herstelwerk of veranderings waarby dit nodig is om gevaarlik naby elektriese apparaat te kom of om sodanige apparaat te hanteer, gedoen word terwyl sodanige apparaat gelaai is nie, tensy sodanige werk deur of onder gedurige persoonlike toesig van 'n bevoegde persoon verrig word.

#### *Veiligheidstoerusting.*

194. Die gebruiker moet geskikte rubbermatte, handskoene, veiligheids gordels en sodanige ander beskermings-toerusting wat moontlik nodig is om ongelukke te voorkom, kosteloos verskaf en in goeie toestand hou vir die gebruik van persone in diens, om ondersoek-, herstel- of verstelwerk te verrig waarby dit nodig is om gevaarlik naby gelaai geleidings of elektriese apparaat te kom of hulle te hanteer.

#### *Tydlike aardverbinding.*

195. Wanneer daar gewerk moet word aan elektriese apparaat wat van alle toevoerbronne afgesluit is, maar wat elektris gelaai kan word of kan wees, moet die gebruiker sorg dat daar toereikende voorsorgmaatreëls getref word om, as dit gevaarlik is, sodanige elektriese apparaat of enige aangrensende elektriese apparaat deur middel van aardverbinding of andersins elektris te ontlai, voordat dit gehanteer word, en om te voorkom dat 'n geleier of elektriese apparaat gelaai raak terwyl persone daaraan werk.

#### *Aardverbinding.*

196. (1) Die gebruiker moet sorg dat alle bereikbare metaaldele van elektriese inrigtings of apparaat wat, hoewel hulle onder normale omstandighede nie deel van die elektriese stroombaan uitmaak nie, per ongeluk gelaai kan raak, beskut is, of omhul is met isoleermateriaal of ander toereikende middel, of met die grond verbind is deur 'n geleier van 'n voldoende deursny area, buiten —

- (a) metaal in aard-vrye omstandighede buiten lengtes metaalbuis en die noupassende metaalomhulsels en kabelpantsering;
- (b) kort afsonderlike lengtes dikmetaalbuis gebruik vir die meganiese beskerming van kables in metaalomhulsels of kables deur taai rubber beskerm, waar sodanige kables nie in die sekondêre stroombane van gloeiglasbuis-inrigtings gebruik word nie;
- (c) kort, beskutte, afsonderlike lengtes metaalbuis gebruik vir die meganiese beskerming van geïsoleerde bedrading wat deur vloere, mure, afskortings of plafonne gaan;
- (d) metaalwerk van vaste elektriese uitrusting, waar sodanige metaalwerk meer as agt (8) voet bovloers is en nóg so geleë is op 'n plek wat klam word, nóg in 'n hysskag, nóg naby werkende masjinerie, nóg in aanraking is met 'n muur, plafon of ander steun wat van geleidingsmateriaal gemaak is of daarmee bedek is nie;

- (a) switchboard, the backs of which are accessible only at the back through an opening in the wall or partition against which they are placed, if such openings are kept closed and locked;
- (b) switchboard which have no uninsulated conductors accessible from the back;
- (c) switchboards for pressure not exceeding low pressure;
- (d) switchboards, the switch gear of which is of a totally enclosed construction.

#### *Examination and repairs.*

193. No user shall require or permit any examination repairs or alterations necessitating the dangerous approach to or the handling of electrical apparatus to be carried on while such apparatus is alive, unless such work be done by or under the constant personal supervision of a competent person.

#### *Safety Equipment.*

194. The user shall provide free of charge and maintain in good condition suitable rubber mats, gloves or gauntlets, safety-belts and such other protective equipment as may be necessary to prevent accidents for the use of persons engaged in examination, repairs or alterations necessitating the dangerous approach to or the handling of live mains or electrical apparatus.

#### *Temporary earthing.*

195. Whenever work is to be carried out on any electrical apparatus which has been disconnected from all sources of supply, but which is liable to acquire or to retain an electrical charge, the user shall cause adequate precautions to be taken by earthing or other means to discharge electrically such electrical apparatus or any adjacent electrical apparatus, if there be danger therefrom, before it is handled and to prevent any conductor or electrical apparatus from being charged whilst persons are working thereon.

#### *Earthing.*

196. (1) The user shall cause all accessible metallic portions of electrical plant or apparatus which, though normally not forming part of an electrical circuit may become alive accidentally, to be protected by an insulating covering or by other adequate means or to be connected to earth by a conductor of adequate cross sectional area, except:

- (a) metal in earth-free situations other than runs of metal conduit and the close-fitting metal sheetings and armourings of cables;
- (b) short isolated lengths of heavy-gauge metal conduit used for the mechanical protection of metal-sheathed or tough-rubber-protected cables, where such cables are not used in the secondary circuits of luminous discharge tube installations;
- (c) short, unexposed isolated lengths of metal conduit used for the mechanical protection of insulated wiring passing through floors, walls, partitions or ceilings;
- (d) metalwork of fixed electrical equipment, where such metalwork is more than eight feet above the floor and is neither situated in any position likely to become damp nor in a lift shaft, or near running machinery, nor in contact with a wall, or ceiling or other support, constructed of or covered with conducting material;

- (a) skakelborde waarvan die agterkante slegs van agter toeganklik is deur 'n opening in die muur of afskorting waarteen dit staan, in welke geval sodanige openinge toe en gesluit gehou moet word;
- (b) skakelborde wat geen ongeïsoleerde geleiers het wat van agter toeganklik is nie;
- (c) skakelborde vir spanning wat nooit meer as laagspanning is nie;
- (d) skakelborde waarvan die skakeltoerusting van algehele ingeslote konstruksie is.

#### *Ondersoek en herstelwerk.*

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#### *Tydlike aardverbinding.*

195. Wanneer daar gewerk moet word aan elektriese apparaat wat van alle toevoerbronne afgesluit is, maar wat elektries gelaai kan word of kan wees, moet die gebruiker sorg dat daar toereikende voorsorgmaatreëls getref word om, as dit gevaarlik is, sodanige elektriese apparaat of enige aangrensende elektriese apparaat deur middel van aardverbinding of andersins elektries te ontlaai, voordat dit gehanteer word, en om te voorkom dat 'n geleier of elektriese apparaat gelaai raak terwyl persone daaraan werk.

#### *Aardverbinding.*

196. (1) Die gebruiker moet sorg dat alle bereikbare metaaldele van elektriese inrigtings of apparaat wat, hoewel hulle onder normale omstandighede nie deel van die elektriese stroombaan uitmaak nie, per ongeluk gelaai kan raak, beskut is, of omhul is met isoleermateriaal of ander toereikende middel, of met die grond verbind is deur 'n geleier van 'n voldoende deursny area, buiten —

- (a) metaal in aard-vrye omstandighede buiten lengtes metaalbuis en die noupassende metaalomhulsels en kabelpantsering;
- (b) kort afsonderlike lengtes dikmetaalbuis gebruik vir die meganiese beskerming van kables in metaalomhulsels of kables deur taai rubber beskerm, waar sodanige kables nie in die sekondêre stroombane van gloeiglasbuis-inrigtings gebruik word nie;
- (c) kort, beskutte, afsonderlike lengtes metaalbuis gebruik vir die meganiese beskerming van geïsoleerde bedrading wat deur vloere, mure, afskortings of plafonne gaan;
- (d) metaalwerk van vaste elektriese uitrusting, waar sodanige metaalwerk meer as agt (8) voet bo vloers is en nóg so geleë is op 'n plek wat klam word, nóg in 'n hysskag, nóg naby werkende masjinerie, nóg in aanraking is met 'n muur, plafon of ander steun wat van geleidingsmateriaal gemaak is of daarmee bedek is nie;

- (a) switchboard, the backs of which are accessible only at the back through an opening in the wall or partition against which they are placed, if such openings are kept closed and locked;
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#### *Earthing.*

196. (1) The user shall cause all accessible metallic portions of electrical plant or apparatus which, though normally not forming part of an electrical circuit may become alive accidentally, to be protected by an insulating covering or by other adequate means or to be connected to earth by a conductor of adequate cross sectional area, except:

- (a) metal in earth-free situations other than runs of metal conduit and the close-fitting metal sheetings and armourings of cables;
- (b) short isolated lengths of heavy-gauge metal conduit used for the mechanical protection of metal-sheathed or tough-rubber-protected cables, where such cables are not used in the secondary circuits of luminous discharge tube installations;
- (c) short, unexposed isolated lengths of metal conduit used for the mechanical protection of insulated wiring passing through floors, walls, partitions or ceilings;
- (d) metalwork of fixed electrical equipment, where such metalwork is more than eight feet above the floor and is neither situated in any position likely to become damp nor in a lift shaft, or near running machinery, nor in contact with a wall, or ceiling or other support, constructed of or covered with conducting material;

- (e) metaaldele van elektriese apparaat, waar sodanige dele op so 'n wyse ingesluit of omhul is deur isoleermateriaal sodat sodanige metaaldele nie aangeraak kan word nie;
- (f) klampe, knypers, saaltjies, kloue of ander apparaat om buise en kables vas te heg;
- (g) lamphulse;
- (h) kappe, weerkaatsers en skerms gesteun op houers of beligtingsonderdele;
- (i) metaaldele op, of skroewe in of deur, nie-geleidende materiaal en deur sodanige materiaal afgesonder van stroomdraende dele en van gearde nie-stroomdraende dele, op so 'n wyse dat hulle in normale gebruik nie gelaai kan raak nie of in aanraking met dele kan kom wat geard is nie.

(2) Voordat 'n gebou met elektriese stroom verbind of herverbind word, moet die verskaffer hom daarvan oortuig dat alle metaaldakke, geute en aflypype toereikend met die grond verbind is.

#### *Transformator- of skakelstasies.*

197. Geen gebruiker mag enigiemand anders buiten iemand wat bevoegd is of met die beheer belas is, verplig of toelaat om transformator- of skakelstasies te betree nie, tensy alle gelaaide geleiers wat daarin is, en wat nie toereikend teen toevallige aanraking geïsoleer is nie, voldoende beskut is: Met dien verstande dat so 'n bevoegde persoon deur enigiemand anders bygestaan kan word, wat dan onder sy onmiddellike persoonlike toesig moet werk.

#### *Beskutting van stutte om te verhoed dat persone daarteen opklim.*

198. Die gebruiker moet sorg dat alle stutte van die traliesoort wat vir bogrondse geleiers gebruik word, toereikend beskut is om te verhoed dat ongemagtigde persone teen sodanige stutte opklim en in gevaarlike nabyheid van die geleiers kom, en 'n inspekteur kan op soortgelyke wyse 'n gebruiker aansê om enige ander soort stut te beskerm.

#### *Boggrondse verbruiksleidings en verbruikers se geleiers.*

199. (1) Geen verskaffer mag vereis of toelaat dat bogrondse bedieningsgeleidings aan die lyngeleiers elders as by 'n stutpunt verbind word nie.

(2) Die verskaffer moet sorg dat —

- (a) elke deel van bogrondse bedieningsgeleidings wat van 'n gebou of van 'n leer wat teen 'n gebou leun, bereikbaar is;
- (b) bogrondse geleidings tussen geboue; en
- (c) dele van bogrondse geleidings wat by 'n gebou verbygaan en binne bereik van 'n gebou is, uit 'n soort geïsoleerde draad bestaan wat die inspekteur goedgekeur het.

(3) Waar verbinding met die verbruiker se geleiers gemaak word deur middel van bogrondse verbruiksleiding, moet die verbinding by 'n ingangspunt van die gebou gemaak word deur middel van 'n eindklemverbindingskas wat 'n inspekteur goedgekeur het, of op 'n ander wyse wat 'n inspekteur ook goedgekeur het.

(4) Die bepalinge van hierdie regulasie is met die nodige veranderinge van toepassing op die verbruiker se opeluggeleiers buiten dié wat gebruik word in verband met private huise.

#### *Planne moet by Direkteur van Pos- en Telegraafwese ingedien word.*

200. (1) Voordat daar met installing van 'n verspreidingsstelsel of uitbreiding van so 'n stelsel begin kan word, moet verskaffers hul voorstelle volledig en twee-

- (e) metal parts of electrical apparatus, where such parts are enclosed or shrouded by insulating material so that such metal parts cannot be touched;
- (f) cleats, clips, saddles, clamps or other devices for fixing conduits and cables;
- (g) lamp-caps;
- (h) shades, reflectors, and guards, supported on holders or lighting fittings;
- (i) metal parts on, or screws in or through, non-conducting material, and separated by such material from current-carrying parts and from earthed non-current-carrying parts in such a way that in normal usage they cannot become alive or come into contact with earthed parts.

(2) Before connecting or reconnecting a supply of electric current to any building the supplier shall satisfy himself that all metal roofs, gutters and down-pipes are adequately bonded to earth.

#### *Transformer or switch houses.*

197. No user shall require or permit any person other than a competent person or the person in control to enter transformer houses or switch houses unless all live conductors therein which are not insulated adequately against inadvertent contact, are screened off adequately: Provided that the competent person may be assisted by any other person acting under his immediate personal supervision.

#### *Protection of supports against climbing.*

198. The user shall cause all supports of the lattice type which are used to carry overhead conductors, to be protected adequately in order to prevent any unauthorised person from coming into dangerous proximity of the conductors by climbing such supports, and an inspector may require a user similarly to protect a support of any other type.

#### *Overhead service mains and consumers' conductors.*

199. (1) No supplier shall require or permit any overhead service mains to be connected to the line conductors elsewhere than at a point of support.

(2) The supplier shall cause:

- (a) every part of overhead service mains which is accessible from a building or from a ladder leading against a building;
- (b) overhead mains between buildings;
- (c) portions of overhead mains which pass a building and are within reach of the building;

to consist of insulated wire of a type which has been approved by the inspector.

(3) Where connection to the consumer's conductors is made by means of overhead service mains, such connection shall be made at the point of entry to the building by means of a terminal connector-box approved by an inspector or by other means similarly approved.

(4) The provisions of this regulation shall *mutatis mutandis* apply to a consumer's open air conductors other than those used in connection with private houses.

#### *Schemes to be submitted to the Director of Posts and Telegraphs.*

200. (1) Before the installation of any distribution scheme or extension to such a scheme may be commenced, supplier shall submit their complete proposals in duplicate

voudig aan die Direkteur van Pos- en Telegraafwese voorlê, sodat daar by onderlinge ooreenkoms besluit kan word oor die metodes of apparaat wat die verskaffers moet aanneem ten einde te voorkom dat daar vir bestaande en beoogde telefoon- en telegraafdrade toestande kan ontstaan wat vir die publiek en poskantoorpersoneel gevaarlik kan wees. In gevalle waar sodanige toestande sonder groot koste vir die een of die ander party vermy kan word deur wysiging van die voorgestelde planne van die verskaffer, of die Direkteur van Pos- en Telegraafwese, moet sodanige wysigings aangebring word: Met dien verstande dat „uitbreiding van 'n stelsel" nie bogrondse bedieningsgeleidings insluit nie.

(2) 'n Ooreenkoms tussen die twee partye moet aan die Direkteur ter goedkeuring voorgelê word, en as die partye nie tot 'n ooreenkoms kan raak nie, moet die Direkteur die saak beslis.

(3) Alle metodes en apparaat wat volgens ooreenkoms nodig is vir die beskerming van die publiek, moet deur en op rekening van die verskaffer voorsien word.

(4) In gevalle waar veranderings aan die ontwerp of oprigting van 'n bestaande kragdraad wat ooreenkomstig subregulasie (1) of (2) aangelê is, of bykomende apparaat daaraan, weens vertoë van die Direkteur van Pos- en Telegraafwese nodig word, moet die verskaffer sodanige veranderings aanbring op rekening van die liggaam op wie se vertoë die veranderings aangebring is.

#### *Hoogte van geleiers.*

201. (1) Buiten in die geval van elektriese trolliedrade en bogrondse bedieningsgeleidings, moet die minimale hoogte van die grond af van elektriese geleiers en ander drade die onderstaande wees —

(a) binne alle dorpsgebiede —

- (i) agtien voet, buiten waar daar anders bepaal word;
- (ii) twintig voet van die spore af by alle spoorwegaange;
- (iii) een-en-twintig voet by telegraafkruis punte, tensy die inspekteur anders gelas: Met dien verstande dat —

(aa) by kruisings van paaie waar belankrike telegraaflyne, soos byvoorbeeld hooflyne en aansluitingslyne, ook gekruis is, die verskaffer nie verplig kan word om vir 'n groter spanafstand as vyf-en-twintig voet van die grond af te sorg nie;

(bb) by kruising van paaie waar elektriese verskaffingslyne onbelangrike telegraaflyne wat van kaal drade gemaak is, kruis, die verskaffer 'n ruimte van minstens agtien duim tussen die elektriese dienslyne en die telegraaflyne moet ooplaat, maar dat hy nie verplig kan word om beskermingsapparaat aan te bring of om groter ruimte as twintig voet ses duim bokant die grond oop te laat nie: Met dien verstande dat alle dele van die kruising- en aangrensende spanafstande van die verskaffingslyne veiligheidsfaktore besit van vyftig persent bo dié wat in hierdie regulasies vir standaardbou voorgeskryf word;

(cc) by alle ander telegraafkruisings, soos inleidraadse telefoonlyne, die verskaffer nie verplig kan word om beskermingsapparaat te verskaf of om 'n groter ruimte as negentien voet ses duim van die grond oop te laat nie;

(b) buitekant dorpsgebiede —

to the Director of Posts and Telegraphs for the purpose of deciding by mutual agreement the methods or devices to be adopted by the suppliers to avoid the creation of conditions on existing and projected telephone and telegraph lines which may be dangerous to the public and post office staff. In cases where such conditions can be avoided without material cost to either party by amendment to the projected plans either of the supplier or of the Director of Posts and Telegraphs, such amendment shall be made, provided that an "extension to a scheme" shall not be interpreted to include overhead service mains.

(2) An agreement between the two parties shall be submitted to the Director for approval, and if agreement cannot be reached, the Director shall decide the matter.

(3) All methods and devices required for the protection of the public as agreed to, shall be provided by and at the expense of the supplier.

(4) In cases where changes in the design or construction of an existing power line, which has been erected in accordance with subregulation (1) or (2), or additional devices thereto, become necessary on account of representations made by the Director of Posts and Telegraphs, such alterations shall be carried out by the supplier at the expense of the body at whose representations the change has been brought about.

#### *Height of conductors.*

201. (1) The minimum height from the ground of electric conductors and other wires, except in the case of electric trolley wires and overhead service mains, shall be as follows:

(a) Within all townships:

- (i) eighteen feet, except where otherwise specified;
- (ii) twenty feet from the rails at all railway crossings;
- (iii) at telegraph crossings, twenty-one feet unless the inspector otherwise directs: Provided that:

(aa) at road crossings where important telegraph lines, such as trunk and junction lines, are also crossed, the supplier shall not be required to provide a greater clearance than twenty-five feet from the ground;

(bb) at road crossings where electrical supply lines cross over unimportant telegraph lines which are constructed of bare wires, the supplier shall give at least eighteen inches clearance between the electrical supply line and the telegraph line but shall not be required to provide protective devices or give a greater clearance above ground than twenty feet six inches: Provided that all parts of the crossing and adjacent spans of the supply line have factors of safety fifty per cent in excess of those laid down in these regulations for standard construction;

(cc) all other telegraph crossings, such as drop wire telephone service the supplier shall not be required to provide protective devices or give a greater clearance than nineteen feet six inches from the ground.

(b) Outside townships:



- (i) sestien voet, tensy waar anders bepaal word;
- (ii) twintig voet van die spore af by alle spoorweg- en tremoorgange;
- (iii) agtien voet by alle geproklameerde padkruisings.

(2) Op enige punt buitekant dorpsgebiede waar spoorweë of geproklameerde paaie of belangrike telegraaf- of kraglyne deur 'n kraglyn gekruis word —

- (a) moet die kruising so na moontlik reghoekig wees;
- (b) moet die spanafstand so kort moontlik wees en die naaste stut aan weerskante van die spoorweg, tremweg, pad, telegraaflyn of kraglyn moet op so 'n wyse geanker en vasgemaak wees, dat as daar verderweg iets breek, dié gedeelte van die geleiers oor die spoorweg, tremweg, pad, telegraaflyn of kraglyn nie slap sal hang nie;
  - (i) moet apparaat aangebring word om te verseker dat as 'n gelaalde geleier val, dit met die aarde verbind word; of
  - (ii) moet gesorg word vir duplikaat isoleerders wat duplikaatgeleiers ophou wat op punte hoogstens vyf voet van mekaar vasgemaak moet wees; of
  - (iii) moet sodanige ander middels verskaf word wat die inspekteur goedkeur.

(3) By die toepassing van hierdie regulasie beteken —  
 „belangrike telegraaflyne” telegraaf- of telefoon-aansluitingslyne of -hooflyne;  
 „onbelangrike telegraaflyne” alle ander telegraaf- of telefoonlyne.

*Veiligheidsfaktore.*

202. (1) By die ontwerp van alle bogrondse lyne, geld die onderstaande minimale veiligheidsfaktore vir elke stut en het betrekking op die breekklas van die struktuur:

Materiaal.	Veiligheidsfaktor.
Yster of staal . . . . .	2.5
Hout . . . . .	3.5
Gewapende beton . . . . .	3.5

Hierdie veiligheidsfaktore geld met die verstandhouding dat elke lyngeleidingskabel of -draad wat deur die stutte gedra word, 'n temperatuur van 32 grade F. het, en dat hulle saam met die stutte blootgestel is aan 'n winddruk reghoekig met die lyn wat gelyk staan aan vyf-en-twintig lb. per vierkante voet. In die geval van traliestrukture is die oppervlakte vir die berekening van die spanning anderhalfmaal die geprojekteerde oppervlakte van een kant; in geval van ronde pale, geleidings en grondgeleidingsdrade word die werklike oppervlakte geneem vir 0.6 van die geprojekteerde oppervlakte.

(2) Die veiligheidsfaktor van elke lyngeleier moet minstens twee (2) wees. Hierdie faktor moet gebaseer word op die breekklas van die geleier, en moet bereken word met die veronderstelling dat die lyngeleier 'n temperatuur van 32 grade F. het, en dat dit gelyktydig aan winddruk reghoekig met die lyn blootgestel is, wat gelyk is aan vyf-en-twintig pond per vierkante voet op 0.6 van die geprojekteerde oppervlakte van die geleier.

(3) Geen verskaffer mag toelaat dat 'n kraglyn nader as vyftig voet van 'n springstofmagasyn af is nie: Met dien verstande dat 'n inspekteur kan vereis dat hierdie afstand verleng moet word, waar die spanafstand tussen die stutte van die kraglyn groter as een-honderd voet is.

- (i) sixteen feet, except where otherwise specified;
- (ii) twenty feet from the rails at all railway and tramway crossings;
- (iii) eighteen feet at all proclaimed road crossings.

(2) At any point outside townships where railways or proclaimed roads or important telegraph lines or power lines are crossed by a power line:

- (a) the crossing shall be as nearly as possible at right angles;
- (b) the span shall be as short as possible and the support immediately on either side of the railway, tramway, road, telegraph line, or power line shall be stayed in such a manner and the conductor shall be fastened in such wise, that in case of breakage further away, the portion of the conductors over the railway, tramway, road, telegraph line or power line shall not sag;
  - (i) a device shall be provided to ensure that in the event of a live conductor falling it shall be earthed; or
  - (ii) there shall be provided duplicate insulators supporting duplicate conductors tied at intervals not exceeding five feet; or
  - (iii) such other means as may be approved by the inspector shall be provided.

(3) For the purpose of this regulation:

“important telegraph lines” shall mean telegraph or telephone junction or trunk lines;  
 “unimportant telegraph lines” shall mean all other telegraph or telephone lines.

*Factors of safety.*

202. (1) In the design of all overhead lines, the following minimum factors of safety shall apply to each support and shall refer to the breaking load of the structure:

Material.	Factor of safety.
Iron or steel . . . . .	2.5
Wood . . . . .	3.5
Reinforced concrete . . . . .	3.5

These factors of safety shall apply on the assumption that every line conductor cable or wire carried by the supports is at a temperature of 32 degrees F. and that, together with the supports, they are subjected to a wind pressure at right angles to the line equivalent to twenty-five pounds per square foot. In the case of lattice structures the area for calculating the stress shall be one and one-half times the projected area of one side; in the case of round poles, conductors and earth wires, the area shall be taken as 0.6 of the projected area.

(2) The factor of safety of every line conductor shall be at least 2 (two). This factor shall be based on the breaking load of the conductor and shall be calculated on the assumption that the line conductor is at a temperature of 32 degrees F., and that it is simultaneously subjected to a wind pressure at right angles to the line equivalent to twenty-five pounds per square foot on 0.6 of the projected area of the conductor.

(3) No supplier shall permit a power line to be less than fifty feet from any explosives magazine: Provided that an inspector may require such distance to be increased where the span between the supports of the power line is greater than one hundred feet.

*Stoomketels. Aansoek om sertifikaat.*

203. Elkeen wat 'n stoomketel wil gebruik, moet skriftelik by die Direkteur op die voorgeskrewe vorm daarom aansoek doen.

*Nuwe stoomketels.*

204. In die geval van nuwe stoomketels moet die aansoekvorm vergesel gaan van —

- (a) die vervaardiger se volledige spesifikasie met inbegrip van die standaard-ekwivalent normale verdampingsvermoë van die stoomketel in pond water per uur van en by 212° F. en die verhittingsoppervlakte daarvan in vierkante voet, soos ontwerp;
- (b) leesbare mate-tekenings wat alle stoomketel-besonderhede betreffende die plaatwerk, klinknaelwerk en/of sweiswerkbesonderhede, en die sterkte van materiaal wat gebruik is, aantoon.
- (c) die sertifikaat van die goedgekeurde gesag uitgereik ingevolge regulasie 205 (1).

*Stoomketelontwerp.*

205. (1) Geen stoomketel mag gebruik word nie, tensy dit gebou is volgens die ontwerp en ander voorwaardes van 'n goedgekeurde praktykkode onder die toesig van 'n goedgekeurde gesag, en 'n sertifikaat en stempel te dien effekte op die romp daarvan dra.

(2) Die Direkteur kan by ontvangs van 'n aansoek om 'n stoomketel te gebruik 'n voorwaardelike permit uitreik op voorwaardes en vir 'n termyn wat hy van tyd tot tyd bepaal.

(3) Die Direkteur kan as hy oortuig is dat 'n stoomketel veilig gebruik kan word en dat die bepalinge van hierdie regulasies nagekom is, 'n registrasiesertifikaat uitreik op voorwaardes wat hy bepaal, en hy kan so 'n sertifikaat wysig of intrek.

*Bepaling van druk.*

206. Die gemagtigde werkdruk van 'n stoomketel is dié wat 'n inspekteur vir so 'n stoomketel bepaal het, en geen gebruiker mag vereis of toelaat dat 'n stoomketel teen 'n hoër druk werk nie.

*Staanplek van stoomketels.*

207. (1) 'n Stoomketel moet so opgerig word dat daar rondom 'n oop ruimte van minstens drie voet weg van alle mure of ander hindernisse is om ondersoek te vergemaklik: Met dien verstande dat die ruimte verminder kan word met hoogstens ses duim ten opsigte van bekleding of ander omhulsel.

(2) Die bepalinge van subregulasie (1) geld nie in gevalle waar messelwerk 'n onafskeibare deel van die stoomketel uitmaak nie.

(3) Tussen die hoogste punt van enige toebehore bo-op 'n stoomketel en die plafon of die onderkant van die laagste deel van die dakwerk moet daar 'n afstand van minstens drie voet wees.

(4) Toegang tot die stoomketel moet onbelemmerd wees.

*Verwydering van vasstaande stoomketel.*

208. Geen gebruiker mag vereis of toelaat dat 'n vasstaande stoomketel in 'n ander posisie gebruik word as dié waarin dit was toe die registrasiesertifikaat toegestaan is nie.

*Waterstand.*

209. Die laagste werk-waterstand vir vasstaande stoomketels moet minstens drie duim bokant die hoogste deel van die vlamgange wees wat om of deur die stoomketel gaan, en vir vervoerbare stoomketels en stoomketels

*Boilers. Application for certificate.*

203. Any person who wishes to use a boiler shall make application in writing to the Director in the form prescribed.

*New boiler.*

204. In the case of new boilers the application form shall be accompanied by —

- (a) the maker's complete specification, including the rated equivalent normal evaporative capacity of the boiler in pounds of water per hour from and at 212° F., and its designated heating surface in square feet;
- (b) legible dimension drawings, setting out the complete boiler, the plating, riveting and/or welding details, and the strength of the materials used;
- (c) the certificate of the approved authority issued in accordance with regulation 205 (1).

*Boiler design.*

205. (1) No boiler shall be used unless it has been constructed to the design and other conditions of an approved code of practice, under the supervision of an approved authority and it is certified and stamped on the shell by such authority to this effect.

(2) The Director may, on receipt of an application to use a boiler, issue a provisional permit subject to such conditions and for such period as he may from time to time determine.

(3) The Director may if he is satisfied that a boiler may be safely used and that the provisions of these regulations have been complied with, grant a certificate of registration subject to such conditions as he may specify and may amend or cancel such certificate.

*Ficing of pressure.*

206. The authorised working gauge pressure for a boiler shall be that determined for such boiler by an inspector and no user shall require or permit a boiler to be worked at a higher pressure.

*Position of boilers.*

207. (1) A boiler shall be so erected as to leave a clear space of not less than three feet free of all walls or other obstructions around it to facilitate examination: Provided that this space may be reduced by not more than six inches in respect of any lagging or other encasement.

(2) The provisions of subregulation (1) shall not apply to any boiler where masonry constitutes an integral part of the boiler.

(3) The highest point of any fitting on top of a boiler shall be at a distance of not less than three feet from the ceiling or the underside of the lowest portion of the roof structure.

(4) Access to the boiler shall be unobstructed.

*Removal of stationary boiler.*

208. No user shall require or permit a stationary boiler to be used in a position other than that in which it was situated when the certificate of registration was granted.

*Water level.*

209. The lowest working water level for stationary boilers shall be at least three inches above the highest part of the flues passing round or through the boiler, and for portable boilers and boilers of locomotives and loco-

van lokomotiewe en lokomobile moet sodanige stand op so 'n hoogte bokant die vuurlyn wees, dat selfs in geval van skommeling van die stoomketel die hoogste deel van die oppervlakte wat deur die vuur en verhitte gasse bereik word, voldoende deur water gedek bly.

#### *Vlamgange.*

210. Waar dit onmoontlik is vir plate om oorverhit te raak, kan die inspekteur dit goedkeur dat die vlamgange oor gedeeltes van die stoomruimte van die stoomketel loop.

#### *Brandstofbespaarder.*

211. Waar 'n stoomketel met 'n watervoerhitter verbind is wat nie 'n wesentlike deel van die struktuur is nie, en bestaan uit buise waardeur die toevoerwater, vloei, moet die watervoerhitter se vlamgange met 'n demper en newesluitingsvlamgang toegerus wees.

#### *Mangate.*

212. Die mangate van alle stoomketels moet 'n oppervlakte van minstens elf by vyftien vierkante duim hê, en daar moet genoeg mangate wees om skoonmaak en ondersoek moontlik te maak. Die inspekteur besluit of die getal toereikend is en hy kan kleiner mangate toelaat by stoomketels wat klein is.

#### *Toevoerapparaat.*

213. (1) Elke stoomkettel met 'n inhoudsvermoë van twintig gelling of meer (stoom- en waterruimte gesamentlik) moet ingerig word met minstens twee betroubare toevoerapparate, elk waarvan in staat is om die stoomketel ruimskoots van water te voorsien. Een van hierdie toevoerapparate moet of 'n kragpomp of 'n inspuitspomp wees. Twee of meer stoomketels wat saamgevoeg is om permanent saam te werk, word by die toepassing van hierdie regulasie as een stoomketel beskou. Die toevoerapparaat moet heeltemaal onafhanklik van mekaar wees, buiten dat wanneer 'n afsonderlike afvoer-afsluitklep aan elke pomp of inspuitspomp aangebring is, een watertoevoerpyp toereikend beskou word.

(2) By stoomketels met 'n inhoudsvermoë van minder as twintig gelling (stoom- en waterruimte gesamentlik) moet daar minstens een toevoerapparaat wees.

(3) By kleinere stoomketels, behalwe dié bedoel in subregulasie (2), kan een toevoerapparaat bestaan uit 'n handtoevoerpomp mits sy inhoudsvermoë sodanig is dat dit die stoomketel van genoeg water kan voorsien.

(4) Die bepalings van subregulasies (1), (2) en (3) geld nie vir stoomopvaarders, stoomhouders van vuurlose lokomotiewe of oorverhitters of watervoerhitters wat afsonderlik gestook word nie.

#### *Keerklep.*

214. Die plek waar die watertoevoerpyp die stoomketel binnegaan, moet ingerig word met 'n selfwerkende keerklep en 'n afsluitkraan of wielklep. Laasgenoemde moet tussen die keerklep en die stoomketel geplaas word.

#### *Waterpeilers en krane.*

215. (1) Met behoud van die bepalings van subregulasie (5) hiervan moet elke stoomketel met minstens twee betroubare apparate vir die bepaling van die werklike stand van die water in die stoomketel voorsien wees. Een hiervan moet 'n waterpeilglas met behoorlike deurblaaskrane wees. In gevalle waar die waterpeilglaskrane nie regstreeks aan die romp van die stoomketel vas is nie, maar aan 'n standpyp of suil, moet krane tussen die stoomketel en die standpyp aangebring word as die verbindingspype kleiner as twee duim in deursnit is of as hulle langer as drie voet is.

mobiles, such level shall be at such a height above the fire line that, even in the case of oscillation of the boiler, the highest part of the surface reached by the fire and heated gases remain sufficiently covered by water.

#### *Flues.*

210. In case where it is impossible for plating to become overheated, the inspector may approve of portions of the steam space of the boiler being overlapped by the flues.

#### *Economiser.*

211. In cases where any boiler is connected to an economiser, which is not an integral portion of the structure, consisting of tubes through which the feedwater passes, the economiser flues shall be fitted with a damper and by-pass flue.

#### *Manholes.*

212. The manholes of all boilers shall have an area of at least eleven by fifteen square inches, and shall be sufficient in number to allow of cleaning and examination. The inspector shall determine whether the number is sufficient and he may allow smaller holes for boilers of small dimensions.

#### *Feeding apparatus.*

213. (1) Every boiler which has a capacity of twenty gallons or more steam and water spaces combined, shall be provided with at least two reliable feeding apparatus, each of which is capable of supplying amply the boiler with water. One of these feeding apparatus shall be either a power pump or an injector. Two or more boilers combined for permanent joint working are considered to be one boiler for the purpose of this regulation. The feed apparatus shall be entirely independent of each other, except that when a separate feed discharge stopvalve is fitted on each pump or injector one feed delivery pipe shall be considered to be sufficient.

(2) In the case of boilers of less than twenty gallons capacity (steam and water spaces combined), at least one feed apparatus shall be provided.

(3) In the case of small boilers, other than those referred to in subregulation (2), one feed apparatus may consist of a hand operated feed pump: provided its capacity is such as adequately to supply the boiler with water.

(4) The provisions of subregulations (1), (2) and (3) shall not apply to steam accumulators, steam drums of fireless locomotives, or separately fired superheaters or economisers.

#### *Check valve.*

214. The place where the feed delivery pipe enters the boiler shall be provided with a self-acting nonreturn valve (check) and a stop-cock or wheel valve. The latter shall be placed between the check and the boiler.

#### *Water gauges and cocks.*

215. (1) Subject to the provisions of subregulation (5) hereof, every boiler shall be fitted with at least two reliable apparatus for ascertaining the true level of the water in the boiler. One of these shall be a glass water-gauge, with proper blow-through cocks. In cases where the water-gauge cocks are not attached directly to the shell of the boiler, but to a standpipe or column, cocks shall be fitted between the boiler and the stand-pipe, if the connecting pipes are of less diameter than two inches or if they exceed three feet in length.

(2) Die verbindingspype kan in enige deel kleiner as twee duim in deursnit of langer as drie voet wees en sonder krane tussenin aan die stoomketel vasgebout wees mits die rangskikking andersins bevredigend is en mits daar geen moeilikheid ondervind word om die deurgange aan die ente skoon te hou en om vas te stel of hulle skoon is nie.

(3) Vir laasgenoemde doel moet die deurgange in die deel van die suil tussen die boonste en onderste waterpeilglaskrane afgesny of toegemaak word, wat permanent of deur die tussenvoeging van 'n kraan in hierdie deel gedoen kan word.

(4) As die ander apparaat bedoel in subregulasie (1) van hierdie regulasie uit proefkrane bestaan, moet hierdie proefkrane elk afsonderlik met die stoomketel verbind word en die laagste moet net so hoog soos die bepaalde laagste waterstand wees.

(5) Een waterpeilglas is voldoende vir stoomketels met 'n inhoudsvermoë van minder as twintig gelling (stoom- en waterruimte gesamentlik).

(6) Die bepaalde laagste waterstand moet deur duidelik treffende merke op sowel die waterpeilglas as die stoomketelromp of messelwerk aangedui word.

(7) Waterpeilglase van die glasbuistipe moet met 'n doeltreffende skerm toegerus word, wat so gemaak moet wees dat dit nie die lesing van die peilglas verhinder nie.

#### *Veiligheidskleppe.*

216. (1) Behoudens die bepalings van subregulasie (5) hiervan moet elke stoomketel met minstens twee betroubare veiligheidskleppe ingerig word, wat so gelaa is dat hulle teen die gemagtigde werkdruk oopgaan. Die openingsoppervlakte van hierdie kleppe vir die uitlaat van stoom moet gesamentlik voldoende wees om die opgaring van stoomdruk van meer as tien persent bo dié waarvoor die kleppe gestel is, te voorkom, as engeen van die veiligheidskleppe buite werking raak.

(2) Veiligheidskleppe moet regstreeks aan die romp van die stoomketel of stoomkoepel vasgeheg word; geen afsluitklep mag tussenin wees nie.

(3) Minstens een veiligheidsklep moet deeglik toegesluit en net vir die gebruiker van die stoomketel toeganklik wees. Sodanige geslote klep of kleppe moet 'n oppervlakte van minstens, en 'n lading van hoogstens, dié van daardie klep of kleppe hê wat nie gesluit is nie.

(4) Waar twee of meer stoomketels 'n gemeenskaplike stoomhouer het waarvan hulle nie ontkoppel kan word nie, is twee veiligheidskleppe voldoende, mits elke klep se oppervlakte dié is wat by hierdie regulasies vereis word.

(5) Een veiligheidsklep wat gesluit word en net vir die gebruiker toeganklik is, word vereis by —

- (i) stoomketels met 'n inhoudsvermoë van minder as twintig gelling (stoom- en waterruimte gesamentlik);
- (ii) oorverhitters en watervoorverhitters wat van stoomketels afgesluit kan word; en
- (iii) apparaat wat stoom van 'n hoër druk as dié van die atmosfeer vir kook- of verwarmingsdoeleindes gebruik;

en die bepalings van subregulasies (1) en (2) hiervan is met die nodige veranderinge van toepassing.

#### *Bou van veiligheidskleppe.*

217. (1) Veiligheidskleppe moet so gemaak word dat die klep te eniger tyd maklik van sy bedding opgelig kan word, en daar moet behoorlike voorsorg getref word om

(2) The connecting pipes may in any part be of less diameter than two inches, or may exceed three feet in length and be bolted to the boiler without the intervention of cocks; provided the arrangement is otherwise satisfactory and provided further that there is no difficulty in keeping the passage at the ends clear, and in ascertaining that they are so.

(3) For the latter purpose, the passage in the part of the column between the top and bottom gauge-glass cocks shall be cut off or closed, which may be done permanently or by the interposition of a cock in this part.

(4) When the other apparatus referred to in sub-regulation (1) of this regulation consists of testcocks the testcocks shall be each separately connected to the boiler and the lowest one shall be at the height of the fixed lowest water level.

(5) One water-gauge shall be sufficient for boilers of less than twenty gallons capacity (steam and water space combined).

(6) The fixed lowest water level shall be indicated by conspicuous marks on the water-gauge, as well as the boiler shell or masonry.

(7) Water-gauges of the glass tubular type shall be provided with an efficient guard which shall be so constructed as not to obstruct the reading of the gauge.

#### *Safety valves.*

216. (1) Subject to the provisions of subregulation (5) hereof every boiler shall be provided with at least two reliable safety valves which shall be loaded so that they will lift when the authorized working gauge pressure is reached. The area opening of these valves for the discharge of steam shall be sufficient in the aggregate to prevent the accumulation of steam pressure in excess of 10 per cent above that for which the valves are set, if any one of the safety valves fails to operate.

(2) Safety valves shall be attached directly to the shell of the boiler or steam dome, and no stop valve shall intervene.

(3) At least one safety valve shall be locked securely and be accessible only to the user of the boiler. Such locked valve or valves shall have an area of not less, and a load not greater, than such valve or valves as are not locked.

(4) In the case of two or more boilers having a common steam drum from which they cannot be disconnected, two safety valves are sufficient, provided that each valve is of the area required by these regulations.

(5) One safety valve which shall be kept locked and be accessible only to the user shall be required in the case of —

- (i) boilers of less than twenty gallons capacity (steam and water spaces combined);
- (ii) super-heaters and economisers which can be shut off from boilers; and
- (iii) apparatus using steam of a higher pressure than that of the atmosphere for cooking or heating purposes; and the provisions of subregulations (1) and (2) shall *mutatis mutandis* apply.

#### *Construction of safety valves.*

217. (1) Safety valves shall be so constructed that the valve can be freed easily from its seat at any time, and satisfactory provision shall be made in order to prevent

te verhoed dat die kleppe afspring ingeval die veer of hefboom breek of die lading skielik per ongeluk of om 'n ander rede verwyder word.

(2) Veiligheidskleppe, gelaai met 'n gewig of veer wat met 'n hefboom werk, moet so gemaak wees dat die lading net op die verste punt van die hefboom werk, en sodanige gewig moet deeglik aan die hefboom vasgeheg word. In gevalle waar veiligheidskleppe regstreeks deur vere gelaai word, moet die drukskroewe by werkdruk teëgehou word deur metaal-teëhouers of wassers.

(3) Alle veiligheidskleppe en hul verbindings aan die stoomketel moet gemaak wees van 'n metaalsoort wat 'n inspekteur goedgekeur het: Met dien verstande dat gietyster nie beskou word as so 'n metaalsoort nie, behalwe ten opsigte van kleppe en hul verbindings aan die stoomketel, waar hulle aan stoomketels met 'n gemagtigde werkdruk van hoogstens 150 lb. per vierkante duim aanbring is.

#### *Lading van veiligheidskleppe.*

218. (1) 'n Inspekteur stel die maksimum lading vas wat op veiligheidskleppe geplaas kan word, en geen gewigte, vere of hefboome buiten dié wat 'n inspekteur goedgekeur het, mag gebruik word nie.

(2) Niemand mag 'n onbehoorlike gewig op 'n veiligheidsklep van 'n stoomketel plaas nie, nóg die lading op enige wyse verhoog tot bo die maksimum wat 'n inspekteur bepaal het.

#### *Laewaterstandalarm.*

219. (1) Elke stoomketel buiten 'n stoomopgaarder, die stoomhouers van vuurlose lokomotiewe, oorverhitters of watervoorverhitters wat afsonderlik gestook word, moet met 'n toestel ingerig word waardeur gebrek aan water outomaties en sonder persoonlike waarneming aangedui word. So 'n toestel kan óf 'n stoomfluit wees wat deur middel van 'n vlot of andersins werk óf 'n smeltbare prop óf 'n ander toestel wat die Inspekteur goedkeur.

(2) Stoomketels wat met elektrisiteit of gas verhit word, moet toestelle — smeltbare proppe uitgesonderd — hê wat alarm moet maak of ander aanduiding gee wanneer die waterstand te laag daal.

#### *Drukmeter.*

220. (1) Elke stoomketel moet minstens een betroubare drukmeter hê, wat so aangebring is dat dit die druk by die hoogste punt van stoomdruk aandui. Die wyserplaat van so 'n meter moet so ingedeel wees dat dit die druk in pond per vierkante duim aandui, en moet ook die gemagtigde werkdruk duidelik met 'n rooi streep aandui. Die wyserplaat moet so ingedeel wees dat dit die gemagtigde werkdruk en die hidroliese proefdruk soos bepaal by regulasie 230 duidelik aangedui word, en die maksimum aanwysing van die meter mag hoogstens twee maal die gemagtigde werkdruk wees.

(2) Elke drukmeter moet afsonderlik en regstreeks in verbinding met die stoomketel wees, en moet van die stoomketel afgesluit kan word. Die kraan of klep hiervoor moet ten volle sigbaar wees.

#### *Toetsmeterverbinding.*

(3) Elke stoomketel met 'n gemagtigde werkdruk van 400 lb. per vierkante duim of minder moet 'n toestel hê wat bestaan uit 'n kraan met 'n flens wat een-en-vyf-agste duim in deursnit is en drie-sestiende duim dik is, waaraan die inspekteur se toetsmeter geheg kan word; so 'n toestel moet so geplaas word dat die toetsmeter en die stoomketelmeter van een plek af gelees kan word.

the valves from flying off in case of the spring or lever breaking or by the "load" being removed suddenly by accident or other cause.

(2) Safety valves loaded by a weight or spring acting on a lever shall be so constructed that the load acts only upon the extreme end of the lever, and such weight shall be securely fastened to the lever. In cases where safety valves are loaded directly by springs, the compressing screws shall abut against metal stop or washers, at the working load compression.

(3) All safety valves and their connections to the boiler shall be constructed of metal of a type approved by an inspector: Provided that cast iron shall not be regarded as such metal, except in respect of valves and their connections to the boiler fitted to boilers with an authorised working gauge pressure of not more than 150 lb. per inch.

#### *Load of safety valves.*

218. (1) The limits of the load to be placed on safety valves shall be those determined by an inspector, and no weights, springs or levers shall be used other than those approved by an inspector.

(2) No person shall place any undue weight on a safety valve of a boiler, or increase the load in any way beyond the limit fixed by an inspector.

#### *Low water alarms.*

219. (1) Every boiler other than a steam accumulator, steam drums of fireless locomotives, separately fired superheaters or economisers, shall be provided with a contrivance by which any deficiency of water is automatically made known, independent of any personal observation. Such contrivance may be either a steam whistle operated by float or other means, a fusible plug or other contrivance approved by the inspector.

(2) Electric or gas heated boilers shall have low water alarms or indicators, other than fusible plugs.

#### *Pressure gauge.*

220. (1) Every boiler shall be provided with at least one reliable pressure gauge which shall be so fitted as to indicate the pressure of the point of maximum steam pressure. The dial of such gauge shall be graduated to show pressure in pounds per square inch, and in addition shall show the authorised working gauge pressure marked distinctly with a red line. The dial shall be graduated to show clearly the authorised working gauge pressure and the hydraulic test pressure as determined in accordance with regulation 230 and the maximum indication of the gauge shall not exceed double the authorised working gauge pressure.

(2) Every pressure gauge shall have a separate direct communication with the boiler and shall be capable of being shut off from the boiler. The cock or valve for this purpose shall be in full view.

#### *Test gauge connection.*

(3) Every boiler, the authorised gauge pressure of which is 400 lbs. per square inch, or less, shall be provided with a contrivance consisting of a cock with a flange one and five-eighths inches in diameter by three-sixteenths of an inch thick for the attachment of the inspector's test gauge, and such contrivance shall be placed so as to enable the test gauge and the boiler gauge to be read from one place.

(4) Elke stoomketel met 'n gemagtigde werkdruk van meer as 400 lb. per vierkante duim, moet 'n klep of kraan hê met 'n ontvangmof in 'n vertikale posisie waaraan die inspekteur se drukmeter geheg kan word. Die ontvangmof moet met 'n standaard Whitworth-skroefdraad of -bout-skroefdraad van driekwart duim ingesny wees en moet 'n skroefsluitdop of 'n prop met skroefdraad hê wat maklik verwyder kan word.

*Afblaaskrane en -pyp.*

221. (1) Elke stoomketel moet minstens een afblaaskraan of -klep hê wat op die laagste punt geplaas en òf regstreeks deur middel van 'n flens òf deur middel van 'n flenspyp verbind moet wees.

(2) Elke afblaaskraan of -klep en al die toebehore wat met sulke toestelle verbind is, moet gemaak wees van 'n metaal soort (buiten gietyster) wat 'n inspekteur goedkeur.

(3) Waar verbindingspype aangebring word, mag hulle nêrens aan messelwerk raak nie; hulle moet deur middel van flense gelas word en as die flens en die pyp nie solied gelas is nie, moet so 'n pyp deur die flens loop en aan die binnekant omgeklink word afgesien nog van ander verbindings tussen die flens en die pyp soos byvoorbeeld skroefdraad en klinknaels. Waar die gemagtigde werkdruk hoër as 450 lb. per vierkante duim is, moet alle flense oral wêr doenlik is aangesweis word en van spanning verlig word.

(4) Die ontlading van elke afblaaskraan moet deur middel van 'n pyp in 'n oop tenk, afleivoor, of bak gelei word wat so geleë en beskut is, dat dit geen gevaar vir persone inhou nie.

(5) Buiten met die skriftelike goedkeuring van 'n inspekteur mag geen gebruiker toelaat dat die ontlading van die afblaaskrane van twee of meer stoomketels in 'n gemeenskaplike pyp lei nie.

*Stoomafsluitkleppe.*

222. (1) Elke stoomketel moet 'n hoofstoomafsluitklep hê wat so na doenlik aan die stoomketel self is.

(2) Waar meer as een stoomketel aan dieselfde hoofstoompyp verbind is, moet 'n keerklep tussen die hoofstoomafsluitklep en die hoofstoompyp geplaas word, en dit wel so na doenlik aan die hoofstoompyp. Die afskroef-tipe keerklep kan gebruik word.

(3) Alle stoomafsluitkleppe en hulle verbindings aan die stoomketel moet gemaak wees van 'n metaal soort wat die inspekteur goedkeur: Met dien verstande dat gietyster nie as so 'n metaal beskou word nie, buiten ten opsigte van kleppe aan stoomketels met 'n gemagtigde werkdruk van hoogstens 150 lb. per vierkante duim.

(4) Niemand mag stoom uit die stoomketel aftrek nie, tensy hy dit deur of deur middel van die hoofstoomafsluitklep doen, buiten waar die aftrekking in verband staan met die hulp-apparaat van die stoomketel.

*Besonderhede wat op nuwe stoomketels gemerk moet word.*

223. (1) Die naam van die vervaardiger, die gangbare fabrieksnommer, die jaar van vervaardiging, en die gestelde werkdruk in pond per vierkante duim moet op die romp van elke nuwe stoomketel aangedui word. Hierdie besonderhede moet so geplaas word dat hulle te alle tye maklik sigbaar is.

(2) Elke stoomketel moet 'n sagtekoperplaat hê wat vier by twee en 'n half by een-agste duim groot is, en wat deur middel van vier koperklinknaels van drie-agste duim in deursnit elk voor aan die ketel se romp aangebring moet word sodat dit te alle tye maklik sigbaar is, en die

(4) Every boiler, the authorised working gauge pressure of which is in excess of 400 lbs. per square inch, shall be provided with a valve or cock carrying in a vertical position a receiving socket for the attachment of the inspector's pressure gauge. The receiving socket shall be tapped with a  $\frac{3}{4}$ -inch standard Whitworth pipe or bolt screw thread and shall be fitted with an easily removable screw cap or plug.

*Blow-off cocks or pipes.*

221. (1) Every boiler shall be provided with at least one blow-off cock or valve, placed at the lowest point and connected either by flange direct or by means of a flanged pipe.

(2) Every blow-off cock or valve and all the fittings connected with such contrivances shall be constructed of metal (other than cast iron) of a type approved by an inspector.

(3) In cases where connecting pipes are fitted, they shall not be in contact with any masonry, they shall be joined by flanges, and, if the flange is not solid with the pipe, such pipe shall pass through the flange and be riveted over on the inside in addition to any other connection between the flange and the pipe, such as screw thread and rivets. Where the authorised working gauge pressure is in excess of 450 lbs. per square inch all flanges shall be welded on wherever practicable, and stress relieved.

(4) The discharge from every blow-off cock shall be conducted by means of a pipe into an open tank, drain or sump which is so situated and guarded as to prevent danger to any person.

(5) Except with the written permission of an inspector, no user shall permit the discharge from the blow-off cocks of two or more boilers to lead into a common pipe.

*Steam stop valves.*

222. (1) Every boiler shall be provided with a main steam stop valve as close as practicable to the boiler.

(2) If more than one boiler is connected to the same steam range a non-return valve shall be placed between the main stop valve and the range, as close to the steam range as practicable. This non-return valve may be of the screw-down type.

(3) All steam valves and their connections to the boiler shall be constructed of metal of a type approved by the inspector: Provided that cast iron shall not be regarded as such a metal, except for valves fitted to boilers with an authorised working gauge pressure of not more than 150 lbs. per square inch.

(4) No person shall draw steam from the boiler for any purpose except the operation of the boiler auxiliary apparatus, otherwise than through or by means of the main steam stop valve.

*Particulars to be marked on new boiler.*

223. (1) The name of the maker, the current factory number, the year of construction, and the intended working gauge pressure in pounds per square inch shall be marked on the shell of every new boiler, and these particulars must be so placed that they can be easily seen at all times.

(2) Every boiler shall be provided with a soft copper plate four by two and a half by one-eighth inches in size which shall be fixed by means of four three-eighths of an inch diameter copper rivets to the front of the boiler shell, in such a position that it can be easily seen at all

kliknaelgate moet versink word sodat die klinknaelkoppe gelyk met die koperplaat is.

Die inspekteur moet so 'n plaat duidelik merk met die amptelike nommer, die jaartal wanneer die stoomketel die eerste keer ondersoek is, en bowendien die gemagtigde werkdruk waarteen die ketel gebruik kan word.

(3) Die inspekteur moet die amptelike stempel op die koperklinknaelkoppe plaas, en die koperplaat mag nie verwyder word nie, nóg mag die aantekeninge wat daarop gestempel is, uitgewis of verander word deur enigiemand buiten die inspekteur nie.

#### *Die leeg- en oopmaak van stoomketels.*

224. (1) As die stoomketel leeg- en oopgemaak word vir skoonmaak, herstelwerk of enige ander doel, moet die gebruiker alle voorsorg tref om die veiligheid van persone te verseker wat daaraan, of in die nabyheid daarvan werk.

(2) Geen gebruiker mag enigiemand verplig of toelaat om 'n stoomketel of die vlamgange daarvan binne te gaan nie, voordat hy oortuig is dat mense die stoomketel en vlamgange met veiligheid binne kan gaan en dat die stoomafsluit-, toevoer-, afblaas- en alle ander kleppe en krane wat gevaar kan inhou met blinde flense afgesluit of toegemaak, en-deeglik met kettings en slotte gesluit is.

(3) Onderwyl 'n stoomketel skoongemaak of herstel word, mag niemand enige kleppe of krane oopmaak wat aldus gesluit is nie.

(4) Waar vervoerbare elektriese ligte gedurende die skoonmaak, herstel of inspeksie van 'n stoomketel of hulp-toerusting gebruik word, moet die gebruiker sorg dat die ligte teen 'n druk van hoogstens 32 volt werk.

(5) Niemand mag water gebruik op warm vlamgange, stof of as waar dit gevaar kan inhou nie.

#### *Stoomketelinspeksies.*

225. (1) Wanneer die inspekteur 'n inwendige ondersoek of waterdruktoets by 'n stoomketel wil uitvoer, moet hy in oorleg met die gebruiker die datum en tyd van so 'n ondersoek of toets bepaal en die gebruiker dan skriftelik daarvan in kennis stel.

(2) By ontvangs van so 'n kennisgewing moet die gebruiker alle dele van die stoomketel deeglik laat skoonmaak en voorberei vir die ondersoek of toets.

(3) Elke gebruiker wat sonder voldoende rede versuim om 'n stoomketel op die datum en tyd waarvan hy kennis gekry het, vir inspeksie te laat voorberei, is skuldig aan 'n oortreding. Elk so 'n gebruiker moet binne sewe dae skriftelik aansoek doen om die bepaling van 'n nuwe datum en tyd vir die ondersoek of toets, en sy aansoek moet van tien rand vergesel gaan.

#### *Bystand by inspeksies.*

226. Die gebruiker van 'n stoomketel of -apparaat moet werksmense, ligte, gereedskap of ander toerusting wat die inspekteur moontlik vir sy ondersoek of toets nodig kan hê, kosteloos tot sy beskikking stel.

#### *Verwydering van omhulsel.*

227. Waar die ondersoek van 'n stoomketel op geen ander wyse behoorlik kan geskied nie, moet die gebruiker gedeeltes van, of al die messelwerk of ander omhulsel op versoek van die inspekteur verwyder.

*Geen omhulsel mag voor toets aangebring word nie.*

228. Buiten met 'n inspekteur se skriftelike toestemming mag geen gebruiker vereis of toelaat dat 'n stoomketel deur middel van messelwerk of andersins in 'n omhulsel geplaas word nie voordat die inspekteur dit ondersoek of met waterdruk getoets het.

times, and the rivet holes must be countersunk so that the rivets are flush with the copper plate.

The inspector shall mark on such plate in a clear manner the official number, the year when the boiler was examined first, together with the authorized working gauge pressure under which the boiler is permitted to work.

(3) The copper rivet heads shall be stamped by the inspector with the official stamp, and such copper plate shall not be removed or the record stamped thereon shall not be defaced or altered except by the inspector.

#### *Emptying and opening of boiler.*

224. (1) When a boiler is being emptied and opened for cleaning, repairs or any other purpose, the user shall take every precaution to ensure the safety of all persons employed on such work or in the vicinity.

(2) No user shall require or permit any person to enter a boiler or its flues, until he has satisfied himself that such boiler and flues are safe for persons to enter and that the steamstop, feed, blow-off and all other valves and cocks which may be a source of danger are banked off or closed and securely fastened by means of chains and locks.

(3) While a boiler is being cleaned or repaired, no person shall unfasten or open any valves or cocks which have been so fastened.

(4) Where portable electric lights are used during cleaning, repair, or inspection of a boiler or auxiliary equipment, the user shall ensure that such lights are operated at a pressure not greater than 32 volts.

(5) No person shall use water on hot flues, dust or ashes where danger may arise from such use.

#### *Inspection of boiler.*

225. (1) Whenever the inspector proposes to conduct an internal examination or hydraulic test of a boiler, he shall after consultation with the user, determine the date and time of such examination or test and notify the user thereof in writing.

(2) Upon receipt of such notification the user shall cause all parts of the boiler to be thoroughly cleaned and prepared for examination, or testing.

(3) Any user who fails without good reason to have a boiler prepared for inspection on the date and at the time notified shall be guilty of an offence. Every such user shall apply in writing, within seven days for a new date and time to be fixed for the examination or test and shall forward with such application a fee of ten rand.

#### *Assistance at inspection.*

226. The user of a boiler or steam apparatus shall place, free of cost, at the disposal of the inspector, workmen, light, tools, or such other equipment as may be required by the inspector for the purpose of his examination or test.

#### *Removal of casing.*

227. When the examination of a boiler cannot be otherwise properly executed, any parts or the whole of the masonry or other casing shall be removed by the user when requested by the inspector.

#### *No encasing before test.*

228. No user shall require or permit a boiler to be encased, whether by masonry or otherwise, before it has been examined or tested by water pressure by an inspector except with the written permission of the inspector.

*Geleentheid vir uitwendige ondersoek.*

229. As die messelwerk of ander omhulsel van 'n stoomketel wat gebruik word, ter vernuwing of herstelling van die stoomketel verwyder is en die werkonderbreking wat dit meebring, voldoende tyd verskaf vir die uitwendige ondersoek van so 'n stoomketel, mag die gebruiker die messelwerk of ander omhulsel nie sonder die skriftelike toestemming van die inspekteur terugplaas nie.

*Hidroliese proefdruk.*

230. (1) Vir stoomketels met 'n gemagtigde werkdruk van hoogstens 75 lb. per vierkante duim moet die hidroliese proefdruk twee maal die gemagtigde werkdruk wees.

(2) Vir stoomketels met 'n gemagtigde werkdruk van meer as 75 lb. per vierkante duim maar hoogstens 150 lb. per vierkante duim, moet die hidroliese proefdruk 75 lb. per vierkante duim bo die gemagtigde werkdruk wees.

(3) Vir stoomketels met 'n gemagtigde werkdruk van meer as 150 lb. per vierkante duim maar hoogstens 300 lb. per vierkante duim moet die hidroliese proefdruk anderhalwe maal die gemagtigde werkdruk wees.

(4) Vir stoomketels met 'n gemagtigde werkdruk van meer as 300 lb. per vierkante duim maar hoogstens 600 lb. per vierkante duim, moet die hidroliese proefdruk 150 lb. per vierkante duim bo die gemagtigde werkdruk wees.

(5) Vir stoomketels met 'n gemagtigde werkdruk van meer as 600 lb. per vierkante duim, moet die hidroliese proefdruk een en 'n kwart maal die gemagtigde werkdruk wees.

(6) Geen toets word as bevredigend beskou nie voordat die stoomketel die proefdruk ten genoë van die inspekteur gedra het nie.

*Vermindering van gemagtigde druk.*

231. (1) As dit by 'n ondersoek blyk dat 'n stoomketel nie langer met veiligheid teen die gemagtigde werkdruk kan werk nie, en die gebruiker weier om die nodige vernuwings of herstelwerk te laat doen, kan die inspekteur 'n nuwe werkdruk magtig waarteen die ketel voortaan gewerk kan word en die inspekteur moet die nuwe verminderde druk op die koperplaat, wat daarvoor verskaf is, aanteken, en geen gebruiker mag vereis of toelaat dat so 'n stoomketel teen 'n hoër druk werk nie.

(2) As dit by ondersoek blyk dat 'n stoomketel in 'n toestand verkeer wat onmiddellike gevaar kan skep, moet die inspekteur opdrag gee dat die gebruik daarvan gestaak moet word, en so 'n stoomketel mag dan nie meer gebruik word nie voordat herstelwerk uitgevoer is en die inspekteur sy verlof daartoe gegee het.

*Registers op stoomketelinspeksie.*

232. (1) 'n Register in die voorgeskrewe vorm moet kosteloos aan die gebruiker van 'n stoomketel uitgereik word.

(2) Elke gebruiker aan wie 'n register uitgereik is, moet so 'n register op 'n plek hou wat 'n inspekteur bepaal, of by gemis aan so 'n bepaling, op 'n veilige plek, en hy moet die registrasiesertifikaat wat ingevolge regulasie 205 aan hom uitgereik is, in die register hou.

(3) As 'n gebruiker die register verloor, moet hy uiterlik sewe dae nadat hy die verlies ontdek het, skriftelik by die inspekteur aansoek doen om 'n duplikate register, en twee rand saam met die aansoek instuur.

*Verslagboek.*

233. (1) Behalwe die inspeksieregister moet die gebruiker 'n verslagboek van die werking van elke stoomketel op die perseel hou.

*Opportunity for external examination.*

229. Whenever the masonry or other 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 the external examination of the boiler, the user shall not replace such masonry or other casing without the written permission of the inspector.

*Hydraulic test pressure.*

230. (1) For boilers having authorised gauge working pressure not exceeding 75 lbs. per square inch, the hydraulic test pressure shall be double the authorised gauge working pressure.

(2) For boilers having authorised gauge working pressures exceeding 75 lbs. per square inch but not exceeding 150 lbs. per square inch, the hydraulic test pressure shall be 75 lbs. per square inch above the authorised gauge working pressure.

(3) For boilers having authorised gauge working pressure exceeding 150 lbs. per square inch but not exceeding 300 lbs. per square inch, the hydraulic test pressure shall be  $1\frac{1}{2}$  times the authorised gauge working pressure.

(4) For boilers having authorised gauge working pressure exceeding 300 lbs. per square inch but not exceeding 600 lbs. per square inch, the hydraulic test pressure shall be 150 lbs. per square inch above the authorised gauge working pressure.

(5) For boilers having authorised gauge working pressure exceeding 600 lbs. per square inch, the hydraulic test pressure shall be  $1\frac{1}{4}$  times the authorised gauge working pressure.

(6) No test shall be regarded as satisfactory until the boiler has borne the test pressure to the satisfaction of the inspector.

*Reduction of authorised pressure.*

231. (1) When it appears from an examination that a boiler can no longer be worked with safety at the authorised working gauge pressure and the user declines to have the necessary renewals or repairs effected, the inspector may fix a new authorised pressure at which the boiler may continue to be worked, and the inspector shall mark the now reduced pressure on the copper plate provided for such purpose, and no user shall require or permit such boiler to be worked at a higher pressure.

(2) When on examination a boiler is found to be in a condition from which immediate danger may arise, the inspector shall order the working of such boiler to be suspended, and such boiler shall not be used until repairs have been carried out and permission has been granted by the inspector.

*Boiler inspection registers.*

232. (1) The user of a boiler shall be furnished free of charge with a register in the form prescribed.

(2) Every user to whom a register has been issued shall keep the said register in such place as an inspector may direct or in the absence of any such direction, in a safe place, and shall keep in the register the certificate of registration issued to him under regulation 205.

(3) If a user loses the register he shall, not later than seven days after the discovery of such loss, apply in writing to the inspector for the issue of a duplicate register and shall forward with such application a fee of two rand.

*Log books.*

233. (1) In addition to the inspection register, the user shall keep record or a log book of the working of each boiler on the premises.



Sodanige verslag moet onverwyld op dieselfde voorgeskrewe vorm vir rapporteerbare ongelukke, wat in regulasie 235 genoem word, bevestig word:

shall be confirmed without delay on the same prescribed form for notifiable accidents mentioned in regulation 235:

- (a) Hysinstallasies toegelaat kragtens regulasies 40 en 73.
- (i) Buite beheer op loop raak van hysmasjien, hystrom of voertuig.
  - (ii) Breek of weiering van enige essensiële deel van die hysmasjien; breek of weiering van enige veiligheidstoestel wat in verband met die hysuitrusting gebruik word.
  - (iii) Breek, weiering of ernstige verwringing van die hystou; breek, weiering of ernstige verwringing van enige verbinding tussen die hystou en die trom of tussen die hystou en die voertuig of tussen die hystou en enige ander vrag wat aan sodanige tou hang of daaraan verbind is; breek of weiering of ernstige verwringing van 'n verbinding tussen voertuie of tussen 'n voertuig en 'n daaraan hangende of daaraan gehegte vrag; breek van leitou of verbindings daarvan; breek van teen- of stertou of verbindings daarvan.
  - (iv) Breek of weiering van die hystou, of balans-toukatrolwiel of die as of aslaer van sodanige katrolwiel; breek of weiering van enige essensiële deel van die skagtoring of ander katrolwielstut.
  - (v) Voertuig steek vas of slaan per ongeluk om; botsing van voertuig of sy vrag met die skaguitrusting; vassteek van kruisraam.
  - (vi) Ontsporing van voertuig.
  - (vii) Voertuig, beuel, raam of kruisraam raak per ongeluk die leispore byster.
  - (viii) Breek of weiering van die rem of die beheermeganisme daarvan.
  - (ix) Werking van veiligheidsgrypers wanneer nie vereis nie.
  - (x) Werking van enige oorhystoestel wanneer nie nodig nie.
  - (xi) Oorhysing of -neerlating van die voertuig in 'n mate wat persone in gevaar kon gestel het of skade aan die hysinrigting kon veroorsaak het.
  - (xii) Weiering van diepte-aanwyser.
- (b) Hysers.
- (i) Breek of weiering van enige essensiële deel van die dryf- of beheermasjinerie; breek of weiering van enige veiligheidstoestel wat in verband met die hys gebruik word.
  - (ii) Breek of weiering van hystou; breek of weiering van verbindings van sodanige tou.
  - (iii) Breek of weiering van katrolwiel of van die as of laer van sodanige katrolwiel.
  - (iv) Vassteek van hok of teengewig.
  - (v) Breek of weiering van rem of die werkmeganisme daarvan.
  - (vi) Werking van veiligheidsgrypers wanneer nie nodig nie.
  - (vii) Werking van enige oorhysweertoestel wanneer nie nodig nie.
- (c) Stoomketels.  
Breek of weiering van enige essensiële deel van 'n stoomketel.
- (a) Winding plant permitted in terms of regulations 40 and 73:
- (i) Running out of control of winding-engine, winding drum or conveyance.
  - (ii) Fracture or failure of any essential part of the winding-engine fracture or failure of any safety device used in connection with winding equipment.
  - (iii) Fracture, failure or serious distortions of winding rope; fracture, failure or serious distortion of any connection between the winding rope and the drum or between the winding rope and the conveyance or between the winding rope or any other load suspended from or attached to such rope; fracture or failure or serious distortion of any connection between conveyances or between a conveyance and any suspended or attached load; fracture of guide rope or its connections; fracture of balance or tail rope or its connections.
  - (iv) Fracture or failure of winding or balance rope sheave or of the shaft or shaft bearing of such sheave; fracture or failure of any essential part of the head-gear or such sheave support.
  - (v) Jamming or accidental overturning of conveyance; conveyance or its load fouling shaft equipment; jamming of crossheads.
  - (vi) Derailing of conveyance.
  - (vii) Conveyance, bridle, frame or crosshead accidentally leaving guides.
  - (viii) Fracture or failure of the brake or its operating mechanism.
  - (ix) Acting of safety catches when not required.
  - (x) Acting of any over-winding prevention device when not required.
  - (xi) Any over-wind or over-run of the conveyance to an extent which may have endangered persons or may have caused damage to the winding equipment.
  - (xii) Failure of depth indicator.
- (b) Elevators:
- (i) Fracture or failure of any essential part of the driving or operating machinery; fracture or failure of any safety device used in connection with the elevator.
  - (ii) Fracture or distortion of elevator rope; fracture or failure of attachments of such rope.
  - (iii) Fracture or failure of any sheave or of the shaft or shaft bearing of such sheave.
  - (iv) Jamming of car or counter-weight.
  - (v) Fracture or failure of brake or its operating mechanism.
  - (vi) Acting of safety catches when not required.
  - (vii) Acting of any over-winding prevention device when not required.
- (c) Boilers:  
Fracture or failure of any essential part of a boiler.

(d) Diverse.

- (i) Uitgebreide inkalwing of insakking in die grond of werkplekke, wat skade veroorsaak of kan veroorsaak aan ondergrondse werkplekke of die oppervlakte of persone in gevaar kan stel.
- (ii) 'n Ongeluk veroorsaak deur springstof of ontsteking of ontploffing van springstof per ongeluk.
- (iii) Oorstroming van enige aansienlike gedeelte van die werkplekke of breek van 'n dam of reservoir wat vir bewaring van water of slyk gebruik word.
- (iv) Brand of aanduiding of hernieuë uitbreking van brand of van selfontbranding in die myn, of enige ontploffing van gas of stof.
- (v) Onklaarraking van enige hoofventilasiewaaier.

*Register van ongelukke.*

242. By elke myn of werke moet 'n register gehou word waarin alle ongelukke aangeteken moet word wat by so 'n myn of werke plaasvind en wat ingevolge hierdie regulasies by die Direkteur aangemeld moet word; en binne een maand na die een-en-dertigste dag van Desember elke jaar moet die bestuurder 'n volledige lys van sodanige ongelukke oor die voorafgaande twaalf maande aan die Direkteur besorg.

*Getuienis.*

243. Met die oog op 'n ondersoek of inspeksie kan die Direkteur —

- (a) by dagvaarding die bywoning eis van sodanige persone wie se teenwoordigheid hy wenslik ag, ter ondervraging;
- (b) die vertoning eis van boeke, dokumente en stukke wat hy vir die doel belangrik beskou;
- (c) 'n eed of plegtige verklaring afneem, en enigeen wat ondervra word, verplig om 'n verklaring af te lê en te onderteken dat die getuienis wat hy by sy ondervraging gelewer het, die waarheid is.

*Dagvaarding van getuies en beskuldigdes.*

244. (1) Die vorm wat gebruik moet word vir die dagvaarding van 'n beskuldigde of 'n getuie wie se getuienis vereis word by 'n ondersoek na 'n ongeluk of ander besering ingevolge hierdie regulasies of by die verhoor van iemand ingevolge artikel 9 van die ordonnansie, of by die verhoor van 'n appèl ingevolge enige bepaling van die ordonnansie moet wesenlik soos volg lui:

(a) Beskuldigdes:

Aan .....  
 U word hierby gelas om .....  
 van ..... te dagvaar om  
 persoonlik te verskyn voor die Hof van die Inspekteur van  
 Mynwese op .....  
 op die ..... dag van ..... eerskomende,  
 om ..... uur in die voormiddag/agtermiddag  
 om daar te antwoord op, en by die uitspraak van die Hof  
 te berus in verband met, die aanklag en getuienis van  
 .....  
 .....  
 dat genoemde ..... of op omtrent  
 die ..... dag van ..... laaslede, en  
 te ..... onregmatig en onwettig .....  
 Bestel aan genoemde .....

(d) Miscellaneous:

- (i) Extensive caving or subsidence in the ground or workings causing or liable to cause damage to underground workings or to the surface or to endanger persons.
- (ii) Any accident due to explosives, or any accidental ignition or detonation of explosives.
- (iii) Flooding of any considerable portion of the working or failure of any dam or reservoir used for conserving water or slimes.
- (iv) Any fire or any indication or recrudescence of fire or of spontaneous combustion in the mine or any explosion of gas or dust.
- (v) Breakdown of any main ventilation fan.

*Register of accidents.*

242. At each mine or works a register shall be kept, in which all accidents occurring at such mine or works which in terms of these regulations are required to be reported to the Director must be recorded, and within one month after the thirty-first of December of each year a complete list of such accidents for the preceding twelve months shall be sent by the manager to the Director.

*Evidence.*

243. For the purpose of any enquiry or inspection the Director:

- (a) may require by summons the attendance of such persons as he may think fit for the purpose of such examination;
- (b) may require the production of any books, papers and documents which he considers important for the purpose;
- (c) may administer an oath or affirmation and require any person examined to make and sign a declaration of the truth of the statements made by him in his examination.

*Summoning of witnesses and accused persons.*

244. (1) The form of summons to be served on any accused person or any witness whose evidence is required at an inquiry into an accident or other injury, or in terms of these regulations, or at the trial of any person under section 9 of the ordinance, or at the hearing of any appeal under any provision of the ordinance shall be substantially as follows:

(a) Accused persons:

To .....  
 you are hereby required to summon .....  
 of .....  
 that he appear personally before the Court of the In-  
 spector of Mines at .....  
 on the ..... day of .....  
 ..... next, at ..... o'clock  
 in the forenoon/afternoon there to answer and abide the  
 judgment of the Court upon the complaint and information  
 of .....  
 that the said .....  
 .....  
 did on or about the .....  
 day of ..... last, and at

'n afskrif van hierdie dagvaarding en doen verslag oor u optrede in hierdie verband.

Gedateer te ..... op hierdie die .....  
dag van ..... 19.....

(Naamtekening van persoon wat gemagtig is om dagvaarding uit te reik.)

(b) Getuies:

Aan .....

U word hierby gelas om ..... te dagvaar om  
van ..... te dagvaar om  
persoonlik te verskyn te .....  
ter bywoning van 'n ondersoek/verhoor voor .....  
op die ..... dag van  
'eerskomende, om ..... uur voormiddag/  
namiddag, om te getuig en te verklaar wat hy alles weet  
aangaande .....  
en in verband daarmee die dokumente en stukke wat hier-  
na genoem word, in te dien .....  
en aan genoemde .....  
'n afskrif van hierdie dagvaarding te bestel en om by  
ondergetekende verslag te doen oor u optrede in hierdie  
verband.

Gedateer te ..... op hierdie die .....  
dag van ..... 19.....

(Naamtekening van persoon wat gemagtig is om dagvaarding uit te reik.)

*Bestelling van dagvaarding.*

(2) Telkens wanneer 'n dagvaarding wat in sub-  
regulasie (1) hiervan genoem word, aan enigiemand bestel  
moet word, moet die bestelling geskied deur middel van  
die hof van die landdros binne wie se regsgebied so iemand  
woon of werk, of deur 'n lid van die Polisiemag, of deur  
iemand wat daartoe gemagtig is deur die persoon wat die  
dagvaarding uitreik.

*Amptenare wat dagvaarding kan uitreik.*

(3) Elke bogemelde dagvaarding moet onderteken  
word deur die Direkteur of ander persoon wat behoorlik  
gemagtig is om so 'n dagvaarding uit te reik, en moet  
spesifiek die tyd en plek aangee waarop die getuie wat  
daarin genoem word, sy opwagting moet maak.

*Wetsbepalings op landdroshowe geld vir dagvaardings.*

(4) Telkens wanneer dit nodig is om iemand wat  
beskuldig staan van oortreding van 'n regulasie of reël  
wat ingevolge artikel 12 van die ordonnansie geld, te dag-  
vaar om voor die inspekteur te verskyn by 'n verhoor  
ingevolge artikel 9 van die ordonnansie, of om op 'n ander  
wyse die teenwoordigheid van so iemand by so 'n verhoor  
te verseker, geld die bepalinge van die wet en regulasies  
wat in landdroshowe ten opsigte van die dagvaarding en  
bywoning van beskuldigdes van krag is, met die nodige  
veranderinge.

*Ambulanse, ens. Ambulans-uitrusting vir noodhulp op oppervlakte.*

245. (1) Op die oppervlakte van elke myn moet min-  
stens die onderstaande artikels beskikbaar gehou word vir  
onmiddellike gebruik op 'n plek wat gereedelik toeganklik  
is ingeval van 'n ongeluk aan werknemers by die myn —

(a) twee draagbare van tipe wat die Direkteur goed-  
gekeur het, elk met twee wolkomberse;

(b) 'n stewig gemaakte maar maklik draagbare nood-  
hulpkissie wat minstens die onderstaande artikels  
bevat —

..... wrongfully and unlawfully  
..... Serve on the said  
..... a copy of  
this summons and return to the undersigned what you  
have have done thereon.

Dated at ..... this .....  
day of ..... 19.....

(Signature of person authorised to issue  
summons.)

(b) Witnesses:

To .....  
You are hereby required to summon .....  
of .....  
that he appear personally at .....  
to attend an inquiry/trial before .....  
on the ..... day of .....  
next, at ..... o'clock in the forenoon/  
afternoon to testify and declare all he knows concerning  
..... and in connection  
therewith to produce the documents and papers herein-  
after specified .....  
and serve on the said .....  
a copy of this summons, and return to the undersigned  
what you have done thereon.  
Dated at ..... this .....  
day of ..... 19.....

(Signature of person authorised to issue  
summons.)

*Service.*

(2) Whenever it shall be necessary to serve any such  
summons as is mentioned in subregulation (1) hereof 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 such person as may be authorised to do  
so by the person issuing such summons.

*Officers who may issue summons.*

(3) Every such summons as aforesaid shall be signed  
by the Director or other person or persons duly authorised  
to issue it and shall specifically state the time and place  
at which the witness named therein is to attend.

*Magistrates' Court's provisions to apply to summonses.*

(4) Whenever it shall be necessary to summon any  
person charged with the contravention of any regulation  
or rule in force under section 12 of the ordinance to  
appear before an Inspector, at any trial under section 9  
of the ordinance or otherwise to secure the attendance of  
such person at such trial, the provisions of the law and  
regulations in force in the magistrate's court for summon-  
ing or securing the attendance of accused persons shall  
*mutatis mutandis* apply.

*Ambulance, etc. Emergency ambulance supplies on surface.*

245. (1) On the surface of every mine there shall be  
kept available for immediate use when required at a place  
readily accessible in the event of accident to persons  
employed at the mine, at least the following:

(a) Two stretchers of a pattern approved by the Direc-  
tor each provided with two woollen blankets.

(b) A substantially constructed and readily portable  
first aid box containing at least:

twee skroefverbande;  
 twaalf driehoekige bindsels;  
 twaalf drie-duimse bindsels;  
 twaalf noodhulp-verbande;  
 een lb. watte;  
 een pond mediese gaas;  
 een skêr met ronde punte;  
 een pakkie haakspelde;  
 'n toereikende voorraad spalke;  
 'n kaartjie met voorskrifte vir die behandeling van gevalle van gasvergiftiging;

sowel as die onderstaande artikels, wat voorheen deur 'n gekwalifiseerde apteker voorberei moet word —

een ses-ons riffelbottel met 'n ontsmettings-oplossing wat duidelik gemerk moet word met die woorde:

„Ontsmettingsmiddel — net vir uitwendige gebruik”;

Drie twee-ons bottels vlugsout-oplossing voorberei in die verhouding van een teelepels vlugsout in twee ons water en duidelik gemerk „Opwekmiddel”;

Drie twee-ons bottels braakmiddel-oplossing voorberei in die verhouding van nege grein kopersulfaat in twee ons water en duidelik gemerk „Braakmiddel”;

een twee-ons bottel met een persent kokaïne in kasterolie, duidelik gemerk „Net vir oog-beserings”.

#### *Ambulansuitrusting onder die grond.*

(2) In elke hoofverkeerskag moet daar by geskikte stasie ondergrondse noodhulpposte — minstens een vir elke vier vlakke waarop gewone mynbedrywighede geskied — ingerig word, en wel op treffende en goedverligte plekke. Hierdie noodhulpposte moet minstens die onderstaande toerusting hê —

- (a) drie draagbare van 'n partoon wat die Direkteur goedgekeur het;
- (b) twee noodhulpkissies wat voldoen aan die vereistes wat in subregulasie (1) (b) hiervan uiteengesit word.

#### *Ambulansbeamptes.*

(3) Die bestuurder moet een of meer bevoegde persone aanstel om toesig uit te oefen oor, en verantwoordelik te wees vir, die instandhouding van die ambulansuitrusting en -toestelle wat sowel bo- as ondergronds verskaf word, en hy moet sorg dat die uitrusting onmiddellik vervang word wanneer dit nodig is.

#### *Noodhulppakkies.*

(4) Elke ondergrondse mynbeampte moet voorsien word van twee kiemdodende kompresse, elkeen op 'n verband, en omsluit in 'n waterdigte pakket of pakkette, en hy moet hulle gedurende werkure by hom dra.

#### *Noodhulponderrig.*

246. (1) By elke myn met meer as driehonderd werksmense moet die bestuurder reël dat elkeen van die ondervermelde mynbeamptes en ander beamptes wat hy aanwys minstens een keer per drie jaar 'n onderrigkursus in noodhulp aan beseerdes bywoon, wat die myn se mediese beampte of ander persoon wat die Mediese Beampte van die Administrasie goedgekeur, moet waarneem:

Ondergrondse bestuurder, mynopsigter, skofbaas, hoof-opmeter, assistent-opmeter, monsternemer, werktuigkundige ingenieur, elektro-tenikus, ongevallebeampte, voormansmid, voorman-skrynwerker, voorman-monteur,

two tourniquets;  
 twelve triangular bandages;  
 twelve three inch bandages;  
 twelve first aid dressings;  
 one lb. cotton wool;  
 one lb. surgical gauze;  
 one pair round pointed scissors;  
 one packet safety pins;  
 an adequate supply of splints;  
 a card containing directions for treatment in cases of gassing;

as well as the following which shall have been prepared by a qualified dispenser:

one, six ozs. corrugated bottle antiseptic solution clearly labeled "Antiseptic — not to be taken";

three two ozs. bottles of salvolatile solution made up in the proportion of one teaspoonful of salvolatile in two ozs. of water and clearly labelled "Stimulant";

three two ozs. bottles of emetic solution made up in the proportion of nine grains of copper sulphate in two ozs. of water and clearly labelled "Emetic";

one two oz. bottle of one per cent cocaine in castor oil clearly labelled "For eye injuries only".

#### *Ambulance supplies underground.*

(2) In every main travelling shaft at suitable stations underground first aid stations not less in number than one for every four levels in which ordinary mining operations are being conducted, shall be established at conspicuous and well lighted places. Such first aid stations shall be equipped with at least the following:

- (a) Three stretchers of a pattern approved by the Director;
- (b) two first aid boxes conforming with the requirements set out in subregulation (1) (b) hereof.

#### *Ambulance officers.*

(3) The manager shall appoint one or more competent persons to take charge and be responsible for the upkeep of the ambulance supplies and appliances provided, both on the surface and underground, and shall provide for the prompt replenishing of the ambulance supplies whenever necessary.

#### *First aid packets.*

(4) Every underground mining official shall be provided with and shall carry with him during his working hours two antiseptic compresses each sewn into a bandage and contained in a waterproof packet or packets.

#### *First aid instruction.*

246. (1) On every mine where more than three hundred persons are employed, the manager shall make provision for each of the following mine officials and such other officials as he may direct to attend at least once in every three years a course of instruction in first aid to the injured given by the mine Medical Officer or other person approved by the Medical Officer to the Administration.

Underground manager, mine overseer, shift boss, chief surveyor, assistant surveyor, sampler, mechanical engineer, electrical engineer, accident officer, foreman smith, foreman carpenter, foreman fitter, foreman timberman,

voorman-timmerman, hoof-elektrisiën, ertsmeulbestuurder, kampongbestuurder, hospitaal-superintendent of -oppasser en ambulansbeampte.

(2) By elke myn en telkens wanneer daar 'n onder-rikkursus in noodhulp aan beseerdes gereël moet word, moet 'n kennisgewing in diervoegte en 'n lys by die myn-kantoor en/of die ontspanningsklub opgeplak word, en die bestuurder moet reëlings tref dat elke blanke werknemer by die myn wat uit vrye beweging sy naam op so 'n lys geskryf het, so 'n kursus kosteloos kan bywoon mits sodanige bywoning nie op sy gewone werkpligte inbreuk maak nie.

(3) By elke myn waar personeel en geriewe vir die onderrig van persone in noodhulp aan beseerdes beskikbaar is, moet die bestuurder die opleiding in noodhulp van sy nie-blanke werknemers, en veral van die voorjongens wat toesig hou oor werkspanne, bevorder en aanmoedig.

#### *Ambulans by bedrywe.*

247. By bedrywe moet die bestuurder die ambulans-reëlings wat die Direkteur vereis, verskaf, en wel by ontvangs van skriftelike kennisgewing van die Direkteur, waarin die reëlings in besonderhede uiteengesit word.

#### *Mediese hulp moet ingeroep word. Bestuurder verantwoordelik.*

248. Wanneer 'n werknemer in of by 'n myn of bedryf deur 'n ongeluk of andersins beseer word, is dit die bestuurder se verantwoordelikheid om te sorg dat die naaste gekwalifiseerde geneesheer ingeroep word, tensy die gereelde geneesheer wat by die myn of bedryf aangestel is, binne twee myl van die toneel van die ongeluk woon, in welke geval so 'n geneesheer geroep moet word. As die beseerde nie in staat is om sonder hulp na sy tuiste of die hospitaal te gaan nie, moet die bestuurder van die myn of bedryf onmiddellik so iemand op die veiligste, beste en vinnigste wyse en op koste van die myn- of werke eienaar, na sy tuiste of na 'n hospitaal laat vervoer.

#### *Verskaffing van teengifwe.*

249. By elke myn of bedryf waar sianiedoplossing gebruik word, of waar arseen (arsenigsuur) geproduseer word, moet daar op 'n ooglopende plek gerieflik naby elke gebou waar sodanige stowwe gebruik of maak word, 'n toereikende hoeveelheid van 'n bevredigende en doeltreffende teengif wat die Mediese Beampte van die Administrasie goedgekeur het, gehou word. So 'n teengif moet in 'n bedekte maar ongesluite kistie gehou word met die etiket „Sianied-teengif” of „Arseenteengif” daarop, en binneaan die deksel van die kistie moet daar duidelike voorskrifte vir die aanwending van sodanige teengif aangebring word.

#### *Verskaffing van wasgeriewe.*

250. (1) By elke maalmasjien, essaaikantoor of bedrywe waar minerale stowwe van 'n giftige aard behandel word, of waar giftige chemikaleë of toetsmiddels gebruik word, moet daar 'n toereikende hoeveelheid gesonde water verskaf word wat duidelik in albei amptelike tale en ander tale wat gewoonweg deur ander werknemers daar gebruik word, aangedui word met die opskrif „Drinkwater”.

(2) Toereikende geriewe moet verskaf word vir werknemers in sodanige plekke om hul hande te was, en geen so iemand mag in die loop van sy werkstof kos eet of sy skof verlaat voordat hy sy hande gewas het nie.

(3) Die bepalinge van hierdie regulasie moet bekend gemaak word aan almal wat in sodanige plekke werk.

chief electrician, mill manager, compound manager, hospital superintendent or orderly, and ambulance officer.

(2) On every mine whenever a course of instruction in first aid to the injured is to be arranged a notice to that effect and a list shall be posted up at the mine office and/or recreation club and the manager shall make provision for any European mine employee who, of his own free will, has subscribed his name to such list to attend such course free of charge provided attendance by such employee will not interfere with his normal working duties.

(3) On every mine where personnel and facilities for the instruction of persons in first aid to the injured may be available, the manager shall promote and encourage the training in first aid of his non-European employees more particularly the boss-boys in charge of working gangs.

#### *Ambulance at works.*

247. At every works such ambulance arrangements as may be required by the Director shall be provided by the manager on receiving written notification from the Director detailing such arrangements.

#### *Medical aid to be sent for — Manager responsible.*

248. When any person employed in or about a mine or works receives injury by accident or otherwise the manager shall be responsible for seeing that the nearest qualified medical practitioner is sent for, unless the regular medical practitioner appointed to the mine or works resides within two miles of the scene of the accident, in which case such medical practitioner shall be summoned. If the injured person is unable to proceed unaided to his abode or to a hospital the manager of the mine or works shall immediately have such person conveyed to his abode or to a hospital in the safest, best and quickest way at the expense of the owner of the mine or works.

#### *Provision of antidotes to poison.*

249. In every mine or works where cyanide solution is used, or where arsenic (arsenious acid) is produced, there shall be kept in a conspicuous place, convenient to every building at which such material is used or manufactured, a sufficient supply of a satisfactory and efficient antidote approved by the Medical Officer to the Administration. Such antidote shall be kept in a covered but unlocked box, which shall be labelled “Cyanide Antidote” or “Arsenic Antidote”, and explicit directions for the use of such antidote shall be affixed inside the lid of the box.

#### *Provision of facilities for washing.*

250. (1) At every mill, assay office or works where mineral substances of a poisonous nature are treated, or where poisonous chemicals or re-agents are used there shall be provided an adequate supply of wholesome water distinctly labelled in both official languages and in such other languages normally used by persons there employed as “Drinking Water”.

(2) Adequate facilities shall be provided for persons employed in such places to wash their hands and no such person shall partake of food during his working shift or go off shift until he has washed his hands.

(3) The provisions of this regulation shall be made known to all persons employed in such places.

## DEEL V.

## SKIETSERTIFIKATE.

*Skietcertifikate. Uitreikingsbevoegdheid.*

251. Die Direkteur is die beampete wat belas is met die bevoegdheid om skietcertifikate uit te reik vir prospekter-, myn- en steengroefwerk, en hy kan 'n sertifikaat uitreik nadat hy 'n applikant ondersoek het en homself oortuig het dat so 'n applikant bekwaam is om die pligte van 'n spanbaas ooreenkomstig die bepalings van hierdie regulasies met betrekking tot die versorging en gebruik van springstowwe uit te voer, en daarby toereikende praktiese kennis dra van die veilige uitvoering van skietbedrywighede.

*Kwalifikasies van kandidaat.*

252. Geen applikant mag aanvaar word as kandidaat vir ondersoek ter uitreiking van 'n skietcertifikaat nie, tensy —

- (a) hy minstens agtien jaar oud is;
- (b) hy minstens een van die amptelike tale kan lees en skryf;
- (c) hy minstens eenhonderd-en-tagtig skofte ondervinding gehad het wat van 'n aard is wat, na die mening van die Direkteur, hom kwalifiseer vir 'n eksamen vir 'n voorlopige skietcertifikaat vir alle ondergrondse pligte van 'n spanbaas, behalwe die pligte van ondersoek en veilig maak vereis deur regulasie 37;
- (d) hy minstens driehonderd skofte ondervinding gehad het van 'n aard wat, na die mening van die Direkteur, hom kwalifiseer vir oorweging vir 'n permanente skietcertifikaat vir alle ondergrondse pligte;
- (e) hy minstens sestig skofte ondervinding gehad het wat aanneemlik is vir die Direkteur vir 'n voorlopige skietcertifikaat vir dagbouwerk;
- (f) hy minstens eenhonderd-en-twintig skofte ondervinding gehad het wat aanneemlik is vir die Direkteur vir 'n permanente skietcertifikaat vir dagbouwerk;
- (g) sy gehoor goed is, en sy gesigsvermoë sodanige is dat hy die pligte van spanbaas doeltreffend kan uitvoer.

*Beperking op geldigheid van skietcertifikaat.*

253. 'n Skietcertifikaat wat uitgereik is ten opsigte van dagbouprospekterwerk, -mynwerk of steengroefwerk, verleen geen bevoegdheid aan die houer daarvan om skietbedrywighede in ondergrondse werkplekke in enige myn uit te voer nie.

*Vertoning van sertifikaat.*

254. By indienstreding moet die mynwerker sy skietcertifikaat inlewer by die bestuurder wat dit behou tot afloop van sy dienstryd, wanneer dit weer aan die mynwerker terugbesorg moet word.

*Direkteur kan skietcertifikaat skors of intrek. Hoër beroep op Administrateur.*

255. As die houer van 'n skietcertifikaat wat ingevolge hierdie regulasies of latere wysigings daarvan uitgereik is, te eniger tyd, na die mening van die Direkteur skuldig is aan onoplettendheid of nalatigheid by die uitvoering van sy pligte, of aan wangedrag, of ly aan 'n swakheid wat hom waarskynlik by die bekwame uitvoering van sy pligte kan hinder, kan die Direkteur so 'n sertifikaat onmiddellik skors of intrek. By sodanige skorsing of intrekking het so 'n spanbaas of mynwerker die reg om by die Administrateur in hoër beroep te gaan teen so 'n beslissing op die wyse wat artikel 15 van die Ordonnansie op Myne, Bedrywe en Minerale 1968 voorskryf.

## PART V.

## BLASTING CERTIFICATES.

*Blasting Certificates — issuing authority.*

251. The issuing authority for blasting certificates for prospecting, mining and quarrying shall be the Director who, on examination of an applicant and on satisfying himself that such applicant is competent to perform the duties of a ganger in accordance with the provisions of these regulations and has proficient knowledge of the regulations appertaining to the care and use of explosives, with sufficient practical knowledge of the safe conduct of blasting operations, may issue a certificate.

*Qualifications of candidate.*

252. An applicant shall not be accepted as a candidate for examination for a blasting certificate, unless:

- (a) he is at least eighteen years old;
- (b) he can read and write at least one of the official languages;
- (c) he has had at least one hundred and eighty shifts of experience of a nature which in the opinion of the Director qualifies him for examination for a provisional blasting certificate for all the underground duties of a ganger except the duties of examination and making safe required by regulation 37;
- (d) he has had at least three hundred shifts of experience of a nature which in the opinion of the Director qualifies him for consideration for a permanent blasting certificate for all underground duties;
- (e) he has had at least 60 shifts of experience acceptable to the Director for a provisional blasting certificate for opencast work;
- (f) he has had at least 120 shifts of experience acceptable to the Director for a permanent blasting certificate for opencast work;
- (g) he has good hearing and has the eyesight necessary to enable him to perform the duties of a ganger competently.

*Limit of validity of blasting certificate.*

253. A blasting certificate issued in respect of opencast prospecting, mining or quarrying operations shall not entitle the holder to conduct blasting operations in the underground workings of any mine.

*Production of certificate.*

254. Upon engagement a miner shall produce his blasting certificate which shall be retained by the manager until the termination of the engagement whereupon it shall be returned to the miner.

*Director may suspend or cancel blasting certificate.**Appeal to Administrator.*

255. If at any time the holder of a blasting certificate issued in accordance with these regulations or any subsequent amendments thereof shall in the opinion of the Director be guilty of inattention or negligence in the execution of his duties or of any misconduct, or shall suffer from any infirmity likely to be detrimental to the efficient discharge of his duties, the Director may immediately suspend or cancel such certificate. In the event of such suspension or cancellation such ganger or miner shall have the right to appeal from such decision to the Administrator as in the manner provided under section 15 of the Mines, Works and Minerals Ordinance, 1968.

## DEEL VI.

## BEHEER OOR WERKDAE EN URE.

*Geen werk op sekere dae nie.*

256. (1) Niemand mag op 'n Sondag, Kersdag, Goeie Vrydag, Geloftedag of Republiekdag in elke vyfde jaar na 1966, enige werk in verband met die werking van 'n myn of bedryf, by 'n myn of bedryf, verrig of laat verrig of toelaat dat iemand anders dit aldus verrig nie, tensy die werk bestaan uit —

- (a) die bediening of die laat werk van pomp of ventilasiemasjinerie of masjinerie vir die voorsiening van lig, hitte of krag, of 'n stoomketel wat in verband met sodanige masjinerie staan;
- (b) sodanige werk bo of benede die oppervlakte wat nie verdraag kan word nie sonder dat gevaar vir, of skade aan lewe, gesondheid of eiendom veroorsaak word, met inbegrip van daarvoor nodige of daarmee in verbandstaande werk in werkswinkels;
- (c) die aan die gang hou van 'n onafgebroke chemiese proses, metallurgiese proses of smeltproses, indien die stilstand daarvan dwarsdeur so 'n dag die onmiddellike hervatting daarvan op die daaropvolgende dag sal verhoed of die doeltreffendheid van die proses sal verminder;
- (d) die polisie-toesig oor die myn of bedryf, of die voortsetting van mediese dienste, gesondheidsdienste of dienste in verband met behuising en voeding.

(2) Die Direkteur kan, nadat aansoek gedoen is, spesiale verlof verleen vir die tydelike voortsetting van enige noodsaaklike werk, benewens dié in subregulasie (1) omskrewe, by 'n myn of bedryf op die in daardie subregulasie vermelde dae.

(3) Vir die doel van hierdie regulasie beteken Sondag, Kersdag, Goeie Vrydag, Geloftedag en Republiekdag die tydperk van twaalfuur middernag op die dag wat enige so 'n dag voorafgaan, tot twaalfuur middernag op so 'n dag.

*Beheer oor werkkure.*

257. (1) Onderhewig aan die bepalings van subregulasie (2), mag geen persoon werk, of toegelaat of verplig word om te werk in of op enige myn of bedryf vir meer as agt-en-veertig uur gedurende enige sewe agtereenvolgende dae nie, uitgesonderd die tyd wat in beslag geneem word om na die werkplek te gaan en daarvandaan terug te keer.

(2) Subregulasie (1) is nie van toepassing nie —

- (a) op werk wat nodig gemaak is deur 'n ongeluk of 'n ander noodtoestand; of
- (b) op die werk of diens van enige mynbeampte of 'n spesiale klas werknemer, wat deur die Direkteur vrygestel is, op grond daarvan dat daardie werk of diens verrig moet word met die doel om veiligheid te verseker, of om werknemers van of na hul werkplek in die myn te vervoer.

(3) Op elke myn waar meer as eenhonderd persone werk, moet die bestuurder sorg dat:

- (a) *in die geval van ondergrondse myne*, daar bogronds by elke skaghoof 'n kennisgewing opgeplak staan wat aandui wanneer die skofte die myn ingaan en wanneer hulle na die oppervlakte terugkeer, en daar by elke skaghoof 'n oorlosie ingerig word, wat die tyd aandui wat by die myn gevolg word;

## PART VI.

## CONTROL OF DAYS AND HOURS OF LABOUR.

*No work on certain days.*

256. (1) No person shall perform, or cause or permit any other person to perform, any work at any mine or works, in connection with the operation of a mine or works, on a Sunday, Christmas Day, Good Friday, Day of the Covenant or on Republic Day in every fifth year after 1966, unless the work is —

- (a) attending to or working pumping or ventilating machinery, or machinery for the supply of light, heat or power, or any boiler belonging to any such machinery;
- (b) such work above or below the surface as cannot be delayed without causing danger or damage to life, health or property, including work in workshops necessary or incidental to any such work;
- (c) operating any continuous chemical, metallurgical or smelting process, if a stoppage thereof during the whole of any such day would either prevent its immediate resumption on the next succeeding day or diminish the effectiveness of the process;
- (d) the policing of the mine or works, or the carrying on of medical and health services or services in connection with housing and feeding.

(2) The Director may, on application, grant special permission for carrying on temporarily any necessary work in addition to work described in sub-regulation (1), at a mine or works on the days mentioned in that sub-regulation.

(3) For the purpose of this regulation Sunday, Christmas Day, Good Friday, Day of the Covenant and Republic Day shall mean the period from twelve o'clock midnight on the day previous to any such day to twelve o'clock midnight on any such day.

*Control of hours of work.*

257. (1) Subject to the provisions of subregulation (2), no person shall work, or cause or permit any other person to work, in or on any mine or works for more than forty-eight hours during any consecutive seven days, exclusive of the time occupied in going to and from the place where the work is performed.

(2) The provisions of subregulation (1) shall not apply to —

- (a) work necessitated by accident or other emergency; or
- (b) to the work or service of any mine official or of any special class of employee exempted by the Director for the reason that such work or service is performed or rendered for the purpose of securing safety, or of transporting employees to and from their working places in a mine.

(3) On every mine where more than one hundred persons are employed, the manager shall provide:

- (a) *in the case of underground mines*: That a notice shall be kept posted up at each shafthead on the surface, showing the times of entry of the shifts to the mine and of their return to the surface and, that a clock, showing the time to be observed on the mine be installed at each such shaft head;

- (b) *in die geval van dagboumyne*, daar 'n kennisgewing opgeplak staan op 'n geskikte plek wat die tyd en duur van die skofte op die myn aantoon;
- (c) die tyd wat in beslag geneem word om enige werksman na en van sy werkplek te bring altesaam hoogstens een uur vir enige skof is. In spesiale gevalle mag die Direkteur, by ontvangs van 'n skriftelike aansoek van die bestuurder, die tydperk van een uur verleng, indien hy dit nodig ag; kennisgewing van sodanige aansoek moet by die myn opgeplak word vir veertien volle dae voordat die aansoek aan die Direkteur gestuur word;
- (d) die mynopsigter, skofbaas, of iemand anders wat vir dié doel deur die bestuurder aangestel is, alle redelike stappe, in die geval van ondergrondse mynwerk, doen, om te verseker dat niemand wat nie kragtens subregulasie (2) van hierdie regulasie vrygestel is, ondergronds bly nadat die werksmense wat op daardie skof gewerk het na die oppervlakte gehys is of teruggekeer het, en dat hy in 'n boek wat deur die bestuurder verskaf moet word, die naam van die persoon wat aldus ondergronds bly sowel as die tyd waarop hy die oppervlakte van die myn bereik, opteken.
- (4) (a) Waar werkenemers op ses dae per week werk, moet enige persoon wat vir meer as agt uur gedurende enige skof moet werk, of die dienstdyperk deurlopend is of nie, besoldig word teen een 'n halwe keer die gewone loontarief vir elke uur of gedeelte van 'n uur wat so gewerk is.
- (b) Waar werknemers op vyf dae per week werk, moet enige persoon wat vir meer as nege uur ses-en-dertig minute gedurende enige skof moet werk, of die dienstdyperk deurlopend is of nie, besoldig word teen een en 'n halwe keer die gewone loontarief vir elke uur of gedeelte van 'n uur wat so gewerk is.
- (c) Indien die werk 'n verlenging van die skof is, word daar net betaal vir die ure wat inderdaad meer is as wat in (a) en (b) hierbo, na gelang, bepaal is: Met dien verstande dat die werknemer gedurende sy gewone skof gewaarsku moet word dat hy oortyd sal moet werk; indien die werknemer, na voltooiing van sy gewone skof, teruggeroep word vir ekstra diens, moet hy besoldig word teen die verhoogde loontarief vir 'n minimum van twee uur ten opsigte van elke oproep as die werk in minder as twee uur voltooi word.
- Duur die werk tot ses uur om te voltooi, word daar net betaal vir ure wat inderdaad gewerk word; duur die werk langer as ses uur, maar minder as agt uur om te voltooi, word die werknemer besoldig teen die verhoogde loontarief vir 'n volle agt uur; duur die werk langer as agt uur om te voltooi, word die werknemer net vir die ekstra ure wat hy inderdaad gewerk het, teen die verhoogde loontarief besoldig.
- (d) Enige persoon van wie verwag word om te werk ingevolge paragrawe (a), (b) en (c) van subregulasie (1) van regulasie 256, op enige van die dae genoem in regulasie 256 (1), word besoldig teen dubbel die gewone loontarief vir enige tydperk gewerk op so 'n dag, met 'n 'n minimum van twee uur se besoldiging, teen die verhoogde loontarief, vir elke afsonderlike dienstdyperk op enige so 'n dag.
- Indien die dienstdyperk langer as ses uur maar minder as agt uur duur, moet die werknemer besoldig word teen dubbel die gewone loontarief vir 'n volle agt uur.
- Duur die werk langer as agt uur om te voltooi, geskied besoldiging teen dubbel die gewone loontarief vir ure wat inderdaad gewerk word.
- (e) Skofte wat gereeld gewerk word op die dae wat paragraaf (d) hierbo noem, tel as skofte wat vakansie-
- (b) *in the case of opencast mines*: That a notice shall be kept posted up at a suitable place showing the time and duration of the shifts on the mine;
- (c) that the time occupied in getting any workman to and from his working place shall not together exceed one hour for any one shift. In special cases the Director may on receipt of a written application by the manager, grant such extension of the period of one hour as he may consider necessary. Notice of such application shall be posted up at the mine for fourteen clear days before the application is sent to the Director.
- (d) That the mine overseer, shift boss or other persons appointed by the manager for the purpose shall take all reasonable steps in the case of underground mining to ensure that no person not exempted under subregulation (2) hereof 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 of any such person so remaining underground and the time when such person reaches the surface of the mine.
- (4) (a) Where employees work on 6 days per week, any person required to work more than eight hours during any one shift, whether the period of duty is continuous or broken, shall be paid at one and one half times the ordinary rates for every hour or part of an hour so worked.
- (b) Where employees work on 5 days per week, any person required to work more than 9 hours 36 minutes during any one shift, whether the period of duty is continuous or broken, shall be paid at one and one half times the ordinary rates for every hour or part of an hour so worked.
- (c) If the duty is a continuity of the shift, only the hours actually worked in excess of those laid down in (a) or (b) above, as the case may be, shall be paid for: Provided that the employee has been warned during his ordinary shift that he will be required to work extra time.
- If the employee is called back for extra duty after the completion of his normal shift, he shall be paid at the increased rate for a minimum of two hours in respect of every call out, if the task is completed in less than two hours.
- Should the task take up to six hours to complete, only hours worked shall be paid for;
- should the task take more than six hours, but less than eight hours to complete, the employee shall be paid at the increased rate for a full eight hours;
- should the task take more than eight hours to complete, the employee shall be paid at the increased rate only for the extra hours actually worked.
- (d) Any person required to work in terms of paragraphs (a), (b) and (c) of subregulation (1) of regulation 256, on any of the days mentioned in regulation 256 (1), shall be paid at double the ordinary rates of pay for any time worked on such day, with a minimum of two hours pay at the increased rate for every individual spell of work on any such day. Should the spell of work be more than six hours but less than eight hours, pay shall be at double the ordinary rate for a full eight hours; should the work take more than eight hours to complete, pay shall be at double the ordinary rate for actual hours worked only.
- (e) Shifts worked regularly on the days mentioned in paragraph (d) above, shall count as holiday accruing



verlof laat ooploop: Met dien verstande dat 'n geleentheidskof wat op so 'n dag met die Direkteur se spesiale toestemming ingevolge die voorbehoud by subregulasie (2) van regulasie 256 gewerk word, nie tel as 'n skof wat vakansieverlof laat ooploop nie.

(f) Nuwejaarsdag word ten opsigte van besoldiging en vakansievoorregte vir werk wat op so 'n dag uitgevoer word, beskou as onderhewig aan die voorwaardes uiteengesit in paragrawe (d) en (e) van subregulasie (4) van regulasie 257: Met dien verstande dat die bestuur van 'n myn of bedryf, op aansoek van 'n werknemer, sodanige werknemer van sy pligte op Nuwejaarsdag kan vrystel, en dan geskied besoldiging teen die gewone loon vir een dag.

#### *Verlof vir werknemers.*

258. (1) Ten opsigte van elke tydperk van 312 gewone werkskofte wat 'n blanke werknemer in sy diens voltooi het, en uiterlik twee maande na afloop van so 'n tydperk, moet elke werkgever elk so 'n blanke werknemer wat hy in of by 'n myn of bedryf in diens het, verlof van minstens dertig agtereenvolgende dae, teen volbetaling, toestaan: Met dien verstande dat —

- (a) die verloftydperk nie gelyktydig mag loop met enige tydperk waarin die werknemer onder kennisgewing van diensbeëindiging staan, of waarin hy vrede-stydse opleiding ontvang ingevolge die „Zuid Afrika Verdedigings Wet 1912” (Wet 13 van 1912), soos dit van tyd tot tyd gewysig kan word, en op die Gebied toegepas word nie;
- (b) as 'n openbare vakansiedag wat regulasie 256 noem binne die verloftydperk val, sodanige vakansiedag by genoemde tydperk gevoeg moet word as 'n bykomende verloftydperk teen volbetaling.

(2) Die werkgever moet aan 'n werknemer aan wie verlof ingevolge subregulasie (1) toegeken is, sy besoldiging ten opsigte van sy verloftydperk uiterlik op die laaste werkdag voor die begin van sodanige verloftydperk uitbetaal.

(3) By diensbeëindiging moet die werkgever aan die werknemer volle besoldiging uitbetaal —

- (a) ten opsigte van enige verloftydperk wat hy verdien het maar wat nie voor die datum van sy diensbeëindiging aan hom toegestaan is nie; en
- (b) vir twee dae ten opsigte van elke voltooide maand van diens by die werkgever na die datum waarop hy laas ingevolge subregulasie (1) op verlof geregtig geword het, en in die geval van 'n werknemer wat minder as twaalf maande in diens is, vir een dag ten opsigte van elke voltooide maand van diens by die werkgever na die datum waarop sy diens begin het.

(4) Elke tydperk waarin 'n werknemer —

- (a) ingevolge subregulasie (1) hiervan met verlof is; of
- (b) vrede-stydse opleidings ontvang ingevolge die „Zuid Afrika Verdedigings Wet 1912” soos dit van tyd tot tyd gewysig kan word en op die Gebied toegepas word; of
- (c) op las of versoek van die werkgever uit sy diens afwesig is; of
- (d) uit sy diens afwesig is weens siekte, word by die toepassing van subregulasies (1) en (3) as diens beskou: Met dien verstande dat die bepalinge van paragraaf (d) hiervan nie geld ten opsigte van afwesigheid weens siekte oor meer as drie agtereenvolgende dae nie, as die werknemer versuim om 'n mediese sertifikaat te toon dat sy afwesigheid deur siekte veroorsaak is, nóg ten opsigte van daar-

shifts: Provided that an occasional shift worked on any such day with the special permission of the Director in terms of the proviso in subsection (2) of regulation 256, shall not count as a holiday accruing shift.

(f) New Year's Day shall, in respect of pay and holiday facilities for work performed on such day be considered subject to the conditions set out in paragraphs (d) and (e) of subregulation (4) of regulation 257: Provided that the management of any mine or works may, on application by an employee, excuse such employee from duty on New Year's Day, when pay shall be at normal rates for one day.

#### *Leave for employees.*

258. (1) Every employer shall grant to every European employed by him in or about a mine or works in respect of each period of 312 ordinary working shifts employment with him, and not later than two months after the termination of the said period, leave of absence on full pay of not less than thirty consecutive days. Provided that —

- (a) the period of such leave shall not be concurrent with any period during which the employee is under notice of termination of employment, or is undergoing peace training under the South Africa Defence Act, 1912 (Act 13 of 1912), as it may be amended from time to time and as applied to the Territory, and
- (b) if any public holiday referred to in regulation 256 falls within the period of such leave, such holiday shall be added to the said period as a further period of leave of absence on full pay.

(2) The employer shall pay to an employee to whom leave is granted under subsection (1), his pay in respect of the period of leave, not later than the last working day before the commencement of the said period.

(3) Upon termination of employment, the employer shall pay to an employee his full pay —

- (a) in respect of any period of leave which has accrued to him but was not granted before the date of termination of the employment; and
- (b) for two days in respect of each completed month of employment with the employer after the date on which he last became entitled to leave in terms of subregulation (1), and in the case of an employee who has been employed for less than twelve months, one day in respect of each completed month of employment with the employer after the date of commencement of his employment.

(4) Any period during which an employee —

- (a) is on leave in terms of subregulation (1) hereof; or
- (b) undergoes peace training under the South Africa Defence Act, 1912, as it may be amended from time to time and as applied to the Territory; or
- (c) is absent from work on the instructions or at the request of the employer; or
- (d) is absent from work owing to illness, shall be deemed to be employment for the purposes of subregulations (1) and (3): Provided that the provisions of paragraph (d) hereof shall not apply in respect of any period of absence owing to illness of more than 3 consecutive days, if the employee fails to submit a doctor's certificate stating that his absence was due to illness, or in respect of that por-

die gedeelte van 'n algehele tydperk van afwesigheid wat, gedurende 'n dienstydperk van twaalf maande, dertig dae oorskry nie.

(5) Elke bedrag wat ingevolge hierdie regulasie aan 'n werknemer betaal word, moet bereken word volgens die basiese skaal van besoldiging wat die werknemer onmiddellik voor die datum waarop sy verlof verskuldig word of sy diens beëindig word, na gelang, ontvang het.

(6) Elke werknemer wat sonder verlof uit sy werk afwesig is, of wat versuim om 'n mediese sertifikaat te toon dat sy afwesigheid deur siekte veroorsaak is, verbeur twee verlofdraende skofte vir elke dag van sodanige afwesigheid.

(7) By die toepassing van hierdie regulasie word die bogenoemde voorwaardes beskou as geldend met ingang van die datum van inwerkingtreding van hierdie regulasie.

(8) By onderlinge ooreenkoms tussen die werkgever en die werknemer kan verlof of deel daarvan ooploop: Met dien verstande dat die totaal aan verlof wat geneem word en opgeloop het minstens die minimum tydperk moet wees wat subregulasie (1) hiervan noem.

(9) Elkeen wat versuim om 'n bepaling van hierdie regulasie na te kom, is skuldig aan 'n oortreding.

tion of any total period of absence during any twelve months of employment which is in excess of 30 days.

(5) Any amount paid to an employee in terms of this regulation shall be calculated at the basic rate of remuneration which the employee was receiving immediately prior to the date upon which the leave became due or his employment terminated, as the case may be.

(6) Any employee who absents himself from his duties without permission or who fails to submit a doctor's certificate stating that his absence was due to illness, shall forfeit two leave qualifying shifts for each day of absence.

(7) For the purpose of this regulation the above conditions shall be deemed to come into force on the date of these regulations.

(8) Leave or part thereof may be allowed to accumulate by agreement between the employer and employee: Provided that the total of the leave taken and accumulated shall not be less than the minimum period provided for in subregulation (1) hereof.

(9) Any person who fails to comply with any provision of this regulation shall be guilty of an offence.