

CHAPTER 115 - EXPLOSIVES ACT: SUBSIDIARY LEGISLATION

INDEX TO SUBSIDIARY LEGISLATION

Explosives Regulations

EXPLOSIVES REGULATIONS

[Section 18]

[Currency mentioned in this regulation should be re-denominated as stipulated under S 4 of Re-denomination Act, 2012, read with S 29 of Bank of Zambia Act, 1996.]

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FIRST SCHEDULE

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[Regulations by the Minister]

SI 71 of 1974,

SI 74 of 1974,

SI 72 of 1979.

PART I
PRELIMINARY AND GENERAL

101. Title

These Regulations may be cited as the Explosives Regulations.

102. Interpretation

In these Regulations, unless the context otherwise requires—

“**ammonium nitrate**” means ammonium nitrate containing less than ten per centum inert material as a diluent;

“**approval**” means written approval of the Chief Inspector;

“**approved**” means approved in writing by the Chief Inspector;

“**blasting agent**” has the meaning assigned thereto in the First Schedule;

“**blasting license holder**” means a person who holds a valid blasting license issued in Zambia in accordance with the provisions of these Regulations;

“**charged up area**” has the meaning assigned thereto in regulation 833;

“**competent person**” means any person who, in relation to any duty or function, has had adequate training and experience so as to enable him to perform such duty or function without avoidable danger to himself or to any other person;

“**danger area**” has the meaning assigned thereto in regulation 208;

“**danger building**” has the meaning assigned thereto in regulation 214;

“**dangerous goods**” has the meaning assigned thereto in the Inland Waters Shipping (Dangerous Goods) Regulations and in the Railways (Handling and Transportation of Explosives and other Dangerous Goods) Regulations;

“**hang-up**” means a blockage of an ore or waste pass, chute or draw-point by rock or other material;

“**hole**” means any hole drilled in rock for the purpose of containing explosives;

“**magazine**” means any building or structure licensed, authorised or sanctioned under these Regulations for the storage of explosives;

“**misfired hole**” means a hole in which the explosives or any portion thereof have failed to explode;

“**nitro-compound explosives**” has the meaning assigned thereto in the First Schedule;

“**on site**” means at any mine or works;

“**open cast working**” means any working beneath the original surface of the ground excluding underground but not including any trench, pit or any other like working;

“**precharged area**” means any part of a mine or works in which precharged holes are located;

“**precharged hole**” means a hole charged with explosives which is not to be detonated during the shift in which it is charged;

“**primary blasting**” means the act of detonating holes charged with explosives for the purpose of fragmenting virgin ground at any mine or works;

“**public service vehicle**” has the meaning assigned thereto in section 2 of the Roads and Road Traffic Act;

“**rail truck load**” means the maximum permitted quantity of explosives which may be transported in an approved rail truck;

“**re-entry period**” means the period of time specified by the manager during which no person shall enter any working place after any primary or secondary blast has been detonated therein;

“**road**” has the meaning assigned to that word in section 2 of the Roads and Road Traffic Act;

“**road vehicle**” means any vehicle capable of and designed for being used on any road;

“**safe loading bay**” means a duly approved bay where explosives are loaded or unloaded into or out of any rail truck approved for transporting explosives;

“**secondary blasting**” means any blast other than a primary blast and shall include the fragmenting of large rocks, the blasting of hang-ups, sockets or hitches and the reblasting of misfired holes and any blasting to make a place safe;

“**socket**” means a hole or part of a hole remaining after being charged with explosives and detonated which is not known to be a misfired hole;

“**special explosives train**” has the meaning assigned thereto in regulation 362;

“**underground**” means any working beneath the surface of the ground access to which is by means of a ramp, adit, raise, shaft, tunnel or winze, but does not include open cast workings;

“**vessel**” includes every description of water craft used or capable of being used as a means of transportation on water.

103. Duties of owner and appointment of holder

(1) Every operation involving explosives at any mine, explosives factory or works shall be under the control, supervision and direction of a holder who shall be appointed by the owner.

(2) Every owner shall at the holder's request provide the necessary means to the holder for observing and enforcing the provisions of these Regulations and any owner who refuses or fails to do so shall be guilty of an offence.

(3) No owner shall appoint himself to be the holder except with the prior approval of the Chief Inspector.

(4) The owner shall not appoint any person to be the holder unless such person is suitably qualified or has had adequate experience acceptable to the Chief Inspector in the capacity to which he is to be appointed and such person shall be readily available to control, at all times, any operation involving explosives undertaken at any mine, explosives factory or works at which he is so appointed:

Provided that, with the prior approval of the Chief Inspector, a person may be appointed to be the holder if the operation involving explosives can be safely undertaken by another person working under such holder, who is suitably qualified or experienced but in such an event the holder shall not be relieved of his responsibilities under these Regulations.

(5) Where an owner is absent from the Republic he shall appoint some other person to be his representative during such absence and such other person shall be deemed to be the owner for the purpose of these Regulations.

(6) Any appointment made in accordance with this regulation may be cancelled at any time by the owner.

(7) A copy of every appointment and cancellation made in accordance with this regulation shall forthwith be forwarded to the Chief Inspector.

104. Holder to enforce Regulations

Every holder shall take all reasonable steps to ensure that the provisions of these Regulations are observed and enforced and any holder who fails to do so is guilty of an offence:

Provided that this regulation shall not apply where the holder can prove that he took all reasonable steps for the observance and enforcement of these Regulations.

105. Appointment of person to assist holder

(1) The holder may appoint in writing one competent person to assist him in the control, supervision and direction of any operation involving explosives at the mine, explosives factory or works and such person shall have the same responsibilities under these Regulations as the holder and the letter of appointment shall specify the responsibilities of such person, but such appointment shall not be taken to relieve the holder of his personal responsibilities under these Regulations.

(2) Where, owing to absence or inability to act from illness or other cause, the holder is unable to exercise and perform the duties of his office for any period in excess of three days, the person appointed to assist him in accordance with sub-regulation (1) shall immediately assume all the responsibilities and duties of the holder who shall then be relieved of his personal responsibility under these Regulations:

Provided that, if the holder is absent from the mine, explosives factory or works, such person shall not carry out the duties of the holder for more than three months.

(3) Where no person has been appointed in accordance with sub-regulation (1), and the holder, owing to absence or inability to act from illness or other cause, is unable to exercise and perform the duties of his office for any period in excess of three days, such holder shall appoint a competent person to act as holder during the period of absence and thereupon all the responsibilities and duties of the holder shall devolve upon the person so acting as holder:

Provided that, if the holder is absent from the mine, explosives factory or works, such person shall not carry out the duties of the holder for more than three months.

106. Appointment of other persons to assist holder

(1) The holder may, in addition to any person appointed by him in accordance with sub-regulations (1) and (3) of regulation 105, appoint in writing such other competent persons as he may deem necessary to assist him in the control, supervision or direction of any operation involving explosives at the mine, explosives factory or works; any person so appointed shall have the same responsibilities for the mine, explosives factory or works under his control, supervision or direction as the holder has under these Regulations, but any such appointment shall not be taken to relieve the holder of his personal responsibilities under these Regulations.

(2) The Chief Inspector may require the appointment of more than one competent person under sub-regulation (1) if, in his opinion, it is necessary so to do.

107. Notice of appointments and cancellations

(1) A copy of every appointment made in accordance with regulation 105 or 106 shall forthwith be forwarded to the Chief Inspector.

(2) An appointment made in accordance with regulation 105 or 106 may at any time be cancelled by the holder.

(3) A copy of every cancellation made in accordance with sub-regulation (2) shall forthwith be forwarded to the Chief Inspector.

(4) Every letter of appointment referred to in regulation 103, 105 or 106 shall be countersigned by the person so appointed signifying his acceptance of the appointment, and no appointment shall be effective until so countersigned and dated.

108. Appointments of other competent persons

(1) Where the competent person appointed in terms of sub-regulation (1) of regulation 106 is of the status of superintendent such competent person may, if he has been specifically so authorised in his letter of appointment, appoint in writing, within the limits of his professional competency, one or more persons who are suitably qualified or have had adequate and suitable experience in the capacity to which they are appointed to assist him in the control, supervision and direction of any operation involving explosives in the mine, explosives factory or works under his control, supervision or direction, and every such person shall have the same responsibility under these Regulations as the competent person who appointed him but only to the extent specified in his letter of appointment; any such appointment shall not relieve the competent person making the appointment of his personal responsibilities under these Regulations.

(2) A copy of every letter of appointment made in accordance with sub-regulation (1) shall be kept at the office of the person making such appointment.

(3) Every letter of appointment made in accordance with sub-regulation (1) shall be countersigned and dated by the person so appointed signifying his acceptance of the appointment, and no appointment shall be effective until so countersigned and dated.

109. Record and reporting of breaches of Regulations

(1) The holder shall maintain a record of any disciplinary action taken under section 7 of the Act and shall forthwith forward a copy of such record to the Chief Inspector.

(2) Any breach of these Regulations which has not been dealt with under section 7 of the Act shall be reported in writing by the holder to the Chief Inspector not later than the fifteenth day of the month following the month during which the breach took place.

110. Failure to comply with Inspector's directions

Any person who fails to comply with the directions issued by an Inspector of Explosives, Inspector of Mines or an Inspector of Machinery and any person who knowingly furnishes or causes any other person to furnish any false particular in any account, survey, statement or report called for by such an Inspector under these Regulations shall be guilty of an offence.

111. Summary penalties

(1) Where any person admits to an Inspector of Explosives, Inspector of Mines or Inspector of Machinery or to an authorised official that he has contravened any of these Regulations, such person shall sign an admission of the contravention in question in the Form 17 in the Third Schedule and thereupon such admission shall be irrevocable.

(2) After obtaining admission of the contravention referred to in sub-regulation (1), the Inspector concerned may impose a fine upon such person in a sum not exceeding five hundred penalty units in respect of each of the contraventions for which such admission has been signed.

(3) After obtaining admission out of the contravention referred to in sub-regulation (1), the authorised official may impose a fine on such person in a sum not exceeding one hundred penalty units in respect of each of the contraventions for which such admission has been signed:

Provided that—

(i) the authorised official cannot impose a fine upon himself;

(ii) the authorised official imposing the fine shall forward to the Chief Inspector a true copy of the admission together with an endorsement thereon duly signed by him showing the amount of the fine so imposed;

(iii) the Chief Inspector may at any time by a written notice to any authorised official, withdraw the authority of such official to impose a fine under this sub-regulation;

(iv) the authorised official shall not have power to impose a fine where the contravention results in the death of or serious bodily injury to any person.

(4) The Inspector or authorised official shall, on receiving payment of any summary fine imposed under sub-regulation (2) or (3), as the case may be, give a receipt there for in the Form 18 in the Third Schedule.

(5) Any person who has been given time to pay any fine imposed under sub-regulation (2) or (3) may authorise the holder to deduct the amount of such fine from any wages due or which may become due to him; such authorisation shall be made on the Form 18 in the Third Schedule.

(6) The holder after deducting the amount of the fine due shall give a receipt in the Form 18 in the Third Schedule, and shall remit such amount to the Chief Inspector who shall pay such amount into the general revenues of the Republic.

(7) The payment of a fine in respect of any contravention shall operate as a bar to any further proceedings being brought in respect of or arising from such contravention against any person who has paid the fine.

(8) Any fine imposed under sub-regulation (2) or (3) shall, in the event of non-payment, be treated and recoverable, for all intents and purposes, as a civil debt.

[Am by Act 13 of 1994.]

112. Persons observing, knowing or hearing of danger

Any person who notices, knows or learns about any danger or anything which is dangerous or is likely to be or become dangerous or cause danger of any kind to any person or anything at a mine or explosives factory or during any operation involving explosives at a works, shall either remove, remedy or repair such danger or thing immediately upon his noticing, knowing or learning about the same, and if he is unable to do so on account of lack of knowledge thereabout or for any other reason, he shall forthwith report the matter to a person in authority who shall take immediate steps to rectify the same.

113. Illegal Act

No person shall—

- (a) fail to observe any order given to him under these Regulations or in the interests of safety or health;
- (b) ignore, damage, deface or remove any sign, notice, barricade, warning flag or other measure provided for the safety of any person:

Provided that such measures may be removed for the purposes of maintenance or repair after suitable precautions have been taken;

- (c) omit to do any act which it is his duty to do in accordance with the provisions of these Regulations;
- (d) omit to do any act, the omission of which endangers or is likely to endanger the safety or health of any person;
- (e) commit any act which endangers or is likely to endanger the safety or health of any person.

114. Copies of Regulations to be supplied where applicable

A copy of the Act and of these Regulations shall be issued to each employee who, in the opinion of the holder, is required by virtue of his employment to have specific knowledge of them and for such issue the employee shall sign a receipt which shall be retained by the holder.

115. Precautions when using, storing, etc., explosives

(1) Every person engaged in the use, storage, manufacture, transportation or handling of explosives, and those engaged in charging or blasting operations shall take all due precautions for the prevention of an accident or incident by fire, explosion or concussion and for preventing any unauthorised person from having access to explosives, charged up areas or precharged areas.

(2) No person shall smoke or have a naked light or allow any person subordinate to him to smoke or have a naked light in any place where such smoking or light could constitute a fire hazard or danger to any explosives.

116. Closure of mine, factory or works

(1) Where any mine or explosives factory is to be closed down for an indefinite period, or permanently, the manager or holder shall give at least one month's written notice of such intention to close down to the Chief Inspector.

(2) All explosives shall be removed from any mine or explosives factory which has closed down and shall be disposed of in such manner and within such time as may be approved by the Chief Inspector.

(3) Where any works closes down for an indefinite period, or permanently, the holder shall cause all explosives to be removed from such works and shall within fourteen days give a written notice of such removal to the Chief Inspector.

117. Electrical wiring

The electrical wiring in any licensed magazine, danger building, mixing house and any building used for the storage of ammonium nitrate or blasting agents shall conform to the requirements of Central African Standard Number CC1 of 1996.

118. Lightning protection system

(1) Every licensed magazine, danger building, mixing house and any building used for the storage of blasting agents shall be provided with a lightning protection system in accordance with Central African Standard Number CC2 of 1967.

(2) Such system shall be thoroughly examined and tested at least once a year not earlier than the 1st July not later than the 30th September. The results and dates of such examinations and tests shall be recorded in the magazine register by the competent person carrying out such examinations and tests.

119. Thunderstorms and loading operations

(1) On the approach of a thunderstorm within the vicinity of any loading operation involving explosives, into or out of any vessel, road vehicle, rail truck, aircraft, conveyance, magazine or safe loading bay, it shall be the responsibility of the blasting license holder in charge of such operation, or where a more senior official is in charge, such official shall decide whether or not such thunderstorm constitutes a danger to such operation, but all of the abovementioned operations shall cease when the interval of time between the lightning-flash and the thunder-clap becomes less than ten seconds.

(2) If in the event of either of the above mentioned persons deciding that such thunderstorm constitutes a danger to such operation, such operation shall immediately cease and all persons shall be withdrawn to a safe place:

Provided that before any withdrawal takes place, such person shall ensure that any explosives are adequately protected against any possibility of being affected by water.

120. Thunderstorms and blasting operations

On the approach of or during a thunderstorm, the blasting license holder in charge of any charging or blasting operation on the surface shall suspend such operation and no person shall remain or be caused or be permitted to remain within any area where he may be injured by the accidental detonation of explosives.

121. Precautions when using electric detonators underground

The manager or holder of any mine or works shall ensure that adequate precautions are taken, as far as is reasonably practicable, to prevent, where electric detonators are used underground, the accidental detonation of any explosives.

122. Radio transmitters and carrying of electric detonators

(1) Where any vessel, road vehicle or rail truck is transporting electric detonators, such detonators shall only be carried in unopened boxes of origin in an explosives compartment constructed of steel or sheet metal lined internally with wood and, where such compartment is not constructed of steel or sheet metal, in an approved metal container.

(2) Where any vessel, road vehicle or train carrying electric detonators is equipped with a radio transmitter, no transmission shall take place from such transmitter when such detonators are being loaded into or unloaded from the compartment or container required to be provided by sub-regulation (1).

123. Conveyance of electric detonators

When electric detonators are being conveyed through any shaft, the use of any radio transmitter in such shaft shall be prohibited.

124. Radio transmission when electric detonators are being charged and blasted

The manager shall ensure, where any charging or blasting operation is being carried out involving the use of electric detonators, that radio transmitters shall only be operated outside those distances shown in the Fourth Schedule when such detonators are in the charging or blasting area.

125. Safety distances for magazines and boxes when storing electric detonators

Any magazine or box in which electric detonators are stored shall only be located outside of those distances set out in the Fourth Schedule.

126. Orderly behaviour

Every person at any mine or explosives factory and every person engaged in operations involving explosives at a works shall behave in an orderly manner.

127. Prohibition against radio transmitters underground

Radio transmitters shall not be used underground at any mine or works except with the prior approval of the Chief Inspector.

128. Complaints by persons

If any person at an explosives factory or that part of a works where explosives are being used complains to the person in charge of his working place or any other official that such working place is dangerous, such person in charge or other official shall take immediate steps consistent with safety to confirm such danger, and then if it is so confirmed, take immediate steps to rectify such danger or prevent access to such working place.

129. Persons to be fit

(1) No person who has been pronounced medically unfit or who, in the opinion of any official or other responsible person, is in any other condition which may render or be likely to render him incapable of ensuring the safety and welfare of himself or any other person shall be or be allowed to be in or about any part of a works where operations involving explosives are being carried out.

(2) No person shall take, consume or have in his possession any intoxicating liquor while he is in or on that part of any works where operations involving explosives are being carried on unless he has received the prior permission of the manager or holder:

Provided that where any intoxicating liquor is in transit and is not removed from the vehicle in which it is being transported this sub-regulation shall not apply.

130. Reporting of accidents at works

(1) The holder at any works shall ensure that, on the form prescribed in sub-regulation (5), he shall give notice of any accident caused by or on account of the presence of explosives specified in sub-regulation (2) and that an inspector shall be immediately informed, by the quickest means available, of any such accident.

(2) The accidents of which notice is required to be given are those—

(a) involving the death of any person;

(b) in which the injuries sustained by any person are so serious that it is possible that they may prove fatal.

(3) In the case of death, the holder shall ensure that the police are notified immediately by the quickest means possible.

(4) The holder shall ensure that, on the form prescribed in sub-regulation (5), notice is given to the Chief Inspector of any accident caused by or on account of the presence of explosives in which any person injured thereby is incapacitated from performing his usual work for more than three days, excluding the day of the accident but including weekends or public holidays.

(5) The notice required to be given by sub-regulation (2) or (4) shall be in the Form 19 as set out in the Third Schedule; the completed form shall be despatched so as to arrive at the office of the Chief Inspector not later than twenty-one days from the date of the accident.

131. Injury resulting in death

(1) In addition to the requirements of sub-regulation (3) of regulation 130, where any injury results in the death of any person after notice has been given in accordance with regulation 130, or when any injury of which no notice was given results in the death of the injured person, the holder shall cause notice thereof to be given to the Chief Inspector.

(2) Where any injury results in the death of any person within twenty-four hours of the occurrence of the accident causing the injury, the place where the accident occurred shall not be disturbed or altered before the arrival of, or without the consent of, an Inspector of Explosives unless such interference is unavoidable to prevent further accidents, to remove dead bodies or to rescue persons from danger:

Provided that this regulation shall not apply to any place where any delay would seriously affect the safe working of the works, or if the inspector fails to visit the place within three days of such inspector being informed of the occurrence of such death.

132. Accidental ignition of explosives at works

Whether or not personal injury is caused by the accidental ignition or detonation of explosives or any accident involving explosives the holder at any works shall ensure that such accident is reported to the Chief Inspector within twenty-four hours of its occurrence and that such report, if not made in writing, is forthwith confirmed in writing.

133. Free replacement license, authorisation or sanction

Notwithstanding the provisions of these Regulations an Inspector of Explosives may, if he deems fit, issue free of charge any license, authorisation or sanction to replace a license, authorisation or sanction which has been lost, destroyed or damaged. Free replacement license, authorisation or sanction

134. Minister's power to exempt

The Minister may, from time to time, exempt from the operation of these Regulations or from any provisions thereof any mine, explosives factory or works or part thereof for such period and under such conditions as he may think fit.

135. Chief Inspector's power to exempt

Whenever the circumstances at any mine, explosives factory or works are such as to render any provisions of these Regulations inapplicable or unduly onerous to such mine, explosives factory or works, or whenever it is necessary for the purpose of carrying out experiments or tests as to the expediency of any regulation or proposed regulation, the Chief Inspector may grant written exemption from such provisions under such conditions as he may determine.

136. Revocation and saving

(1) The Explosives Regulations, Chapter 102 of the Revised Edition, are hereby revoked.

(2) Notwithstanding the provisions of sub-regulation (1), any exemption, rule, notice, instruction, prohibition, authority, permission, certificate or document made, issued, given or granted and any other action taken, under any provision of any regulation revoked by sub-regulation (1), shall be deemed to have been made, issued, given, granted or taken under these Regulations unless specifically cancelled in writing by the Chief Inspector.

137. Penalties

Except where otherwise provided in the Act or in these Regulations, any person who contravenes, aids or abets the contravention of any of these Regulations or fails to comply with any order given or direction made under the Act shall be guilty of an offence and shall be liable on conviction to a fine not exceeding four thousand penalty units or to imprisonment for a term not exceeding twelve months, or to both.

[Am by Act 13 of 1994.]

PART II **MANUFACTURE OF EXPLOSIVES**

201. Prohibition of manufacture

(1) No explosives shall be manufactured except in accordance with the regulations contained in this Part.

(2) For the avoidance of doubt, it is hereby declared that—

(a) Appendix 1 hereto comprises regulations applicable to the manufacture of all classes of explosives for sale commercially;

(b) notwithstanding the provisions of Appendix 1, Appendix 2 hereto comprises regulations applicable to the manufacture of blasting agents for sale commercially;

(c) Appendix 3 hereto comprises regulations applicable to the manufacture of blasting agents on site;

(d) Appendix 4 hereto comprises regulations applicable to the storage of ammonium nitrate;

(e) Appendix 5 hereto comprises regulations applicable to the manufacture of all explosives.

202. License to manufacture explosives

(1) Every license to manufacture explosives for sale commercially shall be issued by the Chief Inspector in the Form 3 set out in the Third Schedule, and he may, at the time of issuing such license, impose such conditions as he may deem fit.

(2) Every license to manufacture any blasting agent on site shall be issued by the Chief Inspector in the Form 4 set out in the Third Schedule, and he may, at the time of issuing such license, impose such conditions as he may deem fit.

(3) It shall be an offence under these Regulations to manufacture explosives without a license.

(4) Any license issued in accordance with sub-regulation (1) or (2) shall not be transferable.

(5) The fee payable in respect of such licenses shall be as follows—

(a) in the case of a license specified in sub-regulation (1), one thousand fee units;

(b) in the case of a license specified in sub-regulation (2), one hundred fee units.

(6) The duplicate or a photostat copy of any license issued in accordance with this regulation shall be posted in the office of the holder or manager behind glass or other suitable transparent material in such a position as to be at all times clearly visible.

[Am by Act 13 of 1994.]

203. Establishment of an explosives factory

An explosives factory may be established and maintained only in accordance with the provisions of the Act and the Regulations made thereunder.

204. Plans, specifications and site plans

(1) Detailed plans, specifications and site plans of any proposed explosives factory shall be submitted in duplicate to the Chief Inspector for his approval before any construction of any such proposed explosives factory is commenced or carried out.

(2) Where any alteration, modification, addition or extension of an explosives factory is necessary, detailed plans of such alteration, modification, addition or extension shall be submitted in duplicate to the Chief Inspector for his approval before any such alteration, modification, addition or extension is commenced or

carried out.

205. Tables of distances

The tables of distances set out in the Second and Fourth Schedules shall form the basis on which any application to establish an explosives factory may be considered.

206. Conditions of issue of license

(1) When an explosives factory has been constructed in accordance with the plans approved by the Chief Inspector he may issue a license to manufacture explosives in the Form 3 set out in the Third Schedule.

(2) The conditions prescribed on the license to manufacture shall be duly observed and the manufacture or any work connected with such manufacture shall not be carried on except in accordance with such conditions:

Provided that the Chief Inspector may make any change in such conditions if he deems such change to be necessary or desirable.

207. Special rules

(1) The manager shall, in accordance with the requirements of section 10 of the Act, make special rules which shall not be inconsistent with these Regulations and shall provide for—

- (a) the processes and procedures undertaken in the explosives factory;
- (b) the safety and proper discipline of every person employed in such explosives factory; and
- (c) the measures or precautions to be taken for the prevention of accidents.

(2) Such special rules shall be submitted to the Minister for his approval and if he considers any special rule to be unreasonable, unnecessary or otherwise undesirable he shall disallow it or require it to be altered.

(3) Special rules approved by the Minister shall have the same force and effect as these Regulations, and any person who contravenes or fails to comply with any such special rule shall be guilty of an offence under these Regulations.

(4) A copy of such special rules shall be issued to each employee who in the opinion of the manager is required by virtue of his employment to have specific knowledge of them and for such issue the employee shall sign a receipt which shall be retained by the manager.

APPENDIX 1

208. Fencing of manufacturing and storage areas

In every explosives factory the explosives manufacturing and storage areas and so much of the land surrounding as shall be shown on the official factory site plan shall be fenced and every such area shall be known as a danger area.

209. Specifications of fencing

The manager shall provide sufficient and suitable fencing around every danger area and such fencing shall be constructed to the following specifications—

- (a) fence posts shall be of steel or concrete;

- (b) the mesh of such fence shall be of a suitable size and be of a substantial gauge;
- (c) the fence shall be a minimum of two point five metres in height;
- (d) an approved padlock or lever type lock shall be used to secure the entry gate.

210. Provision of and offences by searchers

(1) The manager shall provide sufficient number of suitably trained persons to act as searchers at every entrance to any danger area:

Provided that if in accordance with the Protected Places and Areas Act the President or the Minister requires other or further steps to be taken the manager shall take such other or further steps as may be required by the President or the Minister.

(2) Any person employed as a searcher by the manager at any explosives factory who during his period of duty—

- (a) disobeys any instruction or order given to him by a person in authority or fails to carry out any duty allotted to him; or
- (b) leaves his post or the area assigned to him without the permission of a person in authority; or
- (c) permits any unauthorised person to enter any danger area;

shall be guilty of an offence under these Regulations.

211. Entrances to danger areas

(1) Entrance into any danger area shall be only through a gate specified by the manager and any person entering or whilst in any danger area shall submit to being searched by the persons appointed by the manager to be searchers in accordance with sub-regulation (1) of regulation 210.

(2) Any vehicle, trolley, tractor or other receptacle entering any danger area may be searched by the searchers.

(3) A record shall be kept of every person, vehicle, trolley, tractor or other receptacle, entering or leaving any danger area together with the time of entry and the time of departure.

212. Conditions to be observed in danger area

The following acts and each of them shall constitute an offence under these Regulations, that is to say—

(a) any person refusing to submit to or permit any search as required by sub-regulation (1) or (2) of regulation 211 shall be guilty of an offence against these Regulations, and such person shall not be allowed to enter into any danger area;

(b) any person within any danger area who fails to comply promptly with any lawful order given to him by any person in authority shall be guilty of an offence against these Regulations;

(c) no person shall be or be allowed to remain in any part of any danger area who has been pronounced medically unfit or who in the opinion of a responsible official of the factory is in any other condition which may render or be likely to render him incapable of ensuring the safety and welfare of himself or any other person;

(d) no person shall take or attempt to take intoxicating liquor or drugs into any danger area or, while under the influence of intoxicating liquor or drugs, enter or attempt to enter such danger area and any person who may have entered such danger area or is found in such danger area in a state of intoxication or under the influence of drugs shall be apprehended immediately by the manager or any person appointed by the manager and such person shall be deemed to be guilty of an offence against these Regulations:

Provided that alcohol used for authorised purposes may be taken into any danger area;

(e) no person shall smoke nor shall any person take or attempt to take any smoking material or any article designed or adapted to produce a naked flame or spark into any danger area except as allowed by the special rules made under the Act or these Regulations;

(f) any unauthorised person found within any danger area shall be guilty of an offence under these Regulations.

213. Manner of searching

Every search made in accordance with sub-regulation (1) of regulation 211 shall be made in the following manner, that is to say—

- (a) the search shall only be made by a searcher appointed by the manager;
- (b) the search shall be made in the presence of not less than one other person;
- (c) in making the search the searcher shall cause to the person being searched no more inconvenience than may be necessary for the purpose of making an efficient search;
- (d) the searcher shall search for, besides explosives, any article designed or adapted to produce a naked flame or spark, by handling the clothing of the person being searched, including the inside of any pockets, and if after so doing, he has reason to believe or suspect that any such article is in the possession of such person, examine such clothing;
- (e) for the purposes of this regulation, the searcher shall be entitled to search every other article which such person possesses at the time of the search.

214. Authorisation of danger buildings

(1) In every danger area any building used for or associated with the manufacture of explosives shall be shown on the official factory site plan and each such building shall be known as a danger building.

(2) Every danger building in any explosives factory shall be authorised for the function specified in the Form 13 set out in the Third Schedule, and the Chief Inspector may, at the time of such authorisation, impose such conditions as he may deem fit.

(3) The authorisation for any danger building shall show—

- (a) the quantity of explosives or other materials permitted to be or to remain in such building;
- (b) the operations to be carried on therein;
- (c) the maximum number of persons permitted therein at any one time.

(4) Every danger building shall be identified by the code number assigned to it on the official factory site plan and such identification shall be displayed on the outside of the building, close to the door, in a conspicuous place and position.

(5) Every danger building shall only be used in accordance with the authorisation referred to in sub-regulation (2).

(6) Every danger building shall be maintained in good order.

(7) The fee in respect of the said authorisation shall be one hundred fee units.

[Am by Act 13 of 1994.]

215. Documents to be exhibited in danger building

Inside every danger building there shall at all times be affixed in a conspicuous place and position—

- (a) the duplicate or a photostat copy of the original of the authorisation for such building;
- (b) a copy of the special rules which apply to such building;
- (c) a copy of any other conditions which the Chief Inspector may require;
- (d) a list of tools and implements permitted therein.

216. Specifications for danger buildings

Every danger building shall comply with the following requirements—

- (a) the walls and roof shall be constructed of approved materials;
- (b) the floor shall be constructed of impermeable materials;
- (c) the walls shall have a smooth finish;
- (d) any window therein shall be constructed of approved materials;
- (e) the table of distances set out in the Second Schedule shall be adhered to;
- (f) all doors shall open outwards and shall be so placed that the number of persons permitted to be in such danger building by the authorisation can leave the building without hindrance in the event of an emergency;
- (g) the interior and benches, shelves and fittings therein, other than machinery, shall be so constructed or so lined, covered or treated as to prevent—
 - (i) the exposure of any iron or steel which may be a danger to explosives;
 - (ii) the detachment of any iron, steel, grit or similar material.

217. Permitted tools in danger buildings

(1) Every tool and implement used in any danger building shall be made of or effectively covered with non-sparking material or any other approved material.

(2) No tools other than those shown on the list required under paragraph (d) of regulation 215 shall be permitted in any danger building.

218. Danger buildings to be kept clean

(1) The interior, benches, shelves and fittings of any danger building and all movable articles therein shall be kept clean and free from explosives, ingredients, grit and any other extraneous matter or material.

(2) No charcoal, whether ground or otherwise, oiled cotton, oiled rags, oiled waste, or any articles whatever liable to spontaneous ignition shall be taken into any danger building except for the purpose of immediate supply and work, or for immediate use in such building, and upon the cessation of such work or use shall be removed forthwith.

219. Foreign matter in danger buildings

Every empty bag or carton shall be shaken out and every trolley or other receptacle shall be examined to ensure that it is free from foreign matter before being filled with explosives or ingredients.

220. Provision of passageways

Passageways of adequate size shall be provided to all means of ingress to and egress from any danger building and to any platform, stairway, door or porch within such danger building. All such passageways and every platform, stairway, door or porch shall be kept clear.

221. Prevention of danger from heat

Nothing shall be placed on or near any pipe or surface used for heating in any danger building.

222. Spilled explosives

Any explosives or ingredients spilled or dropped and all waste explosives or waste material or article contaminated with explosives shall be deposited in a suitable place or receptacle and disposed of in such manner as shall be specified by the manager.

223. Examination and removal of ingredients

(1) Every ingredient in course of manufacture into explosives that either by itself is possessed of explosive properties, or that when mixed with any other ingredient or article also present in any danger building is capable of forming an explosive mixture, or an explosive compound, shall be removed with all due diligence from such building as soon as the authorised process connected with those ingredients that is carried on in such building is completed, and all finished explosives shall with all due diligence be removed to a factory magazine or sent away immediately from the factory, and such explosives and ingredients shall be loaded and unloaded with all due diligence.

(2) Wherever danger may arise from foreign matter being present with the explosives or any ingredient thereof, all ingredients to be made or mixed into explosives shall, before being so made or mixed, be carefully examined, sifted, or otherwise treated for the purpose of removing there from or excluding, so far as is practicable, all such dangerous foreign matter.

224. Clean floors

(1) Any floor of a danger building required to be kept clean in accordance with sub-regulation (1) of regulation 218 shall be termed a clean floor and all such clean floors shall be clearly marked with a red line at every place where persons can gain access to such clean floor.

(2) Before stepping onto any clean floor in any danger building all persons shall remove their footwear or don authorised clean footwear or overshoes.

225. Specifications for vehicles and receptacles

Any vehicle, truck, or other receptacle in which explosives, or the partly mixed ingredients thereof, are conveyed, shall be constructed without any exposed iron or steel in the interior thereof, and shall contain only the explosives and ingredients, and shall be closed or otherwise properly covered over; and the explosives and ingredients shall be so conveyed with all due diligence, and with such precautions and in such manner as will sufficiently guard against any accidental ignition or explosion.

226. Inspection of danger buildings

Before any danger building is left unattended for more than one hour, a person appointed by the manager under sub-regulation (1) of regulation 106 shall carry out a thorough inspection, and he shall ensure that all machinery has been stopped, that all ventilating and heating apparatus is in a safe condition and that all lights have been extinguished; and he shall record that such inspection has been carried out. Such record shall at all times be readily available for inspection.

227. Duties of person in charge of danger building

In any danger building the person appointed to be in charge of any plant, machine or apparatus shall—

(a) before commencing work and after any break during its use inspect such plant, machine or apparatus under his charge;

(b) where any defect is found, not start such plant, machine or apparatus, and if the defect is found after it has been started, such plant, machine or apparatus shall be stopped forthwith. In either of the above events, the person in charge shall immediately inform his superior and no such plant, machine or apparatus shall be restarted until such defect has been remedied.

228. Repairs to or in danger buildings

Before repairs are done to or in any danger building, such building shall, so far as is practicable, be cleaned by the removal of all explosives and ingredients thereof, whether mixed or otherwise, and, if necessary, by the thorough washing out of the building to or in which repairs are required; such building after being so cleaned, and a certificate of clearance has been issued, shall not be deemed to be a danger building within the meaning of these Regulations until explosives or the ingredients thereof are again taken into such building:

Provided that this regulation shall not apply to such routine repairs as may be specified by the manager.

229. Explosives to be protected from sun

Explosives shall not be exposed unnecessarily to the direct rays of the sun.

APPENDIX 2

230. Mixing houses for blasting agents to comply with tables of distances

In every explosives factory the mixing houses used for the preparation and the buildings used for the storage of blasting agents shall comply with the safety distances for danger buildings set out in the Second Schedule.

231. Specifications for mixing houses

Every mixing house shall—

- (a) be of non-combustible construction;
- (b) have a floor compatible with ammonium nitrate;
- (c) be adequately ventilated;
- (d) be so arranged that stocks of unprocessed ammonium nitrate and processed blasting agents are physically separated from each other and from the area or areas in which mixing or packaging operations are conducted.

232. Specifications for mixing plant

Every mixing plant in a mixing house shall—

- (a) be so designed as to minimise the possibility of frictional heating, compaction and confinement;
- (b) have its frame and all other parts electrically bonded together and be earthed;
- (c) have all bearings and gears protected against accumulations of product dust;
- (d) be constructed of materials compatible with ammonium nitrate;
- (e) be constructed so as to prevent the spillage of any ammonium nitrate or blasting agent during mixing operations.

233. Fuel tanks to be separated from mixing operations

Tanks in which fuel oil or other carbonaceous fuels are stored shall be physically separated from the area or areas in which mixing or packaging operations are conducted and a shut-off valve shall be provided immediately adjacent to such tank in the lead off pipe from such tank.

234. Fuel tanks to be buried

Any tank used to store fuel oil shall—

- (a) be buried; or
- (b) be equipped with a sump below it capable of containing the complete contents of such tank if such tank should rupture.

235. Flash-point of fuel oil

No fuel oil with a flash-point lower than fifty-two degrees celsius shall be used in the manufacture of any blasting agents.

236. Prohibited materials

Crude oil and crankcase oil shall not be used in the manufacture of any blasting agent.

237. Materials to be compatible

Every plant used for the packaging of any blasting agent shall be constructed of materials compatible with ammonium nitrate.

238. Floors of mixing house to be kept clean

The floors and equipment of every mixing house shall, as far as is reasonably practicable, be kept clean.

239. Re-use of bags

Bags which previously contained ammonium nitrate may be used for containing processed blasting agents:

Provided that—

- (i) they are undamaged;
- (ii) they are contained within an outer bag or a container;
- (iii) such outer bag or container is labelled as to its content and weight.

240. Damaged bags prohibited

Bags which previously contained ammonium nitrate and are damaged shall not be re-used for containing processed blasting agents but shall be burnt or buried.

241. Welding in mixing house prohibited

No flame cutting or any welding operation shall be carried out in any mixing house when ammonium nitrate or blasting agents are contained therein and before any such operation is carried out such mixing house or part thereof shall be washed free of ammonium nitrate or blasting agents.

242. Storage prohibited in mixing house

The amount of ammonium nitrate permitted to be taken into any mixing house for processing into a blasting agent shall be sufficient in quantity for immediate mixing; the storage of ammonium nitrate in any mixing house is prohibited.

243. Blasting agent to be stored

After any processed blasting agent has been packaged it shall be removed forthwith to a blasting agent storage building or a magazine or removed from the factory.

244. Trolley to be approved

Any trolley or tractor used to convey ammonium nitrate to or processed blasting agents from any mixing house shall be of a type approved by the Chief Inspector and every such trolley or tractor shall be kept clean and maintained in good working order.

245. Storage of blasting agents

- (1) Processed blasting agents may be stored in either a magazine or a blasting agent storage building.
- (2) Blasting agents shall only be stored in any magazine in accordance with the conditions of the license for such magazine.

246. Specification of storage buildings

Every storage building used for the storage of blasting agents shall—

- (a) be a one-storey construction;
- (b) not have a basement;
- (c) be constructed of non-combustible or fire resistant material;
- (d) be adequately ventilated.

247. Storage buildings to be licensed

Every storage building used for the storage of blasting agents shall—

- (a) be licensed in accordance with sub-regulation (1) of regulation 532;
- (b) be fenced in accordance with regulation 209;
- (c) be equipped in accordance with paragraphs (a), (e) and (f) of regulation 535;
- (d) be kept clean and maintained in good order.

248. Storage buildings to be kept locked

Every storage building used for the storage of blasting agents shall when blasting agents are contained therein be kept securely locked or be under the supervision of a competent person.

249. No cultivation, shrubs or weeds

No cultivation, shrubs or weeds liable to cause danger from fire shall be permitted within ten metres of any mixing house or blasting agent storage building.

APPENDIX 3

250. Prohibited mixing

The mixing of ammonium nitrate and fuel oil by the pouring of fuel oil into holes containing ammonium nitrate shall not, at any time, be permitted.

251. Blasting agents used or destroyed on day of manufacture

All blasting agents manufactured on site shall be used or destroyed on the same day they are manufactured.

252. Equipment of approved design

No equipment shall be used for the manufacture of blasting agents on site unless the design and materials used in the construction of such equipment have been approved by the Chief Inspector.

253. Hand mixing

- (1) When ingredients are mixed by hand, the implements used shall be of wood or non-sparking materials.
- (2) Immediately following use, all implements and mixing containers shall be thoroughly washed.

254. Prohibition against smoking

Smoking within a distance of four metres of any mixing operation shall be prohibited.

255. Supervision in manufacture

The manufacture of blasting agents on site shall be carried out under the direct supervision of a blasting license holder.

256. Additional requirements

The provisions of regulations 233, 234, 235, 236, 239, 240 and 241 shall also apply to the manufacture of blasting agents on site:

Provided that regulations 233 and 234 shall not apply to any fuel oil contained in any mobile mixing plant.

257. Prohibition of manufacture underground

The manufacture of blasting agents underground is prohibited.

APPENDIX 4

258. Storage of ammonium nitrate

Ammonium nitrate stored at any mine, explosives factory or works shall only be stored in accordance with the regulations contained in this Appendix.

259. Requirements for storage of ammonium nitrate

Any building used for the storage of ammonium nitrate shall—

- (a) be constructed of non-combustible or fire resistant materials;
- (b) be kept well ventilated;
- (c) have a floor constructed of impermeable material;
- (d) not have any covered drain in the floor.

260. Stacking of bags

Ammonium nitrate in bags in any building shall be stacked—

- (a) in amounts not exceeding seventy-five tonnes;
- (b) so that every bag is not less than seven hundred and fifty millimetres from the walls;
- (c) so as to leave aisles between stacks of at least seven hundred and fifty millimetres width;
- (d) not less than nine hundred millimetres from the eaves or beams of the roof overhead;
- (e) on the concrete floor or other approved material.

261. Cleanliness

Every building in which ammonium nitrate is stored shall be kept clean.

262. Spilled ammonium nitrate

(1) Any spilled ammonium nitrate shall be cleaned up promptly and disposed of.

(2) Spilled ammonium nitrate may be used in the manufacture of blasting agents if it is thoroughly sifted and examined for extraneous materials before use.

(3) Spilled ammonium nitrate shall not be used for the manufacture of nitro-compound explosives.

263. Prohibition against smoking

Smoking and open flames shall not be permitted in any building used for the storage of ammonium nitrate.

264. Separation of ammonium nitrate

Ammonium nitrate shall be separated, so as to prevent any possible contamination, from any other material by an approved type of wall.

265. Provisions against fires

(1) Any building used for the storage of ammonium nitrate excepting a magazine shall be provided with—

(a) fire hydrants capable of delivering sufficient water to flood such building;

(b) adequate hose capable of being extended to any part of such building.

(2) Fire hydrants and hose provided in accordance with sub-regulation (1) shall be positioned externally to the building.

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