



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

DIRECTIVE A3/3

BLASTING CERTIFICATES FOR FIERY MINES

APPROVED

ACTING CHIEF INSPECTOR OF MINES

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DMR 310: APPLICATION FORM FOR BLASTING CERTIFICATE FOR FIERY MINES

DMR 311: CERTIFICATE OF COMPLIANCE FORM

DMR 312: SCORE SHEET FOR COMPULSORY QUESTIONS

DMR 313: SCORE SHEET FOR CHOICE QUESTIONS

1 INTRODUCTION

Chapter 28 of the Minerals Act, Regulations in force in terms of schedule 4 of the Mine Health and Safety Act No.29 of 1996, as amended (MHSA) deals extensively with all aspects of the issuing of blasting certificates.

This directive contains instructions for the guidance of examining and issuing authorities as well as rules for the conduct of examinations/assessments, as framed in terms of Minerals Act Regulation 28.6 in force in terms of schedule 4 of MHSA.

2 PURPOSE

The purpose of this directive is to:

- (a) Prescribe the instructions for the guidance of examining and issuing authority, the rules for conducting the examinations/assessments for blasting certificate for fiery mines (i.e. Coal Mines);
- (b) Specify the syllabus for the subjects/modules of the examinations/assessments in terms of Minerals Act Regulation 28.6 in force in terms of Schedule 4 of MHSA;
- (c) Structure the examinations/assessments to comply with the rules applicable for the conducting of the blasting certificate examinations/assessments for fiery mines; and
- (d) Ensure that blasting certificate examinations/assessments for fiery mines are conducted in a way that is lawful, fair, transparent, consistent and reasonable.

3 SCOPE

This directive is applicable for blasting certificate for fiery mines (i.e. Coal Mines).

4 ACCEPTANCE AS A CANDIDATE

4.1 QUALIFYING SHIFTS

- (a) It is required that the applicant must have completed a number of qualifying shifts as prescribed in Regulation 28.41.3 and 75 of the qualifying shifts must have been spent at a working face on rock-breaking or winning minerals at a fiery mine. It is of the utmost importance that a reliable record is kept by the employer of the above said shifts in each case.

- (b) In the case of persons in occupations where the 75 shifts are accumulated over an extended period, a record book in which the number of shifts that a candidate has completed at the fiery mine is kept at the mine and certified by the Mine Manager appointed in terms of section 3(1)(a) of MHSA.

- (c) When the candidate makes application for the blasting certificate examinations/assessments, the record book must be handed in at the mine or other suitable place specified by the employer for safekeeping until the candidate has obtained his blasting certificate. The Principal Inspector of Mines must advise the employer of each mine in his or her Region of this requirement.

- (d) This requirement does not apply to learners undergoing an approved training course. The Principal Inspector of Mines is to satisfy himself or herself by arranging regular inspections at suitable intervals of the means adopted by the employer to ensure that at least 75 full shifts are spent by the trainee or candidate on rock breaking or winning minerals and that a proper and reliable record is kept of such shifts.

- (e) Applicants for the blasting certificate of competency for fiery mines (i.e. Coal Mines) must have completed the underground shifts as required by Minerals Act Regulation 28.41.3 in force in terms of schedule 4 of MHSA, of which 75 underground shifts or more are on rock breaking or winning of minerals during which time the applicant achieves the following competencies/outcomes:-

GENERIC SECTION

- Flameproof;
- Mine gases;
- Ventilation and dust;
- Mine Health and Safety act (Act 29 of 1996);
- Belt conveyors;
- Start of shift procedure, waiting place initial examination;
- safe declaration; and
- Strata control.

BLASTING SECTION

- Coal cutting;
- Face preparation;
- Marking the face;
- Drilling the face;
- Handling of Explosives and accessories (all types);
- Blasting procedure;
- Initiating the blast and gas testing;
- Loading;
- Installation of temporary support;
- Installation of permanent support;
- Transport of explosives;
- Emergency procedures;
- Other related blasting activities; and
- Related health and safety procedures or systems.

(f) Emphasis is placed on the applicant achieving the abovementioned competencies/outcomes rather than the occupation of the applicant.

(g) Vacation work spent underground by University students is acceptable as underground service to qualify for a blasting certificate only.

- (h) In terms of the Minerals Act, Regulation 28.40.5 in force in terms of Schedule 4 of the MHSA, the holder of a mining engineering degree or diploma recognised by the Chief Inspector of Mines may be exempted from one-half of the number of shifts of experience.
- (i) In terms of Minerals Act Regulation 28.40.7.3 in force in terms of Schedule 4 of MHSA, an applicant is required to be in possession of a gas testing certificate issued to him/her in terms of the abovementioned Regulation.

4.2 FIRST AID CERTIFICATE

Applicants for the blasting certificate for fiery mines must be in possession of a First Aid certificate issued in terms of the Minerals Act, Regulation 24.7.

4.3 AGE RESTRICTION

Applicants for blasting certificate for fiery mines must have attained an age of 20 years.

4.4 ACADEMIC QUALIFICATIONS

Applicants for blasting certificate for fiery mines must have completed the following academic qualifications:

- (a) Standard 8; or
- (b) Grade 10; or
- (c) N1 Certificate, provided that N1 Certificate holders must have six (6) subjects to their credit; or
- (d) ABET Level 3 or equivalent

4.5 MEDICAL FITNESS

Applicants for blasting certificate for fiery mines must be in possession of a valid certificate of fitness to perform work at the mine issued by an Occupational Medical Practitioner (OMP) appointed in terms of section 13(3) (a) (i) of the MHSA.

4.6 LANGUAGE PROFICIENCY

Applicants for blasting certificate for fiery mines must be able to communicate both orally and in writing.

5 SYLLABI

5.1 GENERIC SECTION

This includes all the relevant Regulations under the mine Health and Safety Act (Act No 29 of 1996) and Regulations.

5.1.1 FLAMEPROOFING

- Hazardous area;
- Define different types of apparatus;
- Intrinsically safe equipment;
- Duties of the component person in charge of flame proof equipment;
- Dangers associated with damage cables;
- Electrical protection mechanisms;
- Electrical interlocking;
- Diesel engines;
- Possible danger types;
- Type;
- Operation;
- Safety devices;
- Legal requirements regarding Construction flameproof enclosure;
- Reason for using flame proof equipment;
- Causes of overheating;
- Type of flameproof joints;
- Legal requirements regarding flexible trailing cables;
- Examination of flameproof lights, etc.

5.1.2 MINE GASES

- Oxygen, Nitrogen, Hydrogen, Carbon Dioxide, Carbon Monoxide, Hydrogen Sulphide and Nitrous Fumes;
- Definition of relative density;

- Composition of air;
- Minimum quantity of oxygen;
- Flammable gases;
- Combustible ranges of methane;
- Causes of methane ignition;
- Source of carbon monoxide;
- Maximum quantity of carbon monoxide permitted by law;
- Source of nitrous fumes;
- Gases in old/abandoned workings;
- Headings under which gases are studied;
- Eight common gases and chemical symbols;
- Liberation of Methane;
- Sources of Hydrogen;
- Effect of carbon monoxide/ dioxide on a human being;
- Smell test hydrogen sulphide;
- Maximum quality of hydrogen sulphide/nitrous fumes permitted by law, etc.

5.1.3 VENTILATION AND DUST

- Quality of Mine air;
- Ventilation district;
- Quantity and velocity;
- Section electric fans;
- Basic ventilation plans;
- Coal dust explosions;
- Incombustible dust;
- Managers duties - reventilation Code of Practice;
- Application of incombustible dust, etc.

5.1.4 MINE HEALTH AND SAFETY ACT (ACT 29 OF 1996, AS AMENDED) AND THE REGULATIONS

- Objectives;
- Employee's rights (Health and Safety);

- Rights and powers of a health and safety representative;
- Functions of Chief Inspector;
- Assistance during inspections;
- Offences;
- Convictions;
- Definitions;
- Managers duties in regard to code of practice;
- Employee's duties;
- Employee's rights (dangerous work place);
- Manager's responsibilities;
- Act (Act 29 Of 1996) and Regulations;
- Appointment of safety representative;
- Purpose of Mining qualification Authority;
- Medical examination of employee leaving the mine.etc

5.1.5 BELT CONVEYORS

This include all the relevant Regulations under the Mine Health and Safety Act (Act 29 of 1996) and the Regulations

- Manager's responsibilities;
- Legal requirements;
- Stopping a belt conveyor;
- Accumulation of dust;
- Breaks or jams;
- Examination of conveyor and feeder equipment;
- Legal requirement*dust allying;
- Precautions before any work may be carried out on a conveyor;
- Causes and solution for possible problems on a belt conveyor;
- Conveyor in series;
- Material used for manufacturing conveyor belts;
- Components of conveyor at drive unit; and
- Accumulation of dust.

5.1.6 START OF SHIFT PROCEDURES, WAITING PLACE AND STATUTORY EXAMINATIONS

- Legal requirements;
- Provision of change house;
- Notice of change house;
- Appointment to search person for prohibited articles;
- Duties of lamp man;
- Waiting places;
- Conduct initial examination;
- Gas test instrument used during initial examination;
- Reporting;
- Miner's responsibility regarding safety of person in his section;
- Section giving flammable gas off freely;
- "Clothes" risk work;
- Appointment and duties of banksman;
- Minimum number of gas measuring instrument;
- Contraband;
- Waiting place lay-out;
- Miner's duties at waiting place;
- Persons to accompany miners with initial examination;
- Proof that a working place was examined;
- Procedures when the miner is relieved from his duties;
- Working place that has been idle for more than six hours; and
- Change of working places during pillar extraction.

5.1.7 STRATA CONTROL

- Systematic support system;
- Action if attempts to take down ground is unsuccessful;
- Precautions when withdrawing support;
- Causes of all of ground accidents;
- Appearance of correctly installed roofbolt;
- Dangerous when intersecting dykes;

- Deviation from systematic support;
- Function of breaker line;
- Factors influencing stability of joints;
- Reasons for poor installed roofbolts;
- Signs of horizontal stress;
- Support of slips and brows;
- Actions when encountering poor roof conditions;
- Special support;
- Dangerous ground;
- Safety of persons;
- Terminology;
- Slips;
- Resin;
- Shelf life, etc;
- Danger associated after expiry date;
- Position when sounding the roof;
- Timber packs;
- Occupational categories a higher risk falls of ground;
- Support of minor faults; and
- Stabilising coal pillars.

5.2 BLASTING SECTION

5.2.1 COAL CUTTING

- Holding props;
- Appointment of operators;
- Dust suppression;
- Reasons for having two free faces;
- Effects of faces incorrectly cut;
- Physical conditions before cutting commences;
- Reason for cleaning a cut;
- Different trailing cables; and

- Precaution when holing into adjacent roadways.

5.2.2 DRILLING THE FACE

- Definitions;
- Marking off holes;
- Requirements before holes are marked off;
- Physical examination prior to marking off holes;
- Visual examination prior to making off holes;
- Misfires that cannot be dealt with immediately;
- Method of marking off holes;
- Distance from any socket;
- Holes that deviate;
- Depth of shot hole;
- Direction of existing holes from charges-up holes;
- Removal of socket plugs;
- Metal implements;
- Removal of explosives from charged-up holes;
- Report on misfires;
- Drilling in a confined space in the presence of a misfire;
- Insight question (Questions 19-27);
- Dust control;
- Tools and equipment needed to drill holes;
- Inspection of equipment;
- Loose clothing;
- Precautions;
- When handling the auger;
- When working in water;
- Long hair;
- Effects of incorrectly drilled holes;
- Benefits of correctly drilled holes;
- Causes of misfires;
- Hazards associated with misfires;

- Holes drilled to correct depth; and
- Mobile face drill.

5.2.3 EXPLOSIVES

- Storage;
- In the section;
- Capacity of Storage boxes;
- Construction of boxes or drums;
- Marking on boxes or drums;
- How boxes must be kept;
- Delivery of explosives;
- Opening a case of explosives;
- Detonators, safety fuses, capped fuses, igniter cord and fuse igniter;
- Transportation of explosives in workings;
- Who may use explosives;
- Charging a shot hole;
- Breaking of cartridges;
- Precaution when a charged up face cannot be blasted;
- Preparation of primer;
- Old or damaged explosives;
- Sequence in which explosives must be used;
- Take and relinquish charge of explosives;
- Blasting and explosives keys;
- Illegal hiding or removal explosives;
- Insight questions (question 26-30);
- Definitions;
- Shot Hole;
- Identification of permitted explosives;
- Charging rod; and
- Old explosives.

5.2.4 BLASTING PROCEDURES

- Whom may conduct;
- Flammable gas;
- Examination before firing a charge;
- Type of instrument;
- Detection;
- Firing charges;
- People's safety;
- Warning;
- Precautions before firing;
- Firing cable;
- Immediately after firing;
- Shot firing apparatus;
- Driving through dyke;
- Environmental control after firing;
- Precautions after firing;
- Misfires;
- Coal Face;
- Stone face;
- Instruction to guards;
- Blasting accidents;
- Drive in advance of 50 meters;
- Geological disturbance when approaching a dyke;
- Amount of explosives per shot in stone;
- Safety precautions;
- Slip exposed; and
- Extra precautions (Question 6-13).

5.2.5 LOADING

- Examination of trailing cables;
- Joint in trailing cables;
- Hazardous area;

- Flameproof;
- Loader enclosures;
- Inspection;
- Safety devices;
- Efficiencies;
- Operator's duties;
- When gas is detected;
- Flexible trailing cables;
- Dust allaying;
- Electrical apparatus in hazardous area;
- Shuttle car anchor points; and
- Loading cycle.

5.2.6 EMERGENCY PROCEDURES

- Accidents;
- Underground fires and refuge chambers;
- Self-rescuers;
- Water; and
- Main power failure.

5.2.7 STOOPING

- Description;
- Hazards associated with stooping;
- Control to minimize risk;
- Extra support;
- Ventilation;
- Typical stooping method;
- Procedures to extract a pillar; and
- Section layout (45°).

5.3 LONGWALL SECTION

5.3.1 EQUIPMENT

- Description and operation of a shearer;
- Description of an armoured flexible conveyor;
- Purpose of the AFC;
- Chain speed of the AFC;
- Chain tension of the AFC;
- Description of the face support;
- Spacing and attachment of face support to the line;
- Advancing of the face supports;
- Description of a stage loader;
- Function of the stage loader;
- Explanation of the tail attachment to the stage loader;
- Description of a typical pantechnicon;
- Starting up of the AFC;
- Shearer motor;
- The primary function of the AFC;
- Main function of the stage loader; and
- Hydraulic fluid used to power support.

5.3.2 INITIAL EXAMINATION AND VENTILATION

- Miner's duties in the main gate;
- Procedures when main gate is declared safe;
- Miner's duties from the face to the tail gate;
- Air velocity;
- Methane drainage;
- Typical methane monitoring system;
- The importance of ventilation control; and
- Typical ventilation lay-out.

5.3.3 MINING TECHNIQUES

- Terminology;

- The controls exercised when cutting a web;
- The importance of horizon controls;
- Face alignment;
- Face creep;
- Control of the face creep;
- Methods of face creep;
- Efficiencies;
- Advantages of the retreat mining method;
- Face layout;
- Services;
- Power supply;
- Location of the main electrical switcher;
- Sequence of face operation;
- Typical labour complement; and
- Factors that would influence the rate of production.

5.4 CONTINUOUS MINER SECTION

5.4.1 LEGAL REQUIREMENTS

- Appointment operators;
- Re- testing operator;
- Joints on trailing cables;
- Operator's duties regarding flammable gas;
- Detection of flammable gas (operator's duties);
- Dust control;
- Operator's duties regarding flexible trailing cables;
- Examination of flexible trailing cables; and
- Supply of water.

5.4.2 ENVIRONMENTAL CONTROL

- Effect of dust suppression on section layout;
- Causes of dust;

- Daily inspection on scrubber box;
- Mine standard applicable to airjet fans;
- Installation;
- Operating procedures;
- Moving of fan;
- Safety;
- Calibration of on-board CH₄ monitor;
- Factors that will influence air utilisation;
- Reason for ventilation;
- Effect of cutting sequence on dust depression;
- Danger of coal dust;
- Stoppage of main fan;
- Types of dust suppression systems;
- Air utilisation; and
- Reason for ventilation measurements.

5.4.3 MINING

- Positioning of machine prior to cutting;
- Safety tasks prior to cutting;
- Marking of a 90° split using a laser;
- Pre-requisite for a pre-use checklist;
- End of shift procedures;
- Risk assessment;
- Safety precautions when changing picks;
- Causes of damage to trailing cables;
- Shuttle car anchor points;
- Support systems;
- Cutting sequence;
- Competent roof conditions;
- Incompetent roof conditions;
- Factors that will influence cutting rate;
- Mining sequence;

- Safety precautions during tramming operations of a continuous miner;
- Installation of laser beam;
- Cutting cycle;
- Miner's task at end shift;
- Special safety procedures during repair;
- Important points when installing temporary support;
- Purpose of the cutter head and picks;
- Cycles of operation; and
- Reason for holing split before headings are advanced.

5.4.4 GENERAL

- Services of using a continuous miner;
- Terminology;
- Changing picks;
- Effects when mining off line;
- Steps to rectify a heading that is off line;
- Advantages of using a continuous miner over normal conventional method;
- Labour compliment;
- Power supply; and
- Suspension of laser.

5.4.5 PILLAR EXTRACTION (Stooping)

- Explanation;
- Hazards associated with stooping;
- Control to rescue hazards;
- Extra support (breaker lines);
- Ventilation controls;
- Stone dust application;
- CH₄ monitoring; and
- Stooping method.

6 APPLICATION FORMS

- 6.1 Applications to be examined for a provisional blasting certificate for schedule mines or a permanent blasting certificate for schedule mines must be done on form DMR 310.
- 6.2 The application form DMR 310 must be accompanied by a:
- (a) Certified copy of the record of service on company letterhead with contact details as proof of the number of qualifying shifts attained;
 - (b) Certified copy of a First Aid Certificate;
 - (c) Certified copy of the identity document (ID) or passport;
 - (d) Certified copy of minimum academic qualification; and
 - (e) Certified copy of a Medical Fitness Certificate
- 6.3 The certified copies referred to in paragraph 6.2 above must be not be older than a period of three (3) months and must be certified by the South African Police Service (SAPS).
- 6.4 The application form must be endorsed by the Mine Manager appointed in terms of section 3(1) (a) of MHSa and a copy of the Mine Manager's appointment letter must be attached to the application form.
- 6.5 Notwithstanding anything stated to the contrary, the issuing authority in exceptional circumstances, may accept an application for a provisional or for a permanent blasting certificate for fiery mine (Coal Mines) without the application being endorsed by the Mine Manager.
- 6.6 Application for the exchange of a provisional blasting certificate for fiery mines for a permanent blasting certificate for fiery mines must be made on the form attached as DMR 314.
- 6.7 The application for the exchange of a provisional blasting certificate for fiery mines for a permanent blasting certificate for fiery mines must comply with the requirements as stipulated in paragraph 6.2 above.

- 6.8 The application for the exchange of a provisional blasting certificate for fiery mines for a permanent blasting certificate for fiery mines must be accompanied by the applicant's original copy of provisional blasting certificate for fiery mines.
- 6.9 Applicants for the blasting certificate of competency for fiery mines (i.e. Coal Mines) must pay an application fee as required by Minerals Act Regulation 28.10 in force in terms of schedule 4 of MHSA.
- 6.10 Applicants may pay the required application fee:
- (a) Directly into the Department of Mineral Resources (DMR) bank account. The original bank deposit slip must be attached to the application form as proof of payment; or
 - (b) To the cashier at any Regional office of DMR. The cashier must be informed that the payment is for examination/assessment purposes. The original payment receipt must be attached to the application form as proof of payment.
- 6.11 Incomplete application form will not be considered.

7 CERTIFICATE OF COMPLIANCE

- 7.1 On receipt of applications, the applicant's names and other relevant details of the applicant who meets the acceptance requirements must be entered on a certificate of compliance form attached as DMR 311 and the certificate of compliance form must be submitted to the Senior Inspector of Mines.
- 7.2 When the Senior Inspector of Mines has satisfied himself or herself that all the necessary documentation has been submitted and is acceptable, he or she must sign the certificate of compliance form attached as DMR 311 and forwards same to the Principal Inspector of Mines.
- 7.3 When the Principal Inspector of Mines has satisfied himself or herself that all the necessary documentation has been submitted and is acceptable, he or she must sign the certificate of compliance form attached as DMR 311 as proof of compliance with the requirements for admission as a candidate.

7.4 A candidate or applicant must not be examined until the certificate of compliance attached as DMR 311 has been signed by the Principal Inspector of Mines.

8 EXAMINATIONS/ASSESSMENTS

8.1 Examinations/Assessments are to be conducted in accordance with the *Learners/Examiners Guide for the Assessment and Certification of Blasting Certificate Holders for Fiery Mines*.

8.2 The examination/assessment consists of two types of questions namely compulsory questions and choice questions

8.2.1 Compulsory Questions

- (a) The score sheet to compulsory questions attached as DMR 312 must be used in preparing for, and assessing a candidate;
- (b) The examiner must assess the candidate on a minimum of five (5) compulsory questions in each subject/module (All candidates must be examined/assessed on equal number of questions);
- (c) The pass mark on compulsory questions is 100%;
- (d) Questions asked in the compulsory section relate to core knowledge that a miner is required to have;
- (e) The intention of the compulsory question is to ascertain whether the candidate has the knowledge of issues that may impact on the health and safety of employees under his/her control;
- (f) Questions and Model answers can be found under section 5 of the "Learners/Examiners Guide for the Assessment and Certification Holders for Fiery Mines";

- (g) The candidate must answer all questions asked that may impact on the health and safety of employees by demonstrating an understanding of the associated risks to the satisfaction of the examiner in the abovementioned part of the examination/assessment; and
- (h) The examiner must record all questions asked and complete the 'Assessor Remarks' section on the score sheet if the candidate gives an unsatisfactory answer.

8.2.2 Choice Questions

- (a) The score sheet for choice questions attached as DMR 313 must be used in preparing for, and assessing a candidate;
- (b) The examiner must assess the candidate on a minimum of five choice questions in each topic (All candidates must be examined/assessed on equal number of questions);
- (c) The pass mark on choice questions is 60%;
- (d) Questions and model answers can be found under section 5 of the 'Learners/Examiners Guide for the Assessment and Certification of Blasting Certificate holders for Fiery Mines';
- (e) The examiner is not restricted to only the abovementioned questions, provided that the question he/she may ask are still within the boundaries of the syllabus and remain relevant to the blasting certificate of competency for fiery mines; and
- (f) The examiner must record all the questions asked and completes the "Assessor Remarks" section on the choice questions score sheet attached as DMR 313 if the candidate gives an unsatisfactory answer.

9 GENERAL RULES FOR EXAMINATION/ASSESSMENT

- 9.1 Every examination/assessment must be recorded in writing by the Secretary to the Commission of Examiners for blasting certificate for fiery mines.
- 9.2 Where possible, record kept for the previous examination/assessment, must be read out and confirmed during the current examination/assessment.
- 9.3 The examination/assessment must be conducted orally.
- 9.4 No reference material must be allowed during the examination/assessment.
- 9.5 Examiners are required to complete the examination/assessment score sheets accurately and comprehensively, as the examination/assessment score sheets are required to be kept on file for the following reasons:
- (a) Documentation proof as a Pass or Fail;
 - (b) Provide a feedback to a candidate in case of a Fail; and
 - (c) Appeal purposes.
- 9.6 Examiners should ask questions clearly.
- 9.7 Examiners to ascertain the candidate has a clear understanding of the question before the candidate answer the question.
- 9.8 Examiners/assessors should ask questions aimed at clarifying understanding or potential confusion relating to the answers provided by the candidate. The assessor's score sheet should reflect this notion.
- 9.9 Examiners/Assessors are encouraged, when posing questions, to ask the candidate why the candidate needs to know in order to enhance the understanding of practical application.
- 9.10 The candidate will be allowed three (3) attempts to pass all topics of the examination/assessment.

- (a) The candidate will be examined/assessed on all three (3) subjects/modules during the first attempt;
- (b) Should the candidate fail any subject(s)/module(s) during the first attempt, the failed subjects/modules will be examined/assessed during the second attempt and the passed subjects/modules will be credited;
- (c) Should the candidate fail any of the subjects/modules during the third attempt, that candidate will be considered as having failed the examination/assessment. The candidate will forfeit all the credited subjects/modules and must re-apply to be examined/assessed on all subjects/modules; and
- (d) The application for examination/assessment referred to in paragraph 9.10 (c) above, must be made by the candidate after a period of one (1) year has lapsed from the date of the third attempt examination/assessment. This means that the candidate will not be allowed to sit for examination/assessment for a period of one (1) year from the date of the third attempt examination/assessment.

10 COMMISSION OF EXAMINERS

- 10.1 The constitution of a Commission of Examiners for a blasting certificate for fiery mines must remain in accordance with the Minerals Act, Regulation 28.39 in force in terms of Schedule 4 of the MHSA.
- 10.2 In order to promote the spirit of tripartite the Commission of Examiners must consist of:
 - (a) An officer in the service of the Department of Mineral Resources, who is a holder of a Mine Manager's Certificate of Competency, the Chairman, representing the State;
 - (b) A member, who is a holder of a Mine Manager's Certificate of Competency, representing the employers in the mining industry; and
 - (c) A member, who is a holder of a permanent blasting certificate for fiery mines, representing employees in the mining industry.
- 10.3 The member representing the employers must be:

- (a) A practising holder of a Mine Manager's Certificate of Competency at a mine; and
- (b) Appointed in terms of section 3(1)(a) of MHSA or appointed in terms of section 7(4) of MHSA read with Minerals Act, Regulation 2.6.1 in force in terms of schedule 4 of MHSA.

10.4 The member representing the employees must:

- (a) Be a practising holder of a blasting certificate; and
- (b) Exercising control over explosives to be used for blasting at a mine, for a minimum period of three (3) years in an underground mining environment.

10.5 The allocation of subjects/modules to be examined/assessed by examiners will be at the discretion of the Chairperson of the examination/assessment board.

10.6 In the event whereby a member of the Commission of Examiners for the blasting certificate for fiery mines, failing to attend the examination/assessment, the Principal Inspector of Mines may use an additional appropriate qualified officer in the service of the DMR to replace the unavailable examiner/assessor, who is the holder of a Mine Manager's Certificate of Competency.

10.7 One person per stakeholder may attend the examinations/assessments as an examiner in training until such time that the relevant examinations/assessments authority is satisfied that the examiner/assessor in training may conduct blasting certificate for fiery mines examinations/assessments.

10.8 The Principal Inspector of Mines must ensure that the Commission of Examiners for the blasting certificate for fiery mines conducts the examinations/assessments in accordance with this Directive for consistency, uniformity, feedback, record and appeal purposes.

11 APPEAL PROCEDURE

- 11.1 A candidate for blasting certificate for fiery mines may appeal against any decision of any examining authority for blasting certificate for fiery mines, to the Chief Inspector of Mines.
- 11.2 Each appeal must be lodged in writing within a period of 30 days, after the date of the examinations/assessments authority's decision.
- 11.3 Each appeal must state the reasons or grounds of appeal.
- 11.4 The appeal case must be heard within a period 60 days from the date of lodging the appeal.
- 11.5 The appeal case must be heard by the Principal Inspector of Mines in the Region where the examination/assessment took place or his/her designated alternate, as long as such Principal Inspector of Mines or his/her designated alternate was not involved in the examination/assessment of the candidate.
- 11.6 After considering the grounds or reasons for the appeal and the Chairperson for the Commission of Examiners' reasons for the decision, the Principal Inspector of Mines or his/her designated alternate may:-
- (a) Confirm the decision of the Chairperson of the Commission of Examiners; or
 - (b) Set aside the decision of the Chairperson of the Commission of Examiners and pass the candidate; or
 - (c) Set aside the decision of the Chairperson of the Commission of Examiners and directs another Commission of Examiners who were not part of the initial examination/assessment to re-examine/re-assess the applicant.
- 11.7 The appeal process must:
- (a) Be fair, transparent and credible;
 - (b) Have reasonable time frames; and
 - (c) Allow the right to representation by the candidate.

11.8 The candidate will not be allowed to be examined/assessed on the subject(s)/module(s) the candidate has appealed on, unless the outcome of the appeal has been determined and communicated to the parties concerned.

12 GENERAL

12.1 EXAMINATION/ASSESSMENT VENUES

- (a) The Principal Inspector of Mines is required at any venue that is suitable for the conduct of the blasting certificate for fiery mines examinations/assessment;
- (b) The Principal Inspector of Mines is required to make arrangements necessary for the examinations/assessments; and
- (c) Candidates must be examined/assessed in Regional offices where their mines are located. A candidate may change Regional offices of examination/assessment under the following conditions:
 - i. An application has been made via a signed letter to the Region of examination/assessment for candidate's file to be moved to a different Region stating reasonable grounds for such transfer request;
 - ii. The candidate has been advised by the Regional office of approved request;
 - iii. The candidate's file plus application for examination/assessment is forwarded to the new Regional office of examination/assessment; and
 - iv. The candidate has been advised of the examination/assessment by the new Region of assessment.

12.2 EXAMINATION/ASSESSMENT BOARDS

- (a) The blasting certificate for fiery mines examination/assessment boards will take place at least once a month;
- (b) The number of the blasting certificates for fiery mines examinations/assessment boards must not exceed five per scheduled date;
- (c) The number of candidates per blasting certificate for fiery mines examinations/assessment board must not exceed 10 per blasting certificate for fiery mines examination/assessment board; and

- (d) Candidates who failed the examination/assessment on a particular examination/assessment board will not be re-examined in the next examination/assessment board, i.e. in the second month, after the date he/she failed the examination/assessment but will be examined in the third month after the date he/she failed the examinations/assessments.

12.3 BLASTING ON SURFACE

- (a) The blasting certificate for fiery mine is valid for a works where subterranean tunnel operations are in progress in a fiery mine. The holder of the blasting certificate for fiery mine is permitted to carry out work such as trenching, excavating for buildings, blasting ore blockages in surfacesilos/bunkers or reduction works and the destruction of explosives; and
- (b) The employer must, however, take cognizance of the provisions of Minerals Act, Regulation 2.10.2 in force in of schedule 4 of MHSA, in terms of which it will be necessary for the employer to satisfy himself/herself that the person doing the blasting on the surface of a fiery mine is competent and experienced.

12.4 ABSENCE FROM THE EXAMINATION/ASSESSMENT

A candidate absent from an examination/assessment, or withdrawing from such examination/assessment within seven (7) days of the date on which the examination/assessment is to take place, will forfeit his/her examination/assessment fee and will be required to re-apply for examination/assessment unless such candidate can either furnish the examinations/assessments authority with:

- (a) A medical certificate to the effect that the candidate was/is medically unfit for the examination/assessment; or
- (b) A letter signed by the candidate's Mine Manager on company letterhead with contact details stating circumstances of a sufficiently important and urgent nature involving the candidates work on the mine that prevented the candidate from attending the examination/assessment.

12.5 TRAINING

The Principal Inspector of Mines is required to forward the syllabi, as described in this directive, for blasting certificate for fiery mines to the relevant training service

providers on request, for the purpose of ensuring uniformity and consistency of training in all the Regions established by the Minister in terms of section 47(2) of MHSA.