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GOVERNMENT NOTICE
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DEPARTMENT OF LABOUR
DEPARTEMENT VAN ARBEID

No. R. 109 **17 January 2003**

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993

EXPLOSIVES REGULATIONS

The Minister of Labour has, under section 43 of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), after consultation with the Advisory Council for Occupational Health and Safety, made the regulations in the Schedule.

SCHEDULE

Definitions

1. In these Regulations "**the Act** "means the Occupational Health and Safety Act, 1993(Act No. 85 of 1993), and any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned and, unless the context otherwise indicates

"**ammonium nitrate**" as defined in the South African Code of Practice SABS 0228,

The Identification and Classification of Dangerous Goods for Transport and classified by the inspector of explosives;

"**authorized explosive**" means any substance or mixture that has the properties of an explosive and is approved by the Minister for Safety and Security and published by notice in the Government Gazette as an explosive;

"**burning grounds**" means a fenced-in area with a controlled entrance where explosives may be exposed to a naked flame under safe controlled conditions;

"**certificated person**" means any competent person to whom a certificate of competency has been granted by an approved inspection authority, accredited by the National Explosives Council or any other organization acceptable to and approved by the chief inspector of occupational health and safety;

"chief inspector of explosives" means the chief inspector of explosives appointed by the Minister for Safety and Security;

"**class 1.1**" means a class of explosives as defined in the South African Code of Practice SABS 0228, The Identification and Classification of Dangerous Goods for Transport ;

"**class. 1.2**" means a class of explosives as defined in the South African Code of Practice SABS 0228, The Identification and Classification of Dangerous Goods for Transport;

"**class 1.3**" means a class of explosives as defined in the South African Code of Practice SABS 0228, The Identification and Classification of Dangerous Goods for Transport;

"**class 1.4**" means a class of explosives as defined in the South African Code of Practice SABS 0228, The Identification and Classification of Dangerous Goods for Transport;

"**class 1.5**" means a class of explosives as defined in the South African Code of Practice SABS 0228, The Identification and Classification of Dangerous Goods for Transport;

"**class 1.6**" means a class of explosives as defined in the South African Code of Practice SABS 0228, The Identification and Classification of Dangerous Goods for Transport;

"**competent person**" means a person with sufficient training and experience in, and knowledge of, the health and safety aspects of explosives deemed appropriate by the National Explosive Council or any other organization approved by the chief inspector of occupational health and safety;

"**complex**" means a group of danger buildings in the same danger area;

"**danger area**" means an area surrounded by a fence provided with a guarded entrance in which are situated explosives testing, manufacturing and storage buildings, and as much of the land surrounding them as is shown on the official explosives workplace site plan;

"**danger building or room**" means any licensed building or room used as an explosives workplace or explosives magazine;

"**danger zone**" means the region inside the area encompassed by the larger safety distance applicable to a danger building in terms of the safety distances stipulated in Annexure 1;

"**explosives groups**" means explosives grouped together for their safe storage and transportation as defined in the South African Code of Practice SABS 0228, The Identification and Classification of Dangerous Goods for Transport;

"**explosives magazine**" means any building licensed under these regulations for the storage of explosives;

"**explosives manager**" means a person appointed in terms of regulation 12(1);

"**explosives workplace**" means any workplace licensed under these regulations for the manufacture, testing, use and storage of explosives, together with every mound, building and works therein or thereon for whatever purpose used;

"**explosives workplace licence**" means a licence referred to in regulation 4(2) or issued in terms of regulation 4 (3) in respect of an explosives workplace for the manufacture, testing, use and storage of explosives;

"**from magazines**" means from one danger building where explosives are stored to another danger building where explosives are stored;

"**guarded entrance**" means an entrance through which no person, equipment or material can pass without the approval of the explosives manager or a person authorized by him and the monitoring by a guard or guarding system approved by the explosives manager;

"**loose article**" means any tool, furniture, cleaning material, handling equipment or stationery which may be used in a danger building where explosives are present;

"**loose article list**" means a list approved by the explosives manager and posted in a conspicuous position in a building or room specifying the number and types of loose articles allowed and present in that building or room;

"**magazine licence**" means a license referred to in regulation 4(2) or issued in terms of regulation 4(3) in respect of a magazine for the storage of explosives;

"**manufacture**" means the making or processing of any explosive including the division of any explosive from or into its component parts by any process, and the conversion of an explosive of one kind into an explosive of another kind, including the alteration, fitting for use, testing, on-site manufacture, repair or destruction of any explosive;

"mobile workplace" means any mobile workplace licensed under these regulations for the manufacture, testing, use and storage of explosives;

"**National Explosives Council"** means a council established under regulation 17;

"**non-danger building or room**" means any building or room within the danger area which is used in connection with the manufacture, testing or storage of explosives, but in which no explosives are kept, used, tested or manufactured;

"non-detonatable explosive" means an explosive that needs extreme conditions to initiate;

"**non-explosives worker**" means an employee in an explosives workplace who normally performs his or her duties outside a danger area;

"non-sensitised explosive" means any explosive or substance that needs to be sensitised by the addition of a gassing agent, chemical sensitiser, gas bubbles, organic fuel or micro balloons , or the like , for it to be used as an explosive;

"official explosives workplace site plan" means a plan as contemplated in regulation 4(5)(*b*);

"**operating instruction**" means a document approved by the explosives manager setting out in detail the methods, materials, equipment, tools and precautions to be used in a given operation;

"**plant office**" means an office for the exclusive use of personnel for the direct control of the operations in the danger area and so situated that exposure to explosions is minimised;

"**plant workshop**" means a workshop used exclusively to maintain equipment and buildings in the danger area;

"**private use**" means the legal use of explosives by individuals for a specific purpose not connected with any other person, trade or business;

"**process building**" means a danger building where work on explosives takes place;

"**process magazine**" means a magazine within the safety circle of a process building in which explosives for one day's use are kept;

"**professional engineer**" means an engineer who has received professional status from the Engineering Council of South Africa;

"**public building**" means a structure beyond the danger zone to which members of the public have access and in which non-explosives workers are stationed;

"**schedule licence**" means a licence categorised as –

(*a*) a schedule I explosives workplace licence, which is a schedule to the explosive workplace licence, in a format acceptable to the chief inspector of occupational health and safety, certified by the explosives manager and approved by the chief inspector of occupational health and safety, in which a description is given of all explosives that may be manufactured, tested, stored or used in a danger area, specifying nominal formulas, with tolerances, components, construction and packaging;

(*b*) a schedule II explosives workplace licence, which is a schedule to the explosives workplace licence pertaining to each danger building or room in the danger area, in a format acceptable to the chief inspector of occupational health and safety, certified by the explosives manager and approved by the chief inspector of occupational health and safety, specifying the name and number of the building or room, the maximum number of persons and the maximum mass of explosives allowed in the building or room, the operations authorized and which of these operations may be carried out simultaneously; or

(*c*) a schedule III explosives workplace licence, which is a schedule to the explosives workplace licence for a non-danger building or room in a danger area, in a format acceptable to the chief inspector of occupational health and safety, certified by the explosives manager and approved by the chief inspector of occupational health and safety,

specifying the name and number of the building or room, the purpose of the building or room and the number of persons allowed therein;

"**to magazines**" means from an explosives process building to any danger building where explosives are stored;

"**to public buildings**" means from a danger building to public buildings as defined in these regulations, and includes main offices, main workshops and dwelling houses other than those defined under "to railways, roads, etc;

"**to railways, roads, etc** " means from a danger building to railways, roads or open sports grounds, or to dwelling houses under the same ownership as the explosives factory and occupied by the owner or an employee;

"**unauthorized explosive**" means any substance or mixture that has the properties of an explosive but has not been approved and published as an authorized explosive.

Scope of application

2. (1) Subject to subregulation (2), these regulations shall apply to any employer, self-employed person or user who operates an explosives workplace for the purpose of manufacturing, testing, storing or using explosives.

(2) These regulations shall not apply to explosives workplaces where the loading or reloading of cartridges for small arms is being carried out for private use and is not offered for sale, trade or any other use: Provided that these Regulations do not detract from the requirements of the Arms and Ammunition Act, 1969 (Act No. 57 of 1969) or the Firearms Control Act, 2000 (Act No. 60 of 2000) .

Classification of explosives for manufacturing

3. (1) The chief inspector of explosives shall classify all explosives and make this classification available to the chief inspector of occupational health and safety.

(2) The chief inspector of occupational health and safety may classify any chemical combination as an explosive or reclassify any explosive for the purposes of these regulations.

(3) No person shall manufacture or use any explosives that are not classified in terms of subregulations (1) and (2).

Licensing of explosives workplaces

4. (1) Any person who desires to erect or operate a new explosives workplace for the manufacture, testing, use or storage of explosives shall apply for a licence in writing to the chief inspector of occupational health and safety.

(2) The licence of any explosives workplace which is in force at the time of the promulgation of these regulations shall be deemed valid: Provided that the licensing conditions as contemplated in these regulations shall be complied with within twelve months of promulgation of these regulations.

(3) The chief inspector of occupational health and safety –

(*a*) may issue a licence subject to compliance with these regulations and after consultation with the relevant employer, self-employed person or user and local government: Provided that such licence shall lapse after twelve months if the erection of the building has not started within that period;

(*b*) may attach any condition to the licence that he or she deems reasonably necessary;

(*c*) may alter the condition of an existing licence after consultation with the employer, self-employed person, user and employees;

(*d*) shall not issue a licence where a competent explosives manager has not been appointed in terms of regulation 12(1) or where the prescribed requirements have not been met;

(*e*) may upon application in writing transfer a licence into the name of another person: Provided that the application shall be made prior to the transfer and the transferee shall appoint a competent explosives manager; and

(*f*) may revoke any licence issued in terms of this regulation if the prescribed conditions are no longer being complied with or where no competent explosives manager is appointed.

(4) Any person applying for a magazine or explosives workplace licence shall attach to such application –

(*a*) Written authorization from the relevant local government for the proposed new magazine or workplace;

(*b*) Written approval from the chief inspector of explosives concerning security aspects for the area and buildings of the proposed workplace or magazine;

(*c*) The letter of appointment of the competent explosives manager, including the acceptance of the appointment;

(*d*) The physical address of the explosives workplace or magazine;

(e) Documentary proof of the explosives manager's competency; and

(f) A full written report on the risk assessment compiled by an approved inspection authority.

(5) Any person applying for a licence to manufacture, use, test or store explosives in the proposed explosives workplace or magazine shall submit draft schedule licences, certified by the explosives manager, and drawings in duplicate setting forth the following:

(a) An area plan of the proposed site indicating the danger zone;

(b) A site plan, which is drawn to scale, is easily readable and clearly indicates the complete layout of the site and the danger zone;

(c) The safety distances, as contemplated in Annexure I, which are to be maintained between danger buildings, and between danger buildings and other buildings or works used in connection with the explosives workplace;

(d) The compatibility of materials to be used in the construction of danger buildings;

(e) Building plans for all danger buildings or works as designed and approved by a professional engineer;

(f) The nature of the process to be used in the workplace and the place at or in which he or she intends to implement each manufacturing process, activity and type of work;

(g) The places at or in which he or she proposes to store, destroy or test –

(i) any ingredient of explosives;

(ii) other articles or substances which are liable to spontaneous ignition; and

(iii) articles which are otherwise dangerous;

(h) The quantity of explosives, or any other partly or wholly mixed ingredients thereof, which he or she intends to use simultaneously in any danger room, danger building or complex;

(i) The maximum number of persons which he or she intends to employ in each danger room, danger building or complex; and

(j) Any additional information that may be required by the chief inspector of occupational health and safety.

(6) Any person who desires to erect or operate a magazine for the storage of explosives shall apply in writing to the chief inspector of occupational health and safety for written approval.

(7) No person shall erect burning grounds within or near a danger area without an appropriate safe separation.

(8) Any person who desires to use explosives in a workplace for any purpose shall apply in writing to the chief inspector of occupational health and safety for written approval.

Non-detonatable and non-sensitised explosives

5. (1) Ammonium nitrate fertilizers shall be manufactured in such a way that the constituents cannot be separated mechanically from one another.

(2) Mixtures of ammonium nitrate with calcium carbonate, or dolomite, or calcium carbonate and dolomite, shall be manufactured in such a way that the calcium carbonate or dolomite is incorporated in the prills or granules of the mixture and shall be approved, in writing, by the chief inspector of explosives.

(3) Every person or concern manufacturing non-detonatable or non-sensitised explosives may apply to the chief inspector of occupational health and safety for exemption from these regulations with the exception of regulation 5.

(4) Application for exemption from these regulations is subject to the conditions that the chief inspector of occupational health and safety may stipulate for the safe manufacture, storage, testing and handling of non-detonatable or non-sensitised explosives.

(5) The basis for the safe manufacture of non-detonatable or non-sensitised explosives referred to in subregulation (4) shall include provision for the following safety measures:

(*a*) Access control measures and equipment at the entry to the workplace area where the non-detonatable or non-sensitised explosives are manufactured, tested or stored shall restrict access to the manufacturing, testing and storage areas to authorised persons only;

(*b*) Unauthorized access to manufacturing operations shall not be allowed, and measures and equipment to prevent access to potentially hazardous areas shall be provided;

(*c*) The following controls shall be in place at the separator stage in non-detonatable or non-sensitised explosives manufacture:

(i) Temperature control;

(ii) pH control;

(iii) An inventory dumping system;

(iv) Control of process steam temperature and pressure; and

(v) Procedures to prevent unsafe confinement of non-detonatable or non-sensitised explosives during operation or cleaning activities;

(*d*) The following controls shall be in place at the storage and pumping stage in non-detonatable or non-sensitised explosives manufacture:

(i) Interlocks that are able to trip;

(ii) Temperature control in heated storage tanks; and

(iii) Tank level control;

(*e*) The following controls shall be in place during evaporation and heating of non-detonable or non-sensitised explosives for prilling and granulation:

(i) Temperature control;

(ii) pH control;

(iii) An inventory dumping system; and

(iv) Control of process steam temperature and pressure;

(*f*) Procedures to manage unsafe confinement of non-detonatable or non-sensitised explosives during operation or cleaning activities shall be in place;

(*g*) Control of contaminants and additives and unsafe accumulation of such substances shall be prevented;

(*h*) Controls of contaminants shall be in place during prilling or granulation;

(*i*) Control of reducing components in the drying air shall be in place;

(*j*) The construction materials in all processes shall be checked for compatibility with non-detonatable or non-sensitised explosives with respect to corrosion and potential sensitising effects in the process;

(*k*) The following control during the storage and packing stages of non-detonatable or non-sensitised explosives shall be in place:

(i) Control over use of combustible materials inside and close to storage areas;

(ii) Control over use of liquid fuels and vehicles in storage areas;

(iii) Control of mechanical condition of non-detonatable or non-sensitised explosives transport and storage equipment;

(iv) Control of potential contamination in non-detonatable or non-sensitised explosives transport containers;

(v) Controls for appropriate fire-fighting equipment;

(vi) Control of pH in solution storage; and

(vii) Prevention of unsafe confinement of non-detonatable or non-sensitised explosives.

Danger area

6. (1) An employer, self-employed person or user shall ensure that entry and exit from danger areas is only permitted –

(*a*) at the permanent authorized point of entry or exit: Provided that entry or exit at any other point may be authorized by the explosives manager or a person authorized by him if the authorized gatekeeper has been informed thereof;

(*b*) for persons and vehicles authorized thereto by the explosives manager or a person authorized by him; and

(*c*) to visitors under escort by an authorized person who is aware of the hazards attached to the danger area.

(2) An employer shall keep a register of the entries and exits contemplated in subregulation (1) and that register shall be available on the premises for inspection by an inspector.

(3) No person shall –

(*a*) enter or exit the danger area through an unauthorized

point of entry or exit;

(*b*) enter or exit the danger area without first submitting themselves to a search by the authorized gatekeeper;

(*c*) enter the danger area with –

(i) tobacco;

(ii) matches, cigarette lighters or other devices capable of generating heat or spark sources;

(iii) intoxicating liquor or narcotics;

(iv) food, medicine or drinkable fluids: Provided that authorization to enter with such articles may be granted by the explosives manager for purposes of consumption in licensed mess rooms and smoking areas: Provided further that special rules for the control of such consumption and smoking, approved by the chief inspector of occupational health and safety shall be made in writing and shall be enforced by the employer, self-employed person or user; or

(v) radio transmitters or cellular telephones; or

(*d*) perform any act or deed that will increase the risk attached to work being performed in a danger area.

(4) An employer, self-employed person or user shall not erect any buildings in the danger zone without first obtaining written approval from the chief inspector of occupational health and safety and complying with regulation 4(5).

(5) An employer, self-employed person or user shall fence-in the danger area in accordance with the South African Police Services Code of Practice SAP 412: Fencing Specifications.

(6) An employer, self-employed person or user shall ensure that hazard warning signs are clearly displayed at the entrance to any danger area, magazine or workplace.

Danger buildings

7. (1) An employer, self-employed person or user shall ensure without derogating from the requirements of the Fire Brigade Services Act, 1987 (Act No. 99 of 1987), that all fire-fighting appliances and emergency equipment provided in the danger building or room are so placed and kept that they are readily visible, accessible and available for use when required.

(2) No person shall discharge any fire extinguisher or tamper with any equipment without thereafter informing the explosives manager.

(3) An employer, self-employed person or user shall ensure that no danger building is used unless the ambient temperature and relative humidity inside the building and the temperature of the explosives in the building are within the limits prescribed by the explosives manager.

(4) An employer, self-employed person or user shall –

(*a*) take all reasonable precautions to prevent foreign materials such as grit, stones or similar objects from entering danger buildings;

(*b*) ensure that no charcoal, whether ground or otherwise, oily rag or other article susceptible to spontaneous ignition is taken into any danger building, unless such article is required for immediate use in a specified place and, upon cessation of such use, is removed forthwith; and

(*c*) not permit any article not listed on the loose article list to be used or to be present in a danger building.

(5) An employer, self-employed person or user shall ensure that –

(*a*) every danger building is protected against lightning in accordance with South African Bureau of Standards Code of Practice SABS 0313, The Protection of Structures against Lightning;

(*b*) every lightning protection system is examined and tested by a person with sufficient knowledge, training and experience in lightning protection;

(*c*) the examination and testing contemplated in paragraph (*b*) is carried out at least every 12 months in the month of September for summer rainfall areas and in January for winter rainfall areas;

(*d*) the results of every examination and testing contemplated in paragraph (b) are recorded in a register and are made available on the premises for inspection by an inspector; and

(*e*) all danger buildings with metal walls or roofs, and all plant and machinery in such buildings, are adequately earthed and bonded in accordance with South African Bureau of Standards Code of Practice SABS 0142, The Wiring of Premises, Part 1, Low Voltage Installations, and SABS 0108, The Classification of Hazardous Locations and the Selection of Apparatus for Use in Such Locations.

(6) An employer, self-employed person or user shall ensure that –

(*a*) the official number of the building is affixed on the outer wall near the main door to every building within the danger area;

(*b*) a copy of the schedule licence is permanently affixed in a conspicuous position inside every building in the danger area; and

(c) a loose article list, approved by the explosives manager, is permanently affixed in a conspicuous position inside every danger building:

Provided that all such numbering and documentation shall be printed or typed.

(7) An employer, self-employed person or user shall ensure that –

(*a*) all danger buildings are maintained in good order and that the interior, including benches, shelves and fittings, of every building in which any manufacturing process takes place or which may, at any stage of the process of manufacture, contain explosives or any ingredients thereof, either mixed or partially mixed, is kept clean and free from foreign materials to the extent that is reasonably practicable;

(*b*) before any maintenance, repairs or new installations are done to or in any danger building, that building is cleaned to the extent that is reasonably practicable, by the removal of all explosives and ingredients thereof, whether mixed or otherwise, and, if necessary, by the thorough washing out of the building or part of the building to or in which such maintenance, repairs or new installations is required;

(*c*) a work permit, approved by the explosives manager is issued prescribing the procedures to be followed for maintenance, repairs or new installations;

(*d*) all the doors of the danger building remain unlocked while persons are present during operations;

(*e*) steps are taken to ensure that doors to danger buildings do not slam; and

(*f*) all machinery and fittings are maintained and operated in accordance with the design specifications of the manufacturer and any other specifications prescribed by the explosives manager.

Safeguarding of explosives workplace

8. (1) An employer, self-employed person or user shall ensure that –

(*a*) an explosives workplace is established, erected, operated and maintained in such a manner as to prevent the exposure of persons to hazardous or potentially hazardous conditions or circumstances;

(*b*) no part of the explosives workplace is used for any other purpose not authorized by the explosives workplace licence;

(*c*) all materials used in the construction of a danger building are of a design approved by a professional engineer and acceptable to the chief inspector of occupational health and safety;

(d) provision has been made for –

(i) escape routes;

(ii) the prevention of confined spaces;

(iii) the safety of electrical appliances;

(iv) lightning protectors; and

(v) vertical clearance between buildings and overhead power lines of not less than 30 meters;

(e) a copy of the special rules, regulations and operating instructions is made readily available to all employees within the danger area; and

(f) a maintenance and inspection schedule is prepared and implemented by the explosives manager in respect of all danger buildings, fittings, plant and machinery in use in the danger area.

(2) An employer, self-employed person or user shall –

(*a*) in the event of any abnormal conditions being discovered or any unusual occurrence taking place, cause operations to be stopped immediately: Provided that where this is not possible, owing to the nature of the process, emergency procedures shall be laid down and immediate action taken in terms of those procedures; and

(*b*) notwithstanding authorized licence limits, reduce the quantity of explosives, or raw materials, or the number of persons at any one workplace whenever this is reasonably practicable.

(3) No person shall manufacture explosives in any manner not provided for in these regulations unless written permission for such manufacture has been obtained from the chief inspector of occupational health and safety.

Design, construction and manufacture

9. No employer shall use or require or permit the use of any building, installation, room, machine or equipment unless –

(*a*) it has been designed and constructed in accordance with health and safety standards incorporated in these regulations in terms of section 44 of the Act;

(*b*) it has been approved by an approved inspection authority contemplated in regulation 18 or any foreign inspection authority recognized by the chief inspector of occupational health and safety; and

(*c*) the employer, self-employed person or user is in possession of a certificate issued by the manufacturer of the machines or equipment: Provided that such certificate shall be countersigned by an approved inspection authority .

Importation of explosives

10. Subject to any applicable law, any person intending to import explosives **to be used in manufacturing or testing** shall obtain permission from the chief inspector of occupational health and safety in writing, specifying the kinds and quantities thereof prior to importation.

Safety distances

11. (1) An employer, self-employed person or user shall –

(*a*) apply the safety distances for the respective categories of explosives as stipulated in Annexure 1 to these regulations;

(*b*) where less than five kilograms of explosives is used, apply to the chief inspector of occupational health and safety for a determination of a safety distance which the employer shall enforce;

(*c*) in the case of quantities of class 1.1 and 1.5 explosives exceeding five kilograms, ensure that the structures or areas where they are manufactured, stored, tested or handled in any manner, are mounded: Provided that where, with the permission of the chief inspector of occupational health and safety, mounds are dispensed with, the distances given in columns (1), (2) and (3) of Annexure 1 shall be doubled.

(2) An employer, self-employed person or user may reduce the distances in column (1) of Annexure 1 where ground-covered magazines are used in explosives workplace magazine areas: Provided that the doors of the magazines do not face each other –

(*a*) between magazines: by half the distance; or

(*b*) for magazines behind each other: by three-quarters of the distance.

Supervision of explosives workplace

12. (1) In order to ensure that the provisions of the Act and these regulations in relation to explosives workplaces are complied with, an employer, self-employed person or user shall, subject to this regulation, in writing appoint a competent and certificated person in a full-time capacity to be explosives manager in respect of every workplace where explosives are being used, tested, stored or manufactured: Provided that the appointment of an explosives manager shall not exempt the employer, self-employed person or user from any liability or responsibility contemplated in section 16 of the Act.

(2) The chief inspector of occupational health and safety may, subject to the conditions that he or she may impose, permit an employer or user to appoint more than one person in terms of subregulation (1).

(3) An employer or user shall appoint one or more persons, who are suitably qualified and experienced, as authorized supervisors to assist the explosives manager appointed in terms of subregulation (1).

(4) An employer, self-employed person or user shall ensure that –

(*a*) the explosives manager, without derogating from any other duties imposed on him or her by the Act and these regulations –

(i) approves in writing the rules, methods, materials, equipment and tools to be used in the danger area;

(ii) ensures that all persons under his or her control are informed of the hazards related to their tasks and are thoroughly trained in safe work procedures, in particular with respect to shock, friction risk of fire, or static electricity, and are familiar with the requirements of these regulations;

(iii) prescribes all protective clothing and equipment to be used in the danger area; and

(iv) ensures that the processes and equipment specified in schedule licences are safe and appropriate for the manufacturing processes envisaged for the workplace.

(*b*) the supervising official, without derogating from any other duties imposed on him or her by the Act and these regulations –

(i) is at all times in a position to exercise control over the operations in the danger building;

(ii) reports without delay to the explosives manager any plant or equipment under his or her control that has or may have posed a risk;

(iii) ensures that all rules implemented in the interest of health and safety are at all times complied with; and

(iv) stops all explosives manufacturing or any work involving explosives if he or she becomes aware of any risk posed to the health and safety of persons.

Safe handling of explosives

13.(1) An employer, self-employed person or user shall ensure that –

(*a*) all explosives or ingredients thereof are at all times free of foreign material;

(*b*) all reasonable precautions are taken to prevent the spillage of explosives;

(*c*) cleaning procedures in the case of a spillage of explosives are prescribed in writing by the explosives manager: Provided that where no cleaning procedures have been prescribed any unusual spillage of explosives shall be reported immediately to the supervising official;

(*d*) all waste, paper, timber, rags, cotton and similar materials that have been in contact with explosives or an ingredient of an explosive are disposed of in a manner prescribed in writing by the explosives manager: Provided that at the end of the working day all waste and floor sweepings from danger buildings shall be deposited in the designated places;

(*e*) the explosives or partly mixed explosives are conveyed as soon and as carefully as possible and taking such precautions and in such a manner as will effectively guard against any accidental ignition or explosion;

(*f*) only containers provided for the conveyance of explosives are used for transporting explosives or partly mixed explosives and that such containers are at all times kept clean, free from grit and in a good state of repair;

(*g*) vehicles containing explosives are left unattended only in designated places;

(*h*) except for drying purposes, preparation on burning grounds or testing, explosives are not exposed to direct rays of the sun or to rain, whether being transported or not; and

(*i*) manufactured explosives are removed as soon as is reasonably possible from the process building to an explosives workplace magazine or that they are immediately dispatched.

(2) An employer, self-employed person or user shall ensure that –

(*a*) all material, equipment, tools or similar articles used in a danger area are decontaminated after such use, and that no person makes use of any such article that has not been decontaminated after use in a contaminated area; and

(*b*) the certification of the decontamination process contemplated in paragraph (*a*) is certified and approved by the explosives manager or a person authorized by the explosives manager.

(3) Unless permission has been granted by the chief inspector of occupational health and safety, no person shall use –

(*a*) explosives in workplaces other than explosives workplaces approved by the chief inspector of occupational health and safety; and

(*b*) any explosives for which no provision is made in these regulations.

(4) An employer, self-employed person or user shall ensure that –

(*a*) explosives are transported and stored together or separately in the explosives workplace in accordance with the compatibility group assignments given in the South African Code of Practice SABS 0228, The Identification and Classification of Dangerous Goods for Transport; and

(*b*) when explosives can be categorized in more than one group, they are deemed to belong exclusively to the higher risk compatibility group given in the South African Code of Practice SABS 0228: The Identification and Classification of Dangerous Goods for Transport.

(5) No person shall –

(*a*) by leaving explosives unattended allow unauthorized access to such explosives; and

(*b*) bury, dump, hide or abandon any explosives.

(6) No person shall use any explosive material for blasting purposes unless –

(a) he or she is in possession of a written permission issued by or under the authority of the chief inspector of occupational health and safety;

(*b*) he or she is undergoing training while using such blasting material under the immediate and constant supervision of a person who is in possession of a permission contemplated in paragraph (*a*);

(*c*) he or she is trained and is authorized by the chief inspector of occupational health and safety to
destroy or test explosives in a licensed workplace; or

(*d*) if the blasting material is used in a workplace other than a manufacturing or testing workplaces he or she –

(i) informs the provincial director not less than 24 hours prior to such use; and

(ii) is in possession of written permission issued by or under the authority of the chief inspector of explosives.

(7) No person shall permit any other person who is not in possession of such a permission to use any blasting material unless such other person is, while using such blasting material, under the immediate and constant supervision of a person who is in possession of such permission.

(8) Any explosives for which provision is not made in these regulations, shall be used only in such manner and under such conditions as may be prescribed, in writing, by the chief inspector of occupational health and safety.

(9) Any permission issued prior to the date of promulgation of these regulations shall be deemed valid: Provided that the conditions for obtaining a permission as determined in these regulations shall be complied with within six months of promulgation of these regulations.

Emergencies

14.(1) An employer, self-employed person or user shall ensure that –

(*a*) an emergency plan is established and implemented;

(*b*) the emergency plan is tested in practice at least once every 12 months; and

(*c*) in the event of a dangerous gas escaping or being emitted all persons evacuate the area immediately.

Incidents

15.(1) An employer, self-employed person or user shall –

(*a*) notwithstanding the requirements of section 24 of the Act or any other legal requirements, whenever an incident involving explosives occurs, forthwith inform the explosives manager and by means of telephone, facsimile or any other method of communication the chief inspector of occupational health and safety, and shall confirm this report in writing stating full particulars of the incident within seven days of the incident; and

(*b*) where there was a possibility of risk to the health and safety of persons, whether or not persons or property sustained injury or damage as a result, inform the chief inspector of occupational health and safety in writing every month of incidents involving the accidental ignition or detonation of explosives or a danger of such accidental ignition or detonation.

Closure of explosives workplaces

16.(1) An employer, self-employed person or user shall –

(*a*) whenever he or she intends to close an explosives workplace for an indefinite period, or permanently, where reasonably practicable, give at least three months' notice of such intention to the chief inspector of occupational health and safety;

(*b*) ensure that the relevant explosives and ingredients are disposed of in a manner approved by the explosives manager;

(c) submit a proof of return of all explosives and ingredients of explosives that had been in the explosives workplace;

(d) submit a decontamination and safety certificate to the chief inspector of occupational health and safety prior to the delicensing of the building and danger area; and

(e) ensure that no explosives or ingredients of explosives are kept on the premises of an explosives workplace after delicensing.

National Explosives Council

17.(1) The chief inspector of occupational health and safety may establish a National Explosives Council consisting of –

(*a*) a person who shall be the chairperson;

(*b*) two persons from the Department of Labour;

(*c*) one person to represent the Department of Minerals and Energy;

(*d*) two persons to represent employers;

(*e*) one person to represent the South African Police Service;

(*f*) two persons to represent the mining houses;

(*g*) two persons to represent the mining unions;

(*h*) one person to represent the South African National Defence Force; and

(i) two persons to represent employees:

Provided that the chief inspector of occupational health and safety may authorize the National Explosives Council to co-opt persons who are knowledgeable about the matters to be dealt with by the council.

(2) The chief inspector of occupational health and safety shall appoint the members of the National Explosives Council for the period that he or she may determine at the time of appointment: Provided that the chief inspector of occupational health and safety may discharge a member at any time, for reasons that are fair and just, and appoint a new member in his or her place.

(3) The National Explosives Council shall –

(*a*) advise the chief inspector of occupational health and safety on explosives codes, standards and training requirements;

(*b*) designate persons to examine explosives managers and workers: Provided that any accredited or approved training shall be in accordance with South African Qualifications Authority standards;

(*c*) make recommendations and submit reports to the chief inspector of occupational health and safety regarding any matter to which these regulations relate;

(*d*) advise the chief inspector of occupational health and safety regarding any matter referred to the National Explosives Council by the chief inspector of occupational health and safety;

(*e*) perform any other function that may be requested by the chief inspector of occupational health and safety;

(*f*) refer appeals against decisions of the National Explosives Council to the chief inspector of occupational health and safety; and

(*g*) conduct its work in accordance with the instructions and rules of conduct framed by the chief inspector of occupational health and safety.

(4) A person affected by any decision of the National Explosives Council may appeal against such decision to the chief inspector of occupational health and safety.

Approved inspection authorities

18. (1) The chief inspector of occupational health and safety may approve as an inspection authority any organization that has been accredited in terms of the provisions of the Act and these Regulations.

(2) The chief inspector of occupational health and safety may at any time withdraw any approval of an approved inspection authority, subject to section 35 of the Act.

Standards of training

19. Any accredited or approved training shall be in accordance with the South African Qualifications Authority standards.

Offences and penalties

20. Any person who contravenes or fails to comply with the provisions of regulation 3(3), 4(1), 5, 6, 7, 8, 9(1), 10, 11, 12, 13 14,15 or 16 shall be guilty of an offence and liable, on conviction, to a fine or to imprisonment for a period not exceeding 12 months and, in the case of a continuous offence, to an additional fine of R200 for each day on which the offence continues or to additional imprisonment of one day for each day the offence continues: Provided that the period of such imprisonment shall in no case exceed 90 days.

Short title

21. These regulations shall be known as the Explosives Regulations, 2002.

ANNEXURE 1

EXPLOSIVES REGULATIONS

Table of safety distances (in metres)

(a) Classes 1.1 and 1.5

Quantity of explosives (kg)	From magazines (1)	To process buildings and magazines (2)	To railways, roads, etc.* (3)	To public buildings (4)
5 to50	9	18	20	24
100	11	22	24	32
200	14	27	29	50
300	16	30	34	68
400	18	33	41	82
500	19	36	47	94
750	22	46	62	124
1 000	24	56	75	150
1 500	27	72	95	190
2 000	30	85	115	230
2 500	32	96	130	260
3 000	35	106	140	280
4 000	38	121	160	320
5 000	40	135	180	360
7 500	45	155	210	420
10 000	50	175	235	470
15 000	58	200	270	540
20 000	65	225	300	600
25 000	70	240	320	640
30 000	75	255	345	690
40 000	80	285	380	760
50 000	85	305	400	800
75 000	100	350	470	940
100 000	110	380	510	1 020
150 000	125	440	590	1 180
200 000	140	480	640	1 280
250 000	150	520	700	1 400

* Applicable for magazines only.

Table of safety distances (in meters)

(b) Class 1.3

Quantity of explosives (kg)	From magazines (1)	To process buildings and magazines (2)	To railways, roads, etc.* (3)	To public buildings (4)
5 to50	9	10	12	23
100	9	15	16	30
200	9	18	19	37
300	10	21	22	42
400	11	23	24	47
500	13	25	25	50
750	14	29	29	57
1 000	14	32	32	63
1 500	15	36	36	72
2 000	17	40	40	80
2 500	18	43	43	86
3 000	19	46	46	91
4 000	20	50	50	100
5 000	21	54	54	108
7 500	25	61	61	122
10 000	28	68	68	136
15 000	33	78	78	156
20 000	27	85	85	170
25 000	40	90	90	180
30 000	45	100	100	200
40 000	50	110	110	220
50 000	55	115	115	230
75 000	65	135	135	270
100 000	75	15	145	290
150 000	90	170	170	340
200 000	95	180	180	360
250 000	105	200	200	400

* Applicable for magazines only.

Table of safety distances (in meters)

(c) Classes 1.2 and 1.4

Quantity of explosives (kg)	From magazines (1)	To process buildings and magazines (2)	To railways, roads, etc.* (3)	To public buildings (4)
5 to50	9	9	9	15
100	9	9	9	18
200	9	9	11	22
300	9	9	13	25
400	9	9	15	29
500	9	9	15	31
750	9	9	17	33
1 000	9	10	18	36
1 500	11	16	19	38
2 000	12	19	20	40
2 500	13	21	21	42
3 000	14	22	22	43
4 000	16	24	23	45
5 000	17	25	23	46
7 500	19	26	24	48
10 000	21	27	25	50
15 000	23	27	27	54
20 000	25	27	28	55
25 000	26	27	29	57
30 000	27	27	30	60
40 000	27	27	30	60
50 000	27	27	30	60
75 000	27	27	32	65
100 000	27	27	33	65
150 000	27	27	35	70
200 000	27	27	35	70
250 000	27	27	35	70

* Applicable for magazines only.