MINISTRY OF COMMERCE AND INDUSTRY

(Department of Industrial Policy and Promotion)

NOTIFICATION

New Delhi, the 29th December, 2008

G.S.R. 907(E).—Whereas the Draft of Explosives Rules, 2006 were published, as required by sub-section (1) of Section 18 of Explosive Act, 1884 (4 of 1884) *vide* notification of the Government of India in the Ministry of Commerce & Industry (Department of Industrial Policy & Promotion) number G.S.R. 226, dated 6th day of September, 2006 in the Gazette of India, Part II, Section 3, Sub-section (i) inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of a period of forty five days from the date on which the copies of the Gazette containing the said notification were made available

(6)**"Bulk Mix Delivery (BMD)"** Vehicle means a vehicle that transports non-explosive materials in bulk, for mixing to form non-cap sensitive explosives and for loading directly into boreholes;

(7) **"cap sensitive"** means an explosive which explodes on initiation by a detonator of minimum strength;

(8) **"carrying box"** means metal case or box specially manufactured for carrying limited quantity of blasting explosives and initiating explosives;

(9) **"Chief Controller"** means the Chief Controller of Explosives;

(10)**"Compatibility Group"** shall have the meaning assigned to it in United Nations Economic and Social Council's Committee of Experts on transport of dangerous goods resolution number 645 G (XXIII), dated 26-04-1957 to the public; and further resolution number 1995/5, dated 10-07-1995;

And, whereas, objections and suggestions were received from the public on the said draft rules, have been duly considered by the Central Government;

Now, therefore, in exercise of powers conferred by Sections 5 and 7 of the Explosives Act, 1884 (4 of 1884) and in supersession of the Explosives Rules, 1983, except as respect of things done or omitted to be done before such supersession, the Central Government hereby makes following rules, namely :—

THE EXPLOSIVES RULES, 2008

(11)**"competent person"** means a person recognised by the Chief Controller who is adequately experienced and well conversant in safe manufacture, storage, transportation, handling, as the case may be of explosive.

(12)**"compressor mounted motor truck or tractor"**means a compressor mounted on mechanically propelled motor truck or tractor duly licensed for transport of explosives to blasting site for use in well sinking, the design of which is approved by the Chief Controller;

(13)**"Conservator"** includes any person acting under the authority of the officer or body of persons appointed to be conservator of a port under Section 7 of the Indian Ports Act, 1908 (15 of 1908);

Chapter I

(14)**"Controller"** includes Joint Chief Controller of

Preliminary

1. Short title and commencement.—(1) These rules may be called the Explosives Rules, 2008.

2. Definitions.—(1) In these rules, unless the context otherwise requires,—

(2) **"Act"** means the Explosives Act, 1884 (4 of 1884);

(3) **"adirvettu or kadina"** means sound producing device made of iron tube having strong base with a hole at the side close to the bottom, which is filled with gunpowder and fired by means of trail of dry loose gunpowder and approved by the Chief Controller of Explosives;

(4) "Ammonium Nitrate Fuel Oil Explosive (ANFO)" means an explosive mixture of ammonium nitrate and fuel oil which is not cap sensitive, but does not include emulsion or slurry explosive or site mixed explosive (SME);

(5) **"authorised explosive"** means an explosive included in the list of authorised explosives referred to in rule 6 and published by the Central Government from time

Explosives, Deputy Chief Controller of Explosives, Controller of Explosives and Deputy Controller of Explosives;

(15)**"deflagration"** means an explosive reaction such as a rapid combustion that moves through an explosives material at a velocity less than the speed of sound in that material;

(16)**"Departmental Testing Station"** means the testing station of the Petroleum and Explosives Safety Organisation;

(17)**"detonating fuse"** means a cord containing a centre-core of high explosive authorised by the Chief Controller which is used for initiating high explosives charges and to transmit explosion from one explosive charge to another;

(18)**"detonator"** means a tubular device —

(a)one end of which is closed and the other—

(i)left open for the insertion of safety fuse for the purpose of initiating explosion within the tube; or

(ii)fitted with wires or other device for that

(b)which is loaded with a charge of initiating explosives, the charge being so designed as to produce an explosion that would communicate to the other tube similarly constructed and charged or other explosive charge and includes cord relay connector;

(19)**"display fireworks"** means a group of authorised manufactured fireworks assembled at site, solely for the purpose of display;

(20)**"emulsion explosive"** means an explosive material in the form of emulsion, containing substantial amount of oxidizer dissolved in water droplets surrounded by an immiscible fuel;

(21)**"explosive actuated device"** means any tool or special mechanised device or gas generator system which is actuated by a small charge of explosive or which releases and directs work through the explosive charge;

(22)**"explosive limit"** means the maximum quantity of explosives permitted by the licensing authority to be stored or processed in a particular premises;

(23)**"explosives van"** means a mechanically propelled vehicle for transport of explosives by land and includes a road van;

(24)**"fireworks"** means low hazard explosive comprising of any composition or device manufactured with a view to produce coloured fire or flame, light effect, sound effect, smoke effect (coloured or natural), or combination of such effects and includes fog-signals, fuses, rockets, shells, percussion caps;

(25)**"fireworks composition"** means any chemical compound or mechanically mixed preparation of an explosive or inflammable substance that is used for the purpose of making manufactured fireworks and is not included in any other class of explosives, and includes any star or coloured fire composition;

(26)**"foreman's certificate"** means certificate of competence issued by the Controller to a person who is conversant with the process of manufacturing fireworks or safety fuse, as the case may be, and associated hazards for the purpose of supervision of such activities by him;

(27)**"Form"** means a Form specified in Schedules annexed to these rules;

(28)**"gunpowder"** means gunpowder ordinarily so called and is an explosive containing a mixture of a inorganic nitrate, charcoal and sulphur;

(29)**"high explosive"** means explosive which is characterised by a very high rate of reaction, development of high pressure, and presence detonation wave, but does not include fireworks and safety fuse;

(30)**"licensing authority"** means authority empowered to issue licence or certificate or permit specified in Part 1 of Schedule IV;

(31)**"magazine"** means a building or structure (other than an explosives manufacturing building) intended for storage of explosives, specially constructed in accordance with the specification provided under these rules or of a design and approved by the Chief Controller;

(32)**"manufactured fireworks"** means low hazard explosive contrivance containing explosive or combination of different classes, namely, Class 1 or Class 2 or Class 3 or Class 4 or Class 6 given in Part 1 of Schedule I of these rules or any explosives that come under Division 2 or Division 3 or Division 4 under Class 7 given under the said Part;

(33)**"man-limit"** means the maximum number of individuals permitted by the licensing authority to work inside a particular premises for manufacture or processing of explosives;

(34) **"marking or detection agent"** is a substance which is introduced into the plastic explosives in a certain minimum quantity for the purpose of detection by means of vapour detection technique;

(35)**"micro cord fuse"** means a fuse other than safety fuse or quick match, characterised by fixed rate of burning and visible lateral propagation of fire, used for igniting fireworks;

(36)**"non-explosive emulsion matrix"** means water in oil emulsion or a slurry matrix, which is neither cap sensitive nor booster sensitive;

(37)**"occupier"**, in relation to a premises means a person a who has the control and is responsible for managing the affairs of the premises, and includes, in relation to any explosives, the person in possession of the explosives :

Provided that in relation to a—

(a) proprietary firm, the proprietor; or

(b)partnership firm, the partner nominated in writing by all other partners; or

(c)company, the director nominated in writing by the board of directors; or

(d)society or association, the office-bearer nominated in writing by the governing body;

shall be deemed to be the occupier;

(38)**"permitted explosive"** means authorised explosive which is permitted by the Director General of Mines Safety to be used in underground coal mines;

(39)**"plastic explosive"** means as explosive material in flexible or elastic sheet form formulated with one or more high explosives which in their pure form have a vapor pressure less than 10^{-4} Pa at a temperature of 25 degree Celcius and is formulated with a binder material, and is, as a mixture, malleable or flexible at normal room temperature;

(40)**"permit"** means permit issued by Chief Controller or Controller or District Magistrate under these rules for specific purpose;

(41)**"prohibited explosive"** means explosive which is prohibited by the Central Government under Section 6 of the Act;

(42)**"propellant"** means an explosive that normally functions by deflagration and is used for propulsion

(43)**"protected works"** includes buildings or structures in which persons dwell, work or assemble, college, school, hospital, theatre, cinema house, shop, market, factory, place of worships, place of storage of hazardous substances, highway or public road, railway line, navigable waterways, cross country above ground pipelines, dams or reservoirs, overhead high tension power lines, but does not include cart tracks not in regular use, agricultural wells and pump sets connected therewith;

(44)**"quick match"** means a fuse for igniting charges of fireworks and consists of strands of cotton or jute yarn coated or impregnated with black powder (gun powder), wrapped and enclosed with paper with the help of binding material and which burns but does not explode and which does not contain its own means of ignition;

(45)**"safety cartridge"** means a cartridge for small arms as defined in the Arms Act, 1959 (54 of 1959) or the rules made thereunder, the case of which can be extracted for the small-arms after firing and which is so closed as to prevent any explosion in one cartridge being communicated to other cartridges;

(46)**"safety fuse"** means a fuse for igniting charges of other explosives which burn and does not explode and which does not contain its own means of ignition, and which is of such strength and construction and contains an explosives in such quantity that the burning of such fuse would not communicate laterally with other like fuse;

(47)**"Safety management plan"** means the comprehensive plan for ensuring and managing safety in an explosive manufacturing factory;

(53)**"slurry explosive"** means an explosive material in the form of slurry, containing oxidizer, fuel, thickener and water;

(54)**"small arm nitro-compound"** means nitro-compound adapted and intended exclusively for use in cartridges for small arms;

(55)**"store house"** means independent building other than a magazine meant to possess fireworks not exceeding 5000 kilogrammes or safety fuse not exceeding 50000 meters, not for sale but for transfer to own licensed shop;

(48)**"safety distance"** means the distance necessary under these rules to be kept clear between any licensed factory shed, magazines, store house or other licensed premises and protected works as referred to in Schedule VIII;

(49)**"Schedule"** means a Schedule annexed to these rules;

(50)**"shock tube"** means a plastic tube that contains explosives charge authorised by the Chief Controller, which on initiation transmits a firing signal through the tube to the detonator;

(51)**"shot firer"** means a competent person recognised and certified by the Controller for carrying out blasting operation using explosives in areas not coming under the Mines Act, 1952 (35 of 1952);

(52)**"Site Mixed Explosive (SME)"** means an explosive charge formed in the borehole and includes manufacture of ANFO, using a BMD vehicle;

(56) **"testing officer"** means such officer as the Central Government may appoint in this behalf;

(57) **"transfer"** with its grammatical variations and cognate expressions includes letting on hire, lending, giving and parting with possession of explosives or the transfer of explosives from one magazine to another magazine of the same licensee or transfer of packed boxes of fire works from a store house of the licensee to the shop owned by the same licensee;

(58)**"traverse or mound"** means a solid mass of earth, sand, concrete or a brick work around a building or magazine or stack containing explosives provided for protection against effects of explosion;

(59)**"UN Classification"** means United Nations recommendations in the Model Regulation on the Transport of Dangerous Goods published vide ST/SG/ AC.10/l Rev 12 in ISBN 92 -1-13974-5, which specify testing procedures to be carried out by competent authority while classifying dangerous goods for transport;

(60)**"UN Number"** means the four digit identification number assigned to the article or substance under the United Nations system for transport and storage of dangerous goods as stated in the Model Regulation on the Transport of Dangerous Goods published vide ST/SG/ AC.10/1/Rev 12 in ISBN 92 -1-13974-5;

(61)**"UN Regulation"** means the United Nations Model Regulations on the Transport of Dangerous Goods published vide ST/SG/AC 10/1 Rev. 12 in ISBN 92-1-13974-5;

(2) All other words and expressions used but not defined in these rules but defined in the Act shall have the meanings respectively assigned to them in the Act.

3.Scope of applicability of rules and exemptions.—(1) These rules are applicable for regulating the manufacture, import, export, transport, and possession for sale or use of explosives.

(2)Nothing in these rules shall apply to the manufacture, possession, use, transport or importation of any explosives by—

(a)any of the Armed Forces of the Union and Ordnance Factories or other establishments of such Forces for own use in accordance with

the rules or regulations made by the Central Government;

(b)Indian railways while cuting as carrier ;

(c)any person employed under the Central or State Government in exercise of any power under the Act or these rules.

(3)When the Chief Controller is of the opinion that an explosive does not pose a risk to public to warrant application of all or part of these rules or the nature and characteristics of explosives present such a minimal and limited risk as not to warrant application of these rules, the Chief Controller may exempt such explosives from the purview of all or part of these rules, with such other conditions as deemed necessary.

(a) The manufacturer shall have a valid export order with him; and

(b) The sound level for these fire crackers shall conform to the sound level prescribed in the country to which these are intended to be exported.

5.**Safety distance categories of explosives.—**(1) Explosives are divided into four categories according to the risks which they present when initiated, namely :—

(a)Category X—Those explosives, which have a fire or a slight explosion risk or both but the effect of which will be local.

(b)Category Y—Those explosives, which have a mass fire risk or a moderate explosion risk, but not the risk of mass explosion.

Chapter-II

Classification, Categorisation and Authorisation

4.Classification of explosives.—(1) For the purposes of these rules, the explosives shall be classified in the manner specified in Schedule I. The dual system of classification shall be retained for five years from the date of commencement of these Rules, thereafter only UN classification shall be applicable.

(2)If any explosive falls within the limits of more than one class as defined in Schedule I, it shall be deemed to belong exclusively to the last number of such classes.

(3)The fireworks are classified into the following categories depending upon the desired pyrotechnique effect :—

(i)Sound emitting fireworks.—Fireworks with sound level not exceeding 125 dB (AI) or 145

(c)Category Z—Those explosives, which have a mass explosion risk and major missile effect.

(d)Category ZZ—Those explosives, which have a mass explosion risk and minor missile effect.

(2)If any question arises as to whether any explosive belongs to Category X, Category Y, Category Z or Category ZZ, the matter shall be referred to the Chief Controller whose decision shall be final.

(3)The safety distances shall be followed as per tables specified in Schedule VIII.

6.**Authorisation of explosives :—** (1) No person shall manufacture, import, export, transport, possess, sell or use any explosive unless it has been declared as an authorised explosive, by an order issued by the Chief Controller and published by the Central Government in the

bursting. For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 log 10(N) dB, where N = number of crackers joined together;

(ii)Colour or light emitting fireworks.—such fireworks which emit colour or light and having sound level not exceeding 90 dB (AI) at 4 m distance from the point of bursting;

(iii)Display Fireworks.— Any product of fireworks assembled at the site for the purpose of display including shell of diameter exceeding 25 mm, multiple shots or cake products of any diameter exceeding 25 nos., of shots in a product and lance network or other products as approved by the Chief Controller; and

(iv)Fireworks for export purpose.—Firecrackers for the purpose of export may be manufactured with high sound level or product of such size and design as approved by the Chief Controller subject to following conditions :

Provided that nothing in this rule shall apply to the manufacture and possession for test and trial purposes and not for sale of a new explosive composition under development at a place specially approved for the purpose by the Chief Controller.

(2)Any person desirous of including an explosive in the list of authorised explosives shall submit an application to the Chief Controller.

(3)The application submitted in accordance with sub-rule (2) shall be accompanied by following particulars, namely :—

(a)the nature and composition of the explosives and in case of plastic explosives, the name and percentage of the marking agent;

(b)the limiting range of percentage of each ingredient of the explosive, including substitutes, if any;

(c) method of function, purpose of use and performance characteristics of the explosives and instructions governing its use;

(d)in the case of a new explosive to be manufactured in India, the process of manufacture stating safe operating procedures

forming the explosive, and the quality of the ingredients employed in its manufacture;

(c)stability — determination of stability after

and precautions; subjection to such varying environmental

(e)where an explosives is enclosed in a case or other contrivance, the dimensions of the case or other contrivance, the quantity, nature, brand of explosives contained therein and markings thereon;

(f)the box, wrapping or other container in which the explosive will be handled, used or displayed or otherwise distributed including the markings thereon;

(g)the package in which the explosiv d including the markings thereon;

(h)country of origin with name and address of the manufacturer, UN Classification and UN number of the explosives; recommended methods of disposal; material Safety Data Sheet for the explosives and raw material;

(i)fee referred to in Part 2 of schedule IV to these rules;

(4)When, in the opinion of the Chief Controller, an explosive in respect of which an application is made may conditions as would tend to produce spontaneous ignition or variation in sensitiveness of an explosive;

(d)ignition characteristics — ignition point, behaviour on ignition, liability to spontaneous ignition, behaviour on ignition in bulk;

(e)mechanical sensitiveness — determination of sensitiveness to friction and impact;

(f)air gap and transmission of detonation;

(g)velocity of detonation;

(h)determination of strength;

(i)composition of gases evolved upon explosion;

(j)ensure that plastic explosives are detected by vapour detection technique;

(k)such other tests and field trials as the Chief Controller may specify.

(8)An explosive tested in accordance with sub-rule (7) shall be declared by the Chief Controller to be an authorised explosive if, he is satisfied that such an explosive can be safely manufactured, handled, stored, transported and used.

properly be considered for authorisation, the Chief Controller shall instruct the applicant as to the samples required and the manner of forwarding the same to the Departmental Testing Station, or to any other authority specified by the Chief Controller in this behalf for testing thereof along with prescribed fees.

(5)No person shall send a sample of an explosive unless such person has first received the instruction referred to under sub-rule (4).

(6)No person shall send a sample of an explosive otherwise than in accordance with instructions given by the Chief Controller under sub-rule (4).

(7)(i) Sample forwarded under sub-rule (4) shall be subjected to such of the tests enumerated in clause (ii) of this sub rule as are necessary having regard to the nature and type of explosive submitted to ensure that the explosive is capable of being safely manufactured, handled, stored transported and used.

(ii) The tests referred to in clause (i) pertain to —

(a)physical properties including consistency, reaction tendency to absorb moisture, segregation in transport or otherwise of the constituents, exudation, behaviour at low temperatures, specific gravity and such other physical properties as may be considered necessary;

(b)chemical composition —determination of the percentage composition of the ingredients

(9)Authorisation issued by the Chief Controller under sub-rule (8) in respect of indigenous explosives shall be valid as long as it is included in the list of authorised explosives, and conforms to the descriptions outlined while issuing authorisation.

(10)In case of explosives manufactured in a foreign country and already authorised in that country, the manufacturer, in addition to the report of tests stated in clause (ii) of sub-rule (7) shall submit the information regarding country of origin, the copies of various approvals or permissions obtained for testing, packaging, markings etc. required for authorisation of the explosives as well as for export of explosives from the country of manufacture to other countries and report of such other tests as the Chief Controller may specify.

(11)The authorisation issued by the Chief Controller of Explosives under sub-rule (8) in respect of any imported explosives shall be valid for one year from the date of authorisation, if the foreign manufacturer certifies that there has been no change in the composition or any other characteristics of the explosives.

(12)The Chief Controller, may, on his own accord once in a year or on the request of manufacturer or importer or exporter or consignor, subject any explosive to the tests enumerated in clause (ii) of sub-rule (7) to verify the approved composition and characteristics of the explosives at the Departmental Testing Station and as a result of the

tests or otherwise, if the Chief Controller is satisfied that the explosive is no longer safe for manufacture, handling, storage, transport or use, or unfit for continuation of authorisation, may delete such explosive from the authorised list after giving the applicant or licensee an adequate opportunity of being heard.

(13)The samples required for testing under sub-rule (7) or sub-rule (12) and as required in rule 3 of rule 45 and testing fees as prescribed in Part 2 of Schedule IV, shall be submitted by the licensee or applicant.

(14)The Chief Controller, on completion of the testing of an explosive, in pursuance of sub-rule (7) shall deicide whether or not the explosives should be declared to be an authorised explosive; and

laboratory and direct to carry out such tests, as he may consider necessary.

(ii)The applicant shall submit test report seeking permission for trial manufacture in the plant or manufacturing unit.

(iii)On receipt of test report, the Chief Controller may permit manufacture of limited quantity of the explosives in the manufacturing unit or plant on trial basis.

(iv)In case of existing plants or conventional type of explosives, the Chief Controller may permit trial manufacture directly in the manufacturing plant without manufacturing in the laboratory scale.

(a) where the explosive is declared to be an authorised explosive, shall assign the class including any division and sub-division and category within which the explosive falls;

(b) where the explosive is not declared to be an authorised explosive, shall communicate the same with reasons thereof to the applicant.

(v)On being satisfied with the reports of the tests as may be required by the Chief Controller, he may issue field trial permission under such conditions as he may specify.

(vi)After field trial, applicant shall submit to the Chief Controller the reports of field trial and necessary fees referred to in Part 2 of Schedule IV of these rules.

(vii)For permitted explosives, test report and field trial report from Central Mining Research

(15)(i) The Chief Controller shall maintain a list of authorised explosives showing-

(a) the brand or trade name of the explosives;

(b) the name and address of the manufacturers;

(c) the class, including any division and sub-divisions thereof, within which each explosive falls ; and

(d) the safety distance category and the corresponding UN Classification and UN Number.

(ii) The list of authorised explosives shall be published by the Chief Controller from time to time.

(16)(i) No alteration in the composition, limiting percentage of ingredients or substitute ingredients, the process of manufacture, the description and construction of the case or the contrivance as submitted in accordance with sub-rule (3) shall be carried out without prior approval of the Chief Controller.

(ii) The Chief Controller may order fresh test to be carried out if the proposed alteration in the percentage, composition, nature of ingredients, process of manufacture or construction of the case or contrivance of the explosive are likely to change the results of the original test prescribed in these rules.

(17)For trial manufacture and field trial of new explosive composition, the following procedure shall be observed, namely :—

(i)Upon scrutiny of the proposal, the Chief Controller may grant permission to manufacture trial batches of the explosives in laboratory not exceeding explosive limit of

Institute and Central Mine Planning and Design Institute are required to be submitted to the Chief Controller and in case of non-permitted explosives field trial report from reputed mining or construction company.

(viii)On receipt of report and being satisfied, the Chief Controller may authorise the explosives and permit its manufacture on regular basis provided that nothing in this sub-rule shall be applicable for fireworks.

Chapter III

General provisions

7.Control over manufacture, import, export, transport, possession for sale or use of explosives.—No person shall manufacture, import, export, transport, possess for sale or use an explosive except as authorised or licensed under these rules.

8. Pre-requisite for grant of licence.—No licence shall be granted unless otherwise all the relevant provisions laid down under these rules are complied with and all conditions which are contained in the licence forms under Part 3 or Part 4 of Schedule V are satisfied.

9. No licence needed in certain cases.— Notwith-standing anything contained in rule 7, no licence shall be necessary for the following cases, namely :—

(1)manufacture of explosive in small quantities in an established laboratory for research and development purpose with prior permission

from the Chief Controller under the conditions as may be imposed by him;

(2)manufacture, possession and sale of colour or star matches with prior permission from the Chief Controller under the conditions set forth by him in SET- XVI referred to in Part 4 of Schedule V:

Provided that the manufacture, possession and sale of colour or star matches shall be done in a factory approved by the Chief Controller and any person desiring to manufacture, posses and sell colour or star matches shall submit to the Chief Controller, an application, plans of the proposed building and site drawn to scale, description of process or work to be carried out, detailed process of

10.**General Restrictions.—**(1) Restriction on manufacture—(a) No explosives shall be manufactured at any place except at a licensed factory with manufacturing process duly approved by the licensing authority.

(b)No person shall manufacture any plastic explosive without adding marking agent as per the International Civil Aviation Organisation Resolution A 27-8 based on United Nations Security Council Resolution 635 of 14th June, 1989 and United Nation General Assembly Resolution 44/29 of 4th December, 1989;

(2)Restriction on import or export —

(a)No person shall import or export any explosive except under and in accordance with the conditions of licence granted under these rules.

(b)No explosive shall be imported or exported except at its ports notified by the Central

manufacture and prescribed scrutiny fee; Government

(3)transport of explosives by other than mechanical propelled vehicle, within the factory premises, from place of storage to place of use, port of import to storage place within the notified port premises;

(4)transport of safety fuse and fireworks;

(5)possession of fireworks not exceeding one hundred kilogram for own use and not for sale;

(6)possession by any person for his own private use and not for sale of gunpowder not exceeding five kilograms and fifty metres of safety fuse in any State other than Bihar, Kerala, Tamilnadu and West Bengal and of small arm nitro-compound not exceeding five kilograms except in the State of Kerala;

(7)possession by Indian Railways of flare lights or other explosives for its own use and not for sale to any other person by transfer or otherwise for maintaining railways, tracks, tunnels if the provisions of the Act and these rules are otherwise complied with;

(8)possession of any explosive, which is not for sale and is required solely for the navigation of aircraft, when kept in an aircraft for use therein, or for distribution to other aircraft or to aerodromes or at an aerodrome for use there or for distribution to aircraft or to other aerodromes:

Provided that the maximum quantity so possessed shall not exceed twenty five kilograms when carried in an aircraft and fifty kilograms when kept at an aerodrome; and

(9)possession and sale from a shop of amorces and sparklers in quantity not exceeding one hundred kilogram.

(c)No licence shall be granted for import or export of any explosives unless—

(i)the explosive is an authorised explosive;

Form CE 1 by the testing officer to have passed the tests specified in Schedule III;

(iii)the explosive is certified to have passed such analysis or examination, if any, as the Commissioner of Customs in consultation with the Chief Controller, by order in writing, may require in order to determine its composition or condition.

(iv)plastic explosives are added with marking agent as per International Civil Aviation Organisation Resolution A 27-8 based on United Nations Security Council Resolution 635 of 14th June, 1989 and United Nation General Assembly Resolution 44/29 of 4th December, 1989;

(v)the exporter shall submit Form AE-7 duly filled in and signed, indicating therein clearly the purpose and intent of export, the UN classification and UN Number, the Material Safety Data Sheet for the explosives intended to be exported, means of transport, detailed address of importer.

(3)**Restriction on transport** —(a) Any explosive of Class 5 (Fulminate) or detonator or any other explosive of Class 6 (Ammunition) containing its own means of ignition or initiation, or an explosive of Class 7 (Fireworks) shall not be transported in the same carriage, or save as provided in Part 3 of Schedule VI in the same vessel and shall not be

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conveyed or handled with any explosives not of the class and division to which it belongs.

(a)No person shall transport any explosive with explosives belonging to Compatibility Group K referred to against serial number 10 in Table 1 under Part 3 of Schedule I, in a vehicle.

(b)No person shall transport explosives of Class 3 or Class 2 along with detonators.

(c)Nothing in clauses (a) and (b) shall apply to the transport of explosives of Class 2 and/or Class 3, safety fuse, detonating fuse and detonators in a compressor mounted motor truck or tractor covered under a licence as per these rules.

(4) **Restriction on delivery—**(a) No person shall deliver or despatch any explosive to any one other than a person who—

(i)is the holder of a licence to possess the explosives or the agent of a holder of such a licence duly authorised by him in writing in this behalf; or

(ii)is entitled under these rules to possess the explosives without a licence.

(b)The explosives so delivered or despatched shall in no case exceed the quantity, which the person to whom they are delivered or despatched is authorised to possess with or without a licence under these rules.

(c)No person shall receive explosives from any person other than the holder of a licence granted under

(7)**Restriction on employment of children, intoxicated persons and certain other persons -** No person shall employ, allow or engage a person—

(a)who is below the age of eighteen years; or

(b)who is in a state of intoxication; or

(c)who is of mentally or physically challenged,

for manufacture, storage, sale, loading, unloading or transport of explosives or to enter any premises licensed under these rules.

(8)**Restriction on toxic, corrosive or flammable substances—**No toxic, corrosive or flammable or otherwise dangerous substances shall be allowed in the premises meant for manufacture, import, export, transport, storage, sale or handling of explosives.

11.**Employment of competent person.—**(1) All operations associated with handling of explosives shall be carried out under supervision of competent person.

(2)No explosive shall be manufactured in any building or part thereof except under the supervision of a competent person employed by the licensee who shall be fully conversant with the process of manufacture of explosives, hazards connected therewith and the provisions of these rules.

(3)Professionally qualified person with Degree or Diploma in Engineering or Graduate in science having minimum 5 years experience in manufacturing explosives shall be an essential qualification and Diploma in Industrial safety as an optional qualification to be the competent person referred to in sub-rules (1) and (2) who shall be

these rules. y the licensee to ensure compliance of safety

(d)No person shall receive from or transfer explosives to any person for a temporary storage or safe custody in a licensed premises unless prior approval is obtained from the Controller or licensing authority having

norms in a factory for manufacturing explosives of Class 1 with the capacity exceeding one hundred and fifty tonnes per annum or explosives of Class 2, 3 or explosives accessories like detonating fuse, detonator, shock tube,

jurisdiction. initiating composition.

(5)**Restriction on handling explosives—**No person shall handle or cause to be handled any explosive between the hours of sunset and sunrise :

Provided that nothing in this rule shall apply to handling of explosives during the dark hours if proper illumination is provided in the area and the place is guarded.

(6)**Restriction on smoking and articles likely to cause fire or dangerous substance—**No person shall smoke, and no fires, lights or articles or substances of a flammable nature or liable to spontaneous ignition, or act to cause or communicate fire or explosion such as acids, petroleum, carbide of calcium, compressed gases or such other hazardous substances, or radio or cell phone or radio frequency operated device or any such communication system or devices shall be allowed at any time within fifteen metres from the place where an explosive is stored or at any place where an explosive is handled during transport

(4)Foreman holding foreman's certificate shall be the competent person referred to in sub-rule (2) who shall be employed by the licensee to ensure compliance of safety norms in a factory for manufacturing fireworks or safety fuse.

12.**Protection from lightning and thunderstorm.-**(1) Every magazine or process building shall have attached thereto one or more efficient lightning conductors designed and erected in accordance with specification laid down by Bureau of Indian Standards.

(2)The connections to various parts of earth resistance of the lightning conductor terminal on the building to the earth shall be tested at least once in every year by a qualified electrical engineer or any other person holding a certificate of competency in this behalf from the State Government and a certificate showing the results of such test and the date of the last test shall be conspicuously

one hour before and during such handling. displayed.

(3)Whenever a thunderstorm appears to be imminent in the vicinity of a magazine or store house or processes building, every person engaged in or about such magazine or store house shall be withdrawn to a safe distance from such magazine and store house shall be kept

(hereinafter referred to as the IMDG Code in these rules) or International Air Transport Authority code or United Nations recommendations on the transport of Dangerous Goods and permitted by the Chief

closed and locked until the thunderstorm has ceased or Controller:

the threat of it has passed.

Provided that process building used for manufacture of fireworks, explosives of class 7, may not be provided with lightning conductor unless otherwise specified by the licensing authority.

13.Repair and maintenance of the premises.—The interior of every building or room used for storage of explosives and the benches, shelves and fittings in such building or room shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel and the detachment of any grit, iron, steel or similar substance so as to come into contact with explosive in such building and such interior benches, shelves and fittings shall, so far as is reasonably practicable, be kept clean and free from grit.

(1)A cemented trough at least fifteen centimetres deep shall be provided near each entrance of a magazine or storehouse. Such trough shall be kept filled with clean water and no person shall enter the magazine or storehouse without dipping overshoes or feet in such a trough so as to remove any grit or dust.

(2)Oiled cotton, oiled rags or oiled waste or any articles liable to spontaneous ignition shall not be taken into any magazine or storehouse used for storage of explosives.

(3)Before repairs are done to any magazine or storehouse or part thereof used for storage of explosives, that magazine or storehouse or part thereof shall be cleaned by removal of all explosives and by thorough washing.

14.Packing of explosives.—(1) No person shall import, export, tender for transport, cause to be transported, possess or sell any explosive unless -

(a)it is packed in the manner laid down in Schedule II;

(b)the container or package is marked in accordance with rule 15;

(c)the packages conform to the relevant standard of Bureau of Indian Standards or other standards accepted and approved by the Chief Controller;

(d)packages of explosives for export or import conform to the requirements of the tests as specified for various classifications under International Maritime Dangerous Goods Code

Provided that nothing in this rule shall apply to explosives in the process of manufacture.

(e)The firecrackers for export purpose shall have different colour packing and shall carry a declaration printed thereon. "Not for sale in India. Only for export".

(2)For the purpose of requirements of clause (c), container or package shall be tested in the Departmental Testing Station or other Testing Stations recognized by the Chief Controller. For testing in the Departmental Testing Station, fees as specified in Part 2C of Schedule IV shall be payable.

(3)An explosive which is not an authorised explosive but which is required to be transported for the purposes of test in connection therewith shall be packed in such manner as may be directed by the Chief Controller.

15.Marking on explosives and packages.—(1) Marking on packages - (i) The outer package shall be marked in conspicuous indelible character, by means of a stamping, embossing or painting with—

(a)the word "EXPLOSIVES";

(b)the name of authorised explosive;

(c)the number if any of the Class and the Division including sub-division to which it belongs;

(d)the safety distance category of explosive;

(e)the name of the manufacturer;

(f)identification number of the package;

(g)the net weight of explosives;

(h)gross weight of the package;

(i)date of manufacture and batch number;

(j)UN Classification and UN Identification number (for export packages);

(k)in case of plastic explosives, the words"marking agent added as per International Civil Aviation Organisation Resolution A 27-8"referred in sub-clause (iv) of clause (c) under sub-rule (2) of rule 10; and

(l)a paper slip containing the above details shall be kept inside the package :

Provided that in the case of safety fuse or fireworks, clauses (a) and (l) may be omitted and the words "safety fuse" or "Fireworks"shall be marked.

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(ii)In case of fireworks, the names of the items, for example - amorces, paper caps, serpents eggs etc. as appropriate shall be marked.

(iii) Every manufacturer shall on the box of each fire cracker shall mention details of its chemical content, sound level and that it satisfies requirements as laid down by the Chief Controller. Firecracker meant for export shall have a different colour packing from those intended to be sold in India and a clear print indicating that they are not to be sold in India.

(2)**Marking on explosives of Class 2 and Class 3.—**In the case of explosives of Class 2 and Class 3, each of the cartridges or primary containment of explosives shall be printed or embossed legibly on it with—

(a)the word "EXPLOSIVES";

(b)the name of explosives and in case of plastic explosives additional words 'marking agent

Provided that in case of explosives of the Class 6 (Ammunition) or Class 7 (Fireworks), the weight shall be deemed to be the weight of the completed article inclusive of the case or contrivance in which the explosive is contained, but shall not include the weight of the inner package and outer packing box.

17.Split explosive to be destroyed.—If any explosive escapes from the package in which it is contained, or is split, such explosive shall immediately be carefully collected and destroyed in a safe manner as provided in these rules.

18. Precautions against danger from water, heat or pollution.—(1) In the case of any explosive which is liable to be dangerously affected by water, due precautions shall at all times be taken to prevent water from coming in contact with such explosive.

(2) Packages containing explosives shall not be allowed to remain in the sun or exposed to excessive heat:

Provided that nothing in sub-rule (2) shall apply to

added'; sun-drying of gunpowder or fireworks or drying of

(c)weight of explosive;

(d)diameter of the cartridge;

(e)name of manufacturer; and

(f)in case of permitted explosive, the letter P1, P3 or P5 as the case may be.

(3)**Marking on explosives of Class 6.—**In the case of explosives of Class 6 Divisions 2 and 3 the name of the manufacturer in full or abbreviated form shall be printed or embossed legibly on every metre or on every piece, as the case may be. The abbreviated form, if used, shall be registered with the Chief Controller.

(4)**Marking on fireworks.—**In case of fireworks, explosive composition, quantity of such composition, whether sound emitting crackers or colour or light emitting crackers, sound level, a caution or warning indicating the name of the item, manufacturer's name, method of firing

explosives in a licensed factory under controlled conditions.

(3)The statutory provisions regarding pollution, as applicable as far as these rules are concerned, shall be complied with.

19.Special precautions against accident.—(1) No person shall commit or attempt to commit any act which may tend to cause a fire or explosion in or about any place where an explosive is manufactured, stored or transported.

(2)Every person possessing explosives and every person in charge of or engaged in the import, export, manufacture, sale, transport or handling of explosives shall at all times comply with the provisions of these rules and the conditions of the licence relating thereto and observe all due precautions for the prevention of thefts or accidents by fire or explosion.

(3)Every person shall prevent any other person from committing any such act as is prohibited under sub-

and precautions to be taken both in words and pictorial rule (1).

view shall be printed on each piece of fireworks and cardboard box and where adequate space is not available on the fireworks, such caution or warning shall be printed on a separate label and inserted in the smallest packet or carton.

(5)**Marking on other classes of explosives.—**Explosives of classes other than those mentioned in sub-rules above shall be marked as directed by the Chief Controller.

(6)**Defacing of marking prohibited.—** No person shall alter or deface any printing or marking on the explosives or packages thereof.

16.Weight of explosives.—The weight of explosives when referred to in these rules shall not include the weight of the packing box in which the explosives are packed:

20.Provision of mounds.—(1) **For manufacturing factory**—Every building used for production, handling, storage, testing of explosives, in a licensed factory unless otherwise exempted by the licensing authority shall be surrounded by a substantial mound which shall be of a type and design approved by the licencing authority:

Provided that the licensing authority may allow blast walls in place of substantial mound if such blast walls can be provided for the purpose.

(2)**For magazines.—**A substantial mound shall be provided near a magazine, if so required by the licensing authority. Such mound shall be of a type approved by the licensing authority and shall always be maintained in good condition to provide effective protection. The mound shall be provided near the magazine and constructed as per

approved specification, if applicable and shall be shown in the drawing for approval by the authority.

21. Restriction on unauthorised persons and provision of guards.—(1) The licensee shall at his own expense provide security guards for safe custody of the factory or magazine for storage of explosives other than

exported to the Controller as well as District Magistrate in the form prescribed in Part 5 of Schedule V so as to reach the above authority within tenth day of every succeeding quarter.

(4)In case the licensing authority is the District Magistrate, the licensee shall submit quarterly return to

fireworks. such authority.

(2) For the purposes of sub-rule (1), the security guards shall be of such strength as the District Magistrate may consider it to be sufficient.

25.Records of accidents.—Records of all accidents occurring within the licensed premises shall be maintained and shall be made available to the inspecting authority.

(3) A factory licensed under these rules for **Chapter IV**

manufacture of explosives shall be surrounded by a wall or security fencing at least two metres high of such strength and construction as to effectively prevent entry of unauthorised persons.

(4)The area enclosed by such wall or fence referred to in sub-rule (3) shall cover the safety zone required to be kept clear from any of the process buildings or sheds.

(5)The licensee for a magazine shall provide a shelter for the security guard(s) on duty near the magazine at a suitable location not less than thirty metres away from the magazine.

22. Use of electrical equipment.—(1) No electrical equipment shall be used in places where explosives are being manufactured, handled or stored except with the prior permission of the Chief Controller.

(2) The electrical equipment shall be of a type acceptable to the Chief Controller.

23. Prohibition of certain acts. —No person

Special Provisions for Manufacture of Explosives

26.**Approval of manufacturing process.—**(1) No new explosive after its inclusion in the list of authorised explosives shall be manufactured unless the process of manufacture is approved by the licensing authority and his permission obtained in writing.

(2)A person intending to manufacture an authorised explosive shall submit to the Chief Controller separately for each explosive a project report in duplicate containing, among other relevant data, the following particulars, namely :—

(a)the detailed process starting from the raw materials, to the finished product describing the plant and equipment, quantities of materials handled, operating conditions and parameters, nature of controls and safety devices provided in the proposed method of treating effluents and waste explosives;

shall— (b)the nature and composition of the explosives;

(1)provide false or misleading information in any application made or statement submitted under these rules; or

(c)the limiting percentage of each ingredient of explosives;

(d)the specification of the various raw materials including substitutes, if any, used in the process of manufacture;

(2)falsify, erase or fraudulently alter any entry in any log, document or other record required to be kept or maintained under these rules; or

(e)physical and chemical characteristics of final product;

(3)change or alter any licence, permit or other documents issued under these rules.

24. Maintenance of records and submission of returns.—(1) Every person holding a licence granted under these rules for manufacture, possession, sale, use or transport of explosives shall maintain records in the prescribed forms specified in Part 5 of Schedule V and shall produce such records on demand to an authority specified in rule 128.

(2)Stock books in prescribed forms shall be page numbered and certified by any officer authorised under these rules and such records shall be retained for period of three years, unless otherwise directed by an authority.

(3)The licensee shall submit quarterly returns of explosives (other than fireworks) manufactured, received, sold or transferred or used or destroyed or imported or

(f)name and percentage of marking agent to be added in plastic explosives for detection by vapour detection technique;

(g)safety management plan as stated in sub-rule (3) to be followed by the company in case of high explosives or blasting accessories;

(h)any other particulars as may be required by the licensing authority;

(i)prescribed scrutiny fee.

(3)Safety management plan referred to in clause (g) of sub-rule (2) shall include the following, namely :—

(a)assigned responsibilities and organisational structure, including resource assessment;

(b) hazard identification, risk assessment and control;

(c)provision of information, education and training to the work force, contractors and visitors;

(d)accident reporting and investigation;

(e)emergency response planning and preparedness such as first aid, testing of emergency plan once in a year;

(f)provision of escape route;

(g)evacuation plan, appropriate fire fighting controls, consequence minimising steps like control of spills, appropriate off-site response plan etc.;

(h)maintenance of records;

(i)maintenance of schedules for plant and equipment;

(j)standard operating procedures where absence of such procedures may adversely affect safety;

(k) availability of Material Safety Data Sheet (MSDS);

(l) security of explosives;

(m)transport and storage of explosives;

(n)material handling;

(o)explosives and man limit in each building and location;

(p)precaution against adverse conditions, natural as well as artificial such as lightning, earthquake, load shedding, trips in the process, etc.;

(q)restriction of source of ignition;

(r)segregation of incompatible materials;

(s)disposal of waste explosives and ingredients, including burning grounds procedures;

(t)competence of personnel for tasks; and

(u)safety meetings, self auditing and external safety auditing of system and procedures.

(4)The Chief Controller, after scrutiny of the project report, the Safety management plan and after making such further enquiries as may be considered necessary, may if he is satisfied, approve the process for each explosive separately.

ascertain if these conform to the particulars given under sub-rule (2).

27.Submission of safety management plan to District Magistrate—The applicant shall submit a copy of the safety management plan to the District Magistrate.

28.Buildings to be used for specified purpose only.—Every building in a factory shall be used only for the purpose specified in the licence granted under these rules :

Provided that the licensing authority may temporarily permit the use of a building for a purpose other than that specified in the licence after satisfying himself that such a change is safe and for smooth operation of the process of manufacture.

29. Interior of buildings to be suitably finished.—A building in which explosives or any ingredient thereof which either by itself is possessed of explosives' properties, or which when mixed with any other ingredient or article also present in such building is capable of forming an explosive mixture or an explosive compound, kept or resent, or in the course of manufacture is liable to be, shall be a

(5)No person shall make any change in the process, nature and composition of explosives, specification and limiting percentages of raw materials and ingredients without prior approval of the licensing authority.

(6)The Chief Controller may cause at any time any test on any raw material, ingredients or explosives to

danger building; and the interior of every such building, and the benches, shelves and fittings in such building (other than the machinery) shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel and the formation and detachment of any grit so as to come into contact with the explosive or ingredient thereof in such building and such interior benches, shelves and fittings shall, as far as reasonably practicable, be kept free from grit and otherwise clean.

30.Restriction of articles liable to spontaneous ignition.—Oiled cotton, oil rags and oil waste and any other article liable to spontaneous ignition shall not be taken into any building where explosives are kept except for the purpose of immediate supply and work or immediate use in such building and upon cessation of such work or use, shall forthwith be removed.

31.Use of special tools and implements.—No tools or other implements shall be used or allowed to be present in a building used for carrying out process of manufacture (hereinafter referred to as process building) unless they are of wood, copper, brass or soft metal or material, or are covered with safe and suitable material.

32.Particulars to be exhibited on process building.—The particulars mentioned hereunder shall be prominently marked or exhibited in every process building, namely :—

(1)**outside the building—**

(a)the name and identification number of the building as per plan approved by the licensing authority; and

(b)man - limit and explosives limit.

(2)**inside the building—**

(a) man limit and explosives limit; (b) general safety instructions; (c) operating instructions; and (d) safe process details.

33.Removal of foreign matter from ingredients.—

part of it shall not be taken into use unless the same is permitted by the licensing authority.

(5)A record of all such servicing and maintenance shall be maintained till the time of next servicing and maintenance and in case of any major repairs or replacement to any machinery or equipment, such record should be preserved till replacement of such machinery and

No ingredient shall be made or mixed into an explosive equipment.

unless it has been thoroughly treated by sifting or other effective means for the detection and removal of all foreign objects or matters that might cause danger.

34.Removal of explosives and materials expeditiously.—(1) All explosives processed in a process building shall immediately be removed to the next process building or a licensed magazine or storehouse, as the case may be, and no explosive shall be allowed to accumulate in any process building.

(2) Where the process in the manufacture of explosive in a process building has been completed, all substances that have been brought into the building for use in that process but not used, and that are not immediately required for use in another process in the same building, shall immediately be removed from the building.

35.Training to personnel.—Every person engaged in the manufacturing factory shall be imparted training in

38.Facilities for testing.—Proper testing facilities for routine physical and chemical examination of raw materials, intermediates and final products shall be provided by the licensee in the licensed premises at places specially approved by the Chief Controller or Controller :

Provided that the Chief Controller or Controller, as the case may be, may direct the licensee, by a written order to provide such additional facilities at such places which, in his opinion, are necessary for maintaining desired quality and safe manufacture of explosives in the licensed factory.

39.Requirement of samples for testing.—Whenever the Chief Controller or Controller requires under sub-rules (7) or (12) of rule 6 testing of any explosive by the Departmental Testing Station, the manufacturer or the applicant shall submit the samples of the explosives, free of cost to the Departmental Testing Station in required

safety by competent person periodically during quantities :

manufacture, handling, transportation and st s of such trainings shall be maintained.

36.Use of vehicles.—Every vehicle and every trolley or receptacle in which finished or partly finished explosives are transported in a licensed factory area shall—

(a)unless otherwise approved, have no exposed iron or steel in its interior;

(b)be closed or covered while the explosives or its ingredients are being transported.

37.Maintenance and repairs of building, plant and equipment.—(1) Every building in the licensed premises shall always be maintained in a fit condition. All plants and equipments in a licensed factory shall be regularly serviced and maintained in a proper and fit condition by the licensee.

(2)Before carrying out repairs to any building or part thereof, including any equipment therein, that building or equipment shall be thoroughly made free of explosives by a suitable safety process of removal.

(3)If the repairs to the building or a part thereof require use of any source of fire, licensee shall issue a written permit allowing use of such articles under the supervision of safety personnel and a copy each of such permit shall be preserved for a period of three months and presented on demand by an inspecting authority.

(4)If major repairs are done to a building or any part thereof including any machinery therein, that building or

Provided that if considered necessary, Chief Controller or Controller, as the case may be, may draw samples through his subordinate officers.

40.Stoppage of manufacture of explosives.—If at any time any operation in the process of manufacture of an explosive is no longer found to be safe or behaviour of the explosives during the course of storage, transport or use is no longer found to be safe due to change in the nature and composition of explosives, or due to any other reason, the licensing authority may issue an order in writing directing the licensee to stop forthwith the manufacture of such explosive till such time the operation or the composition is rectified to the satisfaction of the licencing authority.

41.Exclusion from list of authorised explosives.—If the licensing authority stops the manufacture of any explosives under rule 40 or if any explosive is not manufactured for a continuous period of five years, such explosives may be excluded from the list of authorised explosives by the Chief Controller.

42.Disposal of waste explosives.—(1) The laboratories, process buildings and machineries therein shall be swept and cleaned at the end of each shift or earlier if necessary, and the sweepings and waste explosives shall be properly collected and stored in a safe place and safely disposed of.

(2)Adequate facilities for safe destruction under the supervision of a person adequately competent and at

a place approved by the licensing authority in the licensed premises shall be provided by the licensee for the materials collected under sub-rule (1).

Chapter V

Special Provisions for Import or Export of Explosives General

43.Import or export by land.—No licence for import or export of explosives by land shall be granted without the previous sanction of the Central Government in each case, wherein the Central Government may impose conditions and restrictions in consultation with the Chief Controller.

44.Compliance of port rules.—The provision of rules regulating to handling of explosives at the notified ports issued under the Act and respective port rules and bye-laws shall be observed.

45.Import of explosives.—(1) Declaration by importer - A person holding an import licence granted under these rules shall furnish a declaration to the Chief

(b) The master or the agent, as the case may be, shall deliver to the officer referred to in clause (a), without charges, samples of all the explosives of which samples are required to be taken. One sample consisting of at least two cartridges shall be drawn from a group of cases having the same batch number and same date of manufacture. The samples, if the sampling officer so requires, shall be taken from particular package indicated by him.

(c)If the taking of any samples under clause (a) involves the opening of any case, such case shall, before it is opened, be removed to an isolated position at a safe distance from any place where consignments of explosives are stored.

(4)**Despatch of samples to the testing officer—** (a) The officer taking a sample of any explosives under sub rule (3) shall affix to it the name of the ship, the name of the consignee, name of the explosive and such other distinguishing marks, as he may think necessary and shall forward it to the testing officer without delay.

(b) In the case of a Nitro-compound or a Chlorate mixture, the date and batch number shall also be affixed to the sample.

Controller—

(a)in Form RE-8 under Part 5 of Schedule V as soon as ship carrying explosives sails from the port of loading;

(b)in Form RE-9 under Part 5 of Schedule V as soon as any shipment of explosives is cleared from the port of import.

(2)**Declaration by master of ship or by the ship's agent -** (a) The master of every ship carrying explosives or the agent for such ship shall give the Conservator of the port not less than forty eight hours' notice of its intended arrival at the port.

(b)The master of every ship carrying explosives shall deliver to the pilot before entering any port, a written declaration in

Form CE-2 under his signature:

Provided that if in anticipation of a ship's arrival, the agent for such ship delivers to the Conservator of the port a written declaration as aforesaid under his signature, no such declaration need to be made by master of the ship.

(5)**Testing of samples—**(a) The testing officer shall test, analyse or examine, as the case may be, the samples and shall without delay forward to the Commissioner of Customs a test certificate in CE-1 in duplicate under his signature certifying whether the explosives have passed the prescribed tests, analysis or examination.

(b) The Commissioner of Customs shall, as soon as practicable and ordinarily within twenty four hours after receipt of the report of the testing officer, forward a copy each of the certificate in CE-1 to the Chief Controller and the Controller of the area having jurisdiction.

(6)**Permission to land explosives—**(a) No imported explosives shall be permitted to be landed by the Commissioner of Customs except with the prior permission of the Chief Controller or the Controller duly authorised in this behalf who shall issue such permission if the explosives have passed the prescribed tests, analysis or examination and after making such other enquiries as considered

(c)Every declaration delivered to a pilot under necessary.

clause (b) of sub-rule (2) shall be made over by him without delay to the Conservator of the port and all declarations received by the Conservator of the port shall be forwarded by him, with all convenient despatch to the Commissioner

(b)If the Commissioner of Customs, after receiving the permission under clause (a) and the licence for import of such explosive under these rules and after making such further enquiries as he deems necessary, is satisfied that

of Customs. the explosives can lawfully be imported, he shall permit it to be landed.

(3)**Sampling procedure from imported**

(a) When the master of, or the agent for, a ship has made declaration required by sub-rule (2) as the Commissioner of Customs of the port may authorise in this behalf shall board the vessel and obtain samples of all such explosives intended to land at the port and are required under these

(c) Nothing in this rule shall affect the power of Commissioner of Customs to detain the explosives under any other law for the time being in force.

(d)The imported explosives shall be removed from the port premises by the importer as expeditiously as

rules to be tested, analysed or examined. possible.

(7)**Restrictions on airports for import.—**(a) No explosive shall be imported by air except at the airports the aircraft is ready for loading explosives and explosives so brought to the airport shall be loaded directly into the

authorised for this purpose by the Central Government aircraft.

from time to time.

(b)Any explosive not permitted by International Air Transport Authority regulations or by the Director General of Civil Aviation, shall not be imported by air.

(c)Any person intending to import explosives by air shall obtain landing permit from the Director General of Civil Aviation and produce a copy thereof to the Chief Controller prior to issue of licence.

(d)A person holding a licence for import of explosives by air or his authorised agent shall give a

(d)If for any unforeseen circumstances, explosives brought to the airport cannot be loaded into the aircraft, such explosives shall be stored in an isolated shed under guard as directed by the Officer in charge of the airport and all due precautions against theft, fire or explosion shall be taken.

(e)Any person intending to export explosives by air shall obtain permission from the Director General of Civil Aviation and produce a copy thereof to the Chief Controller prior to grant of export licence.

declaration well in advance before bringing the explosives **Chapter VI**

into the airport to the Officer in charge of the airport, the Commissioner of Customs and the Chief Controller giving full particulars of the explosives intended to be imported.

(e)Proper arrangements shall be made by the importer to take direct delivery of the imported explosives and remove the same as expeditiously as possible from the airport.

46.Export of explosives.—(1) Declaration by exporter or his agent—(a) The exporter or his authorised agent shall give the conservator of the port not less than forty eight hours' notice of his intention to bring explosives to port for export and shall not bring the explosives to any part of the port without prior permission in writing from the

Special provisions for Transportation of Explosives General

47.Procedure to be followed during transportation.—(1) Every consignment of explosives transported under licence shall be accompanied by a pass issued by the consignor in Form RE-12 under Part 5 of schedule V.

(2)Such pass shall be attached to the way-bill, invoice or despatch note as the case may be.

(3)A copy of every pass issued under sub-rule (2) shall forthwith be sent by the consignor to—

(a)the licensing authority who issued the licence of the consignor;

said officer. (b)the Controller and the District Superintendent

(b)The exporter or his authorised agent shall produce before the conservator of a port—

(i)licence granted under these rules for export of explosives in question;

(ii)a certificate issued by the exporter to the effect that the explosives have been packed and marked in accordance with the UN regulations.

(c)The exporter or his authorised agent shall also submit to the Chief Controller, on export of each consignment and within twenty-one days from the date of actual export, copy of bill of lading and return in Form

of Police in whose jurisdiction the place from which the consignment is sent is situated;

(c)the Controller and the District Superintendent of Police in whose jurisdiction the place to which the consignment is sent is situated.

48.Certificate of safety.—(1) Before transporting or tendering for transport an explosive of Class 3 (Nitro-compound) or Class 4 (Chlorate mixture), the consignor shall attach to the consignment a valid certificate in

Form CE-1 under Part 6 of Schedule V or certified copy thereof granted by testing officer.

(2)The certificate referred to in sub-rule (1) shall be issued by the testing officer after conducting the tests as RE-10.

(2)**Export of explosives by air.—**(a) Explosive of any kind and quantity, which is not included in International Air Transport Authority regulations or not permitted by Director General of Civil Aviation , shall not be exported by air.

(b)A person holding a licence for export of explosives by air or his authorised agent shall give a declaration well in advance before bringing the explosives into the airport to the Officer In charge of the airport or the Commissioner of Customs and the Chief Controller giving full particulars of the explosives intended to be exported.

(c)Explosives meant for export shall be brought to the airport after making proper arrangements and only after per the methods of testing set forth in Schedule III as applicable to such explosives in accordance with the existing specification prescribed by the Bureau of Indian Standards.

(3)Certificate referred to in sub-rule (1) shall be valid for a period of twelve months from the date of issue.

49.Transport in passenger carriages and vessels.—Save as otherwise expressly provided in these rules, no explosive shall be transported in any carriage vessel or aircraft plying for or carrying passengers on hire.

50.Documents to be available during transport.—(1) The operator of a vehicle used for the transport of

explosives except fireworks and safety fuse shall ensure that the driver or any attendant thereof has in his possession the following documents during transport, namely :—

(a)copy of indent in form RE-11 under Part 5 of Schedule V, issued by the consignee;

(b)copy of transport pass in form RE-12 under Part 5 of Schedule V issued by the consignor;

(c)copy of road van licence;

(d)original copy of bill of explosives being transported.

(2)The documents mentioned in sub-rule (1) shall be produced on demand by the authority empowered under rule 128.

51.Maximum consignments allowed.—The quantity of explosives except fireworks and safety fuse transported shall not exceed—

(1)ten tonnes or half the carrying capacity of a railway wagon whichever is less ;

(2)ten tonnes or the maximum carrying capacity of a road van, permitted by road transport authority, whichever is less :

Provided that if the explosives to be transported is of Class 2, the quantity of explosives shall not exceed fifteen tonnes or the maximum carrying capacity of the van, whichever is less;

(3)one tonne in any animal drawn carriage;

(4)twenty two and half tonnes or the maximum quantity permitted in International Maritime Dangerous Goods Code, as applicable whichever is less, in any one boat;

(5)quantity specified in International Air Transport Authority regulations or Director General of Civil Aviation whichever is less, in any one aircraft;

(6)twenty five kilograms in tractor compressor licensed under these rules by the District

(iii)stating the true name, description and quantity of explosives to be transported.

(b)he has received a reply and intimation in writing from the Station Master that he is prepared to receive the explosive for immediate despatch;

(c)he has received a confirmation from the consignee regarding readiness to receive explosives as authorised under these rules.

(3)No person shall bring, send or forward to, or upon any railway any explosives which the Indian Railways have by any notice of regulation for the time being in force notified that it will not receive.

53.Place and time of loading and unloading.—(1) Every explosive shall be loaded and unloaded at a safe distance from the station buildings, passenger platforms, dwelling houses, factories, public buildings and other buildings or places where persons assemb azardous goods are stored or handled.

(2)Every explosive intended for transport by road whether under a licence or otherwise shall be loaded only near a licensed magazine, licensed store house or other licensed premises.

(3)Loading of explosives after sunset within a licensed factory may be carried out up to 22 hours at a well-illuminated place approved by the Chief Controller.

(4)Nothing in sub-rule (1) and sub-rule 5 of rule 10 shall apply to any operations connected with the transport of explosives by passenger train or by a pick-up vehicle or a van or a goods train used for the transport of small consignments or in the brake-van.

54.Carriage or vessel or aircraft to be in readiness for loading.—No explosive shall be brought to any place of loading until the carriage or vessel or aircraft into which it is to be loaded is at that place in readiness to receive it.

55.Delay in transit to be avoided.—The person or persons in charge of carriage or vessel carrying explosives shall, not stop or delay at any place for a longer time than may be reasonably necessary, not stop unnecessarily at

Magistrate. any place where such stopping would reasonably be

52.Despatch of explosives to carriers for transport.—(1) No person shall despatch any explosives except fireworks to a carrier other than the Indian Railways for the purpose of transport.

(2)No person shall despatch any explosive to the Indian Railways for the purpose of transport unless—

(a)he has given the Station Master a notice in writing—

(i)of his intention to tender such explosives;

(ii)certifying that the explosives have been packed and marked in accordance with

dangerous to public.

56.Repairs to conveyance.—Before any repairs or alterations are commenced in any part of a carriage or vessel in which explosives are being, or have been transported, all due precautions should be taken to remove all such explosives, or any remnants thereof, and the space in such carriage or vessel in which such explosives have been carried shall be thoroughly washed out to ensure that no remnants of explosives remain therein.

57.Small quantities of fireworks exempted.—Nothing contained in rules 49, shall apply to the transport of manufactured fireworks in the custody of a person entitled to possess them without a licence under sub-rule

rules 14 and 15; (5) of rule 9:

Provided that not more than five kilograms of manufactured fireworks, securely packed in original packing, shall be so transported in any motor vehicle used for conveyance of more than six passengers.

58.Safety distances between carriages and boats.-Where the explosives in two or more carriages, other than motor vehicles or in two or more boats, travelling in company exceed the maximum quantity or International Maritime Dangerous Goods Code, as applicable, or as stated in rule 51, whichever is less, for any one carriage or boat, such carriages or boats shall not approach within fifty metres of one another :

Provided that—

(1)nothing in this rule shall apply to the transport of explosives by rail;

(2)the Conservator of the port may waive the requirement within the limit of a port if in his opinion it is impracticable to secure compliance within this rule.

59.Transport by water.—All the safety provisions stated in Part 3 of Schedule VI annexed to these rules shall be complied with for transport of explosives by water within India.

60.Transport by Rail.—All the safety provisions stated in Part 4 of Schedule VI annexed to these rules shall be complied with for transport of explosives by Rail within India

61.Licence for road van or compressor mounted motor truck or tractor. —(1) No person shall transport or cause to be transported any explosive in a road van or

(2)Nothing in sub rule (1) shall apply to—

(a)any explosive of Class 7(Fireworks), or safety fuse ; or

(b)other explosives not exceeding five kilograms in weight.

63.Restriction on transport of explosives except fireworks and safety fuse by vehicles other than road vans or compressor mounted motor truck or tractor.—

No explosive other than fireworks or safety fuse shall be transported by any carriage, which is not, a road van or compressor mounted motor truck or tractor:

Provided that any carriage, which is not a road van or compressor mounted motor truck or tractor, may transport any explosive if the distance from the place of loading to the place of destination does not exceed ten kilometres and the following conditions are complied with :

(a)the transport of explosives is restricted to the period between sunrise and sunset;

(b)the explosives are accompanied by at least two able-bodied guards;

(c)a red flag is displayed on each cart;

(d)the packages containing explosives are suitably covered by a tarpaulin, and secured.

64.Loading of explosives.—(1)The person in charge of loading explosives into a vehicle or aircraft for carriage shall ensure that the explosives are stowed in such a manner that—

(a) during normal course of transport they will move and will be protected against friction bumping; and

compressor mounted motor truck or tractor unless such vehicle is licensed under these rules to transport explosives. The road van shall meet the requirements laid down in specification 5 of Schedule VII and compressor mounted motor truck or tractor shall meet the requirements laid down in specification 5 thereof and shall be approved by Chief Controller.

(2)The licensee of road van shall maintain records of all transactions in Form RE- 6 under Part 5 of Schedule V.

(b) should it become necessary to unload any of the explosives, those remaining can be re-stowed with as little disturbance as possible.

(2)No person shall load or unload explosives onto or from a licensed vehicle, except when the engine of the vehicle is stopped, the wheels choked and the hand brake applied.

(3)The licensee of road van, compressor- mounted truck or tractor, as the case may be, should engage only such drivers or cleaners, whose antecedents are verified by the local police. A list of such drivers or cleaners along with all personal particulars should be made available to the local police in advance to carry out the verification. Re-verification of such staff should be carried out at regular intervals, preferably once in a year.

62.Prohibition of transport within Streets, Public places and other specified areas.—

(1)No person shall transport or cause to be transported any explosives on any road within the limits of a municipality or cantonment where such a road is specifically prohibited for plying vehicles carrying explosives.

65.Restriction on use of towed vehicles.—No person shall transport explosives other than fireworks in any towed vehicle or tow any vehicle transporting explosives.

66.Carriage of explosives with other substance prohibited.—No other goods shall be carried with explosives in any vehicle :

Provided that not more than one thousand kilograms of fireworks may be carried along with other goods not being flammable and hazardous in nature.

67.Loading, unloading, maintenance and operation of road vans.—(1) After the loading or unloading of explosives in or from any such vehicle is commenced, the operation shall not be stopped until completed and shall be completed as expeditiously as possible.

(2)No bale hooks or other metal tools shall be used for the loading, unloading or handling of packages containing explosives nor shall any package or container of explosives be thrown or dropped during such operation.

(3)The vehicle shall be maintained in safe working condition suitable for transport of explosives.

(4) The driver or operator of a vehicle carrying or containing an explosive shall not stop unnecessarily or for a longer period than is reasonably required, and shall avoid stops or places where public safety is in danger :

Provided that where a van transporting or containing explosives is parked over night due to the reasons beyond the control of licence or the driver, the premises in which the van is parked-

(a)shall not be used for any purpose that might give rise to the presence therein of an open flame, matches or any substance or article likely to cause explosion or fire;

(b)shall be away from any habitation of any godown containing articles of a flammable nature or other hazardous goods:

Provided further that the nearest police station shall be informed about the location and temporary parking of the van.

(5) The driver or operator of any vehicle carrying or containing an explosive shall not drive or conduct the same in a dangerous or reckless manner.

(6)Routes passing through centres of dense habitation shall, as far as possible, be avoided.

(7)A road van while transporting explosives shall always be attended to by two armed guards at the expense of the licensee. If the consignment of explosives is likely to pass through sensitive areas notified by the Ministry of Home Affairs, it should be escorted by armed police escort or guard, provided by the District Police Administration.

(8)When there is a convoy of two or more vehicles transporting explosives, where applicable, a space of at least 300 metres shall be maintained between each such

68.Lighting of stationary vehicles. —Where a road van carrying explosives is stationary on a public road at night, otherwise than by reason of delay incidental to the flow of traffic, driver or the licensee of the van shall keep the parking lights on throughout the stay and if necessary shall also provide reflectors or use blinking lights in such position as to convey an effective warning of the presence of the road van to the drivers of other vehicles.

69.Accident to the vehicle.—(1) Where a vehicle transporting explosives is involved in an accident, fire or any other occurrence that causes a significant delay in the delivery of explosives or damage to the vehicle or explosives, the driver or any other authorised person accompanying the vehicle shall—

(a)comply with all requirements of law relating to road accidents;

(b)inform the nearest police station;

(c)inform the licensee who shall-

(i)inform the Chief Controller and the Controller in whose jurisdiction the accident has taken place giving the full details of explosives carried and accident;

(ii)arrange for safe storage and custody of explosives till examination by the Controller if required, and then arrange for transport to the destination or place designated by the Controller;

(2)In case of a breakdown of road van, the driver or the person in charge of the vehicle shall—

(a)make or permit to be made minor repairs if the repairs can be made without hazard;

(b)where major repairs are required, prevent such repairs being made until the explosives are transferred to another vehicle or are removed from the vehicle and stored under proper security at a safe distance from the highway and at least three hundred metres from any inhabited premises;

vehicle. (c)inform the licensee who shall in turn inform

(9)Road van transporting explosives shall not be driven past fires of any kind on or near the highway or other thorough fare.

(10)The driver of the road van while transporting explosives shall, before crossing any unmanned railway crossing or before crossing any main highway, bring the road van to a full stop and proceed only when the way is

the Chief Controller and the Controller in whose jurisdiction the vehicle is broken down giving full details of the explosives and the circumstances attending the breakdown.

70.Fire extinguishers to be provided.—(1) Every road van shall be provided with two fire extinguishers of minimum two kilograms capacity. One of the extinguishers

safely clear. shall be capable of dealing with fire involving electric

(11)The original licence for van granted under these rules or attested copy of the same shall always be carried circuits and the other, with other inflammable components. (2)The fire extinguishers shall always be kept in

in the vehicle. good working condition.

(3)The fire extinguishers shall be located where they will be convenient and ready for immediate use.

(4) The fire extinguishers shall be examined and recharged according to the manufacturers' recommen-dations.

Chapter VII

Special Provisions for Possession, Sale and Use of Explosives

71.Possession in licensed premises.—(1) A person holding licence for possession of explosives granted under these rules shall store the explosives only in premises specified in the licence.

(2)The licensed magazine or store house shall be kept securely closed or locked at all times except when goods are being placed in or taken from it or when it must be kept open for some other purpose in connection with the management of such premises.

(3)The keys of the licensed magazine shall, at all times be kept secured in licensee's own custody or of his authorised agent and shall be produced for opening the magazine or store house whenever so required by an inspecting officer.

(4) The name and address of the person alongwith passport size photograph with whom the keys will be kept shall be furnished to the licensing authority and the Controller having jurisdiction.

72.Repacking or opening of packages.—(1) An explosive shall, as far as practicable, be sold in original packages. If the quantity sold to any person is less than the quantity of explosives packed in the original packing, such quantity shall be packed in a safe and proper manner in a substantial package which shall be clearly marked with following markings, namely :—

(a)Name of the explosive;

(b) Class, Division and sub-division as per to Schedule I;

package and if the outer package gets damaged in a manner that the explosives contained therein cannot be stored or transported, such explosives shall be repacked after giving prior intimation well in advance to the Controller having jurisdiction over the area with all necessary details.

74.Storage of explosives in excess of the licensed quantity.—(1) The quantity of any kind of explosives kept in any licensed magazine or storehouse shall not exceed the quantity entered in the licence against such kind of explosives.

(2)Notwithstanding anything contained in sub-rule (1), the licensing authority may issue a permit for a period not exceeding fifteen days, on receipt of the such fees as prescribed under Part-2 of Schedule IV, to a licensee for storage of explosives in excess of the licensed quantity when such authority is satisfied that such excess storage is essential and unavoidable due to circumstances beyond the control of the licensee :

Provided that such excess storage shall not exceed one third of the licensed quantity.

(3)The licensing authority may refuse to grant a permit for excess storage of explosives if such excess storage is of a repeated nature.

75. Permit for temporary possession of manufactured fireworks in excess of the licensed quantity.—A permit for a period not exceeding thirty days may be granted by the licensing authority to a licensee for fireworks shop to possess one-third in excess of the licensed quantity on receipt of fees as prescribed under Part 2 of Schedule IV :

Provided that adequate floor area to accommodate excess storage is available in such shop.

76.Quantity of explosives to be purchased in a given period of time.—A licensee for possession, sale or use of explosives in and from a magazine licensed in Form LE-3 shall purchase only such quantity of explosives in a given period as may be specified in the licence.

(c)Quantity of explosive packed;

77. Accountability and transaction of

(d)Name of licensee with licence number of the magazine from where the explosive is being supplied and packed;

(e) Date of packing;

(f) Name and address of the consignee.

(2)No repacking shall be carried out in a magazine or storehouse.

(3)Repacking of explosives shall be done, where necessary, in an approved open sided shed having smoothly finished dust-free floor at a distance as approved by the licensing authority.

73.Explosives not to be kept in damaged boxes.—The licensee of every magazine or storehouse shall ensure that the explosives are always kept in their original outer

(1) All licenses granted under these rules shall bear the photograph of the licensee or occupier.

(2) For purchase and transaction of explosives, following procedures shall be observed—

(a)Indent Form RE-11 under Part 5 of Schedule V shall be signed by the licensee or his authorised representative;

(b)Photograph and specimen signature of the licensee or occupier shall be filed with the supplier of explosives;

(c)Photograph, specimen signature and address of the licensee's authorised representative duly attested by the licensee or occupier shall be filed with the supplier of explosives;

(d)The supplier of explosives shall verify the photograph and signature before effecting the delivery;

(e)The authorised representative mentioned in clause (c), shall represent one licensee only for receiving explosives on his behalf :

Provided that nothing in this rule shall be applicable for fireworks and safety fuse.

78.Magazine, store house, or shop to be at ground level.—A magazine, store house, or shop shall be constructed at ground level only. A magazine or storehouse shall be a single storey building.

79.Stacking of packages.—Packages shall be stacked in magazine or store house in such a manner so as to facilitate inspection of the condition of all packages stored and to read the marking particulars of each package and in the manner provided under Schedule VII.

80.Storage of compatible explosives.—(1) Detonators or gunpowder or fireworks shall be stored only in separate rooms or compartments meant for each in

(c)not be situated under the upper floor used for the purpose of dwelling;

(d)not be situated under or nearby any staircase or lift;

(e)be accessible for fire fighting; and

(f)have no electrical apparatus or battery or oil lamp or similar equipments capable of producing spark or ignition and all electrical wiring in the shop be fixed and effectively sealed or conduited or mechanically protected; the main switch or circuit breaker be provided at the immediate accessible position outside the premises.

84.Temporary shops for possession and sale of fireworks during festivals.—During festivals, the District Magistrate may issue temporary licences for possession and sale of fireworks in a temporary shop subject to the following conditions namely :—

(1) The fireworks shall be kept in a shed made of non-flammable material, which is closed and secured so as to prevent unauthorised persons having access thereto.

(2) The sheds for possession and sale of fireworks shall be at a distance of at least three metres from each other and fifty metres from any protected work.

(3) The sheds shall not face each other.

(4) No oil burning lamps, gas lamps or naked lights shall be used in the shed or within the safety

(2) Paper caps or colour or star matches shall be stored in separate compartments.

81.Specification for construction of a magazine.—

Magazine used for storage of explosives shall be constructed as per Specification 2 of Schedule VII .

82.Store house for fireworks or safety fuse.—(1) Store house shall be used only for possession of fireworks not exceeding five thousand kilograms or safety fuse not exceeding fifty thousand meters and not for sale. (2)A person holding licence for possession and sale of fireworks or safety fuse from a shop shall be eligible for a licence for one store house per shop.

(3)The store house shall be constructed as per Specification 3 of Schedule VII.

83.Explosives permitted for possession and sale from shop.—(1) No explosives, other than fireworks, gun powder, small arm nitro compound and safety fuse, permitted in licence shall be stored in a shop for possession

distance of the sheds. Electrical lights, if used, shall be fixed to the wall or ceiling and shall not be suspended by flexible wire. Switches for each shop shall be fixed rigidly to the wall

and sale. and a master switch shall be provided for each

(2)**Construction of shop.—**The shop shall be row of sheds.

constructed of a brick, stone or concrete and the shop shall be closed and secured so as to prevent unauthorised person from having access thereto.

(3)The premises shall have storage area not less than nine square meters and not more than twenty five square meters.

(4)The shop shall —

(a)be located on the ground floor of a building completely separated from other parts of the building by substantial walls having

(5) Display of fireworks shall not be allowed within fifty metres of any shed.

(6) In one cluster not more than fifty shops shall be permitted.

85.Special precautions to be observed for fireworks.—(1) Subject to other provisions of this rule, fireworks shall not be placed or kept in a shop window used for display of goods.

(2)Fireworks in the shop shall be kept in a spark proof receptacle, or the original outer packet in which they

were received if that package is effectively sealed and in good order and condition.

(2)Explosives shall not be taken to a point nearer than fifty metres from any site until such site is ready for

(3)A receptacle or package containing fireworks charging.

shall be kept in a position away from and clear of shop traffic and to be separated from all articles of a flammable or combustible nature.

(4)Where a package containing fireworks is opened for sale, the fireworks shall immediately be placed in a clean,

(3)Explosives shall not be conveyed in any vehicle with any other materials, tools or implements other than that required for the purpose of blasting.

(4)Explosives left over after the day's work shall be returned to the licensed premises from which the same was dust free and spark proof receptacle. taken.

86.Safety distances to be maintained.—(1) Factory or magazine—The factory licensed for manufacture or magazine licensed for possession, sale or use of explosives shall maintain safety distance specified in Schedule VIII and condition of licence, as the case may be.

(2) Store house.—The store house licensed for possession of fireworks or safety fuse shall maintain safety distance of three metres from protected works and minimum fifteen metres from any such premises or any other premises used for storage of similar explosives, flammable or hazardous materials.

(3) Shop.—The shop licensed for storage and sale of small arms nitro-compound, fireworks or safety fuse shall be at a distance of minimum fifteen metres from any such premises or any other premises used for storage of similar explosives, flammable or hazardous materials.

87.Sale of other article prohibited.—The premises in which small arms nitro-compound or fireworks or gun powder or safety fuse is kept shall be used only for possession and sale of such explosives and for no other purposes when small arms nitro-compound or fireworks or

(5)The carrying box used for carrying explosives from original packages shall be maintained thoroughly cleaned and dried and shall be kept closed when not in use. The containers shall be provided with either handles or carrying straps of adequate strength and shall be conspicuously marked with the word “Explosives”.

(6)Detonators shall be conveyed in special containers constructed of non metal or non conductive material and these shall not be carried with other explosives. Batteries, dry cells and other sources of electric energy shall not be carried in the vehicle carrying detonators.

(7)No detonator shall be taken out from a case or container unless it is required for immediate use.

91.Explosives to be examined before use.—(1) Explosives before use shall be visually examined for any visible defects and any defective explosive shall not be used.

(2)Any explosive showing signs of deterioration of any kind should be reported immediately to the licensing authority and such explosive set-aside for examination by

gun powder or safety fuse is stored : such authority.

Provided that the premises may be used for other purposes except for inflammable and dangerous substances when small arms nitro-compound or fireworks or gun powder or safety fuse are not stored in the premises.

88.Fireworks to be sold from licensed premises only.—No person shall sell fireworks from any premises other than those licensed under these rules.

89.Restriction on preparation of charges.—(1) An explosive of one description shall not be converted into an explosive of another description.

(2)The explosives of Class 2 or Class 3 shall be used in their original cartridge packing and such cartridges shall not be cut to remove explosives for making cartridges of different sizes.

90.Restriction on conveyance of explosives to or at the blasting site.—(1) Explosives shall only be conveyed from the licensed storage premises to near the site in original unopened packages or in closed containers used solely for that purpose and securely locked. No manufacturer shall directly supply the cartridged explosives for charging

(3)Gunpowder, which is found to be caked owing to the moisture, shall not be used.

(4)Frozen nitro-glycerine explosives shall not be used until thawed under the supervision of experienced persons. Where freezing is likely to occur only low freezing explosives shall be used.

92.Precautions to be observed at site.—(1) The electric power at the blasting site shall be discontinued as far as practicable before charging the explosives.

(2)No work other than that associated with the charging operations shall be carried out within fifteen metres of the holes unless otherwise specified to the contrary by the licensing authority.

(3)When charging is completed, any surplus explosives, detonators or fuses shall be removed from the vicinity of the hole and stored at a distance which would prevent sympathetic detonation in the event of a charge detonating in any hole.

(4)The holes, which have been charged with explosives, shall not be left unattended till the blasting is

of boreholes at the blasting site. completed.

(5)Care shall be taken to ensure that fuse or wires **Chapter VIII**

connected to the detonators are not damaged during the placing of stemming material and tamping.

93.Suitable warning procedure to be maintained.—The licensee or an authorised person appointed by the licensee to be in charge of the use of explosives at the site shall lay down a clear warning procedure consisting of warning signs and audible signals and all persons employed in the area shall be made fully conversant with such signs and signals.

94.Precautions to be observed while firing.—(1) The end of the safety fuse should be freshly cut before being lighted.

(2)The exploders shall be regularly tested and maintained in a fit condition for use in firing. An exploder shall not be used for firing a circuit above its rated capacity.

(3)The electric circuit shall be tested for continuity before firing. All persons other than the shot firer and his assistants, if any, shall be withdrawn from the site before testing the continuity.

(4)For the purpose of joining, the ends of all wires and cables should have the insulation removed for a maximum length of 5 centimeters and should then be made clean and bright for a minimum length of 2.5 centimeters and the ends to be joined should be twisted together so as to have a positive metal contact.

95.Precautions against stray currents.—Where electrically operated equipment is used in locations having conductive ground or continuous metal objects, tests shall be made for stray currents to ensure that electrical firing can proceed safely.

96.Person in charge to be responsible.—The licensee or a shot firer employed by him to be in-charge of blasting operations shall take all precautions against fire, accident, loss, pilferage etc., of explosives and will be personally held responsible for any contravention of the relevant provisions of the Act or Rules thereof.

97.Blasting operations in mines.—Blasting operations in mines shall be carried out as per the Mines Act, 1952(35 of 1952) and such operations shall be carried out according to regulations framed under that Act. The shot firer employed for blasting operations shall take all precautions against fire, accident, loss, pilferage etc., of the explosives and personally be held responsible for any contravention of the provisions of the Explosives Act, 1884 and the rules thereof.

98.Blasting operation by shot firer in areas other than mines.—(1) Blasting operation shall be carried out by a shot firer holding valid certificate issued by the Controller.

(2)A copy of the certificate shall be carried by the shot firer during blasting operations.

(3) The shot firer shall take all due precautions in handling or charging or blasting operations.

Grant or refusal of approval, no objection certificate, licence, certificates, amendment, transfer and renewal

99.Licences and licensing authorities.—Licences and certificates for specific purposes may be granted by the authorities specified in Part 1 of Schedule IV.

100.Payment of Fees.—(1) When the licensing authority is the Chief Controller or Controller, the fees payable under these rules shall be paid by a crossed Bank Draft and when the licensing authority is the District Magistrate, the fees payable under these rules shall be paid in such manner as may be specified by him.

(2)The amount of various types of fees payable under these rules shall be as per Part 2 of Schedule IV.

(3)When a licence is sought for more than one financial year, the fees for the desired number of financial years at the rate prescribed in Part 2 of Schedule IV shall be payable.

101.Prior approval before construction .—(1) A person desiring to obtain a licence for manufacture, possession for sale, use, transport of explosives, under these rules, shall obtain prior approval from the authority empowered to grant such licence, by submitting documents mentioned in rule 113.

(2)The District Magistrate while granting the prior approval, shall return to the applicant one set of approval together with plans and

(3)The Chief Controller or Controller while granting the prior approval, shall return to the applicant one set of approval together with plans and a

Form DE-2 if required, showing distances required to be kept clear in and around the premises and an additional set of the said documents to enable the applicant to submit the same to the authority authorised to issue no objection certificate under rules 102 and 103.

(4) Prior approval under sub-rule (1) shall not be necessary in case of licences for manufacture of Adivertus, transport of explosives in tractor compressor, possession in shops, public display of fireworks and import and export of explosives.

102.No objection certificate before construction.—(1) After approval under rule 101, the person desiring to obtain a licence for manufacture, possession for sale or use of explosives shall obtain a no objection certificate from the District Magistrate or Director General of Mines Safety, as the case may be, before commencing construction of the premises.

(2)Certificate referred to in sub-rule (1) shall not be required if—

(a)the premises proposed to be licensed is within the factory licensed under these rules for

manufacture of explosives and the required safety distances are under the control of the District Magistrate shall cause the notice to be served to such authority or applicant; establishment. The day of hearing for

(b)the premises for which the new licence is required is situated within the same survey number, in which the applicant has an existing premises and a valid licence for the same.

(c)any other amendment in the existing licence is carried out which does not warrant any fresh enquiry for grant of no objection certificate.

103.Procedure to be observed for issue of no objection certificate and for grant of licence.—

(1)The applicant desiring to obtain a licence from the Chief Controller or Controller, shall apply to the District Magistrate or the Director General of Mines Safety with copies of the site plan showing the location of the premises proposed to be licensed for issue of a certificate to the effect that there is no objection

consideration of objections shall be fixed as early as possible, after the expiration of the period of one month from the date of publication of notice. On receipt of objection, the District Magistrate shall call the person or persons raising objection and also the applicant, giving not less than seven clear days before the day fixed for hearing for consideration of the objection. On the day fixed for the hearing or any day to which such hearing may be adjourned from time to time, the District Magistrate shall hear any objection relating to the purpose of no objection certificate and shall make such enquiry, as he may deem necessary to assess justification of such objection.

to the applicant receiving licence for the site proposed.

(b) If the quantity of explosives does not exceed one hundred kilograms or in

(2)The District Magistrate shall be the authority to issue the certificate referred to in sub-rule (1) if the area of the proposed site does not come under the Indian Mines Act, 1952 (35 of 1952) and the Director General of Mines Safety shall be such authority if the area of the proposed site is for ANFO, Liquid Oxygen Explosives or SME and comes under the Indian Mines Act, 1952.

(3)The District Magistrate on receipt of application referred in sub-rule (1), shall make verification of the antecedents of the applicant, lawful possession of the site, genuineness of the purpose, interest of public and any other verifications or enquiries as may be specifically required by the licensing authority to be carried out, if any, and on any other matter as deemed necessary.

of ANFO or Liquid Oxygen Explosives or SME or transport of explosives in a road van, the notice for public for objection as stated in clause (a) shall not be necessary.

(4)The Director General of Mines Safety, on receipt of application referred to in sub-rule (1), shall make verification of lawful possession of the site, genuineness of the purpose, any other verifications or enquiries as may be specifically required by the licensing authority to be carried out, if any, and on any other matter as deemed necessary.

(5)The authority referred to in sub-rule (3) or sub-rule (4) shall complete the enquiry within a period of three months and such authority shall after being satisfied, grant no objection certificate along with site plan duly signed and

(a) For verification of the inte sealed by such authority.

the District Magistrate shall forthwith cause a notice to be published calling upon the public to submit objections, if any, with reasons thereof, within a period of one month from the date of publication of the notice and specifying the date, time and place for consideration of objections by him. Where the site of the proposed premises lies within 1.5 kilometers of the limits of the jurisdiction of any town planning municipal authority or port or air port or satellite or space craft launching station or similar establishments of national importance,

(6)If the authority referred to in sub-rule (3) or sub-rule (4) objects to the grant of the no objection certificate on any of the grounds relating to the purpose of no objection certificate, no licence shall be granted by the licensing authority except with the sanction of the Central Government.

(7)The authority referred to in sub-rule (3) or sub-rule (4) shall grant the no objection certificate in the format specified in Part 2 of Schedule V or convey his refusal for granting no objection certificate with reasons thereof in writing to the applicant as expeditiously as possible but

not later than six months from the date of receipt of application from the applicant.

(8)No licence for manufacture of explosives other than Liquid Oxygen Explosives shall be granted or renewed to a person for his factory or mine not covered under the Factories Act, 1948 (63 of 1948) or the Mines Act,1952 (35 of 1957), as the case may be, unless he executes a bond in

Form CE-3 indemnifying person injured or dependants of deceased workers in the event of an accident in the factory or mine for an amount of Rs. 10,000 for factories manufacturing up to 15 kilograms of gunpowder or fireworks at any one time, an amount of Rs. 25,000 for factories manufacturing up to 200 kilograms. of gunpowder or fire works at any one time and

conducting inspection of the premises to ensure conformity of the premises to the provisions of the Act and these rules, such authority shall endorse the licence and from the date of such endorsement, the licence shall come into force :

Provided that if the licensing authority grants a licence without conducting prior inspection, such authority shall issue provisional permission pending endorsement of licence to use the licensed premises for a period which the licensing authority may require for conducting inspection of the premises for endorsement of the licence.

(4)If the licensing authority observes, on inspection, that the premises do not conform to the provisions of the Act and these rules and not fit for endorsement, he shall communicate to the licensee,

(i)his direction for rectification of deficiencies;

Rs. 50,000 in every other case in respect of or factory or mines. (ii)reasons for not regular endorsement of the licence; or

104.Commencement of construction of premises.—On receipt of no objection certificate under rule 103, the applicant shall start construction of the premises or installation of the facilities :

Provided that in case of shops or storehouses or other premises, which are already constructed, no objection certificate may be obtained subsequently.

105.Application for grant of licence. —After the construction of premises is completed, the applicant shall apply for grant of licence along with documents stated in rule 113.

106.Period of validity of licence.—The licensing authority may grant a licence for the period deemed necessary but not exceeding—

(1)six months for import or export of explosives;

(iii)reasons for suspension or revocation of the licence, as the case may be.

(5)In case of application for grant of shot firer's certificate, the Controller on receipt of documents specified in item number 24 of rule 113 shall conduct such examination and enquiries as deemed necessary before granting the shot-firer's certificate. On his being satisfied that the applicant has adequate knowledge and experience in related field of handling and blasting explosives, he shall grant the shot firer's certificate in

Form LE-10 specifying therein the authorised area and category of blasting. Such certificate shall be valid for a period of five years from the date of issue. The certificate may be revalidated for subsequent five-year periods on completion of procedures as in the case of fresh grant.

(2)one month for public display of fireworks;

(3)five financial years or part thereof in case of manufacture of explosives or storage magazine;

(4)thirty days for temporary fireworks shops;

(5)ten financial years or part thereof for all other cases.

Explanation :—For the purposes of this sub rule, there shall be the following categories of blasting, namely :—

Class	Category	
	A	Unlimited
	B	General aboveground
	C	General underground
	D	Demolition
	E	Seismic
	F	Agricultural
	G	Special

107.Grant of a licence and certificate.—(1) The licensing authority, on being satisfied with the documents received for grant of licence, and after making such inquiry, if any, as it may consider necessary, shall, subject to the other provisions of this Act and these rules, by order in writing either grant the licence or refuse to grant the same.

(2)A copy each of every licence other than for import or export of explosives granted by the Chief Controller or the Controller shall be forwarded to the District Magistrate and the Superintendent of Police of the District and the Controller in whose jurisdiction the premises are situated.

(3)When the licensing authority grants a licence other than for export or import of explosives, after

(6)In case of application for grant of foreman's certificate, the Controller on receipt of documents specified in item number 25 of rule 113 shall conduct such examination and enquiries as deemed necessary before granting the foreman's certificate. On his being satisfied that the applicant has adequate knowledge and experience in related field of handling and blasting explosives, he shall grant the foreman's certificate in

Form LE-11 specifying therein the authorised area of manufacture. Such certificate shall be directors or members as the case may be, and photographs of the occupier, to be submitted;

(i)a no objection certificate from the District Magistrate for transfer of the licence in favour of the applicant :

Provided that no objection certificate shall not be necessary if the applicant holds a licence for which a no objection certificate has already been granted.

valid for a period of five years from the date of issue. The certificate may be revalidated for subsequent five-year periods on completion of procedures as in the case of fresh grant.

Form LE-1, LE-2, LE-3, LE-4 and LE-5 to the Controller having jurisdiction over the area.

(8)Wherever licence is granted in Form LE-1 for manufacture of fireworks by the District Authority, he shall ensure that such licence is issued for manufacture of only such fireworks item which are authorized by the Chief Controller.

108.Transfer of licence.—(1) A licence granted under these rules may be transferred by the authority empowered to grant the licence.

(2) An applicant who desires to get the licence transferred in his favour shall submit to the licensing authority—

(a)an application in form appropriate for grant of the licence ;

(b)specimen signature of the applicant or his authorised person;

(c)a letter from the existing licensee signed by the authorised person requesting the transfer of licence in favour of the applicant or a succession certificate from a competent court in case of death of a licensee being an individual;

(d)original licence issued to the existing licensee;

(e)copies of supporting documents regarding transfer of rights of the premises in favour of the applicant;

(f)requisite scrutiny fee and transfer fee;

(g)copies of all approved drawings in the name of the applicant;

(h)status of the applicant whether individual, proprietary firm, partnership firm, company, association or society or otherwise—documentary evidence along with names,

changed, the licensee shall submit application to the licensing authority for amendment of licence in favour of the new name along with—

(a) application in the form as appropriate for grant of licence;

(b)documentary evidence with supporting documents in respect of the change of the name;

(c)copies of all approved drawings in the new name of the licensee;

(d)no objection certificate from the District Magistrate for change in the name of the addresses of the proprietor or partners or licensee;

(e) requisite scrutiny fee and amendment fee .

(2)In case of change of name of licensee being manufacturer of explosives, the licensee shall apply for corresponding amendments in the list of aut f explosives manufactured by him.

109.Amendment of licence in respect of alteration or change in the premises or licenses capacity, but not involving change of name of licensee or partners or directors or members.—(1) A licence granted under these rules may be amended by the authority empowered to grant the licence if the amendment is not inconsistent with the provisions of these rules.

(2) A licensee who desires to have his licence amended shall submit the following particulars to the licensing authority, namely :—

(a)an application stating nature of the amendment and the reasons there for;

(b)the original licence together with enclosures to it;

(c)plans showing the details of the proposed amendment if such plans are required by the licensing authority for the purpose of amendment;

(d)prescribed scrutiny fee;

(e)prescribed amendment fee.

(3)The licensing authority after scrutiny of the documents submitted under sub-rule (2), and after making such further inquiries and taking such action as deemed necessary, may take suitable action to amend the licence.

110.Amendment of licence due to change of name of the licensee (firm or company or association or society).—(1) Wherever, name of the licensee such as firm or company or association or society is proposed to be

111.Procedure for change of partners or directors or members or occupier.—Whenever any new partner or member or director is inducted in the partnership firm or society or association or company, as the case may be, without any change in the name of the licensee firm or society or association or company, the licensee shall submit application to the licensing authority for accepting the newly inducted partners or members or directors,—

(a)names and addresses of newly inducted partners or directors or members as the case may be, and in case the occupier is changed, photographs of the new occupier;

(b)certificate of verification of antecedents from the District Magistrate of the newly inducted partners or members or directors or occupier, as the case may be;

(c)requisite scrutiny fee;

(d)any other document as may be called for by the licensing authority.

112.Renewal of licence.—(1) Every licence except the licences granted for a specific period not exceeding one year, shall be renewable for a maximum period of five financial years ending on the 31st March.

(2)Every application under sub-rule (1) for renewal of the licence shall be accompanied by the following documents, namely :—

(a)application in Form RE- 1;

(b)the original licence;

(c)prescribed renewal fee.

(3) A licence may be renewed by the authority empowered to grant such licence :

Provided that a licence which has been granted by the Chief Controller may be renewed without any alteration by a Controller duly authorised by the Chief Controller in

(5)If the application for renewal reaches the renewing or licensing authority on or before the date of expiry, the licence shall be deemed to be in force until such date as the licensing authority renews the licence or until an intimation that the renewal of the licence is refused has been communicated to the applicant.

(6)The same fee shall be charged for the renewal of a licence for each year as for grant thereof:

Provided that if the renewal application together with complete documents is received by the licensing authority after the date of expiry but not later than six months from the date of expiry; and if the licensing authority is satisfied that such delay is beyond the control of the licensee, the licence may, without prejudice to any other action that may be taken in this behalf, be renewed on payment of penalty fee which is equal to one year's licence fee.

(7)In case of an application for the renewal of the licence for a period of more than one year at a time, the fee prescribed under proviso of sub-rule (6), if payable, shall be paid only for the first financial year of renewal.

(8)Every licence granted under these rules other than a licence granted for a specified period shall be renewable for a maximum period of five years where there has been no contravention of the Act or these rules framed there under or of any condition of the licence so renewed.

(9)Where a licence renewed for more than one financial year is surrendered before its expiry, the renewal fee paid for the unexpired portion of the licence shall be refunded to the licensee:

Provided that no refund of renewal fee shall be made for any financial year during which-

(a)the licensing authority received the renewed licence for surrender;

(b)any explosive is received or stored on the authority of the licence.

(10)No licence shall be renewed if the application for renewal is received by the licensing or renewing this behalf: authority after three months of the date of its expiry. An

Provided further that a licence, which has been granted by the District Magistrate, may be renewed without any alteration by a Sub-Divisional Magistrate or an Executive Magistrate duly authorised by the District Magistrate in this behalf.

(4)Every application for the renewal of a licence shall be made so as to reach the licensing authority or the authority empowered to renew the licence on or before the

application for revalidation received after three months of the expiration of the licence shall be considered as an application for a new licence.

(11)When a licence is renewed by the Chief Controller or a Controller, an intimation to that effect shall be sent to the District Magistrate concerned and when a licence is renewed by the District Magistrate, intimation to that effect shall be sent to the Controller having

date on which the licence expires. jurisdiction.

113.**Documents for approval and grant of licence.—**The following documents shall be required to be submitted for approval and grant of licence.—

Sl.No.	Purpose of Licence	Article number as per Part I of Schedule IV	Licence Form	Documents required for approval	Documents required for grant of licence
1	2	3	4	5	6
1.	Licence to manufacture fireworks or gunpowder or both not exceeding 15 kilogrammes at any one time.	1(a)	LE-1	(i) Form AE-1; (ii) Plans of the proposed buildings or sheds and the site showing approach road to the factory, all buildings in and around, and safety distances maintained; (iii) Particulars of competent persons and their experience in related fields; (iv) Passport size photographs of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (v) Scrutiny fee as per Schedule IV, part-2.	(i) Form AE-1; (ii) Plans of the proposed (buildings or sheds and the site showing approach road to the factory, all buildings in and around, and safety distances maintained; (iii) Particulars of competent persons and their experience in related fields; (iv) Passport size photographs of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (v) Completion certificate; IV, (vi) Indemnity bond in CE-3; (vii) Licence fee as per Schedule part-2.
2.	Licence to manufacture fireworks or gunpowder or both exceeding 15 kilogrammes but not exceeding 500 kilogrammes at any one time.	1(b)	LE-1	(i) Form AE-1 and additional information like details of process; (ii) Plans of the proposed buildings and the site showing approach road net work to the factory or premises; all buildings, blast wall, safety distances, plant, equipment, explosives limit, man limit; (iii) Distance form DE-1; (iv) Particulars of competent technical persons or foreman and their experience in related fields; (v) Passport size photographs of occupier alongwith docu-mentary evidence of nomination (v) No objection certificate alongwith approved plan from competent issuing authority;	(i) Form AE-1 and additional information like details of process; (ii) Plans of the completed buildings and the site showing approach road net work to the factory or premises; all blast wall, safety distances, plant, equipment, explosives limit, man limit; (iii) Distance form DE-1; (iv) Particulars of competent technical persons or foreman and their experience in related fields; as occupier pletion certificate;

				(vi) Scrutiny fee as per Schedule IV, part-2.	(vii) Passport size photographs of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (viii) Indemnity bond in CE-3; (ix) Licence fee as per Schedule IV, part-2.

1	2	3	4	5	6
3.	Licence to manufacture fireworks or gunpowder or both exceeding 500 kilogrammes at any one time.	1(c)	LE-1	(i) Form AE-1 and additional information like details of process; (ii) Plans of the proposed buildings and the site showing approach road net work to the factory or premises; all buildings, blast wall, safety distances, plant, equipment, explosives limit, man limit; (iii) Distance form DE-1; (iv) Particulars of competent technical persons or foreman and their experience in related fields; (v) Passport size photographs of the occupier alongwith docu-mentary evidence of nomination as occupier as per rule 2; (vi) Scrutiny fee as per Schedule IV, part-2.	(i) Form AE-1 and additional information like details of process; (ii) Plans of the completed buildings and the site showing approach road net work to the factory or premises; all buildings, blast wall, safety distances, plant, equipment, explosives limit, man limit; (iii) Distance form DE-1; (iv) Particulars of competent technical persons or foreman and their experience in related fields; (v) No objection certificate the along with approved plan from competent issuing authority; (vi) Completion certificate; (vii) Passport size photographs of the occupier along with documentary evidence of nomination as occupier as per rule 2; (viii) Indemnity bond in CE-3; (ix) Licence fee as per Schedule IV, part-2.
4	Licence to manufactur at site, ANFO explosi-ves not exceeding 200 kilogrammes at any one time.	1(d)	LE-1	(i) Form AE-1 and additional information like details of process; (ii) Plans of the proposed manufacturing shed and the site showing approach road net to the premises; safety distance and equipments for ANFO manufacture; (iii) Particulars of competent technical persons and their experience in related fields; (iv) Passport size photographs of the occupier alongwith docu-mentary evidence of nomination as occupier as per rule 2;	(i) Form AE-1 and additional information like details of process; (ii) Plans of the completed manufacturing shed and the site showing approach road net work to the premises; safety distance and equipments for ANFO manufacture; (iii) Particulars of competent technical persons and their experience in related fields; (iv) No objection certificate the along with approved plan from competent issuing authority; as occupier as per rule 2; (v) Completion certificate;

				(v) Scrutiny fee as per Schedule IV, part-2.	(vi) Passport size photographs of the occupier along with documentary evidence of nomination as occupier as per rule 2; (vii) Indemnity bond in CE-3(not required if covered under the Mines Act, 1955)

1	2	3	4	5	5
					(vii) Indemnity bond in CE-3 (not required if covered under the Mines Act,1955). (viii) Licence fee as per Schedule IV, Part-2.
5.	Licence to manufacture liquid oxygen explosives (LOX).	1(e)	LE-1	(i) Form AE-1 and additional information like details of process; (ii) Plans of the proposed LOX depot and the site showing approach road net work to the premises; safety distance, and equipments for LOX manufacture; (iii) Particulars of competent technical persons and their experience in related fields; (iv) Passport size photographs of the occupier along with documentary evidence of nomination as occupier as per rule 2; (v) Completion certificate;	(i) Form AE-1 and additional information like details of process; (ii) Plans of the comleted LOX depot and the site showing approach road net work to the premises; safety distance, and equipments for LOX manufacture; (iii) Particulars of competent technical persons and their experience in related fields; (iv) No objection certificate along with approved plan from competent issuing authority;
				(v) Scrutiny fee as per Schedule IV, Part-2.	(vi) Passport size photographs of the occupier along with documentary evidence of nomination as occupier as per rule 2; (vii) Indemnity bond in CE-3 (not required if covered under the Mines Act, 1955); (viii) Licence fee as per Schedule IV, Part-2.
6.	Licence to manufacture site mixed explosives (SME).	1(f)	LE-1	(i) Form AE-1 and additional information like details of process; (ii) Plans of the proposed support plant and the site showing approach road net work to the premises; all buildings, distances, plant, equipment, attached BMD vehicles and	(i) Form AE-1 and additional information like details of process; (ii) Plans of the completed support plant and the site showing approach road net work to the premises; all buildings, distances, plant, equipment, attached BMD vehicles and

				annual capacity; (iii) Particulars of competent technical persons and their experience in related fields; (iv) Passport size photographs of the occupier along with mentary evidence of nomination as occupier as per rule 2; (v) Scrutiny fee as per Schedule IV, Part-2.	annual capacity; (iii) Particulars of competent technical persons and their experience in related fields; (iv) No objection certificate along with approved plan from competent issuing authority; (v) Completion certificate; (vi) Passport size photographs of the occupier along with documentary evidence of

1	2	3	4	5	5
					nomination as occupier as per rule 2; (vii) Indemnity bond in CE-3 (not required if covered under the Mines Act, 1955); (viii) Licence fee as per Schedule IV, Part-2.
7.	Licence to manufacture explosives other than fireworks, gunpowder, ANFO, LOX and SME.	1(g)	LE-1	(i) Form AE-1 and additional information like details of manufacturing process; (ii) Plans of the proposed buildings and the site showing full approach road net work to the factory/or premises; all buildings, mounds, safety distances, plant, equipment, explosives limit, man limit, annual capacity; (iii) Distance form DE-1; (iv) Quality control plan and procedures for raw materials, intermediate and finished products; (v) Safety management plan; (vi) Particulars of competent technical persons or foreman and their experience in related fields; (vii) Passport sized photographs of the occupier along with docu-mentary evidence of nomination as occupier as per rule 2; (viii) Details of BMD vehicles in case of SME plant; (ix) Scrutiny fee as per Schedule IV, Part-2.	(i) Form AE-1 and additional information like details of manufacturing process; (ii) Plans of the proposed buildings and the site showing full approach road net work to the factory/or premises; all buildings, mounds, safety distances, plant, equipment, explosives limit, man limit, annual capacity; (iii) Distance form DE-1; (iv) Safety management plan; (v) Particulars of competent technical persons or foreman and their experience in related fields; (vi) Passport sized photographs of the occupier along with documentary evidence of nomina-tion as occupier as per (vii) No objection certificate of the occupier along with approved plan from competent issuing authority; as (viii) Indemnity bond in CE-3; (ix) Completion certificate; (x) Licence fee as per Schedule IV, Part-2.
8.	Licence to possess gunpowder not	2	LE-2	Not necessary as per sub-rule (4) of rule 101.	(i) Form AE-2; (ii) The plan showing place for

				15 kilogramme at any one time for manufacture of adirverttus and posses- storage of Gun powder, filling and firing of Adirvettus and protected works within 100	
				sion of adirverttus not exceeding 200 in number at any one time.	metres on all sides;
				(iii) Passport sized photographs of the occupier along with documentary evidence of nomination as occupier as per rule 2;	
				(iv) Licence fee as per Schedule IV, Part-2;	
					(v) Public liability insurance.

1	2	3	4	5	6
9.	Licence to possess for use, for agricultural purpose or in small quarry, explosives not exceeding 25 kilo- grams of Class 1, 2 or 3; 1500 numbers detonators; 1500 meters of Detona- ting Fuse or Safety Fuse at any one time in a magazine.	3(a)	LE-3	(i)Form AE-3 (for possession and use); (ii) Plans of the proposed magazine and the site showing approach road; safety distances, licensed capacity; (iii) Passport size photographs of the occupier along with documentary evidence of nomination as occupier as per rule 2; (iv) Scrutiny fee as per Schedule IV, Part-2.	(i)Form AE-3 (for possession and use); (ii) Plans of the completed magazine and the site showing approach road; safety distances, licensed capacity; (iii) Completion certificate; (iv) Passport size photographs of the occupier along with documentary evidence of nomination as occupier as per rule 2; (v) Licence fee as per Schedule IV, Part-2.
10.	Licence to possess for sale of explosives of Class 1,2,3,4, 5,6 or 7 in a magazine.	3(b)	LE-3	(i) Form AE-3; (ii) Plans of the proposed magazine and the site showing approach road; mounds, safety distances, licensed capacity; (iii) Distance form DE-1; (iv Passport size photographs of the occupier along with docu- mentary evidence of nomination as occupier as per rule 2; (v) Scrutiny fee as per Schedule IV, Part-2.	(i) Form AE-3; (ii) Plans of the completed magazine and the site showing approach road; mounds, safety distances, licensed capacity; (iii) Distance form DE-1; (iv) Completion certificate (v) No objection certificate with approved Plan from District Magistrate; (vi) Licence fee as per Schedule IV, Part-2.
11.	Licence to possess for use, explosives of class 1, 2, 3,4,5,6 or 7 in a magazine.	3(c)	LE-3	(i)Form AE-3; (ii) Plans of the proposed magazine and the site showing approach road; mounds, safety distances, licensed capacity; (iii) Distance form DE-1; (iv) Passport size photographs	(i)Form AE-3; (ii) Plans of the completed magazine and the site showing approach road; mounds, safety distances, licensed capacity; (iii) Distance form DE-1; (iv) Passport size photographs

			of the occupier along with docu-mentary evidence of nomination as occupier as per rule 2; (v) Scrutiny fee as per Schedule IV, Part-2.	of the occupier along with docu-mentary evidence of nomination as occupier as per rule 2; (v) Completion certificate (vi) No objection certificate with approved Plan from District Magistrate; (vii) Licence fee as per Schedule IV, Part-2.
12. Licence to possess fireworks not exceeding 5000 kilogramme or safety fuse not exceeding 50000 in a storehouse, not	3(d)	LE-3	(i) Form AE-3; (ii) Plans of the proposed house of site showing approach road, safety distance, licence capacity; (iii) Passport size photographs	(i) Form AE-3; (ii) Plans of the completed store house and the site showing approach road, licence capacity; (iii) Completion certificate;

1	2	3	4	5	5
	for sale but for transfer to own licensed shop			of the occupier along with docu-mentary evidence of nomination as occupier as per rule 2; (iv) Scrutiny fee as per Schedule of the occupier along with IV, Part-2.	(iv) No Objection Certificate with approved plan by District Magistrate (v) Passport size photographs documentary evidence of nomination as occupier as per rule 2; (vi) Licence fee as per Schedule IV, Part 2.
13. Licence to possess and transport explosives of class 2 or 3 not exceeding 25 electric or ordinary detonators not exceeding 200 numbers, detonating fuse not exceeding 100 meters	4	LE-4	Not necessary as per sub-rule (4) of rule 101(Type approval to be obtained from Chief Controller).	(i) Form AE-4; (ii) Plans of the tractor compressor conforming to Specification 5;
and safety use not exceeding 200 meters in a compressor mounted motor truck or tractor for use in well sinking	(iii) Passport size Photographs of the occupier alongwith docu-mentary evidence of nomination as occupier as per rule 2; (iv) Licence fee as per Schedule			IV, Part-2.
14. Licence to possess and sale from a shop, at any one time, not exceeding 25 kilogramms of small arms nitrocompound .	5(a)	LE-5	Not necessary as per sub-rule (4) of rule 101.	(i) Form AE-5; (ii) Plans of the shop showing

				storage capacity, approach road, surrounding facilities specifically indicating compliance of sub-rule (3) of rule 86; (iii)Passport size photograph of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (iv)Licence fee as per Schedule IV, Part 2.	
15. Licence to possess and sale from a shop at any one time, not exceeding 100 kilogrammes of manufactured fireworks of class 7, division 2, sub-division 2 and 500 kilogramms of Chinese crackers or sparklers.	5(b)	LE-5	Not necessary as per sub-rule (4) of rule 101.	(i) Form AE-5; (ii) Plans of the shop showing storage capacity, approach road, surrounding facilities specifically indicating compliance of sub-rule (3) of rule 86; (iii)Passport size photograph of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (iv) Licence fee as per Schedule IV, Part 2.	

1	2	3	4	5	6
16.	Licence to possess and sale from a shop, at any one time, not exceeding 2000 nos. of pyrotechnic device explosives of class 6 division 1.	5(c)	LE-5	Not necessary as per sub rule (4) of rule 101	(i) Form AE-5; (ii) Plans of the shop showing storage capacity, approach road, surrounding facilities specifically indicating compliance of sub-rule (3) of rule 86; (iii) Passport size photograph of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (iv) Licence fee as per Schedule IV, Part 2.
17.	Licence to possess for use gunpowder not exceeding 5 and safety fuse not exceeding 50 meters in the states of Bihar, West Bengal, Kerala and	5(d)	LE-5	Not necessary as per sub rule (4) of rule 101	(i) Form AE-5; (ii) Plans of the shop showing storage capacity, approach road, surrounding facilities

				specifically indicating compliance of sub-rule (3) of rule 86; (iii)Passport size photograph of	
	Tamil Nadu				the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (iv)Licence fee as per Schedule IV, Part 2.
18.	Licence to possess, for use of small arms nitrocompound not exceeding 5 kilogramms in the state of Kerala.	5(e)	LE-5	Not necessary as per sub rule (4) of rule 101	(i) Form AE-5; (ii) Plans of the shop showing storage capacity, approach road, surrounding facilities specifically indicating compliance of sub-rule (3) of rule 86; (iii)Passport size photograph of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (iv)Licence fee as per Schedule IV, Part 2.
19.	Licence to possess and sale from a shop manufactured fireworks of class 7, division 2, subdivision 2 exceeding 100 kilogramms but not exceeding 300 kilogramms and Chinese crackers or sparklers exceeding 500 kilogramms but not exceeding 1200 kilogramms	5(f)	LE-5	Not necessary as per sub rule (4) of rule 101.	(i) Form AE-5; (ii) Plans of the shop showing storage capacity, approach road, surrounding facilities specifically indicating compliance of sub-rule (3) of rule 86; (iii)Passport size photograph of the occupier alongwith documentary evidence of nomination as occupier as per rule 2;

1	2	3	4	5	6
					(iv) No Objection Certificate with approved plan by District Magistrate (v)Licence fee as per Schedule IV, Part 2.
20.	Licence to possess and use fireworks for public display	6	LE-6	Not necessary as per sub rule (4) of rule 101.	(i) Form AE-6; (ii) Site Plan for display of fireworks; (iii) Passport size photographs of the occupier alongwith documentary evidence of nomination as occupier as per rule 2;

				(iv) Licence fee as per schedule IV Part 2; (v) Public liability insurance.
21.Licence to transport explosives in a road van	7	LE-7	(i) Form AE-7; (ii) Plans of the proposed Explosives Van as per Specification 4; (iii) Passport size photographs of the occupier along with documentary evidence of nomination occupier as per rule 2; (iv) Scrutiny fee as per Schedule Part-2.	(i) Form AE-7; (ii)Plans of the Explosives Van as per Specification.4; (iii) Completion certificate (iv) Attested copy of registration certificate of the vehicle; (v)No objection certificate from as District Magistrate (not applicable where the applicant is holder IV,
			explosives for sale or use in	of licence for possession of which case a copy of the said licence to be submitted); (vi)Passport size photographs of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (vii)Licence fee as per Schedule IV Part 2.
22.Licence to import or export explosives otherwise than by land	8	LE-8	Not necessary as per sub rule (4) of rule 101.	(i) Form AE-8; (ii) Passport size photographs of the occupier alongwith docu-mentary evidence of nomination as occupier as per rule 2 or exporter; (iii) Licence fee as per Schedule IV, Part-2.
23.Licence to manufacture, possess, sale, use etc. of explosives not provided in articles 1 to 8 of Part 1 of Schedule IV.	9	LE-9 (SPECIAL)	(i) Form AE-1; (ii) Plans of the proposed buildings and the site showing full approach road, network to the factory or premises, all buildings, mounds, safety	(i) Form AE-9; (ii)Plans of the proposed buildings and the site showing full approach road, network to the factory or premises, all buildings, mounds, safety

1	2	3	4	5	6
				distances, plant, equipments, explosives limit, man limit, annual capacity, as the case may be; (iii) Any other document(s) as may be required by the Chief Controller;	distances, plant, equipment, explosives limit, man limit, capacity , as the case may be; (iii) Any other document(s) as may be required by the Chief Controller;
				(iv) Passport size photograph of occupier alongwith documentary evidence of nomination as occupier as per rule 2; (v) Scrutiny fee as per Schedule IV, Part 2.	(iv) No objection certificate with the approved Plan from District Magistrate; (v) Completion certificate;

				(vi) Passport size photographs of the occupier alongwith documentary evidence of nomination as occupier as per rule 2; (vii) Licence fee as per Schedule IV, Part-2.
24.Shot firer's Certificate	10	LE-10	Not required.	(i) Form AE-10; (ii) 2 copies of passport size photograph; (iii) Proof of date of birth; (iv) Certificate of educational qualification and experience; (v) Medical fitness certificate; (vi) No objection certificate from In-charge of Police Station,(not required in case competency is required only for blasting in connection with testing of explosives in a factory or recognised laboratory); (vii) Fee as per Schedule IV, Part-2.
25.Foreman's Certificate		LE-11	Not required.	(i) Form AE-11; (ii) 2 copies of passport size photograph; (iii) Proof of date of birth; (iv) Certificate of educational qualification and experience; (v) Medical fitness certificate; (vi) Fee as per Schedule IV, Part-2.

114.Refusal to grant approval or licence.—The authority refusing to grant approval or licence including

(5) Before refusing renewal of a licence under the rule, the holder of the licence shall be given an opportunity

amendment and renewal shall record in writing the reasons of being heard.

for such refusal and communicate the same to the applicant. Before refusal, the applicant shall be given an opportunity of being heard.

115.Cancellation of no objection certificate.—(1) No objection certificate granted under rule 103, may be cancelled by the authority issuing the same or authority superior to it, if such authority is satisfied, that—

(a)the licensee has ceased to have any right for the lawful possession over the licensed

117.Restriction on quantity or period.—If the authority grants, amends or renews a licence for a quantity or period less than the quantity or period applied by the applicant, the authority shall record in writing the reasons for such reduction in licence quantity and shall communicate the same to the applicant on demand.

118.Suspension and revocation or cancellation of licence.—(1) Every licence granted under these rules shall—

premises; (I)stand cancelled, if—

(b)the licensee is convicted and sentenced for any criminal offence or ordered to execute under Chapter VIII of the Code of Criminal Procedure, 1973 (2 of 1974), a bond for keeping peace for good behaviour;

(c)the cancellation of no objection certificate is absolutely necessary for public peace and

(a)the licensee has ceased to have any right for the lawful possession over the licensed premises;

(b)the licensee is convicted and sentenced under any criminal offences or ordered to execute under Chapter VIII of the Code of Criminal Procedure, 1973(2 of 1974), a bond for keeping peace for good behaviour.

safety:

Provided that before cancellation of the no objection certificate, the licensee shall be given a reasonable opportunity of being heard.

(2) The authority issuing the no objection certificate or the District Magistrate or the State Government cancelling no objection certificate shall record, in writing, the reasons for such cancellation and shall immediately furnish to the licensee and the licensing authority concerned, copy of the order cancelling the no objection certificate and the reason for such cancellation.

(3) In case an appeal is made against the cancellation of no objection certificate, the appellate authority may consult, if so desired, the Chief Controller.

116.Refusal to amend or renew a licence.—(1) The licensing authority refusing to amend or renew a licence shall record the reasons for such refusal in writing.

(2) The licensing authority shall refuse to renew a licence if such licence can be revoked in accordance with the Act or these rules.

(3) A brief statement of reasons for refusal to renew a licence shall be given to the holder of the licence on demand unless in any case the licensing authority is of the opinion that it will not be in public interest to furnish such statement.

(II)stand cancelled, if the no-objection certificate is cancelled by the authority issuing the same or District Magistrate or the State Government in accordance with rule 115.

(III)be liable to be suspended or cancelled by an order of the licensing authority for any contravention of the Act or these rules or of any condition contained in such licence, or by order of the Central Government , if it is satisfied that there are sufficient grounds for doing so:

Provided that before suspending or cancelling a licence under this rule, the holder of the licence shall be given an opportunity of being heard.

(2) The suspension or cancellation shall take effect from the date specified therein.

(3) An order of suspension or revocation of a licence shall be deemed to have been served if sent by post to the address of the licensee entered in the licence.

(4) The suspension of a licence shall not debar the holder of the licence from applying for the renewal.

(5)Notwithstanding anything contained in sub-rule (4) Where the renewal of the licence is refused, the fee paid for the renewal shall be refunded to the licensee after deducting the proportionate fee for the period beginning from the date from which the licence was to be renewed up to the date from which renewal thereof is refused.

(1), an opportunity of being heard may not be given to the holder of the licence before his licence is suspended or cancelled in cases—

(i)where the licence is suspended by a licensing authority as an interim measure for violation of any of the provisions of the Act or these rules or of any conditions contained in such licence and in his opinion such violation is likely to cause imminent danger to the public:

Provided that where a licence is so suspended, the licensing authority shall give the holder of the licence an opportunity of being heard before the order of suspension is confirmed;

communicate the same to the applicant or holder of the certificate and such communication shall specify the reason for refusal or withdrawal of the certificate and shall state that, upon written request by the applicant or the holder of the certificate, a hearing before the issuin twenty one days after the date of the request.

(3) Upon intimation of the revocation of any

or certificate, the holder of the certificate shall immediately

(ii)where the licence is suspended or cancelled by the Central Government, if that Government considers that in the public interest or in the interest of the security of the State, such opportunity should not be given.

surrender to the issuing authority the revoked certificate.

121.Provision for appeal.—(1) An appeal against an order of the authority refusing to grant or renew a licence or suspending or revoking a licence or certificate or varying the condition of a licence or certificate shall lie, if the order

(6) A licensing authority or the Central Government is passed by the—

suspending or cancelling a licence shall record its reason for so doing in writing.

119.Procedure on expiry, suspension or revocation or cancellation of licence.—(1) A licensee on the expiry, suspension or revocation or cancellation of the licence shall forthwith give notice to the licensing authority, of the description and quantity of explosives in his possession and shall comply with the directions which the licensing authority may give in regard to their disposal.

(2) In case the licence is revoked or cancelled by the licensing authority, fee for unexpired portion will be reimbursed to the applicant by the licensing authority.

120.Refusal or withdrawal of shot firer's certificate.—(1) A shot firer's certificate for use of explosive may be refused or withdrawn for any of the following reasons, namely :—

(a)non-compliance with any order of the issuing authority within the time specified by such order;

(b)the applicant or holder is an unlawful user of, or is addicted to, narcotics or dangerous drugs;

(a)Chief Controller,—to the Central Government;

(b)Controller,—to the Chief Controller;

(c)District Magistrate,—to the immediate superior to such authority.

(2) Every appeal referred to in sub-rule (1) shall be preferred in accordance with the provisions of the Act and shall be presented within sixty days of the date of the communication of such order.

(3) Every appeal shall be accompanied by fees specified in Schedule IV annexed to these rules and the fees shall be refunded to the appellant if the appeal is upheld by the appellate authority.

(4) The action taken by the appellate authority shall conform to the provisions of section 6F of the Act .

122.Procedure to be followed by the appellate authority.—(1) On receipt of the appeal and if such appeal can be admitted in accordance with the Act the appellate authority may call for records of the case from the authority who passed the order appealed against and may make such further enquiries as it may deem necessary and after giving the appellant a reasonable opportunity of being heard, pass

(c)the applicant or holder advocates, or final orders.

knowingly belongs to, any organisation or group that advocates violent overthrow of or violent action against any State Government or the Central Government;

(d)the applicant or holder suffers from a mental or physical defect that would interfere with the safe handling of explosives;

(e)violation by the applicant or holder of any provision of any of these rules or that false information was given or a misrepresentation was made to obtain the certificate;

(f)the applicant belongs to any unlawful or barred

(2) When the State Government is the appellate authority, it may, if desired, may consult the Chief Controller regarding technical matter.

123.Procedure on death or disability of licensee.—(1) If a licensee dies or becomes insolvent or mentally incapable or otherwise disabled, the licence granted to him under these rules shall stand cancelled on the date of the licensee's death or mental incapacity or insolvency or disability, as the case may be.

(2) The legal heirs or representatives of the licensee referred to in sub-rule (1) shall as soon as may be, notify the licensing authority—

organisation.

(2) In any case where the issuing authority refuses withdraws a certificate, the issuing authority shall

(a)the date of death, insolvency, mental incapacity or other disability as the case may be, of the or licensee, and

(b)shall await the directions of the licensing authority with regard to the disposal of the explosives kept at the licensed premises.

124.Loss of licence.—Where a licence granted under these rules or an authenticated copy granted thereof, is lost or accidentally destroyed, a duplicate may be granted on payment of fees, specified in Part 2 of Schedule IV.

Chapter—IX

Powers vested with Authorities

125.Power of officers to demand licence or pass.—(1) Every person holding or acting under a licence granted under these rules shall, when called upon to do so by any authority specified in rule 128, produce it, or an

(a)enter, inspect and examine any place, aircraft, train, carriage, vessel or any mode of transport in which an explosive is being manufactured, possessed, used, sold, transported, exported or imported under a licence granted under these rules, or in which he has reason to believe that an explosive has been or is being manufactured, possessed, used, sold, transported, exported or imported in contravention of the Act or these rules;

(b)search for explosives or ingredients thereof;

(c)take samples of any explosive or ingredients found therein on payment of the value thereof, if such payment is demanded at the time of the

authenticated copy of it, at such time and place as may be directed by such officer.

sample are taken;

(2) Every person in charge of a consignment of explosives in transit under cover of a pass issued under these rules shall produce it when called upon to do so by any authority specified in rule 128 .

(d)seize, detain and remove any explosive or ingredients thereof found therein together with connected documents thereof in respect of which he has reason to believe that any of the provisions of the Act or these rules have been

(3) Copies of any licence may, for the purposes of this rule, be authenticated free of charge by the authority, which granted the licence.

contravened.

Table

Authority	Jurisdiction
The Chief Controller or Controller	All parts of India
All District Magistrates	Their respective
All Executive Magistrates subordinate to the District Magistrate	Their respective jurisdiction
All Commissioners of Police	Their respective jurisdiction
Sub-Inspector of Police	not below that of a
The Director General of Mines or officers	Their respective

126.Executive control over authorities.—Every authority other than the Central Government acting under this Chapter shall be subject to the directions and control of the Central Government :

Provided that nothing in this rule shall be deemed to affect the powers of executive control of the Chief Controller over the officers subordinate to

127.Power of officers to prevent dangerous practices.—(1) If in any matter which is not provided for by any express provision of, or condition of a licence granted under these rules and a Controller or District Magistrate finds any factory, magazine or place where an

explosive is being manufactured, possessed or sold, or used or any part thereof, or anything or practice therein or connected therewith or with the handling or transport of explosives to be unnecessarily dangerous or defective so as, in his opinion, to tend to endanger the public safety or the bodily safety of any person, such Controller or District Magistrate may, by an order in writing, require the occupier of such factory magazine, store house or place or the owner of the explosive, to remedy the same within such time as may be specified in the order.

(2) Where the occupier or owner objects to an order made under sub-rule (1), he may appeal to the appellate authority in accordance with rule 121.

128.Powers of search and seizure.—(1) Any authority specified in column (1) of the Table below may within the jurisdiction specified in the corresponding entry in column (2) of that Table—

subordinate to him

(2) Whenever any officer other than the Chief Controller seizes, detains or removes any explosive or ingredients thereof or any connected documents thereof under this rule, he shall forth with report the fact by telegram to the Chief Controller and the Controller under whose jurisdiction the place where the explosives were seized falls and whenever any officer not being the District Magistrate seizes, detains or removes any explosives or ingredients thereof or any connected documents thereof under this rule, he shall forthwith report the fact by telegram to the district authority concerned.

(3) Whenever any explosives are seized they shall be stored up in an isolated place under adequate guard until examination by the Chief Controller or Controller and receipt of instructions from him as to their disposal.

(4) Notwithstanding the above, the Executive Magistrates or Police Officers authorized in the table shall immediate action and shall inform the Chief Controller or the Controller, as the case may be, of the action taken by

carry out inspection of the magazines located within their him on such report.

jurisdiction once in six months in order to ascertain if there has been any violation of the Act or the rules thereof. An assessment regarding adequacy of security guards provided by the licensee at the magazines as per Rule 21(2) should also be made during such inspection. A report of such inspection should be submitted to the concerned District Magistrate or Superintendent of Police or Commissioner of Police with a copy to the licensing

Chapter X

Accidents, Enquiries and Reports

131.Notice of accident.—(1) The notice of an accident required to be given under section 8 of the Act shall be given within twenty four hours of the happening of the accident by telephone, telegram, E-mail, fax or in any other electronic mode or by special messenger followed by

authority. a written report signed by the occupier or authorised person

129.Power to destroy explosives and ingredients thereof. —(1) The Chief Controller or a Controller—

(a)shall destroy any explosive other than military ammunition of Indian or foreign origin, whenever found—

to the same authorities giving particulars of circumstances leading o accident, loss of human life, injury to persons, damage to property, emergency action taken etc, to the—

(a)Chief Controller;

(b)Controller in whose jurisdiction accident has

(i) the manufacture, possession or import taken place;
of which has been prohibited absolutely under section 6 of the Act; or

(c)District Magistrate; and

(d)Officer-in-charge of the nearest police station.

(ii) if the explosive belongs to the Class 5 (Fulminate) and is being manufactured, possessed, used, sold, transported, exported or imported illegally without a licence under these rules;

(2) Pending the visit of the Chief Controller, or authorised representative or instruction received from Chief Controller or his representative that he does not any further investigation or inquiry to be made, all and debris shall be left untouched except in so far as its

(b)may destroy or render harmless any other explosives coming within the purview of these rules, or ingredient thereof in respect of which the Chief Controller or Controller has reasons to believe that any of the provisions of the Act or these rules have been contravened or which in his opinion are no longer fit for storage, transport or use and the matter appears to be urgent to such Controller and fraught with serious danger to public.

(2)Whenever the Chief Controller or a Controller destroys any explosive or ingredient thereof or renders it harmless under sub-rule (1), he shall take and keep a sample thereof :

Provided that if in his opinion such sample can be taken, transported and kept safely for the period required without any danger to any life or property and if required, he may give a portion of the sample to the person owning the explosive or having the same under his control at the time of seizure.

(3) Where any explosive or ingredient thereof is destroyed by a Controller, he shall report all the facts to the Chief Controller. The explosives shall be destroyed or rendered harmless as provided under this rule at the expense of the occupier of factory, magazine, storehouse or the place or owner of the explosives.

130.Procedure on reports of infringement—Whenever any report is made to the District Magistrate by the Chief Controller or Controller of an infringement of the act or of these rules, the District Magistrate shall take

removal may be necessary for the rescue of persons injured and recovery of the bodies of any persons killed, by the accident or in the case of aerodromes or railways, for the restoration of thorough communication.

(3) The Chief Controller or his authorised representative, if so required by them, shall be provided with all assistance by the officer in charge of the nearest police station.

132.Procedure at courts of inquiry.—(1) The Chief Controller shall arrange with the heads of the Armed Forces or Ordnance Factories or other establishments of such forces to be represented at Courts of Inquiry where he so desires. The Chief Controller shall be provided with copies of the proceedings of Court where he is not represented. The heads of Armed Forces or Ordnance Factories or other establishments of such forces, as the case may be, shall co-operate with the Chief Controller by informing him immediately of occurrences, liable to lead to the summoning of Courts of Inquiry on matters of interest to the Chief Controller as indicated by him.

(2) The Chief Controller may attend in person or send a representative and in either case he shall have power to examine witnesses, where he so desires.

133.Inquiry into accident.—(1) Whenever a District Magistrate, holds an inquiry under sub-section (1) of section 9A of the Act, he shall adjourn such an inquiry unless the Chief Controller or an officer nominated by him is present to watch the proceedings or such Magistrate

has received information from the Chief Controller that officer does not wish to send a representative.

(2) The District Magistrate shall, at least twenty-one days before holding the adjourned inquiry, send to the Chief Controller notice in writing of the time and place of holding the adjourned inquiry.

(3) Where an accident has been attended with loss of human life, the District Magistrate, before the adjournment, may, take evidence to identify the dead bodies and may order the disposal thereof.

(4) The Chief Controller or his representative shall be at liberty at any such inquiry to examine any witness subject to the order of the District Magistrate on points of law.

(5) Where the Chief Controller is not present or represented at any inquiry held by a District Magistrate, a copy of the report of the proceedings thereof shall be sent to him.

134.Inquiry into more serious accidents.—(1) Whenever an inquiry is held under section 9A of the Act, the persons holding such inquiry shall hold the same in open court in such manner and under such conditions as they may think most effectual for ascertaining the causes and circumstances of the accidents and enabling them to make the report under this rule :

Provided that where the Central Government so directs the inquiry may be held in-camera.

discrepancies or the violations, if any of the rules or contravention of conditions of the licence; and a copy of the inspection report shall be endorsed to the licensing authority for taking further necessary action.

137.Communication of administrative action on grant of licence.—(1) Copy of the licence granted under these rules shall be forwarded to the District Magistrate along with the copy of licence and approved drawings, if applicable.

(2) Every licence granted under these rules by the District Magistrate as mentioned in the Part 1 of Schedule IV, shall be communicated to the Chief Controller or the Controller, as the case may be, along with the copy of licence and approved drawings, if applicable.

138.Communication of administrative action on suspension or cancellation of licence.—(1) The administrative action taken by the District Magistrate for suspension or cancellation of licence granted by District Magistrate shall be communicated to the Chief Controller or the Controller, as the case may be.

(2) The administrative action taken by the Chief Controller or the Controller, as the case may be, for suspension and cancellation of licence shall be communicated to the District Magistrate.

139. Repeal and Savings.—(1) The Explosives Rules, 1983 are hereby repealed.

(2) Notwithstanding such repeal—

(1) Whenever an inquiry under sub-rule (1) is held by a person other than the Chief Controller, such person shall arrange for the Chief Controller to be represented at such inquiry including any adjournment thereof. The person holding the inquiry shall, at least twenty one days before holding the inquiry or any adjourned inquiry, send to the Chief Controller a notice in writing of the time and place of holding such inquiry. The Chief Controller may attend in person or send a representative and in either case, he shall have power to examine witnesses where he so desires.

(a)all licences, permits or duplicates thereof granted or renewed under the said rules and all fees imposed or levied shall be deemed to have been granted, renewed, imposed or levied, as the case may be, under the corresponding provisions of these rules;

(b)all approvals given and all powers conferred by or under any notification or rule shall, so far as they are consistent with the Act and these rules, be deemed to have been given or conferred by under this Act or these rules.

Chapter XI SCHEDULE— I

Administrative and Penal Actions **Part—1**

135.Protection of action taken in good faith.—No suit, prosecution or other legal proceeding shall lie against the Government or any officer or other employee of the Government or any authority constituted under the Act and these rules in respect of anything which is done or intended to be done in good faith in pursuance of the Act and these rules made or orders or directions issued there under.

136.Administrative action after inspection for violation.—(1) The inspecting authority on inspection of the premises, shall communicate to the licensee and licensing authority in writing, his observation,

Classification of explosives

(see rule 4)

Explosives are divided into 8 classes as follows :

Class 1	Gunpowder Class
Class 2	Nitrate-Mixture Class
Class 3	Nitro-Compound Class
Class 4	Chlorate-Mixture Class
Class 5	Fulminate Class
Class 6	Ammunition Class
Class 7	Fireworks Class
Class 8	Liquid Oxygen Explosives Class.

explosion, and from its great instability (that is to say,

Class 1—Gunpowder Class

"Gunpowder" means gunpowder ordinarily so called.

Class 2—Nitrate Mixture Class

"Nitrate-mixture" means any preparation, other than gunpowder which is formed by the mechanical mixture of a nitrate with any form of carbon or with any carbonaceous substance not possessed of explosives properties, whether sulphur be or be not added to such preparation, and whether such preparation be or be not mechanically mixed with any other non-explosive substance, and includes any explosive containing as per chlorate and not being a chlorate-mixture, fulminate or nitro-compound as defined in this Schedule

Class 3- Nitro-Compound Class

(1) "Nitro-compound" means any chemical compound which is possessed of explosive properties or is capable of combining with metals to form an explosive compound, and is produced by the chemical action of nitric acid (whether mixed or not, with sulphuric acid), or of a nitrate mixed with sulphuric acid, upon any carbonaceous substance, whether such compound is mechanically mixed with other substances or not.

(2) The nitro-compound class two divisions namely division 1 and division 2.

(3) Division 1, comprising any chemical compound or mechanically mixed preparation which consists, either wholly or partly, of nitro-glycerine or some

(4) Division 2 comprising any nitro-compound, which is not comprised in Division 1 that is explosives such as Tri-nitro-toluene (T.N.T.) etc.

Class 4-Chlorate mixture Class

(1) "Chlorate-mixture" means any explosive containing a chlorate.

(2) Chlorate-mixture class has 2 divisions namely Division 1 and Division 2.

(3) Division 1, comprising any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound.

(4) Division 2, comprising any chlorate mixture which is not comprised in Division 1.

Class 5 -Fulminate Class

(1) "Fulminate" means any chemical compound or mechanical mixture whatever, which from its great susceptibility to detonation, is suitable for employment in percussion-caps or any other appliances for developing detonation, or which, from its extreme sensibility to
readiness to undergo decomposition from very slight exciting causes), is specially dangerous.

(2) The Fulminate class consists of two divisions namely division 1 and division 2.

(3) Division 1 comprising such compounds as the Fulminate of sliver and of mercury, and preparations of those substances such as are used in percussion caps, and any preparation consisting of a mixture of chlorate with phosphorus, or certain descriptions of compounds of phosphorous, with or without the addition of carbonaceous matter, and any preparation consisting of a mixture of a chlorate with sulphur or with sulphuret, with or without carbonaceous matter.

(4) Division 2 comprises such substances as the chloride and the Iodide of Nitrogen, Fulminating Gold and Silver, Diazobenzol and the Nitrate of Diazobenzol, Lead Azide and Tetrazine.

Class 6-Ammunition Class

(1) “Ammunition" means an explosive of any of the foregoing classes when the same is enclosed in any case or contrivance, or is otherwise adapted or prepared so as to form: (a) a cartridge or charge for small arms, cannon or any other weapon, or (b) a safety or other fuse for blasting or for shells, or (c) a tube for firing explosive, or (d) a percussion cap, detonator, fog signal, shell, torpedo, war rocket or any other contrivance other than a firework.

(2) The ammunition class has three divisions, namely Division 1, Division 2 and Division 3.

(3) Division 1 comprises exclusively of (i) Safety cartridges (ii) Safety fuses for blasting (iii) Railway fog signal and (iv) Percussion caps.

(4) Division 2 comprises any ammunition, which does not contain its own means of ignition and is not included in Division 1, such as cartridges for small arms other than safety cartridge, cartridges and charges for cannon shells and torpedoes containing any explosives, tubes for firing explosives, and war rocket, which do not contain their own means of ignition.

(5) Division 3 comprises any ammunition which contains its own means of ignition and is not included in Division 1, such as detonators, fuses for blasting which are not safety fuses, tubes for firing explosives, containing their own means of ignition.

Note: The expression "ammunition containing its own means of ignition" means ammunition having an arrangement, whether attached to or

forming part of the ammunition which is adapted to explode or fire the ammunition by friction or percussion.

"Percussion cap" does not include a detonator.

Class 7-Fireworks Class

(1) Fireworks Class has four divisions, namely, Division 1, Division 2, Division 3, and Division 4.

(2) Division 1 comprises fireworks composition that is to say, any chemical compound or mechanically mixed preparation of an explosive or inflammable nature, which is used for the purpose of making manufactured firework, and is not an explosive of classes 1,2,3,4,5 & 6, any star and any coloured fire composition:

Provided that a substantially constructed hermetically closed metal case, containing not more than 500 grammes of coloured fire composition of such a nature, as not to be liable to spontaneous ignition shall be deemed to be "a manufactured firework" and not a "firework composition".

(3) Division 2 fireworks comprises manufactured fireworks i.e. to say any explosive of class 1,2,3,4 or 6 and any fireworks composition when such explosive or composition is enclosed in any case or contrivance or other articles specially adapted, for the production of pyrotechnic effect for pyrotechnic signal or sound signals.

(4) Division 2 fireworks comprises 3 sub-divisions, namely, Sub-division 1, Sub-division 2 and Sub-division 3.

(5) Sub-division 1 of Division 2 fireworks comprises low hazard fireworks which, in the opinion of Chief Controller are relatively innocuous in themselves and are not liable to explode violently or all at once e.g. sparklers [Chinese crackers, serpents, etc.]

(6) Sub-division 2 of Division 2 of fireworks comprises high hazard fireworks which, in the opinion of Chief Controller, present a special hazard to a person e.g. rockets, shells, maroons, wheels, barrages, fountains, illumination pieces, distress signals, pyrotechnic devices etc.

(7) Sub-division 3 of Division 2 fireworks comprises such fireworks, which are assembled at site purely for the purpose of display.

(8) Division 3 comprises any explosive contrivance required for the manufacture of manufactured fireworks e.g. quick match fuse, micro cord fuse etc.

(9) Division 4 comprises manufactured fireworks for use of Armed Forces of the Union.

Class 8-Liquid Oxygen Explosives Class

"Liquid Oxygen Explosives" means an absorbent carbonaceous material such as wood pulp. carbon black, metal powder, coal dust etc. impregnated with liquid air or liquid oxygen with or without the addition of other substances.

Part —2

UN Classification of Explosives

As per the United Nations recommendations in the Model Regulation on the Transport of Dangerous Goods published vide ST/SG/AL.10/1/ Rev 12 in ISBN 92 -1-13974-5, the U N Classification of dangerous goods have been made as U N Class 1(Explosives), Class 2 (Gases), Class 3 (Flammable liquid), Class 4 (Flammable Solids; substances liable to spontaneous combustion; and substances which in contact with water emit flammable gases), Class 5 (Oxidizing substances; organic peroxides), Class 6 (Poisonous and infectious substances), Class 7 (Radioactive Materials), Class 8 (Corrosive substances) and class 9 (Miscellaneous dangerous substances).

Therefore explosives, which come within the purview of the Explosives Rules, are hazardous goods of UN Class 1.

The UN Class 1 i.e. explosives, have been further divided into 6 divisions as follows:

Division 1.1 (U N Class 1 Division 1):

Division 1.2 (U N Class 1 Division 2):

Division 1.3 (U N Class 1 Division 3):

Division 1.4 (U N Class 1 Division 4):

Substances and articles which have a mass explosion hazard e.g., Gun powder, class 3 explosives, Detonators (ordinary or electric), Detonating fuse, shaped charge, demolition charge, boosters, tetryl, smoke less powder, fireworks composition etc.

Substances and articles, which have a projection, hazard but not a mass explosion hazard.

Substances and articles, which have a fire hazard and either a minor blast hazard or a minor projection hazard or both but not, a mass explosion hazard.

Substances and articles, which present no significant hazard, e.g., practice grenades, Safety fuse, fireworks,

Division 1.5 (U N Class 1 Division 5):

Very insensitive substances, which have a mass explosion, hazard e.g., non-cap sensitive class 2 explosives.

Division 1.6 (U N Class 1 Division 6): Extremely insensitive articles, which do not have a mass explosion hazard.

Notes:

(1) For the purpose of safety distances as applicable for manufacturing factories and magazines,

(a) Explosives of "X" category (except sparklers) can be considered as explosives belonging to U N Class 1.4;

(b) Explosives of "Y" category as explosives of U N Class 1.3;

(c) Explosives of "ZZ" category as explosives of U N Class 1.1 and 1.5;

(2) For very low hazard fireworks like sparklers, separate Tables of Safety distances have been prescribed for manufacturing or storage purpose.

Part - 3

Table - 1

Compatibility Groups Pertaining to UN Classification of Explosives: -

The Compatibility Group pertaining to U N Classification Codes of hazardous goods for the purpose of packaging for transport, import and export shall be as follows:

Serial No.	Compatibility Group	Description of substance or article to be classified
1	A	Primary explosive substance
2	B	Article containing a primary explosive and not containing two or more independent safety features
3	C	Propellant explosive substance or other deflagrating explosive substance or article containing such explosive substance
4	D	Secondary detonating explosive substance or black powder or article containing a secondary detonating explosive substance, in each case without means of initiation and without a propelling charge, or article containing a primary explosive substance and containing two or more independent safety features
5	E	Article containing a secondary detonating explosive substance, without of initiation with a propelling charge (other than one containing an inflammable or hypergolic liquid)
6	F	Article containing a secondary detonating explosive substance, without of initiation, with a propelling charge (other than one containing an inflammable or hypergolic liquid) or without a propelling charge
7	G	Pyrotechnic substance or article containing a pyrotechnic substance or containing both an explosive substance and an illuminating, incendiary lachrymatory or smoke-producing substance (other than a water-activated article or one containing white phosphorus, phosphide or inflammable liquid or gel)
8	H	Article containing both an explosive substance and white phosphorus
9	J	Article containing both an explosive substance and an inflammable liquid gel
10	K	Article containing both an explosive substance and a toxic chemical agent
11	L	Explosive substance or article containing an explosive substance and

		presenting a special risk needing isolation or each type
12	S	Substance or article so packed or designed that any hazardous effects from accidental functioning are confirmed within the package unless the package has been degraded by fire, in which case all blast or projection effects are limited to the extent that they do not significantly hinder or prohibit fire-fighting or other emergency response efforts in the immediate vicinity of the package.

Note: As per the Explosives Rules, the methods of packaging of explosives for transport within India may be as per Part -1 of Schedule 2 but the methods of packaging of explosives for import and export of explosives shall be as per Part -2 of Schedule 2

Table - 2

Scheme of classification of goods of class 1

Compatibility Group

	A	B	C	D	E	F	G	H	J	K	L	S
Hazard Division												
1.1	1.1 A	1.1B	1.1C	1.1 D	1.1 E	1.1F	1.1G		1.1 J		1.1 L	
1.2		1.2B	1.2C	1.2D	1.2E	1.2F	1.2G	1.2H	1.2J	1.2K	1.2L	
1.3			1.3C			1.3F	1.3G	1.3H	1.3J	1.3K	1.3L	
1.4		1.4B	1.4C	1.4D	1.4E	1.4F	1.4G					1.4S
1.5				1.5D								

Table - 3

Compatibility Group	A	B	C	D	E	G	S
A	Yes	No	No	No	No	No	No
B	No	Yes	No*	No*	No*	No*	Yes
C	No	No*	Yes	Yes	Yes	No	Yes
D	No	No*	Yes	Yes	Yes	No	Yes
E	No	No*	Yes	Yes	Yes	No	Yes
G	No	No	No	No	No	No	Yes
S	No	Yes	Yes	Yes	Yes	Yes	Yes

Schedule II

Part-1

Methods of packing of explosives for inland transport.

(See rules 14 and 15)

(1) In this Schedule, unless the context otherwise requires, the expression,-

(a) "outer package" means a box, barrel, case or cylinder of wood, metal, or corrugated boxes or other solid material, of such strength, construction and character as not to be liable to be broken or accidentally opened, or to become defective or insecure or to allow an explosive to escape;

(b) "inner package" means a substantial case, bag, canister, card board or other receptacle, made and closed so as to prevent any explosive from escaping;

(c) "propellant" means an authorised explosive of the class 3 adapted and intended exclusively for use as a propelling charge in cannon or small arms .

(2) Wherever an explosive is distinguished as belonging to a particular class or division of a class, the reference is to be made to the classification specified in Schedule 1;

(3) The packages of explosives shall conform to the requirements of relevant standards of Bureau of Indian Standards.

TABLE

Item No.	Class	Method of packing	Quantity in any one outer package	Quantity in any one inner package
(1)	(2)	(3)	(4)	(5)
1	Class 1	When the quantity in any one consignment does not exceed 2.5 kilogrammes , a single outer package.		
		When the quantity exceeds 2.5 kilogrammes a double package, the inner and outer packages being as defined in clause (1) of this Schedule. Inner packages if made of metal shall be secured by Provided that where gun-powder and propellants are packed together the amount shall not exceed 25 Kilogrammes	50 kilogrammes	2.5 kilogrammes cushioning material.
2	Class 2	The material except site mixed Ammonium Nitrate Fuel Oil explosive shall be suitably cartridged in wrappings made of suitable plastic material or papers so as to make it impermeable and protect from damp. Further packing as for Class 1.	25 Kilogrammes	12.5 Kilogrammes
3	Site Mixed Ammonium Nitrate Fuel Oil mixture (ANFO)	As approved by Chief Controller		
4	Class 3 Division 1 other than propellants	The material shall be cartridged in wrappings made of paper or polythene that has been made impermeable. The wrapping should also protect the material from damp. Further packing as for Class 1, provided that either the outer or inner package shall be thoroughly waterproof and no metal shall be used in the construction of the packages, except that (1) nails made of brass, zinc	25 Kilogrammes	2.5 Kilogrammes

		with the same may be used for securing the outer package, and (2) wire stitching may be used for securing the inner package if the wire is effectively prevented from coming into contact with the explosive by means of a sheet of stout cardboard or otherwise.		
5.	Class 3 Division 1 propellants.	As for Class 1	25 Kilogrammes	2.5 Kilogrammes
6	Class 3 Division 2 Other than Picric Acid, Wet Gun Cotton Penta Erythritol Tetranitrate RDX, Tri-nitro Resorcinol (Styphnic Alid)	As for Class 1	25 Kilogrammes	2.5 Kilogrammes

(1)	(2)	(3)	(4)	(5)
7.	Picric Acid	As for Class 1	Unlimited	Unlimited
8.	Gun Cotton so wetted with water as to be absolutely un-inflammable	As for Class 1, provided that the inner or outer package or both of them shall be of such nature, and so closed, as to prevent any material loss of moisture.	Unlimited	Unlimited
9.	Penta-Erythritol Tetranitrate (P.E.T.N Penthrite) containing 25% of moisture	In double package, the inner package shall be a polythene bag closed at the top with twine thread and placed in a bright tin container. Both the bag and the tin container shall be so closed as to prevent any material loss of moisture. The outer package shall be as defined in clause (1) of the Schedule and so closed as to prevent any material loss of moisture.	22.5 Kilogrammes (dry basis)	11.25 (dry basis)
10.	RDX	As for PETN	22.5 Kilogrammes (dry basis)	11.25 (dry basis)
11.	Tri- Nitro-Resorcinol (Styphnic Acid)	As for Class 1, provided that Tri-nitro-Resorcinol (Styphnic Acid) shall be wetted with not less than 20% of water calculated on the wet explosives and that the inner package shall be a substantial bag, case or canister so made and closed as to prevent any loss of moisture or escape of explosives.	25 Kilogrammes of wet explosive	25 Kilogrammes of wet explosive
12.	Class 4 Division 1	As for Class 3, Division 1, other than propellants.	25 Kilogrammes	2.5 Kilogrammes
13.	Class 4 Division 2	As for Class 1	25 Kilogrammes .	2.5 Kilogrammes
14.	Class 5	The explosives shall be packed wet containing not	100 Kilogrammes .	12.5

	less than 25% water, and shall in this condition be enclosed in a treble package; the inner most package containing the wet cloth or other suitable material of close mesh but permeable to water; the intermediate package shall contain all the individual packages and sufficient water to keep the explosive in them constantly wet, and may, consistent with the requirements of the security of the whole package, be in the form of a rubber bag, or of a case, or of such special lining to the other packages as will efficiently attain this object, and it must itself be constantly surrounded by or saturated with water, the outer package containing sufficient water constantly to surround the case. Both the intermediate package and the outer package shall be of such construction and material as will not allow water to escape.		
15.Class 6, Division 1, other than Pin-fire cartridges for pistols.	A single outer package. Provided that clause (3) of this Schedule shall not apply to explosives of this Division: Provided also that bulleted cartridges of a calibre exceeding 1.27 centimetres. And belonging to this Division shall be packed in such a manner that the	Unlimited	

(1) (2)	(3)	(4)	(5)
	point of any bullet cannot come in contact with the cap of another cartridge.		
16.Pin-fire cartridges for pistols	(a)Not exceeding 50 in number in any one consignment—So packed in a single package that the bases lie alternately in opposite directions. The bases and pins shall be so fitted into perforations in millboard or other suitable material as to prevent the firing of any one of the said cartridges by an explosion in any other of the said cartridges.	2500 in number	50 in number
	(b)Exceeding 50 number-In an inner and outer package, the cartridges being packed in inner packages with millboards as above required.		
17.Class 6, Division 2	Explosives made up into cartridges or charges for cannon, shell, torpedoes, mines, blasting or other like purposes shall be packed in such manner and in such quantity as is required for the same explosive when not so made up: Provided that, where a double package is required, the enclosing ease of such cartridges or charges may, if it satisfies the conditions required for an inner packages, be deemed to be such inner package. Other ammunition of this Division-A single outer package.	2500 in number	50 in number
18.Class 6 Division 3, other than Detonators and Electric Detonators	As for Class 1 Provided that bulleted cartridges of a calibre exceeding 1.27 centimetres. And belonging to this Division shall be packed in such a manner that the point of any bullet cannot come in contact with the cap of another cartridge.	10,000 in number	1,000 in number

(a)Not exceeding 1,000 in any one consignment. As for Class 1, provided that the detonators and the spaces between the same and between the sides of the inner package and the said detonators shall all be filled as far as practicable, with fine sawdust or other similar material; a layer of felt or other soft yielding material shall be placed between both ends of all the detonators and the interior of the inner package in which the same are placed, in such manner and so secured, that both ends of the detonators will rest upon the said cotton wool or other material, every inner package, if of metal to be lined throughout with the paper or other soft material.

(b)Exceeding 1,000 detonators. The detonators shall be packed in inner packages, with sawdust and cotton wool as above described. Such inner packages shall be placed inside a substantial case of wood or metal, made and closed so as to prevent any of the inner packages escaping there from, and such case shall be placed inside an outer package in such manner and so secured

(1)	(2)	(3)	(4)	(5)
		as to leave a clear space of not less than 7.5 centimetres. Between the case and every part of the interior of the said outer packages, notwithstanding that such clear space may, if preferred be filled with sawdust, straw or other similar material or may contain a light framework or battens of wood to keep the case aforesaid in position in the outer package.		
		(c)Where the number of detonators exceeds 5,000 such other packages shall be provided with handles or other contrivance, by means of which it can be safely and conveniently carried.		
20.	Electric Detonators	As for Class 1, provided that the number in any outer package shall not exceeds 2,000.	2,000 in number	100 in number
21.	Class 7 Division 1	Double package, the inner package being hermetically closed and contained in an outer package as above defined.	10 Kilogrammes	0.5 Kilogrammes
22.	Class 7 Division 2 Sub-	Double package, the inner and outer packages made of wood being as defined in clause (1) of this Schedule. Inner Packages made of card board.	50 Kilogrammes	

	division 1, 2 and 3 except serpents and paper caps or amerces			
23	Class 7 Division 2 Sub-division 1, 2 and 3 except serpents and paper caps or amerces	Double package, the inner and outer packages being as defined in clause (1) of this Schedule. Inner Packages made of card board	20 Kilogrammes	
24	Class 7 Division 2 Sub-division 1for serpents	Double package, the inner and outer packages being as defined in clause (1) of this Schedule. Inner Packages shall be filled with cotton or suitable material to protect from breakage of serpents palates	15 Kilogrammes	
25	Class 7 Division 2 Sub-division 2 for paper caps or amerces	Double package, the inner and outer packages made of wood being as defined in clause (1) of this Schedule. Inner Packages shall be made as per rule 34	2.8 Kilogrammes	
26	Class 7 Division 2 Sub-division 2 for paper caps or amerces	Double package, the inner and outer packages corrugated boxes being as defined in clause (1) of this Schedule. Inner Packages shall be made as per rule 34	1.4 Kilogrammes	

(1)	(2)	(3)	(4)	(5)
27	Class 7 Division 3	Single out package and inside of outer box shall secured by cushioning material	25 Kilogrammes	--
28	Class 7, Division 4	Single outer package provided that clause (3) of this Schedule shall not apply.	50 Kilogrammes . or as approved by Armed Forces of the Union	--
29.	Class 8, L.O.X. (Liquid Oxygen Explosives	Cartridges packed and transported for immediate use in insulated packing boxes of a design approved by the Chief Controller	--	--

Part - 2

Methods of packing of explosives for import and export

(see rules 14 and 15)

(1) The methods of packing of explosives for import and export shall comply with the Scheme of classification of dangerous goods of U N class 1 (i.e., explosives) in combination with the hazard Division and the Compatibility Group devised by United Nations as 'Transport of Dangerous Goods' and accepted world wide as harmonised

International Regulations as amended from time to time for governing the various modes of transport of dangerous goods.

Schedule III

Methods of testing

(see rule 48)

An explosive of the 3rd (Nitro-compound) Class or of the 4th (Chlorate-mixture) Class shall comply with the tests set forth in this Schedule as applicable to such explosive.

Heat test as applied to explosives

1. Apparatus and materials employed

Specification	Pattern No.	Article		
1	2	3	4	5
A		Acid, Acetic 56.8 cubic centimetres. Bottle		1
	I	Balance		1
	II	Bath, water		1
	III	Bath, water, for hot water heating *		1
	IV	Beaker, glass, 1 1/3 litres		1
	V	Bottle, dropper, brown glass, 28.4 cubic centimetres. (for glycerine and water mixture)		1
	VI	Bottle, glass-stoppered, brown glass, 28.4 cubic centimetres (for standard tint papers)		1
	VII	Bottle, glass-stoppered, brown glass, 56.8 cubic centimetres (for test papers)		1
	VIII	Brush, cleaning		2
	IX	Brush, cleaning, test tube		1

1	2	3	4	5
	X	Burner, gas, Argand, and screen		1
	XI	Caps, for test tubes	Sufficient supply	
B	XII	Chalk, French	Sufficient supply	
	XIII	Forceps, lifting, heat test papers		1
	XIV	Funnel, aluminium		1
C	XV	Funnel, glass		1
		Glycerine 28.4 cubic centimetres bottle		1
	XVI	Knife, cordite		1
	XVII	Lid, Water bath		1
	SVIII	Mill, cordite		1
	XIX	Needle, piercing, heat test papers		1
	XX	Oven, water		1
D		Paper, filter	Sufficient supply	
		Papers, filter, 5.5 centimetres.	-Do-	
	XXI	Papers, standard tint	-Do-	
E		Papers, test	-Do-	
	XXII	Pestle and mortar, wedgwoodware		1
	XXIII	Plate, glass, resting heat test papers on when piercing		1
	XXIV	Rings, rubber, test tube	Sufficient supply	

XXV	Rod, glass, flat-headed		1
XXVI	Rods, glass, platinum wire hook		6
XXVII	Scoop, aluminium		1
XXVIII	Screen, burner for water bath		1
XXIX	Sieves, rectangular, tinned, brass wire		1
XXX	Sieves with lid and base, Circular brass	A set	
XXXI	Spatula, horn		1
XXXII	Stand, heat test tubes		1
XXXIII	Stand, water bath		1
XXXIV	Stoppers, rubber, perforated	Sufficient supply	
XXXV	Thermometers, glass, and wood case		2
XXXVI	Trays, aluminium		6
XXXVII	Tray, cordite knife		1
XXXVIII	Tubes, heat test	Sufficient supply	
XXXIX	Tubes, standard tint paper		1
XL	Tubing, rubber, Argand gas burner	Sufficient supply	
XLI	Weights, gramme and forecps in box	A set	

*Alternative pattern for use where hot water is available.

N.B.—The apparatus and materials are to comply in all respects with the specification and standard patterns.

Specification —acid, acetic

The acetic acid is to be clear, colourless and free from all impurities, and is not to contain less than 96 per cent CH_3COOH. When 1 cubic centimetre. Of N/10 potassium permanganate solution is added to 100 cubic centimetres of the acetic acid maintained at 15^oC, the distinctive colour is to remain for not less than 15 minutes.

One drop of the diluted acetic acid-one volume acetic acid diluted with four volumes of distilled water—when placed by means of a glass rod on freshly-prepared potassium iodide-starch paper is to produce no colour.

Specification —chalk, french

The French chalk is to be equal in colour, to the standard sample and is not to contain more than 0.5 per cent of moisture.

The bulk of the French chalk is to be such that a volume of 50 cubic centimetres. will weigh 23.5 +1.0 grammes. This to be determined as follows:

A glass funnel, the stem of which is 11 centimetres in length tapering, internally from 8 mm. at the top to 5 mm. at the end, is to be clamped vertically above a 50 cubic centimetres cylinder so that the mouth of the latter is 7 centimetres. Below the lowest point of the funnel. The cylinder is to be 2.5 centimetres. in internal diameter, with a ground edge. The French Chalk is to be poured gradually into the funnel and allowed to flow into the cylinder until the latter overflows. This should take one minute. The surface of the chalk is then to be levelled off, without tapping into the funnel and allowed to flow into the cylinder until the latter overflows. This should take one minute. The surface of the chalk is then to be levelled off, without tapping or shaking the cylinder, by drawing a straight edge over the mouth of the cylinder. The cylinder and contents are then to be weighed.

The fitness of the French chalk is to be such that it will all pass, without rubbing, through a 0.075 mm. wire sieve of 6.400 meshes per square centimetre.

The French chalk is not to contain more than 0.1 per cent of soluble alkali salts calculated as $CaCo_3$. This is to be determined as follows:

10 grams of the chalk are to be boiled with 250 cubic centimetres of water for one minute, filtered, washed and the filtrate titrated with N/10 hydrochloric acid.

The French chalk, when warmed with hydrochloric acid is not to give off more than 1 per cent and not less than 0.25 per cent of carbonic acid gas.

The French chalk is not to absorb more than 0.5 per cent of moisture after being dried at 100°C till constant in weight, and then exposed under a bell-jar to saturated atmosphere at 15°C to 20°C for 24 hours.

Note:—Before use in heat-test experiments the French chalk is to be carefully washed with distilled water, dried in a water oven at 65-70°C, and exposed to a saturated atmosphere for 24 hours. It is to be kept in a well-stoppered bottle.

Specification—glycerine

The glycerine is to comply with the latest edition of British Pharmacopoeia Specification in all respects.

Specification—paper, filters

The paper for making heat test paper is to consist entirely of pure normal cotton cellulose of strongly resistant quality and free from any loading or sizing.

During manufacture, the paper is not to be submitted to artificial heat of any kind.

The paper is to have a smooth white surface, and both sides are to be as nearly alike as possible.

The average length of the fibres is to be 2±0.5 millimetres.

The sheets, when measured with a Ciceri smith's patent fixed pressure micrometer, are to have a thickness of 1.8 ±0.2 millimetres.

The last treatment in its preparation is to be a thorough washing with pure distilled water and subsequent air drying in a pure atmosphere.

The paper is to be free from all traces of chemical or other impurity particularly acids, chlorine and peroxides.

On boiling with 3 per cent, caustic soda solution for 60 minutes, the paper is to lose more than 7.5 per cent of its weight.

When heated for 15 minutes at 100° C with Fehlings's solutions, diluted with twice its volume of boiling water, it is not to produce more than 1.25 per cent of its weight of cuprous oxide (Cu_2O).

It is to be supplied in sheets 50 centimetres. long by 15 centimetres. wide, and each 100 sheets packed separately in a hermetically sealed tin case closed by a tear-off strip.

For use in the extraction of nitro-glycerine from dynamite it is to be supplied in circles 5.5 centimetres in diameter, each 100 papers being packed separately.

Specification—papers, test

The papers are to be prepared and tested by the method laid down in Appendix II.

Each batch of papers is to be tested by carrying out four consecutive tests of four papers on each of two days. The mean test obtained is to be 18.5± 0.75 minutes. A test different from the mean by more than two minutes is to be considered abnormal, and is to be disregarded unless there are more than one of such abnormal tests amongst the 32 papers tested, in which case the batch is to be condemned.

Specification—papers, standard tint

The standard tint papers are to be made by the method described in, and are to conform to the conditions laid down in Appendix I.

II—Preparation of the sample to be tested:

All the operations in preparing a sample for testing are to be carried out as expeditiously as possible, avoiding exposure to light, as far as practicable and the test is to be carried out as soon as the sample is prepared.

In weighing out heat test quantities, an accuracy of ± 0.05 gramme is sufficient. These quantities are to be weighed out into test tubes which have been fitted with rubber rings, the Explosives of Class 3, Division 1.

(1) Friable Nitro-glycerine preparations from which the nitro-glycerine or liquid nitro-compound cannot be conveniently extracted with water-

(a)A cartridge of the sample to be tested is to be opened at one end and rotated with one hand while with the other contents of the cartridge are to be loosened by means of pressure between the thumb and forefinger. The first 12.7 millimetres of the sample so loosened is to be rejected.

(b)The cartridge is then to be inverted over the scoop and the loosening operation continued so as to transfer a portion of the explosive to the scoop.

(c)When the weight of the sample in the scoop has been adjusted to 3.2 grammes the sample is to be transferred by means of the aluminium funnel to a heat test tubes collected at the bottom by gently tapping the side of the tube with the fingers and pressed down to a height of 3 centimetres by means of the flat-headed glass rod. The sample is then ready to be heat tested.

(2) Blasting Gelatine and Analogous Preparations-

(a)The wrapper of the cartridge is to be opened out and 12.7 millimetres of the sample is to be removed with the spatula and rejected. A price weighing 3.2 grammes as nearly as can be judged is then to be cut off for test. The sample is to lie on its own wrapper during these operations, and direct contact of the operator's hands with the sample is to be avoided.

(b)The portion of the sample removed is to be weighted in the scoop and pieces added to, or removed from it, until 3.2 grammes are obtained. This quantity is then to be transferred to the mortar. 6.5 grammes of French Chalk are to be weighed out using the spatula and scoop and also transferred to the mortar.

(c)The sample is to be incorporated with the French Chalk by repeatedly squeezing it with the end of the pestle, until it is in a condition in which it can be ground. The times for normal samples should generally be as follows:

Blasting gelatine	1 ½ minutes.
Gelatine dynamite	1 minute.
Gelignite and Similar Explosives containing less than 63 per cent of Nitro-glycerine.	½ minute.

The mixture is then to be ground by a circular movement of the pestle for a further period of half a minute, and should then be homogenous in appearance.

(d)The mixture is to be transferred to a test-tube by means of the horn spatula and the aluminium funnel, and gently pressed down to a height of 5 centimetres with the flat headed glass rod. The sample is then ready to be heat tested.

(e)The pestle and mortar after each grinding are to be thoroughly washed with tap water, rinsed with distilled water, dried with a clean towel, and finally dried in a bath at 100° C. The pestle and mortar are to be allowed to cool to the ordinary temperature before being used again.

(3) Cordite, Ballistite and other propellants of Class 3, Division 1-

(i) Explosives in the form of sticks or tubes—

(a)The operator is to wash his hands carefully, thoroughly rinse them in distilled water, and dry them with a clean towel.

(b)The sticks or tubes to be tested are to be wiped out with clean filter paper.

(c)The sample is to be reduced to a condition suitable for grinding in the cordite mill by being cut into small piece about 3.175 millimetres. long by means of the cordite knife, 12.7 millimetres being rejected from each end of the sticks or tubes to be tested.

(d)The set of sieves with the lid removed is to be placed under the mill so as to allow the ground material to fall directly on the top sieve.

(e)The cut sample is to be transferred from the cordite tray to the mill and ground. The first portion passing through the mill is to be rejected. A sufficient quantity of the sample is to be taken to ensure that enough material is obtained on the second sieve without grinding the whole quantity introduced into the mill.

(f) The lid is to be replaced on the set of sieves and the sample is sieved for one minute. The material which remains on the second sieve is to be taken for heat test, except in the case of powder in sticks or tubes the nominal diameter of which is less than 0.762 millimetres. in this case, the material in the bottom compartment is to be taken for heat test.

(g)1.6 grammes of the ground and sieved sample are to be weighed out in the scoop, transferred by means of the aluminium funnel to a heat test tube and collected at the bottom by gently tapping the side of the tube with the fingers. Three such test quantities are to be so weighed out. The sample is then ready to be heat tested.

(h)The set of sieves and the cordite mill are to be cleaned with the cleaning brush before and after the preparation of each sample.

(ii) Explosives in the form of grains for small arms.—1.6 grammes of the sample is to be weighed out in the scoop, transferred by means of the aluminium funnel to a heat test tube and collected at the bottom by gently tapping the side of the tube with the fingers. Three such test quantities are to be weighed out. The sample is then ready to be heat tested.

Explosives of Class 3, Division 2

(1) Nitro-cellulose Pulp—

(a)The operator is to wash his hands carefully, thoroughly rinse them with distilled water and dry them with a clean towel.

(b)Six thickness of filter paper are to be laid on top of one another. Sufficient quantity of the sample to be tested, to give about 5.6 grammes after the final pressing, is to be spread on the top sheet. Six other thickness of filter paper are to be similarly laid over the sample. The whole is then to be placed under pressure as, for instance, in a hand screw press, and pressure applied for three minutes. On removal from the press, the sample is to be rubbed up by hand on the filter paper and again pressed for three minutes on fresh filter paper. The sample is then to be transferred to the rectangular sieve and rubbed through it with the hand.

(c)5 grammes of the sieved sample are to be weighed out in the scoop and spread evenly on an aluminium tray.

(d)The oven is to have been brought to, and is to be maintained at a temperature of 48.9°C (120°F) the tray is to be placed in the oven and kept there for 15 minutes with the door closed.

(e)The tray is to be removed from the oven and the sample transferred to the top sieve of the set of sieves. The lid is to be replaced, and the sample sieved for two minutes. For this operation the second sieve is not to be used.

(f) The portion of the sample, which passes through, the top sieve is again to be spread evenly on an tray and exposed to the air of the room for four hours.

(g)1.3 grammes of the exposed sample are to be weighed out in the scoop and transferred by means of the aluminium funnel to a heat test tube. Two such test quantities are to be so weighed out. The material in each is to be gently pressed down with the flat headed glass rod to a height of three centimetres. The sample is then ready to be heat tested.

(h)The wire sieve and the set of sieves are to be cleaned with the cleaning brush before and after each sample has been sieved.

(2) Compressed Guncotton —

(a)About 10 grammes of guncotton are to be removed from the centre of the primer or slab by scrapping with the horn spatula.

(b)The scrapping so obtained are to be placed in the glass beaker two thirds full of cold distilled water. The sample is to be frequently stirred up on the water during 15 minutes with the flat headed glass rod, and then allowed to settle. The water is to be poured off and replaced by a similar quantity of distilled water in which the sample is to be frequently stirred up as before during 15 minutes. After setting, the second wash water is to be poured off.

(c)The operator is to wash hands carefully, thoroughly rinse them with distilled water and collect the sample by hand squeezing out the excess of water.

(d)Six thickness of filter paper are to be laid on top of one another. The washed guncotton is to be spread on the top sheet. Six other thickness of filter paper are to be similarly laid over the sample. The whole is then to be placed under pressure as, for instance, in a hand screw press and pressure applied for three minutes. On removal from the press, the sample is to be rubbed up on the filter paper by hand and again pressed for three minutes on fresh filter paper. The sample is then to be transferred to the rectangular sieve and rubbed through it by hand.

(e)5 grammes of the sieved sample are to be weighed out in the scoop and spread evenly on an aluminium tray.

(f) The above is to have been brought to, and is to be maintained at a temperature of 48.9°C(120°F). The tray is to be placed in the oven and kept there for 15 minutes, with the door closed.

(g)The tray is to be removed from the oven and the sample transferred to the top sieve of the set of sieves. The lid is to be replaced, and the sample sieved for two minutes. For this operation the second sieve is not to be used.

(h)The portion of the sample, which passes through, the top sieve is to be again spread evenly on an aluminium tray and exposed to the air of the room for four hours.

(i) 1.3 grammes of the exposed sample are to be weighed out in the scoop and transferred by means of the aluminium funnel to a heat test tube. Two such test quantities are to be so weighed out. The material in each is to be gently pressed down with the flat-headed glass rod to a height of three centimetres. The sample is then ready to be heat tested.

(j) The wire sieve and the set of sieves are to be cleaned with the cleaning brush before and after each sample has been sieved.

(3) Nitro-cellulose Propellant —

(i) Explosives in the form of sticks or tubes:

(a)The operator is to wash his hands carefully, thoroughly rinse them in distilled water, and dry them with a clean towel.

(b)The sticks or tubes to be tested are to be wiped with clean filter paper.

(c)The sample is to be reduced to a condition suitable for grinding in the cordite mill by being cut into small pieces about 3.175 millimetres long by means of the cordite knife 12.7 millimetres being rejected from each end of the sticks or tubes to be tested.

(d)The set of sieves with the lid removed, is to be placed under the mill so as to allow the ground material to fall directly on to the top sieve.

(e)The cut sample is to be transferred from the cordite tray to the mill and ground. The first portion passing through the mill is to be rejected. A sufficient quantity of the sample is to be taken to ensure that enough material is obtained on the second sieve without grinding the whole quantity introduced into the mill.

(f) The lid is to be replaced on the set of sieves and the sample is to be sieved for one minute. The material which remains on the second sieve is to be taken for heat test, except in the case of powder in sticks or tubes, the nominal diameter of which is less than 0.762 millimetres in this case, the material in the bottom compartment is to be taken for heat test.

(g)1.6 grammes of the ground and sieved sample are to be weighed out in the scoop, transferred by means of the aluminium funnel to a heat test tube, and collected at the bottom by gently tapping the side of the tube with the fingers. Three such test quantities are to be so weighted out. The sample is then ready to be heat tested.

(h)The set of sieves and the cordite mill are to be cleaned with cleaning brush before and after the preparation of each sample.

(i) The explosives in the form of

(a)A quantity of the sample sufficient for the tests required is to be spread evenly on an aluminium tray.

(b)The oven is to have been brought to, and is to be maintained at a temperature of 48.9°C (120° F). The tray is to be placed in the oven and kept there for 15 minutes, with the door closed.

(c)The tray is to be removed from the oven and exposed to the air of the room for 4 hours.

(d)1.3 grammes of the exposed sample are to be weighed out in the scoop and transferred, by means of the aluminium funnel to a heat test tube. Three such test quantities are to be so weighed out. The sample is then ready to be heat tested.

III—Application of the Test

(a)The water bath is to be fitted up and is to be levelled and filled with water up to the outflow. It is to be placed on a table of convenient height in such a position that the heat test tint can readily be observed by reflected light. No part of the apparatus to be exposed to direct sunlight.

(b)The thermometer fixed in the rubber stopper, is to be inserted in the wire cage provided for the purpose on the under side of the water bath of 7.6 centimetres. The water is heated to the required temperature, and maintained at a constant temperature and depth. The temperatures for the various explosives are given in Table-I.

(c)The glass rod with platinum wire hook is to be inserted in the rubber stopper. A test paper is then to be removed from the brown glass bottle by means of the forceps placed on the glass plate so that its edges coincide with the lines on the plate, and pierced by passing the needle through the paper and the hole in the plate. The test paper is then to be held by means of the forceps, and a mixture of equal volumes of distilled water and glycerine is to be applied to the upper edge of the test paper by means of the glass rod of the dropping bottle in sufficient quantity to moisten the upper half of the test paper by the time the test is complete. The platinum wire hook of the glass rod is then to be passed through the hole in the paper. At no time is the operator to touch the paper with his finger.

(d)The rubber stopper carrying the glass rod and test paper is at once to be firmly pressed into the test tube containing the explosives to be tested until the bottom of the stopper coincides with the top line etched on the test tube and the position of the glass rod is to be adjusted, so that the lower edge of the wet portion of the test paper, which edge is to be approximately horizontal, coincides with the middle etched line on the test tube. The test tube is then to be inserted in one of the wire cages of the lid of the water bath, so that the bottom line etched on the test tube coincides with the upper surface of the lid. The rubber ring is to pressed down on the bath and the cap placed in position over the tube.

The quantities of the various explosives to be placed in the test tube are given in Table-I.

The test paper is not to be inspected by lifting the cap until shortly before the time explosive ought to stand the test as given in Table-I.

(e)The test is completed when the faint brown line, which after time makes its appearance at the margin between the wet and the dry positions of the test paper, equals in depth of tint the brown line on the standard tint paper.

For any given explosives to pass the test, the time elapsing between the introduction of the tube into the bath and the production of the tint equal to the standard must not be less than the time given in table below:

Class	Division	Explosive Nature	Temperature of Heat Test Tested	Quantity of Explosive Heat Tested	Time explosive should stand the Test
3	1	Friable Nitro-glycerine preparations from which the Nitro-glycerine cannot conveniently be extracted by water.	°C 71.1 (160° F)	3.2 grammes	Min 7
		Blasting Gelatine, and Analogous preparations.	71.1 (160° F)	3.2 grammes +6.5 grammes French chalk	10

		Cordite, Ballistic and other propellant of Class3, Division 1.	71.1 (160° F)	1.6 grammes	10
3	2	Nitro-cellulose, pulp, compressed Gun cotton.	76.7 (170° F)	1.3 gramme	10
		Nitro-cellulose Propellants	76.7 (170° F)	1.3 grammes	10

After the test is finished, the explosive is to be carefully removed from the tubes, and the tubes thoroughly washed out with tap water by means of the test tube brush. They are then to be rinsed out and allowed to drain for a few minutes. The washing is repeated with distilled water, the tubes rinsed, allowed to drain, and finally dried in a bath at 100° C. The tubes are to be allowed to cool to the ordinary temperature before being used again.

IV—Exudation and liquefaction test for Blasting Gelatine and analogous preparations

Test for Liquefaction

A cylinder of blasting gelatine is to be cut from the cartridge to be tested, the length of the cylinder to be about equal to its diameter and the ends being cut flat.

The cylinder is to be placed on end on a flat surface without any wrapper and secured by a pin passing vertically through its centre.

In this condition the cylinder is to be exposed for one hundred and forty-four (144) consecutive hours (six days and nights) to a temperature ranging from 29.40° C to 32.2° C and during such exposure the cylinder shall not diminish in height by more than one-fourth of its original height, and the upper cut surface shall retain its flatness and the sharpness of its edge.

Note:—If the blasting gelatine and gelatine dynamite to be tested cannot be made up in cylindrical form, the test is to be applied with necessary modifications.

Test for liability to exudation

(''Freezing and thawing test'')

There shall be no separation from the general mass of the blasting gelatine or gelatine dynamite of any nitro glycerine or liquid nitro-compound under any conditions of storage, transport or use or when the material is subjected to the liquefaction test hereinbefore described or when subjected three times in succession to alternate freezing and thawing i.e. storage at -3 to -6°C for 16 hours (freezing) followed by 8 hours at room temperature (thawing). The cycle is repeated three times (3 days) and the explosives are examined for any abnormality in respect of gel segregation or oozing out of nitro glycerine

V-Picric Acid

(1)The material shall contain not more than 0.3 part of mineral or non-combustible matter in 100 parts by weight of the material dried at 71.° C (160° F).

(2)It should not contain more than a minute trace of lead.

(3)One hundred parts of the dry material shall not contain more than 0.3 part of total (free and combined) sulphuric acid, of which not more than 0.1 part shall be free sulphuric acid.

(4)Its melting point should be between 120° C and 122.8° C.

VI- Testing Chlorate mixtures

The material must not be too sensitive and must show no tendency to increase in sensitiveness on keeping.

The material must contain nothing liable to reduce the chlorate.

Chlorites calculated, as potassium chloride must not exceed 0.25 per cent.

The material must contain no free acid, or substance liable to produce free acid.

Explosives of this class containing nitro-compounds will be subject to the heat test as they belonged to Class 3.

Note:--These explosive will considered too sensitive if they can be exploded however, partially by means of a glancing blow with a broom stick on soft wood such as deal.

VII-PETN (Penta Erythritol Tetranitrate)

(A) Heat Test:--

If the sample is received dry, it is to be transferred to a clean sheet of paper and mixed thoroughly in an atmosphere free from dust. Sample of moist PETN is to be dried prior to being heat tested by taking the same in a tared flat-bottomed dish and expose the dish and its contents in a oven at a temperature not exceeding 60_{o} C until constant in weight.

1.3 grammes of the dry sample is carefully transferred to a heat test tube by means of the aluminium funnel. After removal of the funnel the sample is to be collected at the bottom of the tube by tapping with the fingers. It is then to be heat tested at a temperature of 76.6_{o} C and the time explosive should stand the test, should not be less than 10 minutes.

(B) Other tests and requirements-

(1)The PETN should be in the form of white crystals.

(2)It should be free from gritty particles, visible impurities and foreign matter.

(3)Melting point-The melting point of the PETN should be between 139_{o} C and 142_{o} C.

(4)Insoluble matter-The total insoluble matter in acetone should not be more than 0.05 per cent.

(5)Volatile matter-Volatile matter should not be more than 0.15 per cent.

(6)Acidity-The acidity, calculated as HNO_2 should not exceed 0.01%.

(7)Alkalinity-The alkalinity, calculated as Na_2Co_3, should not be more than 0.01%.

(8)Nitrogen content-The nitrogen content should be not less than 17.40 per cent and not more than 27.80 per cent.

Appendix 1 to Schedule III

Preparation of Standard Tint Papers

0.48 grammes of the finest yellow ochre, 0.2 gramme of raw umber and 5 grammes of fine white gum arabic, all of which have been very finely ground in an agate mortar are weighed into a stoppered bottle of about 150 cubic centimetre capacity and 100 cubic centimetre of water added. The whole is shaken in the cold until the gum is dissolved. The suspension is then well shaken and allowed to stand for one hour.

A stylographic pen is then filled from the centre of the suspension and with the aid of a ruler lines are drawn at a steady pace across one side, of a sheet of filter paper to Specification D. The sheet is then cut up into rectangular strips 1 centimetres broad by 2 centimetres long, each with a line across the middle perpendicular to the length of the strip. The breadth of the line must be not less than 0.5 millimetres. not more than 1 millimetres.

In order to maintain continuity as regards depth of tint strips in which the tint does not correspond with that of the sealed pattern are to be rejected.

Appendix 2 to Schedule III

Preparation and Testing of Heat Papers

Preparation

Potassium Iodide:

The purest potassium iodide obtainable commercially is to be purified by triple re-crystallisation from pure ethyl alcohol, diluted by the addition of one-twentieth of its volume of distilled water. The crystals are to be kept as small as possible, and are to be spread out on clean filter paper, resting on a glass plate, and allowed to dry in the dark,. When dry,

¹Hkkx II¹[k.M 3(i)º Hkkjr dk jkti=k % vlk/kj.k 221

they are to be placed in a thin layer on the bottom of a platinum crucible and heated to a dull red heat for one minute over a spirit lamp burning pure alcohol. When cold the crystals are to be transferred to a brown glass stoppered bottle from which the quantities required are to be weighed out.

The potassium iodide used for each batch of filter paper is to be prepared as above immediately before use.

Starch :

The starch used is to be best maize starch in the form of cornflower. It is to be purified immediately before use by washing six times by decantation with freshly distilled water. It is then to be placed on a porous plate of unglazed porcelain, allowed to dry in a warm atmosphere in the dark, and stopped in a brown bottle from which the quantities required are to be weighted out.

Preparation of the Dipping Solution:

220 cubic centimetres of freshly distilled water are to be placed in a Jena glass flask and raised to boiling point over a spirit lamp burning pure spirit. 3 gram of the starch, prepared as above, are to be suspended in 30 cubic centimetre of distilled water and the mixture poured into the 220 cubic centimetres of boiling water, with continuous shaking. The whole is to be kept boiling gently, and shaken occasionally for 5 minutes. The solution of starch so prepared is to be added to a solution of 1 gramme of the purified potassium iodide in 250 cubic centimetre of freshly distilled water, and the solution well mixed. The mixture is to stand overnight in a dark room. The following day, the clear supernatant liquid is to be carefully siphoned off and used immediately for dipping the paper.

If it is desired to dip a large batch of paper, the foregoing quantities may be multiplied in order to obtain sufficient solution.

Dipping the papers:

The clear potassium iodide and starch solution is to be poured into a porcelain tray, which is to be kept exclusively for this operation. Sheets of filter paper to Specification D are to be passed through it singly, so that all except 3 centimetres at the end of the strip of paper passes beneath the surface of the liquid.

The strip of paper is to be held above the tray by the dry portion and a glass rod passed down each side to remove the excess of solution. It is then to be suspended by the undippened portion in a warm dark room, cupboard, or oven until dry.

It is advisable to nip a small piece, out of the edge of each sheet at the boundary line between the wet and dry portions as a guide in subsequent cutting.

Cutting and Trimming the Test Paper :

In cutting and trimming heat test paper the operator is to wear clean cotton gloves.

When the sheets are dry they are to be trimmed by cutting off the unclipped end about 0.5 centimetre below the edge of the undipped portion, 0.5 centimetres strips are also cut from the other three edges. The sheets are then to be stored in amber coloured glass jars, kept in the dark.

When a batch of paper has been passed for issue the sheets are to be cut up into rectangular pieces 1 centimetre by 2 centimetres, and are to be issued in this form.

All the above operations are to be carried out in a building specially reserved for this work. This building is to be protected from the direct access of the sun's rays, and is, as far as possible, to be kept dark.

Testing of Heat Test Paper by the Diffusion Test

Apparatus and Materials required :

No.			
1.	Acheson graphite	Pieces,	1
2.	Acid, Sulphuric, normal solution	Sufficient supply	
3.	Annulus aluminium		2
4.	Cap, light-tightpaste board		1
5.	Cylinder, glass, with rubber stopper		1
6.	Cylinder, measuring 100 cubic centimetres		1
7.	Ferrous ammonium sulphate	Sufficient supply	

No.			
8.	Jar, cylindrical, brown glass		1
9.	Pipette 10 cubic centimetres		1
10.	Rod, stirring, glass		1
11.	Sodium nitrite solution containing 1.7 grams in 1 litre	Sufficient supply	
12.	Stopper, rubber, with 4 platinum hooks		1

Application of the Test :

The solution is to be brought to 15° C before use. 2 grammes of ferrous ammonium sulphate are weighed out and placed in the glass jar, 90 cubic centimetres of the normal sulphuric acid added and solution effected by stirring with the glass rod. The jar is then placed in a bath of water at 15° C, and must be kept at the temperature of the air should be 15° C to 17° C. 10 cubic centimetres of the sodium nitrite solution are then added by means of the pipette and well stirred in. An aluminium annulus is placed centrally over the mouth of the jar and the orifice covered by the graphite slab; over this is placed a second annulus. Good contact between surfaces is to be ensured by exerting a slight pressure and twisting motion.

The glass cylinder with rubber stopper and light tight cap are then placed on the second annulus, and the assembled apparatus is allowed to stand for 20 minutes. After the expiration of the 20 minutes, the light tight cap and the glass cylinder are removed, the rubber stopper taken out of the cylinder waved several times through the air. As soon as possible, four of the heat test papers to be tested are moistened with glycerine solution, placed on the platinum hooks of the stopper, the stopper inserted in the cylinder, and the cylinder and light tight cap again placed in position of the second annulus, and the time noted.

When the papers read by reflected light reach the standard, tint, the time is again noted; the difference gives the time of test. Standard tint papers to be read by reflected light are used for comparison.

The cylinder is then removed uncorked, waved several times through the air, and a fresh set of papers is at once put on for test. After four sets of tests have been made the graphite slab must be heated to 200° C for 1 hour allowed to cool in an evacuated desiccators over potash for at least 16 hours before being used again.

A batch of papers is to be tested by carrying out four consecutive tests of four papers on each of two days.

SCHEDULE IV

Part 1

(See rule 99)

Licences and licensing authorities

Article No.	Purpose for which granted	Licence Form	Licensing Authority
1	2	3	4
1	(a)Licence to manufacture fireworks or gunpowder or both not exceeding 15 kilogrammes at any one time.	LE-1	District Magistrate.
	(b)Licence to manufacture fireworks or gunpowder or both exceeding 15 kilogrammes but not exceeding 500 kilogrammes at any one time.	LE-1	Controller of
	(c)Licence to manufacture fireworks or gunpowder or both exceeding 500 kilograms at any one time.	LE-1	Chief Controller or Controller of Explosives authorised by Chief Controller.
	(d)Licence to manufacture at site, ANFO explosives not exceeding 200 kilogrammes at any one time.	LE-1	Controller of
	(e)Licence to manufacture liquid oxygen explosives (LOX).	LE-1	Chief Controller or Controller of Explosives authorised by Chief Controller.
	(f) Licence to manufacture site mixed explosives (SME)	LE-1	Chief Controller or Controller of Explosives authorised by Chief Controller.

1	2	3	4
	(g)Licence to manufacture explosives other than fireworks, gunpowder, ANFO, LOX and SME.	LE-1	Chief Controller or Controller of Explosives authorised by Chief Controller
2	Licence to possess gunpowder not exceeding 15 kilogramme at any one time for manufacture of adirverttus and possession of adirverttus not exceeding 200 in number at any one time.	LE-2	District Magistrate
3	(a)Licence to possess for use, for agricultural purpose or in small quarry, explosives not exceeding 25 kilogrammes of Class 1 or 2 or 3 and 1500 numbers detonators; and 1500 meters of detonating fuse or safety fuse at any one time in a magazine.	LE-3	District Magistrate
	(b)Licence to possess for sale, explosives of Class 1, 2, 3, 4, 5, 6 or 7 in a magazine.	LE-3	Chief Controller or Controller of Explosives authorised by Chief Controller
	(c)Licence to possess for use, explosives of Class 1, 2, 3, 4, 5, 6 or 7 in a magazine.	LE-3	Chief Controller or Controller of Explosives authorised by Chief Controller

	(d)Licence to possess fireworks not exceeding 5000 kilogramme or safety fuse not exceeding 50000 meters, in a storehouse, not for sale but for transfer to own licensed shop. authorised by Chief Controller	LE-3	Chief Controller or Controller of
4	Licence to possess and transport explosives of class 2 or class 3 not exceeding 25 kilograms, electric or ordinary detonators not exceeding 200 numbers, detonating fuse not exceeding 100 metres and safety fuse not exceeding 200 metres in a compressor mounted motor truck or tractor for use in well sinking.	LE-4	District Magistrate
5	(a)Licence to possess and sell from a shop, at any one time, not exceeding 25 kilogrammes of small-arms nitro- compound	LE-5	District Magistrate
	(b)Licence to possess and sell from a shop, at any one time, not exceeding 100 kilogrammes of manufactured fireworks of Class 7, Division 2, sub-division 2; and 500 kilogrammes of chinese crackers or sparklers	LE-5	District Magistrate
	(c)Licence to possess and sell from a shop, at any one time, not exceeding 2000 numbers of pyrotechnic device explosives of Class 6 Division 1	LE-5	District Magistrate
	(d)Licence to possess for use Gunpowder not exceeding 5 kilogrammes and safety fuse not exceeding 50 metres in the States of Bihar, West Bengal, Kerala and Tamilnadu.	LE-5	District Magistrate
	(e)Licence to possess for use of small-arms nitro-compound not exceeding 5 kilogrammes in the State of Kerala.	LE-5	District Magistrate
	(f) Licence to possess and sell from a shop manufactured fireworks of Class 7 Division 2 sub-division 2 exceeding 100 kilogrammes but not exceeding 300 kilogrammes, and chinese crackers or sparklers exceeding 500 kilogrammes but not exceeding 1200 kilogrammes.	LE-5	Controller of
6	Licence to possess and use fireworks for public display.	LE-6	District Magistrate
7	Licence to transport explosives in a road van.	LE-7	Controller of Explosives

1	2	3	4
8	Licence to import or export explosives otherwise than by land.	LE-8	Chief Controller
9	Licence to manufacture, possess, sell, use, etc of explosives not provided in articles 1 to 8.	LE-9 (SPECIAL)	Chief Controller
10	Shot firer's Certificate.	LE-10	Controller of
11	Foreman's Certificate.	LE-11	Controller of

Part 2

(See rules 100 and 113)

A. Fees other than licence fees and fees for testing in the departmental testing station : The following Fees other than licence fees and fees for testing in the departmental testing station shall be payable:

(1)	Scrutiny fee for each proposal for inclusion of any explosive in the authorised list of explosives	Rs. 500
(2)	Fees for testing each sample of imported explosives	Rs. 100
(3)	(i) Fees for testing each sample to issue certificate of safety	Rs. 100

	(ii) Fees to renew each certificate issued under (i) above without fresh test.	Rs. 50
	(iii) Fees for testing each sample to renew certificate issued under (i) above after fresh	Rs. 500
	(iv) Scrutiny fee for approval of manufacturing process for any new explosives.	Rs. 2000
(4)	Fees for storage of explosives in excess of licensed capacity on each occasion.	Rs. 500 for first 15 days and Rs. 200 for every additional day
(5)	Fees for permit for temporary possession of fireworks in excess of licensed quantity	Rs. 200
(6)	Scrutiny fee for application for approval before grant of a licence to manufacture	
	(i)any explosives other than those mentioned under (ii), (iii) and (iv) below	Rs. 2000
	(ii) site mixed ANFO Explosives	Rs. 500
	(iii) Liquid Oxygen explosive	Rs. 500
	(iv) (a) Fireworks or Gunpowder in a quantity not exceeding 15 Kilogrammes at a time.	Rs. 50
	(b) Fireworks or Gunpowder in a quantity exceeding 15 Kilogrammes but not exceeding 500 200 Kilogrammes at a time.	Rs.
	(c) Fireworks or Gunpowder in a quantity exceeding 200 Kilogrammes at a time	Rs. 500
(7)	Scrutiny fee for grant of approval to manufacture colour matches	Rs. 1000
(8)	Scrutiny fee for application for approval before grant of licence to possess explosives in	
	(a) magazine or store house	Rs. 500
	(b) shops	Rs. 200
(9)	Scrutiny fee for application for grant of each licence to import or export explosives	Rs. 500
(10)	Scrutiny fee for application for grant of each licence to transport explosives	Rs. 100
(11)	Scrutiny fee for each application for grant of a licence for a road van compressor mounted motor truck or tractor	Rs. 200
(12)	Scrutiny fee for each application for grant of a shot-firer's certificate	Rs. 300
(13)	(a) Scrutiny fee for application for amendment or transfer of each licence or certificate	
	(i) to manufacture high explosives and of Class 6 and other explosives not mentioned below:	Rs. 1500
	(ii) to manufacture fireworks or Gunpowder in a quantity not exceeding 15 Kilogrammes at a time;	Rs. 50

	(iii) to manufacture fireworks or Gunpowder in a quantity exceeding 15 Kilogrammes but not exceeding 200 kilogrammes at a time;	Rs. 300
	(iv) to manufacture fireworks or Gunpowder in a quantity exceeding 200 Kilogrammes at a time;	Rs. 300
	(v) to manufacture site mixed ANFO explosives;	Rs. 300
	(vi) to manufacture liquid oxygen explosives;	Rs. 300
	(vii) to possess explosives in magazine for sale or use or in store house;	Rs. 300
	(viii) to possess fireworks in a shop for sale;	Rs. 300
	(ix) to transport explosives in explosives van;	Rs. 300
	(x) in Form LE-3.	Rs. 50
	(xi) shot firer's or foreman's certificate	Rs. 100
(b)	Amendment or transfer fee for each licence	
	(i) to manufacture high explosives and explosives of Class 6 and other explosives not mentioned below;	Rs. 200
	(ii) to manufacture fireworks or Gunpowder in a quantity not exceeding 15 Kilogrammes at a time;	Rs. 50

(iii) to manufacture fireworks or Gunpowder in a quantity exceeding 15 Kilogrammes but not exceeding 200 Kilogrammes at a time; Rs. 200

(iv) to manufacture fireworks or Gunpowder in a quantity exceeding 200 Kilogrammes at a time; Rs. 200

(v) to manufacture site mixed ANFO explosives; Rs. 200

(vi) to manufacture liquid oxygen explosives; Rs. 200

(vii) to possess explosives in magazine for sale or use or in store house; Rs. 200

(viii) to possess fireworks in a shop for sale; Rs. 200

(ix) to transport explosives in explosives van; Rs. 200

(x) in form LE-3 Rs. 50

(xi) shot firer's or foreman's certificate Rs. 100

(c) Scrutiny fee for a proposal for any change in the manufacturing process of explosives Rs. 1000

(d) Scrutiny fee for a proposal for any change in the composition of an authorised explosives Rs. 500

(14) For appeal against an order of a licensing authority

(i) if such appeal is preferred to Central Government or Chief Controller Rs. 1000

(ii) if such appeal is preferred to immediate official superior to District Magistrate. Rs. 200

(15) For issue of a duplicate copy of licence or certificate Rs. 200

(16) For approval of -

(a) a packing box or container. Rs. 1000

(b) a new design of equipment, machinery or composite vehicle used for manufacture and transport of explosives Rs. 1000

(c) a magazine 'Mode B' Rs. 1000

(d) BMD vehicle Rs. 1000

(17) Lightning Conductor testing fee for each test conducted by Departmental officer. Rs. 500

B. Licence fee -(1) The following fees shall be payable per year for each licence issued under these rules :

(I)Licenses fees for manufacture of explosives (a)of classes 2,3,4 and 5 other than site mixed Ammonium Nitrate Fuel Oil explosive

Rs.1000 per 1000 tonnes or part thereof of the installed annual plant capacity for each explo-sive subject to a maximum of Rs.20,000

(b)of class 6 Rs.1000 per one million metres or numbers or part thereof of the installed annual plant capacity of each explosives subject to a maximum of Rs.20,000

(c)of class 1 or class 7

(i) in a quantity not exceeding 15 Kilogrammes at a time; Rs. 200

(ii) in a quantity exceeding 15 Kilogrammes but not exceeding 200 Kilogrammes at a time; Rs. 2000

(iii) in quantities exceeding 200 Kilogrammes at a time;

Rs. 2000 for the first 200 Kilogrammes plus Rs. 500 for every additional 50 Kilogrammes or part thereof at a time subject to a maximum of Rs. 15000

(d)of class 8 (Liquid Oxygen Explosive) Rs. 5000

(e) of site mixed ANFO explosives . 1000

(II)Licence fees for possession and sale of explosives in a magazine. explosive	(a) Rs.1000 for every 1000 Kilogrammes or part thereof of the licensed capacity of each of Class 1, 2, 3, 4, 5 or 7 subject to a maximum of Rs. 15000 (b) Rs. 500 for every 10000 metres or numbers or part thereof of each explosive of Class 6 subject to a maximum of Rs. 15000
(III)Licence fees for possession of explosives in a magazine for use. explosives	(a) Rs. 1000 for every 1000 Kilogrammes or part thereof of the licensed capacity of each of Class 1, 2, 3, 4, 5 or 7 subject to amaximum of Rs.15000, and (b) Rs. 500 for every 10,000 metres or numbers or part thereof of each explosive of Class 6 subject to a maximum of Rs. 15000
(IV)Licence fees for possession and sale of fireworks or Gunpowder or smallarms nitrocompound from a shop	
(a)licensed by District Magistrate	Rs. 500
(b)licensed by Controller of Explosives	Rs. 1000
(V)Licence fees for possession of fireworks in storehouse.	Rs. 3000
(VI)Licence fees for road van	Rs. 2000
(VII)Licence fees for compressor mounted motor truck or tractor.	Rs. 1000
(VIII)Licence fee for possession of Gunpowder for manufacture of adirvettus	Rs. 500
(IX)Licence for possession of explosives for use (other than agricultural purpose) in	Rs. 1000

Form LE-3 issued by District Magistrate

(2) The following fees(one time) shall be payable for each licence issued under these rules:

Licence fees for -

(i)import of explosives	Rs.1500
(ii)export of explosives	Rs.1000
(iii)possession and public display of fireworks	Rs. 500
(iv)possession of explosives for use for agricultural purpose in Form LE-3 issued by District Magistrate	Rs. 100

C. Testing fees - The following fees shall be payable for testing of explosives in the Departmental Testing Station.

Sl. No.	Name or type of explosive	Class and Division	Tests to be conducted		Fees (in rupees)
1	2	3	4		5
1.	Gun Powder	1	1.1	Physical Properties i.e Moisture, Bulk density	200
			1.2	Chemical analysis of composition	100
			1.3	Any additional test as per BIS specification	500
2.	Slurry or Gel or Emulsion Explosives or ANFO or Non-explosives emulsion matrix or SME	2	2.1	Physical Properties	
				2.1.1Physical examination (Examination of dimensions, markings and nature of inner package)	200
				2.1.2Density	300
				2.1.3Consistency (Examination of quality of gel or slurry or emulsion)	500
				2.1.4Segregation (Segregation of constituents in transport)	500
				2.1.5Behaviour on low and high temperature	1000
				2.1.6Tendency to absorb moisture	500
			2.2	Chemical analysis of composition	5000
			2.3	Stability Test (Determination of stability after subjecting to such varying environmental conditions as would tend to produce spontaneous ignition or variation in sensitivity of an explosive)	1000
			2.4	Ignition characteristics (Behaviour on ignition, liability to spontaneous ignition, behaviour on ignition in bulk)	1000
			2.5	Mechanical Sensitivity to	
				2.5.1Friction	1500
				2.5.2Impact	1500
				2.6 Air Gap Sensitivity	2000
				2.7 Continuity of detonation	2000
				2.8 Velocity of detonation	2000
				2.9 Cap sensitivity	1500
				oster sensitivity	2000

				2.11 Strength by ballistic Mortar	5000
				2.12 Any additional test as per BIS specification	500
				Physical properties	
				3.1.1Physical examination (examination of dimensions, markings and nature of inner package)	200
				3.1.2Heat test (testing of stability of explosives at specified temperature	500
				3.1.3Density.	

1	2	3		4	5
				3.1.4Consistency (examination of quality of gel).	500
				3.1.5 Exudation	500
				3.1.6 Tendency to absorb moisture	500
			3.2	Chemical analysis of composition	5000
			3.3	Stability Test (Determination of stability after subjecting to such varying environmental conditions as would tend to produce spontaneous ignition or variation in sensitivity of an explosive)	1000
			3.4	Ignition characteristics (Behaviour on ignition, liability to spontaneous ignition, behaviour on ignition in bulk)	1000
			3.5	Mechanical Sensitivity to	
				3.5.1Friction	1500
				3.5.2Impact	1500
			3.6	Air Gap Sensitivity	2000
			3.7	Continuity of Detonation	2000
			3.8	Velocity of Detonation	2000
			3.9	Cap Sensitivity	1500
			3.10	Strength by Ballistic Mortar	5000
			3.11	Freezing and Thawing Test	1000
			3.12	Liquefaction Test	1000
			3.13	Any additional test as per BIS specification	500
4	Booster or Cast Booster	3(2)	4.1	Physical Properties	
				4.1.1Physical Examination (examination of dimensions, markings and nature of inner package)	200
				4.1.2Density	300
				4.1.3Consistency (examination of quality of gel or emulsion or slurry or casting)	500
				4.1.4Segregation (separation of constituents in transport)	500
				4.1.5Behaviour on low and high temperature	1000

				4.1.6 Tendency to absorb moisture	500
				4.1.7 Melting point (for cast booster)	200
				Chemical analysis of composition	3000
			4.3	Stability Test (Determination of stability after subjecting to such varying environmental conditions as would tend to produce spontaneous ignition or variation in sensitivity of an explosive)	1000
			4.4	Ignition characteristics (Behaviour on ignition, liability to spontaneous ignition, behaviour on ignition in bulk)	1000
			4.5	Mechanical Sensitivity to	
			4.5.1	Friction	1500
			4.5.2	Impact	1500
			4.6	Determination of strength by ballistic mortar	5000
			4.7	Cap Sensitivity	1500
			4.8	Performance Test	1500
			4.9	Any additional test as per BIS specification	500
5	Safety fuse or Micro cord fuse	6(1)	5.1	Physical Properties (dimensions, smoothness etc)	200
			5.2	Chemical analysis of composition of core.	500
			5.3	Stability Test (Determination of stability after subjecting to such varying environmental conditions as would tend to produce spontaneous ignition or variation in sensitivity of an explosive)	500
			5.4	Burning Rate	200
			5.5	Water Immersion Test	200
			5.6	Lateral Transmission Test	500
			5.7	Any additional test as per BIS specification	500
6	Detonating Fuse	6(2)	6.1	Physical Properties (dimensions, smoothness, finishing, inspection of foreign material, pinholes etc).	200
			6.2	Chemical analysis of composition	1000
			6.3	Stability Test (Determination of stability after subjecting to such varying environmental conditions as would tend to produce spontaneous ignition or variation in sensitivity of an explosive)	1000
			6.4	Flexibility Test at Low and High	
			6.5	Water proofness Test	1000

			6.6	Velocity of Detonation	2000
			6.7	Transmission of detonation	1000
			6.8	Determination of Core load	1000
			6.9	Breaking load test	1000
			6.10	Any additional test as per BIS specification	500
			7.1	Physical examination (dimensions, finishing, pinholes etc)	200
			7.2	Detonator sensitivity test	1000
			7.3	Detonating fuse sensitivity test	1000
			7.4	Series test	1000

1	2	3	4	5
				7.5 Parallel test
				7.6 Kninck and Knot test
				7.7 180_o bend test
			7.8	Side initiation test
				7.8.1with another nonel tube
				7.8.2with detonating fuse
			7.9	Tensile strength test
			7.10	Delay timings test
				7.10.1 surface trunk line
				7.10.2 down the hole line
				7.10.3 velocity of detonation
				7.11 Any additional test as per BIS specification

Sr.No.	Name/Type of explosive	Class/Div	Tests to be conducted			Ordinary detonator	Electric detonator
8.	Detonator	6(3)	8.1 Physical Examination (Dimensions, Finishing etc.)			200	200
			8.2 Water Resistance	--	500	500	
			8.3 Drop Test	500	500	500	
			8.4 Snatch Test	--	500	500	
			8.5 Vibration Test	500	500	500	
			8.6 Strength Test	2000	2000	2000	
			8.7 Electric Resistance	--	500	500	
			8.8 No Fire Current Test	--	1000	1000	
			8.9 Delay Time Test	--	--	1000	
			8.10 Minimum Series Firing Current Test	--	1000	1000	
			8.11 Any additional test as per BIS specification	500	500	500	
9.	Fireworks	7(2) 7(3) or 7(4)	9.1 Test for Sound level			200	
			9.2 All other test (physical, chemical, performance etc.)			250 (consolidated)	

D. The following fees shall be payable for testing of packages of explosives in the Departmental Testing Station

Sl	Tests to be conducted		Fees

No.		(in rupees)
1	2	3
1.	Bursting Strength of Paper or Paper Board	325
2.	Burst Factor	400
3.	Compression Strength	650
4.	Drop Test	650
5.	Exudation Test (For Bitumen / Pitch Coal tar impregnated Paper)	350

1	2	3
6.	Grammage of Paper	300
	Grammage for 3 Ply	350 400
	Grammage for 5	550
7.	Inclined Impact Test	550
8.	Observations on CFB Box Style, No. of Plies, No. of Joints and external defects	325
9.	Dimension of carton / box, per dimension	300
10.	Puncture Resistance	325
11.	Rain Test	550
12.	Scuff Proofness	400
13.	Stack Load Test	550
14.	Cobb Test	350
15.	Studies on the effect of humidity and temperature on filled (dummy) package	5000
16.	Tensile Strength and % elongation for Paper and paper board	400
17.	Tear Factor	400
18.	Tests as per IMDG Code	2350
	1. IMDG Testing(drop test and stack load test)	600
	2. Dimensions (3)	325
	3. Bursting Strength	350
	4. Cobb Test	400
	5. Scuff Proof ness Test	
19.	Tests as per UN Recommendations on Transport of Dangerous Goods for classification	
	Series -1 and 2	
	1. UN Gap test	5,000
	2. Koenen test	5,000
	3. Time/Pressure test	5,000
	4. Internal ignition test	5,000
Series- 3		
	1. Impact sensitivity test	5,000
	2. Friction sensitivity test	5,000
	3. Thermal stability test	20,000
	4. Small scale burning test	5,000
Series-4		
	1. Thermal Stability Test at 75°C	20,000
	2. Drop Test	10,000
Series-5		
	1. Cap sensitivity test	5,000

2. Deflagration to detonation test 10,000
3. External fire test for Division 1.5 45,000

Series - 6

1. Single Package Test 10,0
2. Stack Test 10,0
3. External Fire (Bonfire) Test 45,0

Schedule -V

(See rule 113)

Part-1

APPLICATION FORMS

Form AE-1

(See rule 113 of the Explosives Rules, 2008)

Application for approval or grant or amendment or transfer of licence for manufacture of explosives

I,……..on behalf of…….apply for approval or grant or amendment (1) of licence for the following purpose.

1. Purpose: (Write the purpose corresponding to particular article as per Schedule IV, Part 1)

……
……
……
....

2. Name: I require licence in the following name and postal address:

(a) Name in which licence is required to be granted (see notes below)

……

(b) Status(1)

(c)Age(2)

(d) Postal address:

……
……
……City……... ……..

District……State……Pin Code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

3. The proposed premises are situated at the following address:

……
…….....Survey number …….City ……..

District……State……Pin Code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

4. Qualifications and experience of applicant and the technical personnel employed by him. (Give individual details and attach separate sheet if required)

……
……
……

5. Explosives proposed to be manufactured
(a) Class
(b) Division (if any)
(c) Name and description

……
……

…….

…….

(d) UN Classification and number

(e) Annual capacity of the manufacturing plant (f) Quantity of explosives present at any one time in each shed of the manufacturing plant

…….

`…….

(g) Quantity of explosives proposed to be manufactured ……. in one day

(h) Details of BMD vehicles approved (in case of SME Plant)

(i) Details of amendment proposed or additional information, if any

……..

……..

6 Has the applicant been convicted under any offence…….

or ordered to execute bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years. If yes, please give details.

…….

…….

7 (a) particulars of other licenses under Explosives Act, 1884, if any held by the applicant during the last 10 years

……..

……..

……Yes……No……..

(b) was any licence cancelled or not renewed? ……..

(c) If yes, give details ……..

I hereby certify that the above particulars given by me are correct.

Date……..

Signature of applicant…….. (Authorised person in case of a Company)

Full Name ……..

Address ……..

Notes:

Please see the rule for the purpose and documents to be enclosed

(1) In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2) Passport size photographs of the occupier to be attached.

(3) Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4) Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-2

(See rule 113 of the Explosives Rules, 2008)

Application for approval or grant or amendment or transfer of licence to possess gunpowder not exceeding 15 kilogrammes at any one time for manufacture of adirverttus and possession of adirverttus not exceeding 200 in number at any one time.

I, ……..on behalf of ……., apply for grant of licence/amendment of licence No…… to possess gunpowder for manufacture of adirverttus and possession of adirverttus

1. Name in which licence is required to be granted. (see notes below)
2. Status:(Individual, Company or Society)
3. Age (see notes below) :
4. Postal Address :

……
……..……City……
……. District…….. ……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

5. Qualifications and experience of the applicant and the technical personnel employed by him (Give individual details and attach separate sheet if required)
6. Situation of the Premises:……
…….....Survey number …….City ……..

District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

6.(a) Quantity of gunpowder proposed to be possessed at any one time…….

(b) Quantity of adirverttus proposed to be manufactured and possessed at any one time…….

: I hereby certify that the above particulars given by me are correct.

Notes:

Date…….. Signature of applicant……..

Please see the rule for the purpose and documents to be enclosed

(1) In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2) Passport size photographs of the occupier to be attached.

(3) Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4) Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-3

(See rule 113 of the Explosives Rules, 2008)

Application for approval or grant or amendment or transfer of licence for possession and sale of explosives; for possession and use of explosives; or for possession of fireworks or safety fuse in a store house

I,……..on behalf of…….apply for approval or grant or amendment(1) of licence for the following purpose.

1. Purpopse: (Write the purpose corresponding to particular article as per Schedule IV, Part 1)

…….
……..……
…….

…….……

2. Name: I require licence in the following name and postal address:

(a) Name in which licence is required to be granted (see notes below) …….

(b) Status(1)

(c)Age(2)

(d) Postal address:

……
……City……
……

District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat……. Phone……E-mail……..Fax……

3. The proposed premises are situated at the following address:

……
……Survey number …….City ……..

District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

4. Qualifications and experience of applicant And the technical personnel employed by him. (Give individual details and attach separate sheet if required) …….
…….
…….
…….

[1]Hkkx II[1][k.M 3(i)º Hkkjr dk jkti=k % vlk/kj.k 235

5. (a) Explosives proposed to be possessed and sold:*

Name and Description	Class	Division if any	Quantity	
			at any one time	In one month
i.				
ii.				
iii.				
iv.				
v.				
vi.				

(b) Are the premises attached to a factory licensed to manufacture explosives?
If so, please give the licence number ……..

6. (a) Explosives proposed to be possessed and used* -

Name and Description	Class	Division if any	Quantity		
			To be possessed at any one time	To be used per day	To be used one month
i					
ii.					
iii.					
iv.					
v.					
vi.					

(b) Details of site where explosives will be ……..

(c) Whether the site is coming under the Mines Act,1952:……..

(If yes, documentary evidence to be submitted ; if not, particulars of proposed activity, documentary evidence and shot firer employed to be furnished)

(d) List of documents attached with reference to clause (c) above

(i)…

(ii)….

(iii)…

(e) Distance of site where the explosives will be used

from the storage premises mentioned in item 6 (f) Mode of transport of explosives

(g) Licence particulars of road van, if used

7. Has the applicant been convicted under any offence or ordered to execute bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years. If yes, please give details.

8. (a) particulars of other licenses under

……..

…….....……..……..

…….

…….

…….

……..

Explosives Act, 1884, if any held by ……..

the applicant during the last 10 years (b) was any licence cancelled or not renewed?

……Yes……No…..

……..

(c) If yes, give details ……..

I hereby certify that the above particulars given by me are correct.

Date……..

Signature of applicant…….. (Authorised person in case of a Company)

Full Name ……..

Address ……..

***strikeout inapplicable portion**

Notes:

Please see the rule for the purpose and documents to be enclosed

(1) In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2) Passport size photographs of the occupier to be attached.

(3) Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4) Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-4

(See rule 113 of the Explosives Rules, 2008)

Application for approval or grant or amendment or transfer of licence for tractor compressor

I,……..on behalf of…….apply for approval or grant or amendment(1) of licence for the following purpose.

1. Purpose: (Write the purpose corresponding to particular article as per Schedule IV, Part 1)

……

……..…… ……

……2. Name: I require licence in the following name and postal address:

(a) Name in which licence is required to be granted (see notes below) …….

(b) Status(1)

(c) Age(2)

(d) Postal address:

……
……City……
……District…….. ……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat……. Phone……E-mail……..Fax……

3.Qualifications and experience of applicant and particulars of shot firer employed by him.

(Give individual details and attach separate sheet if required)

…….
…….
…….

…….

5. Experience of the applicant in handling & blasting of explosives

6. Address of the premises where the compressor mounted motor truck or tractor is to be normally parked when not in use. :

7. Particulars of the area where the compressor mounted motor truck or tractor is to be used for well sinking purpose. :

8. Explosives to be possessed and transported—

		Max. Capacity Permitted
(i)	Class 2 and/or Class 3 explosives .....kilogrammes.	25 kilogrammes
(ii)	Detonators Ordinary or Electric .....numbers	200 numbers
(iii)	Detonating fuse …….. meters	100 meters.
(iv)	Safety fuse ..... meters.	200 mtrs.

9. Description of the compressor mounted motor truck or tractor of the applicant -
Make :
Registration No. :
Engine No. :
Chassis No. :
Description of other fittings on the vehicle :

10.Has the applicant been convicted under any offence Or ordered to execute bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years. If yes, please give details.

11. (a)particulars of other licenses under Explosives Act, 1884, if any held by the applicant during the last 10 years

(b)was any licence cancelled or not renewed?

…….
…….
…….

……..
……..
……Yes……No…..
……..

(c)If yes, give details ……..

I hereby certify that the above particulars given by me are correct.

Date……..

Signature of applicant…….. (Authorised person in case of a Company)

Full Name ……..

Address ……..

Notes :

Please see the rule for the purpose and documents to be enclosed

(1)In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2)Passport size photographs of the occupier to be attached.

(5)Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4)Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-5

(See rule 113 of the Explosives Rules, 2008)

Application for approval or grant or amendment or transfer of licence in

Form LE-5 as per article 5(a) to (f) of Part 1 of Schedule IV

I,……..on behalf of…….apply for approval or grant or amendment(1) of licence for the following purpose.

1. Purpose: (Write the purpose corresponding to particular article as per Schedule IV, Part 1)

……..……..…
……..…..…….……..……
……..……..…..
……..……

2. Name: I require licence in the following name and postal address :

(a) Name in which licence is required to be granted (see notes below)

…….

(b)Status(1)

(c)Age(2)

(d)Postal address :

……
……..……City……
…… .. District……State……Pin code……..……..……..…….. Police Station…… Railway Station / Steamer Ghat……..……..……..... Phone……E-mail……..Fax……..……..……..…….

3. The proposed premises are situated at the following address :

……
……..... Survey number ……City ……..
District……State……Pin code……... Police Station…… Railway Station / Steamer Ghat……..……Phone……E-mail……..Fax……..……..……..…….
…….

4. Explosives proposed to be possessed :

Name and Description	Class	Division if any	Quantity at any one time
i.			
ii.			
iii.			

5. If the explosives are to be used, furnish the particulars related to the purpose of use……6. Has the applicant been convicted under any offence.....…….

or ordered to execute bond under Chapter VIII of…….

Code of Criminal Procedure, 1973, during the last…….

10 years. If yes, please give details.

7. (a) Particulars of other licenses under Explosives Act, 1884, if any held by the applicant during the last 10 years (b) was any licence cancelled or not renewed? ……..

……Yes……No…..

……..

(c) If yes, give details ……..

I hereby certify that the above particulars given by me are correct.

Date……..

Signature of applicant…….. (Authorised person in case of a Company)
Full Name ……..

Address ……..

Notes:

Please see the rule for the purpose and documents to be enclosed

(1)In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2)Passport size photographs of the occupier to be attached.

(3)Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4) Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-6

(See rule 113 of the Explosives Rules, 2008)

Application for approval or grant of licence for public display of fireworks

I,……..on behalf of…….apply for approval or grant or amendment(1) of licence for the following purpose.

1. Purpose: (Write the purpose corresponding to particular article as per Schedule IV, Part 1)

…….……
……..…
……..……..
.....……..……..……..……..……..……..……
…..……..……..……..……..……..

2. Name: I require licence in the following name and postal address:

(a) Name in which licence is required to be granted (see notes below) ……

(b) Status(1)

(c) Age(2)

(d) Postal address.....…….City……..

District…….……State……...……Pin code……...…...

Police Station…….....Railway Station / Steamer Ghat…….

Phone……E-mail…….....……..Fax……

3. The proposed premises are situated at the following address:

……

……Survey number ……..City ……..

District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

4. Qualifications and experience of applicant …….
And the technical personnel employed by him. (Give individual details and attach separate
…….
…….
sheet if required) …….

5. Name , qualification and experience of the persons ……..

supervising the display ……..

6. Description and quantity of fireworks to be used ……..

7. (a) Licensee from whom the fireworks will be obtained ……..

Name ……..

Address ……..

Particulars of licence (licence number and form, issuing authority and validity)……..

(b) Location of the place where the fireworks will be stored prior to display

……..

……..

8. (a) Description and quantity of fireworks to be displayed ……..

(b) Date and time of display

(c) Location of the place where the display will be held ……..

9. Has the applicant been convicted under any offence ……

Or ordered to execute bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years. If yes, please give details.

…….

…….

10. (a) particulars of other licenses under ……..
Explosives Act, 1884, if any held by the applicant during the last 10 years

(b) was any licence cancelled or not renewed?

(c) If yes, give details

……..

……Yes……No…..

……..

……..

I hereby certify that the above particulars given by me are correct.

Date……..

Signature of applicant…….. (Authorised person in case of a Company)

Full Name ……..

Address ……..

Notes :

Please see the rule for the purpose and documents to be enclosed

(1) In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2) Passport size photographs of the occupier to be attached.

(3) Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4) Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-7

(See rule 113 of the Explosives Rules, 2008)

Application for approval or grant or amendment or transfer of licence for transport of explosives in road van

I,……..on behalf of…….apply for approval or grant or amendment(1) of licence for the foll

1. Purpose: (Write the purpose corresponding to particular article as per Schedule IV, Part 1)
……
……
……
2. Name: I require licence in the following name and postal address:
(a) Name in which licence is required
……
….
to be granted (see notes below)
(b) Status(1)
(c) Age(2)
(d) Postal address:
……
.....……. .....City …….. District……State……Pin code……...
Police Station…… Railway Station / Steamer Ghat……. Phone……E-mail……..Fax……

3. Address of the premises where the vehicle is to be normally stationed …….
……

4. Kinds and quantities of explosives to be carried
……..…

5. Places (states or districts) where the van will normally ply …….
……..……

6. Description of vehicle …….
Make …….
Registration No. …….
Engine No. …….
Chassis No. …….
Gross vehicle weight ……kilogrammes
Unladen weight ……kilogrammes

7. Description of other fittings on the vehicle …….

8. Carrying capacity permitted by Regional Transport Authority …….

9. Has the applicant been convicted under any offence …….
Or ordered to execute bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years. If yes, please give details.

10. (a) Particulars of other licenses under Explosives Act, 1884, if any held by the applicant during the last 10 years
(b) was any licence cancelled or not renewed?
…….
…….
……..
……..
……Yes……No.…..
……..
(c) If yes, give details ……..

I hereby certify that the above particulars given by me are correct.

Date……..

Signature of applicant…….. (Authorised person in case of a Company)
Full Name ……..
Address ……..

Notes:
Please see the rule for the purpose and documents to be enclosed
(1) In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.
(2) Passport size photographs of the occupier to be attached.
(3) Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.
(4) Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-8

(See rule 113 of the Explosives Rules, 2008)

Application for approval or grant of licence for import or export of explosives

I,……..on behalf of…….apply for approval or grant or amendment (1) of licence for the following purpose.

1. Purpose: (Write the purpose corresponding to particular article as per Schedule IV, Part 1)
…….……..……
……..
.....……

2. Name: I require licence in the following name and postal address:
(a) Name in which licence is required
……
….
to be granted (see notes below)
(b) Status(1)
(c) Age(2)
(d) Postal address:
……
……..……City……......
....…….. District……State……Pin code……...
Police Station…… Railway Station / Steamer Ghat…….
Phone……E-
mail……..Fax……3(a). **(In case of Import)**
Explosives proposed to be imported at a time
……..

(i) Name & Description	Class	Division, if any	Quantity

(ii) Are the explosives to be imported authorised explosives ……Yes……No…..
(iii) Name and address of the manufacturer of explosives to be……..
imported.
(iv) Licence particulars of the premises where explosives will be stored :
……..
(v) Port or place of import ……..
(vi) Mode of Import
3.(b) (**In case of Export**) Quantity of explo ……..

(i) Name & Description Class Division, if any Quantity

(ii) Name and address of consignee

(iii) Place or port from which explosives will be exported

……..

……..

(iv) Name of the ship carrying explosives and likely date of sailing.....…….. (v) Mode of import…….....……..

(vi) Quantity of each explosives to be loaded on the ship

4. Has the applicant been convicted under any offence or ordered to execute bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years. If yes, please give details.

5. (a) particulars of other licenses under Explosives Act, 1884, if any held by the applicant during the last 10 years (b) was any licence cancelled or not renewed?

……..

…….

…….

…….

……..

……..

……Yes……No…..

……..

(c) If yes, give details ……..

I hereby certify that the above particulars given by me are correct.

Date……..

Signature of applicant…….. (Authorised person in case of a Company)

Full Name ……..

Address ……..

Notes :

Please see the rule for the purpose and documents to be enclosed

(1) In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2) Passport size photographs of the occupier to be attached.

(3) Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4) Age to be given in case the applicant is an individual.

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-9

(See rule 113 of the Explosives Rules, 2008)

Application for grant or amendment or transfer of licence in

Form LE-9(SPECIAL)

I,……..on behalf of……...…….apply for approval or grant or amendment(1) of licence for the following purpose.

1 Purpose: (Write the purpose corresponding to particular article as per Schedule IV, Part 1)

…….……

……

……

2. Name: I require licence in the following name and postal address:

(a) Name in which licence is required

……

….

to be granted (see notes below)

(b) Status(1)

(c)Age(2)

(d) Postal address:

……

……..

……..……City……

……District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

3. The proposed premises are situated at the following address:

……

……Survey number ……City ……..

District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

4. Qualifications and experience of applicant ……. and the technical personnel employed by him. (Give individual details and attach separate sheet if required) …….

5. Explosives proposed to be manufactured ……
(a) Class ……
(b) Division, (if any)
(c) Name and description
……
……
(d) UN Classification and number
(e) Annual capacity of the manufacturing plant (f) Quantity of explosives present at any one time in each shed of the manufacturing plant
……
`…….
(g) Quantity of explosives proposed to be manufactured ……. in one day
(h) Details of amendment proposed or additional information, if any
……..
……..

6. Has the applicant been convicted under any offence…….

or ordered to execute bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years. If yes, please give details.

7. (a) Particulars of other licenses under Explosives Act, 1884, if any held by the applicant during the last 10 years

…….

…….

……..……..

……Yes……No…..

(d) was any licence cancelled or not renewed? ……..

(e) If yes, give details ……..

I hereby certify that the above particulars given by me are correct.

Date……..

Signature of applicant…….. (Authorised person in case of a Company)

Full Name ……..

Address ……..

Notes:

Please see the rule for the purpose and documents to be enclosed

(1) In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2) Passport size photographs of the occupier to be attached.

(3) Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4) Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Form AE-10

(See rule 113 of the Explosives Rules, 2008)

Application for grant or amendment of Shot firer's certificate to carry out blasting of explosives in areas not coming under Mines Act, 1952.

I,…….. apply for approval or grant or amendment(1) of Shot firer's certificate

1. (a) Name in which certificate is required to be granted

(b) Age

(c) Postal address:

…….

……

……

……City…..

District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

(d) Residential address:

…….City

…….....……..

District……...……State……...……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

(e) Whether the applicant is employed; if yes, name and address of the employer……

2. Qualifications and experience of applicant …….

(attach documentary evidence) …….

3. Field of specialisation …….....…….

4. Particulars of no objection certificate. number.....dated..... issued by ……

5. Particular of category and type for which certificate is required (see note below):

6. I certify that

(i) the above particulars are true and correct.

(ii) I am aware that permit to conduct blasting operation is required to be obtained by me from the local authority before conducting blasting.

(iii) I am aware that if explosives are illegally transferred by me to any unauthorised person(s), it may lead to terrorist activity for which I shall commit a punishable offence.

(iv) Annousement before blasting and after sunrise and before sunset.

Date…….

……
(Signature of applicant)

Note : (1) Please enclose certified copies of certificates showing Date of Birth, Educational qualifications, experience and **medical fitness certificate.**

(2) Category and type of blasting as per rule 107 :

Clas	Category	Type of blasting permitted
A	Unlimited	All types of blasting
B	General aboveground	All phases of aboveground blasting operation
C	General underground	All phases of underground blasting operation
D	Demolition	All phases of blasting in demolition projects
E	Seismic	All phases of blasting in seismic prospecting or production
F	Agricultural	All phase of blasting in agricultural and well sinking
G	Special	Blasting for special purpose not covered under the above categories

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law. ……

Form AE-11

(See rule 113 of the Explosives Rules, 2008)

Application for grant or amendment of foreman's certificate to supervise manufacture of fireworks or safety fuse

I, …… hereby apply for a Foreman's certificate to supervise manufacture of fireworks / safety fuse (strike off which is not relevant).

The necessary particulars are given below and required documents are enclosed.

1. Name of the Applicant in full
:……2. Age of the Applicant
:…….:
3. Father's Name :……..
4. (a) Postal Address :
……
…… …… …… …… City…….....……..
District……State……Pin code……...

Police Station…… Railway Station/Steamer Ghat…….
Phone……E-mail……..Fax……
(b) Residential address :
……
……Survey number
……City …….. District……
State……Pincode……...
Police Station…… Railway Station/Steamer Ghat…….
Phone……E-mail……..Fax……

5. Qualifications and experience of the applicant……
6. Field of Specialisation.....……
7. (a) Name and address of the factory where the applicant has acquired experience
(b) Particulars of process or operation in which the applicant has gained experience
……
…8. (a) Name and address of the factory where the applicant is working at present……
(b) Capacity in which the applicant is working at present……9.
Any other information ……..... I certify that the above particulars are true and correct.

……
Signature of applicant
Date …….

Place ……

NOTE : Please attach the following with the application :

(1) Two copies of pass-port size photograph.

(2) Experience certificate.

(3) Certificate of age proof.

(4) Medical certificate stating that the applicant is not handicapped and having good health.

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

……..

Form AE-12

(See rule 113 of the Explosives Rules, 2008)

Form of application for grant of no objection certificate under the Explosives Rules, 2008

To
(Designation and address of the no objection certificate issuing authority)
Sub : Application for grant of no objection certificate under the Explosives Rules, 2008.

I,……..on behalf of…….apply for no objection certificate under the Explosives Rules, 2008 required for grant of licence for the following purpose.

1. **Purpose :** (Write the purpose corresponding to particular article as per Schedule IV, Part 1)
……
…..……..…….....
……..……..……..……..……..……..……..……..…….
2. (a) Name in which no objection certificate and licence is required (see notes below):
……
(b) Age
(c) Postal address: ……
……
…… ……City ……..

District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

3. **Situation of the premises** : The proposed premises are situated at the following address :

……

……Survey number……City …...……..

District……..……State……Pin code……... Police Station……

Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

4. **Quantity of Explosives proposed to be manufactured/possessed for the purpose stated at serial No. 1 above :**

Name and Description	Class	Division if any	Quantity	
			at any one time	In one month
i.				
ii.				
iii				
iv.				
v.				
vi.				

5. Details of site where explosives will be used and distance of site of use from the storage premises **(in case of licence for use)**

6. Details of explosives road van which will be used for transportation of explosives (in case of no objection certificate for road van)

7. **Additional information:**

(i) I or We have not been convicted under any offence or ordered to execute bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years (If yes, please give details).

(ii) Particulars of other licenses: I / We possess under Explosives Act, 1884 (Note: Please write the licence no(s), if any)

(iii) I/We have obtained approval as required under rule 101 from the competent authority: (Note: Please enclose the approval letter, approved drawing(s), other enclosures, if any)

(iv) Any other relevant information:

I/We hereby certify that the above particulars given by me/us are correct, nothing therein has been concealed and there is no title dispute pertaining to the site of the proposed premises.

Therefore no objection certificate may be granted to me /us as per rule 103 of the Explosives Rules, 2008 in format specified in Part 2 of Schedule V of the Explosives Rules, 2008.

I/We enclose the following documents:

Signature of
applicant……..
(Authorised person in case of a Company)
Full Name ……..

Address ……..

Date……

Notes:

Please see the rule for the purpose and documents to be enclosed

(1) In case where application is made by a person other than an individual, the names and addresses of the occupier as per rule 2 and directors or partners or members, as the case may be, and specimen signatures of authorised person to be attached.

(2) Passport size photographs of the occupier to be attached.

(3) Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

(4) Proof of the status of the company to be attached.

(5) Age to be given in case the applicant is an individual.

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Part-2

Format of no objection certificate

(See Rules 102 and 103)

Subject: No objection certificate under the Explosives Rules, 2008

No……. Date

With reference to the application in Form AE - 12 dated ……..submitted by…….and in pursuance of rules 102 and 103 of the Explosives Rules, 2008, there is no objection for granting licence under the Explosives Rules, 2008 to Shri/M/s. _____ of address…… for the following purpose, kinds and quantities of explosives in the premises at Survey No./Gat No./Khasra No.……., Village …… Taluka…….……District …… State……as shown in the site plan duly endorsed and enclosed herewith.

1. **Purpose** (Note: Please write only one purpose corresponding to one Article No. as stated in Table of purposes and authority in Part 1 of Schedule IV annexed to the Explosives Rules, 2008):

……

2. **Kinds and quantities of explosives:**

	Name of Explosives	Class	Div.	Quantity
(a)				
(b)				

Signature of the no objection certificate issuing authority with his office seal
(District Magistrate or Directorate General of Mines Safety)

Note: The following particulars have been verified/considered while issuing this No Objection Certificate.

(a) The antecedents of the applicant (in case of individual or proprietary firm) /partners (in case of partnership company) or directors (in case of limited company) or office bearers in case of society or association and also occupier of the premises.

(b) The lawful possession of the site by the applicant.

(c)Interest of public.

(d) Requirement of explosives for use in mines or quarries (possessed by the applicant) or in the area proposed the licensee have been considered

(e) Genuineness of purpose

Notes:—

(1) Genuineness of purpose means relating to manufacture - whether there is need for manufacture of the explosives for lawful constructive use in the area or state or country or for export purpose.

(2) Verification of antecedents and lawful position of site by applicant as stated in serial Nos. 1 and 2 are not applicable in case of no objection certificate granted by Directorate General of Mines Safety.

……

Part 3

Forms of licence or certificate

LICENCE FORM LE-1.

[See article 1(a) to (g) of Part 1 of Schedule IV of the Explosives Rules, 2008]

Licence to manufacture:

(a) fireworks or gunpowder or both not exceeding 15 kilogrammes at any one time;

or

(b) fireworks or gunpowder or both exceeding 15 kilogrammes but not exceeding 500 kilogrammes at any one time;

or

(c) fireworks or gunpowder or both exceeding 500 kilogrammes at any one time;

or

(d) at site, ANFO explosives not exceeding 200 kilogrammes at any one time;

or

(e) liquid oxygen explosives (LOX);

or

(f) site mixed explosives (SME) ;

or

(g) explosives other than Fireworks, Gunpowder, ANFO, LOX and SME.

Space for photograph of the licensee or occupier with signature

Licence No……
Annual Fees Rs……

1. Licence is hereby granted to:

Name:
Postal address:……
……City ……..

District……State……Pin Code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

2. Status of licensee: ……

3.Licence is valid for the following purpose: Manufacture of
……
……
……

4. Licence is valid for the following kinds and quantity of explosives:

(Name, description, Class, Division, sub-division, quantity at any one time and annual capacity) :

Name of explosive	Description	Class, Division, sub-division	Quantity at any one time	Quantity annual capacity [only for licence under article 1(g)]
¹Hkkx II¹[k.M 3(i)º		Hkkjr dk jkti=k % vlk/kj.k		249

5. The licensed premises shall conform to the following drawing(s):
Drawing No. ……dated……
Drawing No. ……dated……
Drawing No. ……dated……

6. The licensed premises are situated at following address:
……
…….....Survey No.……City ……..

District……State……Pin code……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail……..Fax……

7. The licensed premises consist of following facilities:
……
……

8. The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and annexure.

(1) Drawings (showing site, constructional and other details) as stated in serial no. 5 above.
(2) Conditions and Additional Conditions of this licence signed by the licensing authority.
(3) Distance Form
(4) Annexure

9. This licence shall remain valid till 31st day of March …20…….

This licence is liable to be suspended or revoked for any violation of the Act or rules framed there under or the conditions of this licence as set forth under SET-1 to SET-VI, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……20…. Signature, Designation and seal of licensing authority
[District Magistrate for article 1(a)]
[Chief Controller of Explosives or Controller of Explosives authorised by Chief Controller for Articles 1(b) to (g)]

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

……..

FORM LE-2.

Licence to possess Gunpowder not exceeding 15 kilogrammes at any one time for manufacture of adirverttus and possession of adirverttus not exceeding 200 in number at any one time.

(See article 2 of Part 1 of Schedule IV of the Explosives Rules, 2008)

Space for photograph of the licensee or occupier with signature

Licence

No……Annu

al Fees Rs…….

1. Licence is hereby granted to :
Name:
…….....…….
Address:……
……City
…….....……..
District……State……Pin Code……...……...
Police Station…… Railway Station / Steamer Ghat…….
Phone……E-mail……...Fax…….....……
2. Status of licensee:…….……
3. Licence is valid for the following purpose :
……
……
4. Licence is valid for the following kinds and quantity of explosives:
possession of ……kilogrammes of gunpowder at any one time for manufacture of adirvettus and possession of adirvettus not exceeding …….. numbers at any one time.

5. The licensed premises shall conform to the following drawing(s):
Drawing No. ……dated……
Drawing No. ……dated……
Drawing No. ……dated……
Drawing No. ……dated……
Drawing No. ……dated……

6. The licensed premises are situated at following address:
……
…….....Survey No ……City
…….....
District……State……Pin Code…….....……...
Police Station…… Railway Station / Steamer Ghat……..…….
Phone……E-mail……..Fax…….....……

7. The licensed premises consist of following facilities:
……
……
……

8. The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and annexures:
(1) Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
(2) Conditions of this licence signed by the licensing authority.

9. This licence shall remain valid till 31st day of March …20…….

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this licence or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……20….

Signature, Designation and seal of licensing authority [District Magistrate]

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

CONDITIONS

(1) The maximum quantity of gunpowder, which may be kept at any one time on the licensed premises, shall not exceed 15 Kilogrammes.

(2) The gun powder or adirvettus shall be kept in a storage shed constructed of non-flammable materials in a fireproof box as may be approved by the licensing authority, separated from any other building used for storage of explosives or another licensed premises under this rule or storage of flammable substances or other hazardous material by fire proof wall.

(3) The total number of tubes for making adirvettus shall be recorded in the licence as licensed tubes.

(4) The tubes which are pitted or badly rusted, or visibly defective shall not be used.

(5) Internal diameter of the tubes shall not be less than 40 millimetre and thickness of walls not less than 10 millimetre.

(6) Not more than 50 grammes of gunpowder shall be used in each tube and no tube shall be filled to more than ¼ its total length.

(7) "Tamping" of gunpowder in the tubes shall not be done with iron rods. Only wooden implements shall be used.

(8) The tubes shall be securely mounted and fixed to a log of wood or other suitable base.

(9) No person under 18 years of age and no person who is in a state of intoxication or of unsound mind or physically handicapped shall be employed in manufacture of adirvettus.

(10) The tubes shall be produced for inspection before the licensing authority or other authority specified by the licensing authority at the time of grant of licence and thereafter at such intervals as the licensing authority may direct.

(11) The interior of the storage shed or the box as a case may be and all fittings therein shall be so constructed, covered, or lined, as to prevent the exposure of any iron or steel, or of any hard or gritty surface or the entry, detaching or accumulating of any grit, iron, steel or similar substance.

(12) Adequate provision shall be made for the ventilation and the interior of the storage shed or box shall be kept scrupulously cleaned.

(13) The doors of the storage shed or the box shall open outwards, and shall be kept clearly closed or locked except when required to be opened for receipt or issue of explosives or for other necessary purposes.

(14) All articles or substances of explosive or highly inflammable nature shall be kept at a safe distance from the explosives and from any room or part of a building or fire proof box containing the explosive, and no person entering such room or part of building or opening such safe shall have any iron or steel in his possession or attached to or on his boots or shoes.

(15) No tools, implements, balance, weights, etc. made of iron or steel shall be kept at any time on the premises. (16) The licensee shall maintain records of purchase of gunpowder with supplier's name, address and his licence particulars; and also of daily stock and account of use of gunpowder, adirvettus manufactured and fired and produce the same to the inspecting authority.

(17) Gun powder purchased on the strength of this licence shall not be sold or transferred to any other person.

(18) Experienced person shall be engaged for manufacture and firing adirvettus.

(19) The licensee may manufacture adirvettus by filling in manufacturing shed.

(20) The total quantity of adirvettus on the licensed premises including the manufacturing shed in which such adaptation or preparation is carried on, shall not exceed the quantity the licensee is authorised to possess.

(21) No work unconnected with such adaptation, or preparation or manufacture shall be carried on in the said manufacturing shed while such adaptation or preparation or manufacture is being carried on.

(22) The said manufacturing shed shall be situated at a distance of 18 meters from storage shed.

(23) The area of firing of adirvettus shall maintain a distance of at least 45 meters from the place of storage shed, manufacturing shed and spectators or devotees. Where the confines of a street or temple precincts do not permit this distance to be observed readily in all directions from the spot where the adirvettus is fired, the person firing the adirvettus shall give prior warning to all persons within a distance of 45 metres that the adirvettus are to be fired and request them to remove themselves to a safe place for shelter. This warning should be conveyed orally as well as by placard in the vernacular language. The licensing authority shall not grant permission to fire adirvettus at a location where the above requirement cannot be complied.

(24) The licensee and his employees shall be conversant with procedure to be taken during the emergency within the premises.

(25) Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

(26) If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(27) No chlorate shall be used in the manufacture of adirverttus and in the gun powder.

(28) Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and seal of licensing authority
[District Magistrate]

LICENCE FORM LE-3.

[See articles 3(a) to (d) of Part 1 of Schedule IV of the Explosives Rules, 2008]

Licence to :

(a) possess for use, for agricultural purpose or in small quarry, explosives not exceeding 25 kilogrammes of Class 1, 2 or 3; 1500 numbers detonators; and 1500 metres of Detonating Fuse or Safety Fuse at any one time in a magazine; or

(b)possess for sale, explosives of Class 1, 2, 3, 4, 5, 6 or 7 in a magazine; or

(c) possess for use, explosives of Class 1, 2, 3, 4, 5, 6 or 7 in a magazine; or

(d)possess fireworks not exceeding 5000 kilogrammes or safety fuse not exceeding 50000 metres, in a storehouse, not for sale but for transfer to own licensed shop.

Licence No……

Annual Fees Rs…….

Space for photograph of the licensee or occupier with signature

1.Licence is hereby granted to:
Name : ……
Postal Address:…… …… City
…….. District……State……Pin
Code…….....……Police Station…… Railway
Station/Sorvoyor Circle
Phone……E-mail…….....……..Fax…….……

2. Status of licensee: …….....……

3.Licence is valid for the following purpose :

……
……

4.Licence is valid for the following kinds a

(a) Name, Description, Class, Division, Sub-division, Quantity at any one time

……

……

……

(b) Quantity of explosives to be purchased in a calendar month [applicable for licence under article 3(b) and (c)]…

Name, Description, Class, Division, Sub-division, Quantity in a month

……

……

5. The licensed premises shall conform to the following drawing(s) :

Drawing No. ……dated……

Drawing No. ……dated……

Drawing No. ……dated……

6. The licensed premises are situated at following address :

……

…… … ……..

…….....……City.....

District……State…….....……Pin code…….....…… Police Station…… Railway Station / Steamer Ghat….....…….

Phone……E-mail…….....……..Fax……

7. The licensed premises consist of following facilities:

……

……

……

……

8. The licence is granted subject to the provision of Explosives Act, 1884 as amended from time to time and the Explosives Rules, 2008 framed thereunder and the conditions, additional conditions and the following annexure

(1) Drawings (showing site, constructional and other details) as stated in serial No. 5 above.

(2) Conditions and additional conditions of this licence signed by the licensing authority.

(3) Distance Form

(4) Annexure

9. This licence shall remain valid till 31st day of March …20…….

This licence is liable to be suspended or revoked for any violation of the Act or rules framed there under or the conditions of this licence as set forth under SET-VII to SET-IX wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……20….

Signature, Designation and seal of licensing authority [District Magistrate for article 3(a)]
[Chief Controller of Explosives or Controller of
Explosives authorised by Chief Controller for Articles 3(b)-(d)]

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

LICENCE FORM LE-4.

Licence to possess and transport explosives of Class 2 or Class 3 not exceeding 25 kilogrammes, electric or ordinary detonators not exceeding 200 numbers, detonating fuse not exceeding 100 metres and safety fuse not exceeding 200 metres in a compressor mounted motor truck or tractor for use in well sinking.

(See article 4 of Part 1 of Schedule IV of the Explosives Rules, 2008)

Licence
No……
Annual Fees
Rs…….

Space for photograph of the licensee or occupier with signature

1. Licence is hereby granted to:
Address:……
……...……..……City…….
…….. District……State……Pin code……...
Police Station…….
Railway Station / Steamer
Ghat…….Phone……E-
Mail……..Fax……2 Status of licensee:
……
3. Licence is valid for the following kinds and quantity of explosives:
(Name,description, Class, Division, sub-division, quantity at any one
time)……...……
……
……4. The licensed premises shall conform to the following drawing(s):
Drawing No……..dated……
5. Particulars of the Compressor mounted motor truck or tractor:
(a)Registration number
(b)Make and model ……
6. The licence is granted subject to the provision of Explosives Act, 1884 as amended from time to time and the Explosives Rules, 2008 framed thereunder and the following annexure.
(1)Drawings (showing constructional and other details) as stated in serial no. 4 above.
(2)Conditions of this licence signed by the licensing authority.

7. This licence shall remain valid till 31st day of March …20…….

This licence is liable to be suspended or revoked for any violation of the Act or rules framed there under or the conditions of this licence or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……20….
Signature, Designation and seal of Licensing authority [District Magistrate]

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Conditions

(1)The licence shall be valid only for the particular Tractor-Compressor described above.
(2)The Compressor mounted motor truck or tractor shall conform in all respect to the Specification 5 in Schedule VII of the Explosives Rules, 2008.
(3)This licence or its authenticated copy shall at all times be kept in the Compressor mounted motor truck or tractor and produced on demand by an inspecting officer.
(4)The Compressor mounted motor truck or tractor shall not be used for transport of any other inflammable and hazardous material other than that authorised by this licence.
(5)No smoking, fire, artificial light or any article capable of causing fire shall be allowed on the Compressor mounted motor truck or tractor.
(6)The Compressor mounted motor truck or tractor especially its compressor fittings like safety valve, limiting pressure switch and pressure gauge shall be maintained in good working condition and checked at least once in a year for correct operation.
(7) (i) The explosives shall be procured from a licensed magazine and shall be used up in well-sinking carefully and in case of any inordinate delay in completing the work during daytime the same shall be reported to nearest police station.

(ii)The receipt and use of the explosives shall be recorded in the Record sheet annexed to this licence. The entries shall be signed by the licensee or his authorised agent in respect of explosives procured and used and the entries should be endorsed by the local authority.

(8)The explosives of Class 2 or 3 and Detonating Fuse class 6, division 2 shall be kept in an wooden box; and Detonators of class 6 division 3 shall be kept in another wooden box. Both the boxes of the type approved by the Chief Controller of Explosives shall be locked and placed inside the two separate steel boxes fixed to the Compressor mounted motor truck or tractor. These outer boxes also shall be locked. Explosives shall neither be primed nor primed explosives shall be kept in the Compressor mounted motor truck or tractor.

(9)While running the Compressor mounted motor truck or tractor, the locked wooden boxes shall be removed from the vehicle and kept at a secluded place under guard. The two boxes for high explosives and detonators shall be at least kept 2 meters apart and no source of fire and smoking shall be allowed within a distance of 15 meters. The place shall be adequately away from the site of blasting and protected.

(10)(i)After the drilling of all the holes, the persons engaged in drilling shall retire from the site, and the drilling equipments shall be restored to the Compressor mounted motor truck or tractor.

(ii)The explosives required for blasting the holes shall be kept apart and the rest of the explosives shall be restored to the steel boxes fixed on the Compressor mounted motor truck or tractor and the vehicle shall be driven away.

(iii)The explosives kept apart shall be prepared for blasting by the shot-firer. Sufficient time, not less than 30 minutes in any case, shall be allowed for the drill holes to cool down to ambient temperature. The primed cartridges shall be placed in the drill holes and the connections shall be checked by the shot-firer. The key of the exploder used for blasting by electric detonator shall be kept with the shot firer during charging the holes.

(iv)The firing of the shots shall be carried out by the shot-firer from a safe distance of at least 30 meters under protection in case of electrical firing and in case of firing by safety fuse, sufficient length of fuse shall be used to enable him to move to safe distance from the blasting site.

(v)Before firing the shots, warning by shouting or whistling and by red flags shall be given and the shot-firer shall ensure that no person is present within 100 meters of the blasting site.

(11)After allowing adequate time, not less than 30 minutes after firing of the shots, the shot-firer shall ensure that all the holes are fired. No other person shall be allowed to the site of blasting before this is checked by the shot-firer.

(12)The Compressor mounted motor truck or tractor shall not carry any person at any time other than driver and shot-firer having a valid driving licence and a shot-firer's permit respectively.

(13)The licensee shall inform the nearest police station in advance of the location where blasting is to be carried out for well sinking.

(14) (i) When not in use in the day or at night, the Compressor mounted motor truck or tractor shall be parked open place duly guarded maintaining at least 45 meters safe distance all-round. No source of fire or smoking shall be allowed within 15 meters of the vehicle.

(ii) The boxes containing explosives fixed on the Compressor mounted motor truck or tractor shall be protected from sun and rain as far as practicable by covering with a tarpaulin.

(iii) The nearest police station or outpost shall be kept informed of the location where the vehicle is parked at night. (15)Any accident and all losses, shortage of stock and thefts of explosives shall be reported without delay to the nearest police station and the licensing authority.

(16)The licensee and the shot-firer shall be responsible for preparation of charges, the charging of holes and the firing of shots and shall take all precautions against fire and accident involving the explosives.

(17)For charging or stemming a shot hole, no person shall use an iron or steel tools, scraper, or tamping rod, nor shall forcibly press the explosive into a hole of insufficient size. A tamping rod made entirely of wood shall be used.

(18)Before exploding any blasting charge, adequate measures shall be taken so as to prevent as far as possible, the projection of fragments of stone by the explosion of the blasting charge.

(19)No person shall re-bore or tamper a hole that has once been charged or attempt to withdraw a charge either before firing or after a misfire or deepen or tamper with empty holes or sockets left after blasting.

(20)The licensee of the magazine shall submit at the end of every month a return in Form RE-6 to the District Magistrate, Superintendent or Commissioner of Police in whose jurisdiction the magazine is situated in the proforma prescribed from time to time so as to reach the above authorities by 10th day of the succeeding month.

(21)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(22)Free access shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

(23)If the licensing authority informs in writing, the holder of the licence to carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(24)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and seal of Licensing authority
[District Magistrate]

Record sheet attached to licence No.....for Compressor mounted motor truck or tractor Registration No.....

RECEIPT OF EXPLOSIVES FROM MAGAZINE

Date	Name of licensee, location and licence number	Quantity received	Signature of the licensee of the magazine or his authorised agent

USE OF EXPLOSIVES

Date	Place where used	Number of Holes blasted	Quantity used	Remarks	Signature of occupier of the well where explosives used	Signature of licensee of Compressor mounted motor truck or tractor or the shot-firer	Particulars (number, issuing authority and or the shot-firer's certificate	Endorsement by local authority

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LICENCE FORM LE-5.

[See article 5(a) to (f) of Part 1 of Schedule IV of the Explosives Rules, 2008]

Licence to

(a)possess and sell from a shop, at any one time, not exceeding 25 kilogrammes of small-arms nitro- compound; or

(b)possess and sell from a shop, at any one time, not exceeding 100 kilogrammes of manufactured fireworks of Class 7, Division 2, sub-division 2 and 500 kilograms of Chinese crackers or sparklers; or

(c)possess and sell from a shop, at any one time, not exceeding 2000 numbers of pyrotechnic device explosives of Class 6 Division 1; or

(d)possess for use gunpowder not exceeding 5 kilogrammes and safety fuse not exceeding 50 metres in the States of Bihar, West Bengal, Kerala and Tamilnadu; or

(e)possess for use of small-arms nitro-compound not exceeding 5 kilogrammes in the State of Kerala; or

(f)possess and sell from a shop manufactured fireworks of Class 7 Division 2 sub-division 2 exceeding 100 kilogrammes but not exceeding 300 kilogrammes, and Chinese Crackers or Sparklers exceeding 500 kilogrammes but not exceeding 1200 kilogrammes

Licence No……

Annual Fees Rs…….

1.Licence is hereby granted to:

Space for photograph of the licensee or occupier with signature

Name: ……...…….

Postal Address:……City ……...……..

…...…District……State……Pin code…….

Police Station…… Railway Station / Steamer Ghat…….……

Phone……E-mail……..Fax……

2. Status of licensee: ……

3. Licence is valid for the following purpose:

……

…….....

…….. …….. ……..

…….. .....

4. Licence is valid for the following kinds and quantity of explosives:

(Name, description, Class, Division, sub-division, quantity at any one time…….....….....

……

….....

5. The licensed premises shall conform to the following drawing(s):

Drawing No. ……dated……

Drawing No. ……dated……

Drawing No. ……dated……

Drawing No. ……dated……

Drawing No. ……dated……

6. The licensed premises are situated at following address:

……

……Survey No:……City ……..

District……State……....…….Pin code……..……...

Police Station…… Railway Station / Steamer Ghat…….

Phone……E-mail…….....……..Fax……

7.The licensed premises consist of following facilities:

……

……

……....……....……

…….....

8. The licence is granted subject to the provision of Explosives Act, 1884 as amended from time to time and the Explosives Rules, 2008 framed thereunder and the conditions, and annexures ……

(1) Drawings (showing site, constructional and other details) as stated in serial no. 5 above.

(2) Conditions of this licence signed by the licensing authority.

9. This licence shall remain valid till 31st day of March 20……except for temporary licences issued under rule 84 for which the maximum period should be 15 days from the date of issue.

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this licence as set forth under SET-X to SET-XV, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……20….

Signature, Designation and seal of licensing authority [District Magistrate for articles 5(a) to 5(e)]
[Controller of Explosives for article 5(f)]

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

[1]Hkkx II[1][k.M 3(i)º Hkkjr dk jkti=k % vlk/kj.k 257

LICENCE FORM LE-6.

(See article 6 of Part 1 of Schedule IV of the Explosives Rules, 2008)
Licence to possess and use fireworks for public display

Licence No……Annual Fees Rs…….

1. Licence is hereby granted to :

Space for photograph of the licensee or occupier with signature

Name : …….. …….. …….. ……..

Address :…….. …….. ….

……..……City……..

…….. ..

District……State……Pin code……..…….. ……..

…….. .....

Police Station…… Railway Station / Steamer Ghat…….....……..

…….

Phone……E-mail……..Fax…….. ……..

…….. ..... 2. Status of licensee: ……..

…….. …….. ….

3. Licence is valid for the following purpose:

.....

.....

..……

……4.. The licensed premises shall conform to the following drawing(s) :

Drawing No. ……dated……

Drawing No. ……dated……

Drawing No. ……dated……(space for signature)

5. The licensed premises are situated at following address : …… ……

Survey No. :……City ……..

District……State…….. Pin code……...

Police Station…… Railway Station / Steamer Ghat…….…….. ……..

…….. Phone……E-mail……..Fax……..

…….. …….. .....

6.. The licence is granted subject to the provision of Explosives Act, 1884 as amended from time to time and the Explosives Rules, 2008 framed thereunder and the conditions and the following annexures :

(1) Drawings (showing site and other details) as stated in serial no. 4 above.

(2) Conditions of this licence signed by the licensing authority.

7. This licence shall remain valid till.....day of..... …20..... (maximum one month)

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this licence or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……20….

Signature, Designation and Seal of licensing authority [District Magistrate]

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Conditions

(1)The licensee shall intimate the licensing authority at least seven days in advance before conducting fireworks display :

(a) time and place at which the public display is to be held,

(b) the types of fireworks to be used in the display,

(c) the name, address and licence number of the supplier of fireworks for use in display,

(d) names, addresses and experience of persons who will be supervising the display.

(2)The fireworks shall be stored and displayed only at the places shown in the plan attached with the licence. (3)A minimum distance of 100 meter shall be maintained between the spectators and the area where the display is carried out.

(4)Only authorised fireworks shall be used. Such fireworks shall be purchased directly from persons holding valid licence granted to manufacture such fireworks.

(5)The fireworks shall be assembled at site for the purpose of display.

(6)No fireworks shall contain chlorate or prohibited explosives mixture.

(7)No display of fireworks shall be carried out when the wind velocity exceeds 50 kilometres per hour or the control over spectators has been lost.

(8)Only minimum persons shall be employed for making and display of fireworks. The site should be constantly supervised and the persons employed shall wear protective clothings, ear defenders, safety glasses and other protective devices.

(9)Once fireworks have been taken to the site, the site must not be left unattended or unprotected.

(10)No fireworks shall be ignited inside of or closer than 15 metres of any tent, trailer, canvas shelter of vehicle. (11)No fireworks shall be ignited within 250 metres of a hospital, nursing home, schools unless consent from local authorities and the owner or its agent is obtained.

(12)Adequate fire fighting equipments, facilities and first-aids shall be provided in consultation with the fire service authorities.

(13)After the display, the wastes and remnants shall be carefully collected, removed from the site and destroyed by burning under supervision of a competent person, taking due precautions.

(14)The licensee shall follow the provisions of the Act and these rules made thereunder as otherwise applicable.

(15)No electrical wire shall be allowed within 15 metres of the area where the fireworks are laid down.

(16)Half the length of the iron mortars used for display shall be buried in the ground .The mortars of the same size shall be grouped and spaced not less than 50 centimetres apart. Groups of different size mortars shall be placed at least 10 metres apart. The mortars or frames shall be securely anchored to the ground.

Note: Mortars made of card board or paper of sufficient strength may be used in case small shell.

(17)Before starting the display it shall be ensured that the fireworks explode and the debris fall in the safe area. (18)No matches, lights or any article of flammable or hazardous nature liable to cause fire or explosion shall be brought or kept in the licensed premises expect for firing purpose only.

(19)No tools, implements etc. made of iron or steel except mortars used for display shall be kept at any time in the premises and no person on the licensed premises shall have any iron or steel in his possession or on his boots or shoes. (20)The licensee shall keep records and accounts of all fireworks received, used and stock on hand.

(21)The licensee shall follow the local bye-laws at the place of storage and display and obtain necessary permission whenever required.

(22)The kinds and quantities of explosives remaining after the expiry of licence shall be intimated to the licensing authority and the licensee shall abide by the instructions of such authority regarding disposal of explosives.

(23)If the licensing authority directs the licensee by notice in writing to make any additions or alterations, which, in the opinion of such authority, is considered necessary for the safety, of the premises or of the person working therein or the spectators the licensee shall execute such additions or alterations within such period as may be specified.

(24)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(25)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be provided to the officer for ascertaining that the provisions of the Act, these rules and the conditions are complied with.

(26)If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(27)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority.

Signature,
Designation and Seal of licensing authority
[District Magistrate]

LICENCE FORM LE-7.

Licence to transport explosives in a road van
(See article 7 of Part 1 Schedule IV of the Explosives Rules, 2008)

Space for photograph of the licensee or occupier with signature

Licence
No……
Annual Fees Rs……..

1. Licence is hereby granted to:
Name :
Address
:……
……City……
……District……State……Pin code……...
Police Station…… Railway Station / Steamer Ghat…….
Phone……E-mail……..Fax……

2. Status of licensee :
……3. Particulars of the road van :
(a)Registration number
(b)Make and model of vehicle….....….
(c)Unladen weight…….....……(d)Maximum laden weight
(e)Maximum quantity of explosives permitted for transport…..…..

4. The licensed premises shall conform to the following drawing(s):
Drawing No.
…….....……dated…….....……

5. The licence is granted subject to the provision of Explosives Act, 1884 as amended from time to time and the Explosives Rules, 2008 framed thereunder and the conditions and the following annexures ……
(a) Drawings of the road van as stated in serial no.4 above.
(b) Conditions signed by the licensing authority.

6. This licence shall remain valid till 31st day of March …20…….

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this licence or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……20….

Signature, Designation and Seal of licensing authority [Controller of Explosives]

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Conditions (1)This licence is not transferable to any other explosives van.

(2)No alterations should be made to the vehicle, its body and other fittings without approval from the licensing authority.

(3)This licence or its authenticated copy shall at all times be kept in the van and produced on demand by an inspecting officer.

(4)The road van shall not be used for transport of explosives unless it is in a fit condition and complies with the Explosives Rules, 2008.

(5)The road van shall not be used for transport of any material other than that authorised by this licence, unless permitted by licensing authority in writing.

(6)No smoking and no fire or artificial light or any article capable of causing fire shall be allowed on the explosives van.

(7)The vehicle shall not be used for carrying passenger.

(8) Road van, while explosives are being loaded or unloaded or transported shall always be under the charge of competent person who shall be experienced in handling of explosives and fully conversant thereunder. Where the vehicle is not driven by the licence holder, a document signed by the licensee naming persons authorised to drive and accompany the vehicle shall be carried in the van and produced on demand to an inspecting officer.

(9)No explosives unless they are packed in accordance with the Explosives Rules or in a manner specified by the Chief Controller shall be transported in the explosives van.

(10)Detonators shall not be transported with any other explosives.

(11)Any breakdown, accident, fire or explosion occurring in or involving the road van, shall be immediately reported to the licensing authority together with a full report of such breakdown, accident, fire or explosion. If such accident, fire or explosion is attended with loss of human life or serious injury to person or property, a report shall also be made immediately to the nearest Police Station.

(12)The explosives shall be loaded into the van only at the licensed premises of consignor and unloaded from the van at the licensed premises of the consignee.

(13)The licensee shall maintain account of explosives transported in Form RE-5 and present the same on demand by an inspecting officer.

(14)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(15)Free access shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act or these rules and these conditions are duly observed.

(16)If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site persons, the holder of the licence shall execute the recommendations and report compliance within the period specified by such authority.

(17)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and Seal of licensing authority
[Controller of Explosives]

LICENCE FORM LE-8.

(See article 8 of Part 1 of Schedule IV of the Explosives Rules, 2008)

Licence to import or export explosives otherwise than by land.

Space for photograph of the licensee or occupier with signature

Licence No……

Fees Rs…….

1. Licence is hereby granted to

Name :

……P

……City ……..

District……State……Pin code……... Police Station……Railway Station / Steamer Ghat…….Phone……E mail…….....

Fax……

2. Status of licensee: ……

3.Licence is valid for the following purpose :

……

……

4. Licence is valid for the following kinds and quantity of explosives :

(a) **For import**

Description of explosives and consignor :

Name of explosives Class & Division	Weight in kilogram or number or metres	Number of packages	Consignor's name and address from where explosives will be imported	Licence number of the magazine or store house of the consignee	Port of import	Mode of import
¹Hkkx II¹[k.M 3(i)º			Hkkjr dk jkti=k % vlk/kj.k			261

(b) **For export**

Description of explosives and consignee :

Name of explosives Class & Division	Weight in kilograms or number or metres	Number of packages	Consignee's name and address	Port of export	Mode of export

5. The licence is granted subject to the provision of Explosives Act, 1884 as amended from time to time and the Explosives Rules, 2008 framed thereunder and the conditions and the following annexure :

(1) Conditions signed by the licensing authority.

(2) Annexure.

6. This licence shall remain valid till ……..…(maximum six months from the date of issue).

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this licence or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……20….

Signature, Designation and eal of licensing authority [Chief Controller of Explosives]

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Conditions

(1)No explosives other than those permitted under this licence shall be imported.

(2)The quantity of explosives imported shall not exceed that authorised by this licence.

(3)All explosives imported under this licence shall be packed and marked in accordance with the provisions of Explosives Rules, 2008.

(4)No ship or boat or aircraft containing explosive imported on the strength of this licence shall bring to or more and no such explosive shall be unloaded or trans-shipped from any ship or boat or aircraft except at the port authorised by this licence.

(5)The licensee shall comply with all the rules and regulations in force at the port of import mentioned in this licence.

(6)The owner and master of the ship or boat or aircraft in which explosives are imported on the strength of this licence, shall, if and when required by an inspecting authority or the custom's authority having jurisdiction over the place of importation, allow such inspector or officer to take for examination samples of any explosive so imported.

(7)As soon as the explosive has been cleared from the place or port and despatched to the magazine for storage, the licensee shall complete the importer's transmission Schedule in Form RE-9 and forward it to the Chief Controller.

(8)The explosive shall be despatched to the various consignees mentioned in the licence directly from the port and the licensee shall make prior arrangements to ensure that there is no hold up of explosives at any place.

(9)The imported explosives if of Class 3 or Class 4 shall not be unloaded from the ship or boat unless such explosives have been tested and permission to unload given by the Chief Controller or Controller authorised for the purpose.

(10)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(11)Free access shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act or these rules and these conditions are duly observed.

(12)If the licensing authority or a Controller informs in writing, the holder of the licence to carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site persons , the holder of the licence shall execute the recommendations and report compliance within the period specified by such authority.

(13)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and Seal of licensing authority

[Chief Controller of Explosives]

LICENCE FORM LE-9 (SPECIAL)

(See article 9 of Part 1 of Schedule IV of the Explosives Rules, 2008)

Licence to manufacture, possess, sell, use etc. of explosives not provided in articles 1 to 8 of Part 1 of Schedule IV

Licence No.

……

Annual Fees Rs.

…….

Space for photograph of the licensee or occupier with signature

1. Licence is hereby granted to : Name :

……City …….....

District……State……Pin code…….....

Police Station……Railway Station / Steamer Ghat…….....

Phone……E-mail……..Fax…….....

2. Status of licensee : ……..…….....

3. Licence is valid for the following purpose :

……

…….....

4. Licence is valid for the following kinds and quantity of explosives :

(Name, description, Class, Division, sub-division, quantity at any one time, in a month and annual capacity as applicable)……....

……...

5. The licensed premises shall conform to the following drawing(s) :

Drawing No. ……dat

Drawing No. ……dated……

Drawing No. ……dated……(space for signature)

6. The licensed premises are situated at following address: Name :

…….....

.....

Postal Address:…….....

……Survey No. …… ……City

……..... District……State…… Pin code……... Police Station……..... Railway Station / Steamer Ghat…….

Phone……E-mail……..... Fax……

7. The licensed premises consist of following facilities :

……

8. The licence is granted subject to the provision of Explosives Act, 1884 as amended from time to time and the Explosives Rules, 2008 framed thereunder and the conditions, and the following annexures :

(1)Drawings (showing site, constructional and other details) as stated in serial No. 5 above.

(2)Conditions of this licence signed by the licensing authority.

(3)Distance Form.

(4)

9. This licence shall remain valid till 31st day of March …20…….

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this licence or if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

The ……..20…. ..... Signature, Designation and Seal of Licensing Authority

[Chief Controller of Explosives]

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Conditions : (To be specified by the Chief Controller)

Signature, Designation and Seal of Licensing Authority

[Chief Controller of Explosives]

……

Form LE-10

Shot Firer's Certificate

(See article 10 of Part 1 of Schedule IV)

[See rule 107(5) of the Explosives Rules, 2008]

(Certificate of competency to carry out blasting of explosives in area not coming under the Mines Act, 1952)

No. .....

Space for photograph of the Shot Firer's with signature

This is to certify that

.....

(name)

born on resident of

(date of birth) (address)

……. ...../passed

the..... (date) (name of examination)

held on ..... by..... .....

(date) (authority conducting examination)

and is authorised to conduct blasting operations as mentioned below using explosives in areas other than mines coming under the purview of the Mines Act 1952, subject to the provisions of the Explosives Act, 1884 and the rules framed there under.

Authorised class, category and type of blasting …….....

[See explanation to sub-rule (5) of rule 107]

This certificate shall remain valid till .....(five years from the date of issue)

This certificate is liable to be suspended or revoked for any violation of the Act or rules framed there under or the conditions of this certificate or if there is any discrepancy or deviation in the information or suppression of facts furnished by the applicant in his application form.

Place : .....

Date : .....

[Controller of Explosives]

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

.....

Endorsement for revalidation

.....

.....

Conditions

(1)All local laws and regulations applicable for obtaining, owning, transporting, storing, handling and using explosive materials shall be followed.

(2)Explosive materials shall be protected form unauthorised possession and shall not be abandoned.

(3)Explosive materials shall be used only by experienced persons who are familiar with the hazards involved and who hold all required permits.

(4)Loading and firing shall be performed or supervised only by a person possessing an appropriate shot firer certificate and permit to blast.

(5)Trainees helpers and other persons who do not hold the required shot firer certificate or permits shall work only under the supervision of persons holding such permits.

(6)No explosive materials shall be located or stored where they may be exposed to flame excessive heat sparks or impact.

(7)No smoking shall be permitted within 15 metre of any location where explosive are being handled or used.

(8)No person with in 15 metres of any location where explosive are being handled or used shall carry any matches open light or other fire or flame. H hting safety fuse are exempted form this

requirement. (9)No person under the influence of intoxicating liquors narcotics or other dangerous drugs shall be allowed to handle explosive materials.

(10)Explosive materials shall be kept in close approved containers or packages while being transported between the storage magazine and the blasting site.

(11)A holder of a shot firer certificate and Permit to Blast shall keep a daily record of all explosive materials received and fired or otherwise disposed of by the permit holder. Such records shall be retained for five years.

(12)The shot firer and the employee shall be conversant with procedure to be taken during the emergency.

(13)The holder of the shot firer certificate shall comply with all or any of the directions as may be given by the Controller from time to time in the interest of safety.

(14)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the Controller of Explosives having jurisdiction over the area.

[Controller of Explosives]

.....

Form LE—11

Foreman's Certificate

(See article 11 of Part 1 of Schedule IV)

[See rule 107(6) of the Explosives Rules, 2008]

(Certificate of competency to supervise manufacture of fireworks or safety fuse)

No. .....

Space for photograph of the Foreman with signature

This is to certify that

.....

(name)

born on (date of birth) resident of (address)

……. ...../passed the..... (date) (name of examination)

held on ..... by..... (date) (authority conducting examination)

and is authorised to supervise manufacture of ---------- in a factory licensed under Explosives Rules, 2008

This certificate shall remain valid till .....(five years from the date of issue) This certificate is liable to be suspended or revoked for any violation of the Act or rules framed there under or the conditions of this certificate or if there is any discrepancy or deviation in the information furnished by the applicant in his application form.

Place : .....
Date : .....

[Controller of Explosives]

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

.....

Endorsement for revalidation

.....

.....

Conditions

(1)All local laws and regulations applicable for manufacture of explosives shall be followed.

(2)No person under the influence of intoxicating liquors narcotics or other dangerous drugs shall be allowed to handle explosive materials.

(3)The holder of the this certificate shall comply with all or any of the directions as may be given by the Controller from time to time in the interest of safety.

(4)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to licensee, the nearest police station and the Controller of Explosive having jurisdiction over the area.

[Controller of Explosives]

Part 4

(Conditions of Various Licences)

SET-I

The Following are the conditions of licence number ……. to manufacture fireworks or gunpowder, or both, not exceeding 15 kilogrammes at any one time in

Form LE-1 [article 1(a)] granted by District Magistrate

(1)The maximum quantity of explosives in the whole factory at any one time, including those in process of manufacture as well as those stored in the licensed premises, shall not exceed as mentioned in item 4 in from LE-1.

(2)All explosives in the premises shall be manufactured and kept in a building substantially constructed of brick, stone or concrete or in a securely constructed fireproof safe and shall be separated from any dwelling house, highway, street, public thoroughfare building or public place or another licensed premises by the safe distances as mentioned in the licence and its enclosures.

form LE-1 shall be kept in the premises

(4)The fireworks/gunpowder shall be manufactured in single storied building and all doors of the building shall open outwards.

(5)The interior of every building and receptacle used for explosives and the shelves and fittings therein shall be so constructed or so lined and covered as to prevent the exposure of any iron or steel, or the detaching of any grit, iron steel or similar substance, in such manner as to come into contact with the explosives. Such interior, shelves and fittings shall, so far as reasonably practicable, be kept free from grit and otherwise clean.

(6)The building or receptacle in which explosive is kept shall be used only for the keeping of such explosive and for no other purpose whatsoever.

(7)Fireworks shall be kept in separate receptacles or shall be so separated as to prevent explosion or fire communicating from one to the other.

(8)All explosives exceeding 0.5 kilogramme in amount shall be packed and marked in accordance with the Schedule II of the Explosives Rules 2008.

(9)The explosive shall be manufactured in rooms of lightly constructed one-storied building kept and used only for the purpose of such manufacture and separated from the storage place by a distance of 45metres and separated from any dwelling house, other building, another licensed premises, highway, street, public thoroughfare or public place by a distance of 45 metres.

The facilities of the factory shall maintain the following inter-distances in metres :

From shed or room	To ingredient store, road, dwelling house and place of public assembly	To manufacturing sheed	To drying platform	To magazine
Ingredient Shed	—	45	45	45
Manufacturing Shed	45	10	10	45
Drying platform	45	10	10	45
Magazine	45	45	45	more than one magazine not permitted

(10)The ingredients for the manufacture of gunpowder shall be kept in separate stores distinct from each other and separated by a distance of at least 45 meters from the place where gunpowder/fireworks is manufactured or stored as per above table.

(11)Not more than four persons shall be allowed at any one time in any one building or tent in which the explosive is being manufactured and only persons actually employed in manufacturing or superintending manufacture shall be allowed inside the place of manufacture.

(12)No iron or steel implements or stone implements, such as mortars, pestles, grinders (chukkis) shall be used in the manufacture of explosives or shall be kept at any time in the licensed premises.. Only copper, gun metal or wooden tools are permissible.

(13)All explosives, as and when they are manufactured, shall be removed, without delay to the licensed place of storage and no explosive shall be allowed to accumulate in the place of manufacture.

(14)Manufacture shall only be carried on between sunrise and sunset and no smoking or lights shall be allowed in or near the place where explosives are being manufactured.

(15)No oils, paints, matches, lights, any article of a highly inflammable or explosive nature or liable to cause fire or explosion or any acids or similar substances shall be brought or kept in the licensed premises. No smoking shall be allowed inside the factory.

(16)The licensee shall keep records and accounts of all explosives manufactured and of all stocks in hand in forms RE-2 and RE-4 and exhibit the stock books and records to the officers authorised under Explosives Rules, 2008, whenever such officer may call upon him to do so.

(17)No activity other than those specified in licence shall be carried out in the factory premises.

(18)The licensee and the employee shall be conversant with procedure to be observed during the emergency within the premises.

(19)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and the Rules and the safety conditions are duly observed.

(20)If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises/persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(21)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

(22)No person under 18 years of age and no person who is in a state of intoxication or of unsound mind or physically handicapped shall be employed in or allowed to enter the factory.

(23)No electronic appliances or instruments like mobile phones, pagers shall be allowed in or near the premises where explosives are manufactured handled, stored and used.

(24)The date of manufacture shall be marked in conspicuous indelible character, by means of stamping or printing on the label/outer package of the sound producing cracker.

(25)No chlorate shall be used in the manufacture of fireworks.

(26)The manufacture or sale of fire-crackers generating noise level exceeding;

(a)125 dB(AI) or 145 dB(C)pk at 4 meters distance from the point of bursting shall be prohibited

(b)For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 log10 (N) dB, where N = number of crackers joined together

Signature, Designation and seal of licensing authority

SET - II

Form LE-1 [articles 1(b) and (c)] granted by the Chief Controller or Controller of Explosives.

CONDITIONS

General :

(1) All explosives in the premises shall be manufactured and kept in a building substantially constructed of brick, stone or concrete as per specification No. 3 under Schedule-VII or in a securely constructed fireproof safe or of a type and design approved by the Chief Controller of Explosives.

(2) The interior of every building and receptacle used for explosives and the shelves and fittings therein shall be so constructed or so lined and covered as to prevent the exposure of any iron or steel, or the detaching of any grit, iron steel or similar substance, in such manner as to come into contact with the explosive. Such interior, shelves and fittings shall, so far as reasonably practicable, be kept free from grit and otherwise clean.

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(3)The building or receptacle in which explosive is kept shall be used only for keeping of such explosive and for no other purpose whatsoever.

(4)Fireworks shall be kept in separate receptacles or shall be so separated as to prevent explosion or fire communicating from one to the other.

(5)All explosives exceeding 0.5 kilogramme in amount shall be packed and marked in accordance with the Schedule II.

(6)The ingredients for the manufacture of fireworks, serpents, paper caps, safety fuse/micro cord fuse or sparklers shall be kept in separate stores distinct from each other and separated by safety distances as mentioned in the table 4 or 6 of Schedule VIII.

(7)No iron or steel implements or stone implements, such as mortars, pestles, grinders (chukkis) shall be used in the manufacture of explosives or shall be kept at any time in the licensed premises. Only copper, gun metal or wooden tools are permissible.

(8)All explosives, as and when they are manufactured, shall be removed, without delay to the licensed place of storage and no explosive shall be allowed to accumulate in the place of manufacture.

(9)Manufacture shall only be carried in between sunrise and sunset and no lights shall be allowed in or near the place where fireworks are manufactured provided that nothing in this rule shall apply to handling/manufacture of fireworks during dark hours if proper illumination with flame and/or dust proof motors, light and fittings is provided in the area and the place is guarded.

(10)No oils, paints, matches, lights, any article of a highly inflammable or explosive nature or liable to cause fire or explosion or any acids or similar substances shall be brought or kept in the licensed premises. No smoking shall be allowed inside the factory.

(11)The licensee shall keep records and accounts of all explosives manufactured and of all stocks in hand in forms RE-2 and RE-4 and exhibit the stock books and records to the officers authorised under rule 128 of the Explosives Rules, 2008, whenever such officer may call upon him to do so.

(12)No activity other than those specified in licence shall be carried out in the factory premises.

(13)The licensee and the employee shall be conversant with procedure to be observed during the emergency within the premises.

(14)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and the Rules and the safety conditions are duly observed.

(15)If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(16)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

(17)The maximum number of process buildings excluding mixing/filling, transit building and drying platform in a factory shall not exceed 85.

(18)Unless specifically exempted by the Chief Controller of Explosives, the minimum capacity for store house attached to any factory shall be 1/5th of its annual manufacturing capacity.

(19)Licensee shall appoint minimum one qualified foreman certified by the Controller of Explosives, for every 20 process buildings to supervise the manufacture of fireworks.

(20)Every process building where electrically operated machinery is used in the manufacture of explosives shall have attached thereto one or more efficient lighting conductors designed and erected in accordance with the specification laid down in Indian Standard Specification No.2309 as amended from time to time.

(21)No electronic appliances or instruments like mobile phones, pagers shall be allowed in or near the premises where explosives are manufactured, handled, stored and used.

(22)No person under 18 years of age and no person who is in a state of intoxication or of unsound mind or physically handicapped shall be employed in or allowed to enter the factory.

(23)The doors of any process building shall not face each other. If doors of adjoining sheds face each other, a screen wall of 23 cm cement and brick should be provided at a distance of 1 to 2 M from the building and 0.5 m wider than the door opening on both sides and up to the height of the doors.

(24)The maximum quantity of explosives in the whole factory at any one time, including those in process of manufacture as well as those stored on the licensed premises, shall not exceed as mentioned in item 4 in from LE-1.

Special conditions for fireworks

(25)The Mixing /filling building shall be surrounded by a blast wall as per specification no. 3 under Schedule-VII.

(26)Manufacturing building , mixing, filling, transit building and drying platform shall observe inner safety distance to and from any process building and an outer safety distance from the fence as per table 6 of Schedule VIII.

(27)The total quantity of explosives and person/persons in any manufacturing building, mixing, filling, transit building and drying platform shall be as per table 6 of Schedule VIII.

(28)The licensed premises shall be surrounded by a wall or barbed wire fencing at least 2 meters high of such strength and construction as to prevent entry of unauthorised persons at safe distance as mentioned in the table 6 of schedule VIII.

(29)One drying platform shall be provided for every five manufacturing sheds (excluding filling/mixing/transit building).

(30)Black powder and fireworks shall not be kept in the same receptacle and shall be so separated as to prevent explosion or fire communicating from one to the other.

(31)No chlorate shall be used in the manufacture of fireworks.

(32)No loose fireworks composition, dry or wet, shall be allowed to be kept in the factory at the close of any single working day. All such compositions that remain at the close of the day shall be destroyed..

(33)The fireworks shall be manufactured in single storied building and all doors of the building shall open outwards :

Provided that nothing in this condition shall apply to manufacture of explosives with aid of electrically operated machinery and such process of manufacture and machinery approved by Licensing Authority

(34)Every process building shall have required number of doors as approved by Licensing Authority

(35)The safety distance is required to be kept clear between any licensed factory building, magazine or store house, public road and protected works as per Table-6 of Schedule VIII

(36)The date of manufacture shall be marked in conspicuous indelible character, by means of stamping or printing on the label/outer package of the sound producing cracker

(37) The manufacture or sale of fire-crackers generating noise level exceeding;

(a)125 dB(AI) or 145 dB(C)pk at 4 meters distance from the point of bursting shall be prohibited

(b)For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 $\log_{10}$ (N) dB, where N = numb

Special conditions for paper caps or amorces

(38)The composition of dots in the amerces or paper caps shall be a mixture of potassium chlorate, amorphous-phosphorus, starch and calcium carbonate with or without the addition of sulphur (free from acid), provided that amount of amorphous-phosphorus, present in the mixture shall not exceed the proportion of 0.65 grams, in 1000 dots.

(39)The composition used in the amerces or paper caps shall be in a proportion not exceeding 4.54 mgs. to every 1000 dots, i.e. no one dot shall individually contain more than 0.0045 gram. of the composition. If the amerces or paper caps be manufactured in the form of a tape, it shall not have more than 30 dots for one tape.

(40)Not more than one kilogram of explosives composition required for the manufacture of amerces or paper caps shall be prepared at a time.

(41)The ingredients shall be kept separately until mixed wet in a mixing vat, which shall not have any exposed iron.

(42)Potassium chlorate shall be kept in a separate store room distinct from other ingredients.

(43)Sulphur shall be kept in a separate store room distinct from other ingredients.

(44)Licence under Arms Rule, 1962 shall be obtained for storage of sulphur and chlorate.

(45)Amorces shall be packed in approved closed boxes of cardboard of not less than .33 mm thickness. The boxes shall be of round shape and not less than 25 mm in dia and 20 mm in height and shall contain not more than 50 amorces in each. A round corrugated cardboard sheet shall be placed in each box before amorces are packed in it. (If, however, not more than 30 amorces are packed in a cardboard box, such sheet need not be placed in each box). The round cardboard boxes shall then be bunched and rolled in a paper wrapper

forming 10's packets, and ten such 10's packets shall be packed in a strong cardboard box making the 100's package. Such 100's boxes not exceeding 80 in number shall finally be packed in approved strong wooden cases bound with hoop iron or corrugated boxes of a type and structure approved by Chief Controller of Explosives.

(46)Net weight of paper caps containing 80 units shall not exceeds 2.8 kilogrammes.

(47)The over pasting building may be an extension of first stage drying building through window in amorces factory.

(48)The Second stage drying shed shall be constructed of a type and design approved by the Chief Controller of Explosives.

(49)The dipped amorces sheets shall be dried inside second stage drying building by placing them in singles without lying on each other.

(50) The gum used for over pasting of amorces sheet shall not contain copper sulphate or a chemical acidic in nature.

(51)Manufacturing building , mixing, filling , transit building and drying platform shall observe inner safety distance to and from any process building and an outer safety distance from the fence as per Table 6 of Schedule VIII.

(52)The licensed premises shall be surrounded by a wall or barbed wire fencing at least 2 meters high of such strength and construction as to prevent entry of unauthorised persons at safe distance as mentioned in the Table 6 of schedule VIII.

(53)The manufacture or sale of fire-crackers generating noise level exceeding;

(a)125 dB(AI) or 145 $dB(C)_{pk}$ at 4 meters distance from the point of bursting shall be prohibited.
(b)For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 $\log_{10}$ (N) dB, where N = number of crackers joined together.

Special Conditions for Saparklers

(54)Manufacturing building, mixing, filling , transit building and drying platform shall observe inner safety distance to and from any process building and an outer safety distance from the fence as per Table 4 of Schedule VIII.

(55)The sparklers shall be manufactured in one storied building and all doors of the building shall open outwards.

(56)Every process building expect transit building shall have four doors.

(57)Mixing building shall be constructed as per specification no. 3 under schedule VII.

(58)Manufacturing (packing) building/transit shed shall be constructed as per specification no. 3 under schedule VII.

(59)Drying space shall of hard smooth surface without rising from the ground level.

(60)The doors of different buildings shall not face each other.

(61)The steel filings or iron borings or magnesium metal should be coated with linseed oil or paraffin wax or pitch before mixing along with other chemical in wet condition.

(62)The wires of sparklers shall be G.I. wire or shall be coated with copper.

(63)The wires of sparklers shall not be dipped with any other material except with the mixture of chemical approved by the Chief Controller.

(64)The total quantity of explosives and person/persons in any manufacturing (packing) building, mixing, dipping shed transit building and drying platform shall be as per Table 4 of Schedule VIII.

(65)A transit building shall be provided for storing semi finished or unpacked sparklers at end of day.

(66)No chlorate shall be used in the manufacture of fireworks.

(67)Manufacturing (packing) building, mixing, dipping, transit building and drying space shall observe inner safety distance to and from any process building and an outer safety distance from the fence, as per Table 4 of Schedule VIII.

(68)The total quantity of explosives and person/persons in any manufacturing building, mixing, transit building and drying space shall be as per Table 4 of Schedule VIII.

(69)The licensed premises shall be surrounded by a wall or barbed wire fencing at least 2 meters high of such strength and construction as to prevent entry of unauthorised persons at safe distance as mentioned in the Table 4 of Schedule VIII.

Special Conditions for Serpent Eggs

(70)All the process building shall be of a type and design approved by the Chief Controller of Explosives.

(71)Nitration - Nitration of bitumen shall be done in room having acid proof tiles or brick floor with efficient ventilation system to disperse acid fumes or a building of a type and design approved by the Chief Controller of Explosives.

(72)Washing-Nitrated bitumen shall be washed thoroughly by water to remove the trace of acid before taking to drying platform or grinding or mixing building.

(73)The floor of washing building shall be made of acid proof tiles or bricks with sufficient water drainage system.

(74)Every person employed in Nitration and wash building shall use goggles, acid proof gloves and apron.

(75)Utensil used in Nitration shall be made of acid proof material.

(76)The mixture of chemical shall be moist, before making pellet or tablet to prevent fire due to friction.

(77)The pellets or tablets shall be packed in a cardboard box along with cushioning material to prevent the breakage of pellets or tablets if packaging is done by hand.

(78)No chlorate shall be used in the manufacture of fireworks.

(79)Manufacturing building , mixing, filling , transit building and drying platform shall observe inner safety distance to and from any process building and an outer safety distance from the fence as per Table 6 of Schedule VIII.

(80)The licensed premises shall be surrounded by a wall or barbed wire fencing at least 2 meters high of such strength and construction as to prevent entry of unauthorised persons at safe distance as mentioned in the Table 6 of Schedule VIII.

Signature, Designation and seal of Licensing Authority

SET-III

Form LE-1 [article 1(d)] granted by Chief Controller or Controller of Explosives. —

CONDITIONS

(1)The quantity of ANFO explosives in the premises or any part thereof shall not exceed at any one time the quantity for which licence has been issued.

(2)The ANFO manufacturing shed shall be protected by a fencing at a distance of 15 metres and it shall maintain safety distance from protected works as specified in Table 1 of Schedule VIII.

(3)Work in the shed shall be carried out strictly in accordance with the laid down safe working procedures and instructions.

(4)The ANFO explosives shall be manufactured under the immediate supervision of a qualified responsible person appointed by the licensee.

(5)The licensee and every person employed shall take all due precautions for the prevention of accidents by fire or explosion in the place or places where the ANFO explosives is manufactured, handled or used.

(6)All spillage of ANFO explosive shall be collected and destroyed at a safe place away from the licensed premises under the supervision of experienced person.

(7)All containers and mixers used for manufacturing the ANFO explosive shall after use, be thoroughly cleaned with suitable detergent solution and washed with water.

(8)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(9)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

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(10)If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(11)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and seal of Licensing Authority

SET - IV

The following are the conditions of licence number ……. for manufacture of Liquid Oxygen Explosives (LOX) in

Form LE-1 [Article 1(e)] granted by Chief Controller or Controller of Explosives. —

CONDITIONS

(1)The quantity of Liquid Oxygen Explosives (LOX) on the premises or any part thereof shall not exceed at any one time the quantity for which licence has been issued.

(2)Soaking of Liquid Oxygen Explosives (LOX) cartridges shall be done in a secured location within a fenced area maintaining safety distance from protected works as specified in table 1 of Schedule VIII.

(3)Work shall be carried out strictly in accordance with the laid down safe working procedures and instructions.

(4)The Liquid Oxygen Explosives (LOX) shall be manufactured under the immediate supervision of a qualified responsible person appointed in writing by the licensee.

(5)The licensee and every person employed shall take all due precautions for the prevention of accidents by fire or explosion in the place or places where the Liquid Oxygen Explosives is manufactured, handled or used.

(6)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(7)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

(8)If the licensing authority or a Controller2 of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises/persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(9)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and seal of Licensing Authority

SET - V

Form LE-1 [Article 1(f)] granted by Chief Controller or Controller of Explosives. -

CONDITIONS

(1)Only SME permitted in writing by the Chief Controller of Explosives shall be manufactured in the Bulk Mixing and Delivery (BMD) Vehicle.

(2)The SME shall be manufactured in the BMD vehicle only within the mining area of_____after obtaining necessary clearance from Director General of Mines Safety under Mines Act in force and the SME so manufactured shall not be used except under and in accordance with such conditions as may be imposed by the Director General of Mines Safety.

(3)The SME shall be manufactured strictly in accordance with the laid down safe working procedures and related instructions.

(4) All due precautions shall be taken in the Support-Plant to prevent any mixing of solutions or ingredients which may form explosives.

(5)At least two fire extinguishers of suitable size and capable of fighting electrical and petroleum fires shall be provided in each vehicle in an easily accessible position. During the process of manufacture, they must be kept in a state of readiness.

(6)The manufacture of SME shall be carried out by or under the immediate supervision of a experienced person appointed in writing for the purpose by the licensee. This supervisor and the operators shall be conversant with the operation of the vehicle and the facilities mounted thereon. The supervisor shall be familiar with the general procedure for handling emergency situations and the requirements of these rules and the conditions of this licence.

(7)During mixing and loading, a positive grounding device and a semi-conductive hose shall be used to prevent accumulation of static electricity. The supervisor shall evaluate all system to ensure that they will adequately dissipitate static electricity under potential field conditions.

(8)The flexible hoses used to deliver explosives directly in the boreholes shall be electrically and mechanically continuous. The hoses shall be periodically tested by water at the prescribed pressure and also tested for electrical continuity periodically.

(9)The manufacture of SME shall be carried out only between sunrise and sunset.

(10)The SME manufactured in the vehicle shall be charged into the bore holes immediately on its manufacture and at the end of charging operation, the entire system including hose pipes should be emptied of explosives by evacuating with compressed air flushing with water. At the end of the loading operations for the day, the entire system of the vehicle including hose pipes shall be completely cleaned and thereafter the vehicle shall be parked at the support plant.

(11)All spillages of explosives shall be collected and destroyed at a safe place and the effluents shall be discharged after proper treatment.

(12)The licensee shall keep records and accounts of all explosives manufactured in form RE-2 and shall exhibit his books and records to any of the officers authorised under these rules whenever such officer may call upon him to do so.

(13)All boosters, detonators and detonating fuses required in connection with the work of blasting, shall be kept in a magazine, licensed under the Explosive Rules, 2008.

(14)All due precautions for blasting of charged holes shall be taken as per Indian Mines Act, 1952 (35 of 1952).

(15)The licensee and the shot firer shall be responsible for preparation of charges, the charging of holes, and the firing of shots and shall take all precautions against fire and accident involving the explosives.

(16)The licensee and the employee shall be conversant with the procedure to be taken during an emergency.

(17)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

(18)If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the licence shall execute the recommendations and report compliance within the period specified by such authority.

(19)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and seal of licensing authority

SET - VI

The following are the conditions of licence number ……. to manufacture explosives other than fireworks, gunpowder, ANFO, Liquid Oxygen Explosives and Site Mixed Explosives in

Form LE-1 [article 1(g)] granted by Chief Controller or Controller of Explosives.

CONDITIONS

(1)The quantity of explosives on the premises or any part thereof shall not exceed at any one time the quantity for which licence has been issued.

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(2)The process and storage sheds or buildings shall maintain safety distances as specified in Schedule VIII.

(3)Work in each building or shed shall be carried out strictly in accordance with the laid down safe working procedures and instructions.

(4)The licensee and every person employed in or about the factory shall take all due precautions for the prevention of accidents by fire or explosion in the factory and for preventing unauthorised person from having access to the factory or to the explosives therein and shall abstain from any act whatsoever which tends to cause fire or explosion and is not reasonably necessary for the purposes of work in the factory. Due provisions shall be made, by the use of suitable working clothes, suitable shoes etc. as not to cause any danger of fire or explosion.

(5) No additions and alterations shall be carried out in the licensed premises without a previous sanction in writing of the licensing authority. Such additions and alterations so sanctioned shall be shown in the amended plan attached to the licence.

(6)The interior of the compartments of the building in which explosives are manufactured or handled and the machinery or fittings therein shall be thoroughly cleaned at the end of day's work. Sweepings from the compartments of the building in which explosives are manufactured or handled shall be carefully collected and disposed as per laid down procedure. The effluent shall be discharged only after proper treatment as per laid down procedure.

(7)The licensee shall appoint a qualified and competent person to supervise the manufacture of explosives and other process and to conduct the operations in accordance with these rules.

(8)The licensee, occupier, the safety officer and the qualified and competent persons shall undergo and also organise safety workshops and training programmes regularly for safety awareness and for knowledge for their own as well as their sub-ordinates and shall record the same.

(9)All employees (full time, part time or contract basis) shall be conversant with the emergency response plan for disaster management of the factory.

(10)All unsafe incidents (including the minor one) shall be recorded (preferably stating the near-misses and also critical situations) and shall be reviewed periodically by the licensee and the competent person as a learning process disseminate the lesson(s) learnt, to all the people working in the premises.

(11)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and all facilities shall be offered to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

(12)If the licensing authority or the Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and therefore the same is necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(13)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and seal of licensing authority

SET - VII

The following are the conditions of licence number ……. to possess for use, for agricultural purpose or in small quarry, explosives not exceeding 25 kilogrammes of Class 1, 2 or 3; 1500 numbers detonators; and 1500 meters of Detonating Fuse or Safety Fuse at any one time in a magazine in

Form LE-3 [Article 3(a)] granted by the District Magistrate.

CONDITIONS

(1)The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.

(2)The magazine used for storage of explosives shall maintain safety distance of 45 meters from protected works.

(3)The magazine shall be used only for keeping explosives specified in this licence and of receptacles, tools or implements for work connected with the keeping of such explosives.

(4)The opening of packages and the weighing and packing of explosives shall not be carried in the magazine.

(5) Two or more description or explosives which may be permitted to be kept in the magazine shall be kept only if they are separated from each other by an intervening partition of such substance or character, or by such intervening

space, as will effectually prevent explosion or fire in the one communicating with the other :

Provided that—

(a)the various explosives of Classes 2 (nitrate-mixture), 3 (nitro-compound), safety fuses belonging to Class 6 Division 1 and detonating fuses belonging to Class 6 Division 2 as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space;

(b)Detonators belonging to Class 6 Division 3 shall be kept separately;

(c)Gunpowder belonging to Class 1 shall be kept separately.

(6)Explosives of Class 3 (nitro-compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of licensing authority.

(7)When an explosive owing to its being no longer of standard purity or owing to signs of liquefaction or of exuded nitro-glycerine or liquid nitro-glycerine or liquid nitro-compound is no longer fit for storage in the magazine, the licensee shall comply, at his own expense, with such directions as licensing authority may issue.

(8)The interior of the magazine and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel to come in contact with the explosives. Such interior, benches, shelves and fittings shall so far as is reasonably practicable, be kept free from grit and shall otherwise be clean; and in the case of any explosives liable to be dangerously affected by water, due precautions shall be taken to exclude water therefrom:

Provided that so much of this condition as relates to precautions against the exposure of any iron or steel shall not be obligatory in a building in which no explosive other than safety fuses belonging to Class 6 Division 1 are kept.

(9)If the lighting conductor is tested by licensing authority, the licensee shall pay the fees prescribed for test. In the event of the test proving unsatisfactory, the same fees shall be payable by the licensee for each subsequent test until the lighting conductor is passed by the testing officer as satisfactory :

Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day :

Provided further that where two or more lighting conductors are attached to one and the same magazine, the fee for the testing of all such conductors shall not exceed the fee prescribed in this condition for testing a single lighting conductor.

(10)The licensee shall keep records and accounts of all explosives in Forms RE-2 and RE-4 and exhibit the stock books and records to the officers authorised under these rules whenever such officer may call upon him to do so. The stock books in prescribed proforma shall be page numbered.

(11)Any accident and losses, shortage of stock and thefts of explosives shall be reported without delay to the nearest police station, and the licensing authority.

(12)Free access to the licensed premises shall be given at all times to any inspecting or sampling officer and all facilities shall be offered to the officer for ascertaining that the provisions of the Act and these rules and the conditions of this licence are duly observed.

(13)No changes or alterations shall be carried out to the premises without prior approval of the licensing authority and the licensee shall comply with any condition that may be specified by the licensing authority in this behalf.

(14)If the licensing authority calls upon the holder of the licence by a notice in writing to take any action which may in the opinion of such authority be necessary for the safety of the premises or the public, the holder of licence shall take such action within such period, not being less than one month from the date of receipt of the notice, as may be fixed by the notice.

(15)Magazine shall at all times be kept in state of good repair (or maintained in good condition). The licensee shall report to licensing authority forthwith, if the magazine becomes unfit for storage of any explosives for any reason whatsoever.

(16)The licensee of the magazine shall submit at the end of every quarter a return in Form RE-7 to the District Magistrate and District Superintendent or Commissioner of Police in whose jurisdiction the magazine is situated in the proforma prescribed from time to time so as to reach the above authorities by 10th day of the succeeding quarter.

(17)Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.

(18)The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.

(19)The explosive packages shall be stacked in such a way so as to allow movement of at least one person to check the condition of all packages stored and to read the manufacture particulars of each package.

(20)The resistance of the lightning conductor to earth shall be as low as possible and in no case more than 10 ohms.

(21)A distance of 15 metres surrounding the magazine shall be kept clear of dried grass or bush or flammable materials.

(22)Every packet of explosive at the time of bringing inside the magazine shall be examined for its sound condition.

(23)Not more than four persons shall be allowed inside the magazine at any one time.

(24)Empty packages of the explosives shall be removed at the earliest and destroyed.

(25)The explosives shall not be used for blasting purposes in the areas not coming within the purview of Mines Act, 1952 (35 of 1952) unless the licensee employs a qualified shot firer holding a shot-firer's permit granted under these rules or the person having equivalent qualifications as recognized by the Chief Controller.

(26)The licensee and the shot firer shall be responsible for preparation of charges, the charging of holes and the firing of shots and shall take all precautions against fire and accident involving the explosives.

(27)No smoking or any source of light or fire shall be allowed in or near the place where explosives charges are being prepared or kept.

(28)For charging or stemming a shot hole, no person shall use an iron or steel tools, scraper, or tamping or nor shall forcibly press the explosive into a hole of insufficient size. A tamping rod made entirely of wood shall be used.

(29)Before exploding any blasting charge, adequate measures shall be taken so as to prevent as far as possible, the projection of fragments of stone by the explosion of the blasting charge.

(30)No person shall re-bore or temper a hole that has once been charged or attempt to withdraw a charge either before firing or after a misfire or deepen or tamper with empty holes or sockets left after blasting.

(31)Before commencing shot firing the licensee shall give sufficient warning to the public by an efficient system of signals and by putting up red flags in the danger zone. He shall see that all persons in the vicinity have taken proper shelter and shall also take suitable steps to prevent any person approaching the shot.

(32)The licensee shall warn the public not to approach the site of blasting operation at least within an hour after explosion or in the case of an open quarry, not to approach such quarry within half an hour after explosion.

(33)The number of shots, which explode, shall be counted and unless it is certain that all the shots have exploded no person shall approach or be permitted to approach the place until 30 minutes after the firing of shots.

(34)In the event of a misfire, if relieving hole is to be drilled it shall not be placed within 30 centimetres from the misfired hole. The relieving hole shall run parallel to the misfired hole.

(35)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(36)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act or these rules and the safety conditions are duly observed.

(37)If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(38)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and seal of licensing authority

SET-VIII

The following are the conditions of licence number ……. to possess for sale or use, explosives of Class 1, 2, 3, 4, 5, 6 or 7 in a magazine in

Form LE-3 [articles 3(b) to (c)] granted by Chief Controller of Explosives or Controller of Explosives.

CONDITIONS

(1)The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.

(2)The magazine used for storage of explosives shall maintain safety distance specified in Schedule III and annexure to the licence.

(3)The magazine shall be used only for keeping all explosives specified in this licence and of receptacles for, or tools or implements for work connected with the keeping of such explosives.

(4)The opening of packages and the weighting and packing of explosives shall not be carried on in the magazine.

(5) Two or more description or explosives which may be permitted to be kept in the magazine shall be kept only if they are separated from each other by an intervening partition of such substance or character, or by such intervening space, as will effectually prevent explosion or fire in the one communicating with the other;

Provided that—

(d)the various explosives of Class 2 (nitrate-mixture), Class 3 (nitro-compound), safety fuses belonging to Class 6 Division 1and detonating fuses belonging to Class 6 Division 2 as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space ;

(e)Detonators belonging to Class 6 Division 3 shall be kept separately;

(f)Gun powder belonging to Class 1 shall be kept separately.

(6)Explosives of Class 3 (nitro-compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of licensing authority.

(7) Explosives of Class 3 (nitro-compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of the Controller of Explosives.

(i)When such sanction has been given, a written certificate showing the period covered by the sanction shall be obtained from the Controller of Explosives at each inspection, and shall be kept by the licensee and produced on demand.

(ii)When an explosive owing to its being no longer of standard purity or owing to signs of liquefaction or of exuded nitro-glycerine or liquid nitro-glycerine or liquid nitro-compound is no longer fit for storage in the magazine or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Controller or Controller of Explosives may issue.

(8)The interior of the magazine and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel to come in contact with the explosives. Such interior, benches, shelves and fittings shall, so far as is reasonably practicable, be kept free from grit and shall otherwise be clean; and in the case of any explosives liable to be dangerously affected by water, due precautions shall be taken to exclude water there from :

Provided that so much of this condition as relates to precautions against the exposure of any iron or steel shall not be obligatory in a building in which no explosive other than explosive of the 1st Division 6th (Ammunition) Class is kept.

(9)If the lighting conductor is tested by the Controller of Explosives, the licensee shall pay the fees prescribed for test. In the event of the test proving unsatisfactory, the same fees shall be payable by the licensee for each subsequent test until the lighting conductor is passed by the testing officer as satisfactory:

Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day :

Provided further that where two or more lighting conductors are attached to one and the same magazine, the fee for the testing of all such conductors shall not exceed the fee prescribed in this condition for testing a single lighting conductor.

(10)Due provisions shall be made, by the use of suitable working clothes without pockets, suitable shoes and by searching or otherwise or by such means, for preventing the introduction into danger area of the factory

premises of fire, Lucifer matches or any substance or article likely to cause explosion or fire, but this condition shall not

prevent the introduction of an artificial light of such construction, position or character as not to cause any danger of fire or explosion:

Provided that so much of this condition as applies to the exclusion of iron or steel, shall not be obligatory in a building in which no explosive other than an explosive of the 1st Division of the 6th (Ammunition) Class is kept.

(11)The licensee shall keep records and accounts of all explosives in Forms RE-3 and RE-4 or RE-5, as the case may be, and exhibit the stock books and records to any of the officers authorised under the Explosives Rules, 2008 whenever such officer may call upon him to do so. The stock books in the prescribed proforma shall be page numbered.

(12)No changes or alterations shall be carried out to the premises without prior approval of the licensing authority and the licensee shall comply with any condition that may be specified by the licensing authority in this behalf.

(13)Magazine shall at all times be kept in state of good repair (or maintained in good condition). The licensee shall report to licensing authority forthwith, if the magazine becomes unfit for storage of any explosives for any reason whatsoever.

(14)The licensee of the magazine shall submit quarterly return as per sub-rules (3) and (4) of rule 24 of these rules.

(15)Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.

(16)The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.

(17)The explosive packages shall be stocked in such a way so as to allow movement of at least one person to check the condition of all packages stored and to read the manufacture particulars of each package.

(18)The resistance of the lightning conductor to earth shall be as low as possible and in no case be more than 10 ohms.

(19)A distance of 15 meters surrounding the magazine or store house shall be kept clear of dried grass or bush or flammable materials.

(20)Every package of explosive at the time of bringing inside the magazine shall be examined for its sound condition.

(21)Not more than 4 persons shall be allowed inside the magazine or store house at any one time.

(22)Empty packages of the explosives shall be removed at the earliest and destroyed.

(23)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(24)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

(25)If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(26)The licensee shall purchase authorised explosives/ fireworks or safety fuse as mentioned in the list authorised explosives from a licensed factory or company for possession and sale from the magazine.

(27)The possession and sale of fire-crackers generating noise level exceeding;

(a)125 dB(AI) or 145 dB(C)/pk/at 4 meters distance from the point of bursting shall be prohibited;

(b)For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 log10 (N) dB, where N = number of crackers joined together.

(28)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and Seal of Licensing Authority

SET-IX

The following are the conditions of licence number ……. to possess fireworks not exceeding 5,000 kilogrammes or safety fuse not exceeding 50,000 metres, in a storehouse, not for sale but for transfer to own licensed shop; in

Form LE-3 [article 3(d)] granted by Controller of Explosives

CONDITIONS

(1)The quantity of fireworks or safety fuse in the premises at any one time shall not exceed the licensed capacity.

(2)The licensee shall purchase authorised fireworks or safety fuse as mentioned in the list authorised explosives from a licensed factory or company for possession in the store house.

(3)No fireworks containing chlorate except paper caps or amorces or colour match or fireworks approved by Chief Controller shall be kept in the premises.

(4)The opening of packages and the weighing and packing of fireworks or safety fuse shall not be carried out in the store house.

(5)The store house shall be constructed as per specification given in specification 3 of Schedule VII.

(6)A person holding licence for possession and sale of fireworks or safety fuse from a shop shall only be eligible for a licence for storehouse.

(7)The paper caps or amorces or colour or star matches which contain chlorate, which may be permitted to be kept in the store house, shall be kept only if they are separated from each other by an intervening partition wall made of brick or stone with cement mortar to prevent explosion or fire in the one communicating to the other.

(8)The interior of the store house and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel to come in contact with the explosives. Such interior, benches, shelves and fittings shall so far as is reasonably practicable, be kept free from grit and otherwise clean; and in the case of any explosives liable to be dangerously affected by water, due precautions shall be taken to exclude water therefrom.

(9)Due provisions shall be made, by the use of suitable working clothes without pockets, suitable shoes and by searching or otherwise or by such means, for preventing the introduction into danger area of the store house premises of fire, Lucifer matches or any substance or article likely to cause explosion or fire, but this condition shall not prevent the introduction of an artificial light of such construction, position or character as not to cause any danger of fire or explosion or light of dust proof approved by Chief Controller.

(10)The licensee shall keep records and accounts of all fireworks manufactured and of all stocks in hand in Form RE-2 and RE-3 and exhibit the stock books and records to any of the officers authorised under the Explosives Rules, 2008 whenever such officer may call upon him to do so.

(11)No changes or alterations shall be carried out to the premises without prior approval of the licensing authority and the licensee shall comply with any condition that may be specified by the licensing authority in this behalf.

(12)Store house shall at all times be kept in state of good repair (or maintained in good condition). The licensee shall report to licensing authority forthwith, if the storehouse becomes unfit for storage of any explosives for any reason whatsoever.

Form DE - 2 shall be immediately communicated to the licensing authority for necessary advice and action.

(14)The store house shall be used only for possession and for no other purposes. However the premises may be used for other purpose, as permitted by the licensing authority, when no explosives is kept in the premises.

(15)The licensing authority shall be immediately informed for advice if any fireworks or safety fuse is found deteriorated or unserviceable.

(16)The fireworks or safety fuse packages shall be stacked in such a way so as to allow movement of at least one person to check the condition of all packages stored and to read the manufacture particulars of each package.

(17)A distance of 3 metres surrounding the storehouse shall be kept clear of dried grass or bush or flammable materials.

(18)Every package of fireworks or safety fuse at the time of bringing inside the storehouse shall be examined for its sound condition.

(19)Not more than 4 persons shall be allowed inside the store house at any one time.

(20)Empty packages of the fireworks or safety fuse shall be removed at the earliest and destroyed.

(21)All tools and implements kept or used in opening or closing of packages of fireworks shall be made only of wood, copper, brass or other similar soft metal or shall be covered with some safe and suitable material.

(22)No person shall smoke or have any Lucifer matches or any other fire producing devices in any part of the premises.

(23)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(24)Free access to the licensed premises shall be given at all times to any inspecting or sampling officer and all facilities shall be offered to the officer for ascertaining that the provisions of the Act or these rules and the conditions of this licence are duly observed.

(25)If the licensing authority or a Controller of Explosives inform in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and therefore the same is necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(26)The possession of fire-crackers generating noise level exceeding :

(i) 125 dB(AI) or 145 dB(C)pk at 4 metres distance from the point of bursting shall be prohibited.

(ii) For individual fire-cracker constituting the series (joined fire-crackers), the above-mentioned limit be reduced by 5 log10 (N) dB, where N = number of crackers joined together.

(27) There shall at all times be kept prominently exhibited in clearly legible writing—

(a)Licence No. of the premises.

(b)The quantity of the various fireworks authorised for storage.

(c)The daily opening stock of various fireworks.

(28)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and Seal of Licensing Authority

SET - X

The following are the conditions of licence number ……. to possess and sell from a shop, at any one time, not exceeding 25 kilogrammes of small-arms nitro- compound in

Form LE-5 [article 5(a)] granted by District Magistrate.

CONDITIONS

(1)The holder of this licence is authorised to sell only small arm nitro- compound in quantities not exceeding the quantities as specified in the licence.

(2)The small arm nitro- compound shall be kept in premises made of non-flammable material which is closed and secured so as to prevent unauthorised persons having access thereto.

(3)No oil burning lamps, gas lamps or naked lights shall be used in the shed or within the safety distance of the sheds for the purpose of lighting. Any electrical light, if used shall be fixed to the wall or ceiling and should not be suspended by flexible wire.

(4)The licensee shall keep records and accounts of all explosives in stock and of all sales in form below as the licensing authority may from time to time direct and shall exhibit his stock and his books and records to any of the officers authorised under these rules whenever such officer may call upon him to do so.

Date	Opening balance	Quantity of small arm nitro-compound purchased	Name and licence number of the licensee from whom purchased	Quantity of small arm nitro-compound sold	Closing balance

(5)All sales under this licence must be made in the premises described in the licence and shall not be sold to any person under the age of 16 years.

(6)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(7) Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act or these rules and the safety conditions are duly observed.

(8)If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(9)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licenceing authority.

Signature, Designation and Seal of Licensing Authority

SET-XI

The following are the conditions of licence number ……. to possess and sell from a shop, at any one time, not exceeding 100 kilogrammes of manufactured fireworks of Class 7 Division 2 sub-division 2; and 500 kilogrammes of Chinese crackers or sparklers in

Form LE-5 [article 5(b)] granted by District Magistrate.

CONDITIONS

(1)The fireworks shall be kept in a shed/building made of non flammable material, which is closed and secured so as to prevent unauthorised persons having access thereto.

(2)No oil burning lamps, gas lamps or naked lights shall be used in the shed or within the safety distance of the sheds for the purpose of lighting. Any electrical light, if used shall be fixed to the wall or ceiling and should not be suspended by flexible wire. Switches should be fixed rigidly.

(3)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(4)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act or these rules and the safety conditions are duly observed.

(5)If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out. recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(6)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

(7)The licensee shall purchase authorised fireworks as mentioned in the list of authorised explosives from a licensed factory or company for possession and sale from the shop.

(8)Fireworks / colour /star matches containing chlorates shall be separated from other type of fireworks by intervening partition of such substance and character or by such intervening space, as well effectually prevent explosion or fire in the one communicating with other.

(9)All sales of fireworks under this licence must be made in the premises described in the licence.

(10)No fireworks containing chlorate except paper caps or amorces or colour match or fireworks approved by Chief Controller shall be kept in the premises.

(11)The licensee shall keep records and accounts of all explosives in stock and of all sales in form below as the licensing authority may from time to time direct and shall exhibit his stock and his books and records to any of the officers authorised under these rules, whenever such officer may call upon him to do so.

Date	Opening balance	Quantity of fire works purchased	Name and licence number of the licensee from whom purchased	Quantity of fire works sold	Closing balance

(12)No fireworks capable of generating noise exceeding level as under shall be stored in the premises and sale from the premises :

(a)125 dB(AI) or 145 dB(C)pk at 200 meters distance from the point of bursting shall be prohibited.
(b)For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 log10 (N) dB, where N = number of crackers joined together.

Signature, Designation and Seal of Licensing Authority

SET - XII

The following are the conditions of licence number ……. to possess and sell or use from a shop, at any one time, not exceeding 2000 numbers of pyrotechnic device explosives of Class 6 Division 1 in

Form LE-5 [article 5 (c)] granted by the District Magistrate.

CONDITIONS

(1)The holder of this licence is authorised to possess for sale or use only pyrotechnic device explosives in quantities not exceeding the quantity as specified in the licence.

(2)The pyrotechnic device explosives shall be kept in premises made of non-flammable material which is closed and secured so as to prevent unauthorised persons having access thereto.

(3)No oil burning lamps, gas lamps or naked lights shall be used in the shed or within the safety distance of the sheds for the purpose of lighting. Any electrical light, if used shall be fixed to the wall or ceiling and should not be suspended by flexible wire.

(4)The licensee shall keep records and accounts of all explosives in stock and of all sales in form below as the licensing authority may from time to time direct and shall exhibit his stock and his books and records to any of the officers authorised under these rules, whenever such officer may call upon him to do so.

Date	Opening balance	Quantity of pyrotechnic device explosives purchased	Name and licence number of the licensee from whom purchased	Quantity of pyrotechnic device explosives sold	Closing balance

(5)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(6)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act or these rules and the safety conditions are duly observed.

(7)If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(8)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and Seal of Licensing Authority

SET-XIII

The following are the conditions of licence number ……. to possess for use Gunpowder not exceeding 5 kilogrammes. and safety fuse not exceeding 50 meters in the States of Bihar, West Bengal, Kerala and Tamilnadu in

Form LE-5 [article 5(d)] granted by District Magistrate.

CONDITIONS

(1)The maximum quantity of gunpowder, which may be kept at one time on the licensed premises, shall not exceed 5 Kilograms.

(2)Gunpowder shall be kept in a secured substantial receptacle.

(3)The interior of every receptacle used for keeping gunpowder shall be so constructed or so lined and covered as to prevent the exposure of any iron or steel or the detaching of any grit, iron, steel or similar substance in such manner as to come into contact with the gunpowder.

(4)The receptacle in which gunpowder is kept must be kept locked and used only for the keeping of such gunpowder and for no other purpose whatsoever.

(5)Gunpowder exceeding 0.5 kilogramme in amount must be kept in a substantial bag, canister or case made and closed so as to prevent any gunpowder from escaping and shall be otherwise packed and marked in accordance with the requirements of rule 14 and 15 of Explosives Rules,2008.

(6)No oils, paints, matches, lights or any article of a highly inflammable or explosive nature or liable to cause fire or explosion or any acids or similar substances shall be brought or kept on the licensed premises.

(7)The licensee shall at the time of purchasing have the following particulars endorsed upon his licence and signed by the person delivering the gun powder :

Name and address and licence number of the person delivering gun powder	Signature	The quantities of gun powder purchased	Name and address of the person who takes delivery	The date of purchase

(8)The licensee shall keep register of all receipts and issues in such form shall exhibit his stock and register to any of the officers authorised under rule 128 of these rules, whenever such officer may call upon him to do so.

(9)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(10)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act or these rules and the safety conditions are duly observed.

(11)If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(12)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and Seal of Licensing Authority

SET-XIV

The following are the conditions of licence number ……. to possess for use of small-arms nitro-compound not exceeding 5 kilogrammes in the State of Kerala in

Form LE 5 [article 5(e)] granted by District Magistrate.

CONDITIONS

(1)The maximum quantity of small-arms nitro-compound, which may be kept at one time on the licensed premises, shall not exceed 5 kilogrammes.

(2)Small-arms nitro-compound exceeding 0.5 kilogramme shall be kept in a substantial bag, canister or case made and closed so as to prevent any small-arms nitro-compound from escaping and shall be otherwise packed and marked in accordance with the requirements of rules 14 and 15 of these rules.

(3)The interior of every receptacle used for keeping small-arms nitro-compound shall be so constructed or so lined and covered as to prevent the exposure of any iron or steel or the detaching of any grit, iron, steel or similar substance in such manner as to come into contact with the small-arms nitro-compound.

(4)The receptacle in which small-arms nitro-compound is kept must be kept locked and used only for the keeping of such small-arms nitro-compound and for no other purpose whatsoever.

(5)No oils, paints, matches, lights or any article of a highly inflammable or explosive nature or liable to cause fire or explosion or any acids or similar substances shall be brought or kept on the licensed premises.

(6)The licensee shall at the time of purchasing have the following particulars endorsed upon his licence and signed by the person delivering the small-arms nitro-compound.

Name and address and licence Number of the person delivering small-arms nitro-compound	Signature	The quantities of small-arms nitro-compound purchased	Name and address of the person who takes delivery	The date of purchase

(7)The licensee shall keep register of all receipts and issues in above form and shall exhibit his stock and register to any of the officers authorised under rule 128 of the Explosives Rules, whenever such officer may call upon him so to do.

(8) The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(9)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

(10)If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(11)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

Signature, Designation and seal of licensing authority

SET- XV

The following are the conditions of licence number ……. to possess and sell from a shop manufactured fireworks of Class 7 Division 2 sub-division 2 exceeding 100 kilogrammes but not exceeding 300 kilogrammes, and Chinese Crackers or Sparklers (manufactured fireworks of Class 7, Division 2, sub-division 1) exceeding 500 kilogrammes but not exceeding 1200 kilogrammes in

Form LE 5 [article 5(f)] granted by Controller of Explosives

CONDITIONS

(1)The fireworks shall be kept in a shed/building made of non flammable material, which is closed and secured so as to prevent unauthorised persons having access thereto.

(2)No oil burning lamps, gas lamps or naked lights shall be used in the shed or within the safety distance of the sheds for the purpose of lighting. Any electrical light, if used shall be fixed to the wall or ceiling and should not be suspended by flexible wire. Switches should be fixed rigidly.

(3)The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.

(4)Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act or these rules and the safety conditions are duly observed.

(5)If the licensing authority informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

(6)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

(7)No fireworks containing chlorate except paper caps or amerces or colour match or fireworks approved by Chief Controller shall be kept in the premises.

(8)The licensee shall purchase authorised fireworks as mentioned in the list of authorised explosives from a licensed factory or company for possession and sale from the shop.

(9)Fireworks /colour/star matches containing chlorates shall be separated from other type of fireworks by intervening partition of such substance and character or by such intervening space, as well that effectually prevent explosion or fire in the one communicating with other.

(10)All sales of fireworks under this licence must be effected on the premises described on the face of the licence.

(11)The licensee shall keep records and accounts of all explosives in stock and of all sales in form below as the licensing authority may from time to time direct and shall exhibit his stock and his books and records to any of the officers authorised under these rules, whenever such officer may call upon him to do so.

Date	Opening balance	Quantity of fire works purchased	Name and licence number of the licensee from whom purchased	Quantity of fire works sold	Closing balance

(12)No fireworks capable of generating noise exceeding level as under shall be stored in the premises and sold from the premises :

(a)125 dB(AI) or 145 dB(C)pk at 4 meters distance from the point of bursting shall be prohibited

(b)For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 $\log_{10}$ (N) dB, where N = number of crackers joined together.

2Signature, Designation and seal of licensing authority

SET-XVI

Permission to manufacture, possess and sell colour or star matches under sub-rule (2) of rule 9 of the Explosives Rules, 2008

Number …….

Permission is hereby granted to……(name and address) valid only to manufacture, possess and sell colour and /or star matches at any one time at the premises described below subject to the conditions given below :

This permission is liable to be suspended or revoked for any violation of the Act or these rules or the conditions of this permission or if the premises are not found conforming to the description shown in the attached plans and annexure.

Description of the premises

The permitted premises shown in plan number …….. …… ……..…attached hereto are situated at …… ……..……District…….……State……and consist of …… ……..…..

Dated the …….20….

[Chief Controller of Explosives]

CONDITIONS

(1)The manufacture of colour or star matches shall be done in a factory approved by the Chief Controller of Explosives.

(2) (a)The colour or star matches shall be manufactured in one or more lightly constructed single storied buildings(s) which may be divided into rooms. The quantity of colour and / or star matches or its ingredients in the manufacturing rooms and bonded storage room shall not exceed the following quantity:

Serial Number	Room	Quantity for manufacture of 100 kilogrammes at a time	Quantity for manufacture of 200 kilogrammes at a time	Quantity for manufacture of 500 kilogrammes at a time
1.	Mixing	20	40	100
2.	Drying dipped splints	20	40	100
3.	Dipping	20	40	100
4.	Box filling	10	20	50
5.	Painting/side painting	10	20	50
6.	Band rolling	10	20	50
7.	Packing	10	20	50
8.	Bonded storage	200	500	2000

(b)Not more than four persons shall be allowed at any time in any of the manufacturing rooms namely Mixing, Drying and Dipping rooms.

(c)Doors of all the rooms shall open outwards.

(d)A clear space of 6 metres, 9 metres or 15 metres for the manufacturing capacity of 100 Kilogrammes, 200 Kilogrammes or 500 Kilogrammes, respectively, shall be maintained all round the factory building. Barbed wire fencing or wall of 2 metres high and adequate strength shall be provided along the perimeter of the safety zone.

(e)The manufacturing and storage rooms shall have adequate space to accommodate comfortably the prescribed quantity of explosives and the number of persons.

(3) (a)The explosive mixture on each stick shall not exceed 0.8 gramme in the case of colour match and 1.0 gramme in the case of star match.

(b)The side painting on each box shall have a clearance of at least 2 millimetres from the edges.

(4) (a)Ingredients shall be kept adequately separated until mixing. Potassium Chlorate shall be kept in a separate room away from the other ingredients storage.

(b)Mixing of the ingredients shall be done under solvent or water. Any electrical grinder used for mixing shall have flameproof / dust tight motor and accessories as the case may be.

(c)The dipped splinter frames shall be dried in racks not exceeding 1.8 metres in height and the number of such racks in the drying room shall not exceed 10 in number. Each rack shall hold a maximum of 10 frames placed in the alternate groves.

(d)The matches shall not be accumulated unpacked and shall be packed as soon as they are dried.

(e)The manufacture shall be done only between sunrise and sunset.

(f)No loose explosives composition shall be left in the factory at the end of the working day. All such material shall be carefully collected and destroyed at the end of the day as per the procedure laid down.

(5) (a)The interior of the manufacturing rooms and the fittings therein, other than machinery, shall be so constructed, lined or covered as to prevent exposure of any iron or steel or detaching of any grit, iron or similar substance in such manner as to come in contact with any explosives. The interior including the floor of the rooms shall be kept clean and free from grit.

(b)No tools, implements, balance, weights, receptacles etc. made of iron or steel shall be brought or kept at any time in the licensed premises.

(c)No stone implements such as mortars, pestles, grinders etc. shall be used for grinding, mixing or pounding of match composition.

(6) (a)All due precautions shall be taken during drying of the match sticks and in handling dried matches. No smoking, fire or naked light shall be allowed in the premises.

(b)Adequate provisions of water shall be made in the premises for purpose of fire fighting.

(7) (a)If Controller of Explosives calls upon the manufacturer of colour and/ or star matches by notice in writing to execute any repairs or to make any alterations to the factory premises which are in the opinion of such authority necessary for the safety of the premises or of the persons working in the factory, the manufacturer shall execute the repairs, alterations within the period specified in the notice.

(b)No change in the manufacturing process and no addition/alteration in the premises shall be carried out without permission from the Chief Controller of Explosives.

(8) (a)No persons shall commit or attempt to commit any act which may tend to cause fire or explosion in or about any place where colour and /or star matches are manufactured, stored, handled or transported.

Provided that nothing in this connection shall apply to any act which is reasonably necessary for the purpose of manufacture, storage or handling during transport of any such matches or of any article present therewith.

(b)Every person in charge of or engaged in the manufacture, sale, transport or handling of colour or star matches shall at all times :

(i)observe all the precautions for the prevention of accidents by fire or explosion;

(ii)prevent unauthorised persons from having access to the body composition and head composition;

(iii)prevent any other person from committing any such act as is prohibited under sub-condition (a) above.

(9)The manufacture of colour or star matches shall be done under the supervision of qualified and competent person.

(10)Free access to the factory premises shall be given at all times to any authorised inspecting or sampling officer and all facilities shall be offered to such officer for ascertaining that the provisions of the Act, these rules or the conditions of this permission are duly observed.

(11)Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

(12)If the factory is used for manufacture of safety matches as well, such manufacture shall be completely discontinued and the premises and its ingredients shall be freed of safety match before taking up manufacture of colour or star matches. The Controller of Explosives in whose jurisdiction the factory is situated shall be intimated before commencing manufacture of colour or star matches and on its completion. After completion of manufacture and before resuming manufacture of safety match, the premises shall be made free of all compositions used in the manuf

(13)No person under 18 years of age and no person who is in a state of intoxication or of unsound mind shall be employed in or allowed to enter the factory.

(14)The colour or star matches shall not be stored, handled or transported along with other items of fireworks, safety matches, flammable or hazardous materials.

(15)No person shall import, export, transport, manufacture, possess, use or sell any colour/star matches which is not approved by Chief Controller of Explosives

[Chief Controller of Explosives]

Part - 5

Forms of Accounts and Returns of Explosives

FORM RE - 1

(See rule 112 of the Explosives Rules, 2008)

Application for Renewal or revalidation of licence or certificate

(See also note below before filling up the form)

Form : ----------

To,

_____

_____

Dear Sir,

1. I,…….. on behalf of …… apply for renewal of licence or certificate number…..……. inform……..for the period from…… …..to… ……and furnish the following information :

During the last five years—

(i)I was/we were—

(a)not convicted/convicted and sentenced for……..for following offences……..

(b)not ordered/ordered to execute under Chapter VIII of Code of Criminal Procedure, 1973, a bond for keeping peace or for good behaviour.

(c)Not issued any direction from the Court in connection with the above said licence or certificate.

(Give details if answer in affirmative)

(ii)Licence or certificate No……..in Form……..granted under the Act and these rules to me/us were cancelled/not renewed by the licensing authority.

2. I/We also enclose the following documents:

(i)Licence or certificate No……..in Form……together with approved plans and schedules.

(ii)Renewal fee of Rs……by bank draft of……(name of issuing bank) bearing number ……date …….payable in favour of……

3. I/We confirm that I/we shall inform you about the court's order or direction, interim or otherwise, if any issued in connection to the licence for which renewal is being applied, failing which I/we shall commit a punishable offence.

4. I/We hereby certify that

(i)the above particulars given by me/us are correct.

(ii)I am/we are aware that if explosives are illegally transferred by me/us to any unauthorised person(s), I/we shall commit a punishable offence.

(iii)I am/we are aware that if I/we conceal any material information relevant to this application, I/we shall commit a punishable offence and in addition, any administrative action can be taken against me/us.

Signature of Licensee or certificate holder……
……..... (Authorised person in case of company)

Place…… Date of application……..

Notes.— (1) The complete renewal or revalidation application should reach the renewal authority before the expiry date of licence or certificate, to avoid payment of late fees.

(2)Strike out the inapplicable portion.

FORM RE - 2

(See rule 24 of the Explosives Rules, 2008)

Form of account to be maintained by a licensee

Accounts of explosives manufactured (other than fireworks) Note.—This record should be kept up to-date.

Licence number…….. in Form …… of Explosives Rules, 2008

Date and shift number	Brand name of explosives	Class and Division	Dimensions of finished products	Batch number
1	2	3	4	5

Quantity manufactured	Date of test	No. of packages	Magazine or storehouse licence number to which the explosives sent	Remarks	Signature of person in-charge or licensee
6	7	8	9	10	11

FORM RE -3

(See rule 24 of the Explosives Rules, 2008)

Form of account to be maintained by a licensee

Accounts of receipt of explosives (other than fireworks)

Note- This record should be kept up to-date. Entries should be made daily and as and when explosives are received.

Licence number…….. in Form …… of Explosives Rules, 2008

Date	Description of explosives			Opening balance	Explosives received by licensee	Quantity
	Name	Class	Division			
1	2	3	4	5	6	7

Batch No.	Name, address and licence number of supplier	Mode of transport and road van licence number if transported by road	Pass No.	Closing balance	Remarks	Signature of licensee or person in charge
8	9	10	11	12	13	14

FORM RE - 4

(See rule 24 of the Explosives Rules, 2008)

Form of account to be maintained by a licensee

Accounts of sale of explosives (other than fireworks)

Note - This record should be kept up to date. Entries should be made daily and as and when explosives are sold.

Licence number…….. in Form …… of Explosives Rules, 2008

Date	Description of explosives		
	Name	Class	Division
1	2	3	4

Opening Balance	Explosives sold by licensee		
	Name	Class	Division
5	6	7	8

Quantity	Batch number and Date	Name, address and licence number of person to whom explosives are sold	Mode of transport and road van licence number if transported by road
9	10	11	12

Pass number	Closing balance	Remarks	Signature of licensee or person in charge
13	14	15	16

FORM RE - 5

(See rule 24 of the Explosives Rules, 2008)

Form of account to be maintained by a licensee

Accounts of explosives used by licensee (other than fireworks)

Note - This record should be kept up to date. The entries should be made daily and as soon as explosives are issued for use or unused explosives are returned.

Licence number…….. in Form …… of Explosives Rules, 2008

Date	Shot Firers name and permit number.	Description of explosives		
		Name	Class	Division
1	2	3	4	5

Quantity issued	Number of holes fired	Description of explosives		
		Name	Class	Division
6	7	8	9	10

Quantity used	Description of explosives		
	Name	Class	Division
11	12	13	14

Quantity returned	Signature of shot firer of magazine in charge	Remarks
15	16	17

FORM RE - 6

(See rule 61(2) of the Explosives Rules, 2008)

Form of records to be maintained by a licensee

Records of explosives transported by road van Note - This record should be kept up to date.

Licence number…….. in Form …… of Explosives Rules, 2008

Date	Name, address and licence number of the consignor				
1	2				
Description of explosives			Batch number and date of manufacture		
Name	Class	Division			
4	5	6	7		
Pass number			Signature of the consignor	Name, address and licenc the consignee	
9			10	11	
Date of unloading of explosives				Signature of consignee	
		13		14	

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FORM RE - 7

(See rule 24 of the Explosives Rules, 2008)

Return of explosives

Received, used, sold, destroyed and stolen during the month of……in respect of the explosives magazine or store house of ……situated at……District……State…….

Name of Explosives, Class and Division Quantity

---

1. Licence number …….. in Form …… of Explosives Rules, 2008
2. Opening balance on the 1st day of the quarter:
3. Account of explosives:

Date	Name of explosives	Class and Division	Quantity
1	2	3	4
1.			
2.			
3.			
4.			

Particulars of explosives received

Name of explosive	Class and Division	Quantity	Name, address and licence number of suppliers from whom explosives were received	Pass no.	Road van licence number
5	6	7	8	9	10

Particulars of explosives used or sold

Date	Name of explosive	Class and Division	Quantity
11	12	13	14

Sold

Name of explosive	Class and Division	Quantity	Name, address and licence number of person to whom explosives were sold	Pass no.	Road van licence number
15	16	17	18	19	20

4. Total quantity of each kind of explosives used or sold during the quarter

Used

Name of explosives	Class and Division	Quantity
1	2	3
1.		
2.		
3.		
4		

Sold

Name of explosives	Class and Division	Quantity
4	5	6
1.		
2.		
3.		
4.		

5. Particulars of explosives destroyed during the quarter

Date	Name of explosives	Class and Division
1	2	3

1.		
2.		
3.		
4.		

Quantity	Reasons for destruction	Authority under which destruction was done
4	5	6

6. Particulars of explosives stolen or short received

Date	Name of explosives	Class and Division
1	2	3
1.		
2.		
3.		
4		

Quantity	Whether theft or loss reported to police and Department of Explosives, if so, give reference	Remarks
4	5	6
1.		
2.		
3.		
4		

FORM RE-8

[See rule 45(1)(a) of the Explosives Rules, 2008]

Declaration to be submitted to the Chief Controller by an importer on despatch of explosives from the place or port of loading

Name and address of the importer	Import licence number granted by Central Government and kinds and quantities of explosives permitted to be imported and date of expiry of licence	Import licence number granted by Chief Controller and date of expiry of the licence.	Name and address manufacturer of explosives

Kind and quantities of explosives on the ship or aircraft

Name and Description	Class and Division	Date of manufacture

Name and address of consignor	Place or port of despatch	Name of ship or airlines and date of sailing or air lift	Place or port of import	Likely date of arrival

Batch number	Quantity	Number of packages

Signature of Importer

Date :

Place: (Authorised person in case of a Company)

…….....

.....

Name in full……

Address……

……

FORM RE -9

[See rule 45(1)(b) of the Explosives Rules, 2008]

Importer's despatch Schedule

This declaration should be filled up and forwarded in triplicate to Chief Controller as soon as any consignment of explosives is cleared from the place or port of import.

Name and address of importer	Import licence number granted by Chief Controller under Explosives Rules and date of expiry of licence	Description of explosives	Name and address of the manufacturer of explosives

Particulars of despatch from place or port of import.

Name and address of licensee to whom explosives were despatched	Licence number and Form	Quantity of explosives despatched			
		Name and description	Class and Division	Quantity	Number of packages

Name and address of consignor	Quantity of explosives imported	Place or port from which explosives were forwarded	Name of ship or airlines	Date of arrival and place or port of import

Batch number and date	Date of despatch	Mode of despatch	Road van licence number if despatched by road

Date :…… Signature of importer…….....

(Authorised agent in case of company) …….....

Name in full ……..

Address …….....

FORM RE - 10

(See rule 46 of the Explosives Rules, 2008)

Declaration to be submitted to the Chief Controller by an exporter on despatch of explosives from the place or port of loading

Name and address of exporter	Exporter's licence number granted by Ch	Description of es	Name and address of the manufacturer of

under Explosives Rules and date of expiry of licence	exported	explosives	

Particulars of despatch from place or port of export.

Name, address and authority of person to whom explosives were despatched	Kinds and quantity of explosives exported			
	Name and description	Class and Division	Quantity	Number of packages

Place or port from which explosives were exported	Name of ship or air lines	Date of despatch

Batch No. and date	Mode of despatch	Road van licence number if despatched by road

Signature of exporter…….....

Date …….....

To,

(Authorised agent in case of company) ……Name in full……..... Address

…….....

FORM RE -11

(See rules 50 and 77 of the Explosives Rules, 2008) Form of indent for explosives

Place…….

Date…….

……

……

……

Dear Sir,

Kindly supply the following quantities of explosives to me/us:—

Sl. No.	Name	Class and Divmision	Quantity
1.			
2.			
3.			
4.			
5.			

I/We hold a licence number. ……in Form……of Explosives Rules, 2008 for possession for sale or use of following quantities of explosives:

Sl. No.	Name	Class and Division	Quantity
1.			
2.			
3.			
4.			
5.			

The abovementioned licence is valid till…….

*The licence is sent herewith for necessary endorsement as required under rule…. of Explosives Rules, 2008. The licence may please be returned after the endorsement.

I/We solemnly declare that

(a)the receipt of explosives indented will not result in the licensed quantity being exceeded; and

(b)no identical indent has been placed with any other supplier

*The explosives may please be handed over to my/our-authorised representative whose signatures are attested below :

Attested

Signature of Licensee.

Yours faithfully,

Licensee

Designation

Copy forwarded to the Controller of Explosives……

*Strike out whichever is not applicable.

FORM RE-12

(See rules 47 and 50 of the Explosives Rules, 2008)

Pass issued by the consignor for transport of a consignment of explosives.

1. No. ……..

2. This pass covers. ……..packages containing following explosives :

Name and description	Class	Division if any	Quantity	Number of packages	Batch number and date
(i)					
(ii)					
(iii)					
(iv)					
(v)					

While in transit from …….to . ……..

3. The explosives are being transported by rail or road van number ……..having licence number

…….. till …….. or lorry number ……..

otheron

mechanically propelled vehicle.

4. Name and address of consignee …….

5. Number and Form of Consignee's licence …….....

6. Consignee's order number and date and quantity of each

explosives ordered ….....…….....

7. Consignee's letter number and date intimating

readiness to receive explosives.…….....

8. Date of despatch of consignment .....……...

9. Approximate date on which consignme

should reach in destination. …….....

Signature of the consignor

Licence number.....

Licence form .....…

Part-6

Certificates, Declaration and Distance Forms

Form CE - 1

(See rules 45 and 48 of the Explosives Rules, 2008)

TEST CERTIFICATE FOR EXPLOSIVES

Certified that samples of the explosives of the description given below have been tested and have passed the tests set forth in Schedule III as applicable to such explosive and in the case of explosives of the 1st Division of class 3 (Nitro-compounds) or class 4 (Chlorate Mixture), that there are no signs of liquefaction or of exuded nitro-glycerine or liquid nitro-compound.

Name and address of importer* /consignor	Description of explosives	Number of packages	Date of manu-facture and batch number	Actual time taken in Heat Test for tint to appear	Remarks

This certificate is valid for twelve months only that is to say it expires on the ……. Day of……20 provided that, in case of nitro-glycerine compounds which are not used as propellants, it shall expire on the 31st day of July following.

Date : Signature of Testing

Place: Officer

*Name of importer in case of import, and consignor in case of transport.

Form CE - 2

(See Rule 45 of the Explosives Rules, 2008)

Declaration to be made by the master of a ship carrying explosives before entering a port or by the ship's agent.

1. Name of ship……..

2. Date of Arrival at……Port…….

Description of	Date of manufacture, batch number and other distinguishing marks	Total quantity carried	Quantity to be landed at port	Remarks
	cases		Kilogramme/Cases	Kilogramme/Cases

Date :

Signature of Master/Agent of

298 THE GAZETTE OF INDIA : EXTRAORDINARY [PART II—SEC. 3(i)]

Form CE - 3

(See rule 103 of the Explosives Rules, 2008)

FORM OF INDEMNITY BOND

To

The President of India,

I/we ……..carrying on business as manufacturer(s) of fireworks and/or gunpowder and having a factory or shop at……..and I/we of …… …… sureties on his or their behalf hereby jointly and severally agree and undertake that we shall pay to the President of India, his successors and assigns on demand a sum of Rs…….. for which payment to be well and truly made we bind ourselves, our respective heirs, executors, administrators and assigns. I/We agree that the dependents of such workers as may die as a result of accidents occurring in the factory or shop above mentioned and that such compensation amounts shall be a first charge on the immovable properties mentioned in the Schedule hereunder and that the above undertaking shall remain in force until all compensation payable hereunder have been fully paid and shall be binding upon us, our respective heirs, executors, administrators and assigns.

We, our heirs, executors, administrators and assigns jointly and severally undertake to keep the President of India indemnified against all claims that may be made on behalf of workers dying as a result of accidents. In case the compensation awarded is paid to the dependants by us or by our heirs, executors, administrators and assigns the above written bond shall be void but otherwise it shall remain in full force and virtue.

It is hereby agreed that the liability of the sureties hereunder shall not be discharged by reason of time being granted or any other indulgence shown to the Principal(s) nor shall it be necessary for the President of India to sue the Principal(s) before suing the sureties for the amounts due hereunder.

SCHEDULE ABOVE REFERRED TO

(Here full description of the immovable properties should be given)

……..

……..

……..

In witness whereof these presents have been duly executed on the ……..day of ……..20…….. Full signature of licensee……..

Father's name in full ……..

Age……..

Profession……..

Residence……..

Full Signature of Surety……..

Father's name in full……..

Age……..

Profession……..

Residence……..

Station……..

Date……..

Executed in my presence
District Magistrate
…….
.

Form DE - 1

(See rule 113 of the Explosives Rules, 2008)

Distance form to be submitted by the applicant indicating the clear distances available around proposed storage magazine for explosives or fire works or proposed explosives factory

Proposed kinds and quantity of explosives …… ……

Type of structure(s)	Safety distance required as per Explosives Rules, 2008 metres	Distance actually observed metres
Inside Safety Distance (ISD)		
1.Room or works used in connection with the magazine		
2.Any other explosives magazine		
3.Magazine office for this magazine		
Middle Safety Distance (MSD)		
4.Dwelling house of the security guard of the magazine		
5.Railway including private Railway		
6.Canal (in active use) or other navigable water		
7.Dock or Pier or Jetty		
8.Public highway or Public roads		
9.Private road which is a principal means of access to a temple, mosque, church, gurudwara or other places of worships, hospital, college, school or factory		
10.River embankment or sea embankment or Public well		
11.Reservoir or bounded tank or rope way		
12.Wind mill or solar panel for power generation		
Outside Safety Distance(OSD)		
13.Dwelling house		
14.Government and Public building		
15.Temple, mosque, gurudwara, church or other place of worship		
16.Shops, market place, public, recreation and sports ground, College, School, hospital, theatre, cinema or other buildings, where the public are accustomed to assemble		
17.Factory		
18.Buildings or works used for the storage in bulk of petroleum spirit, gas or other inflammable or hazardous substance		
19.Building or works used for the manufacture of explosives or of articles which contain explosives		
20.Aerodrome		
21.Furnace, Kiln or chimney		
22.Quarry or mine pit head		
23.Power house or electric sub-station		
24.Wireless Station		
25.Warehouse or other storage buildings		
26.Any other protected works		
Over head Electric lines		
27.Electric Powerover head Transmission lines above 440 V		
28.Electric Powerover head Transmission lines up to 440 V		

Signature of applicant……

Date ……..

(Authorised person in case of company) ……Name in full.....……..

Address.....……..

Form DE - 2

(See rule 113 of the Explosives Rules, 2008)

(Distance Form to be attached to the licence)

Safety distances required to be kept clear around magazine for high explosives or fire works or factory licence number……in form ……granted to…….

Type of structure(s)	Safety distance metres
Inside Safety Distance (ISD)	
1. Room or works used in connection with the magazine	
2. Any other explosives magazine.	
3. Magazine office for this magazine	
Middle Safety Distance (MSD)	
4. Dwelling house of the security guard of the magazine	
5. Railway including private Railway	
6. Canal (in active use) or other navigable water	
7. Dock or Pier or Jetty	
8. Public highway or Public roads	
9. Private road which is a principal means of access to a temple, mosque, church, gurudwara or other places of worships, hospital, college, school or factory	
10. River embankment or sea embankment or Public well	
11. Reservoir or bounded tank or rope way	
12 Wind mill or solar panel for power generation	
Outside Safety Distance(OSD)	
13. Dwelling house	
14. Government and Public building	
15. Temple, mosque, gurudwara, church or other place of worship	
16. Shops, market place, public, recreation and sports ground, College, School, hospital, theatre, cinema or other buildings, where the public are accustomed to assemble	
17. Factory	
18. Buildings or works used for the storage in bulk of petroleum spirit, gas or other inflammable or hazardous substance	
19. Building or works used for the manufacture of explosives or of articles which contain explosives	
20. Aerodrome	
21. Furance, Kiln or chimney	
22. Quarry or mine pit head	
23. Power house or electric sub-station	
24. Wireless Station	
25. Warehouse or other storage buildings	
26. Any other protected works	
Overhead Electric lines	
27. Electric Power overhead Transmission lines above 440 V	
28. Electric Power overhead Transmission lines up to 440 V	

[Controller of Explosives/Chief Controller of Explosives]

Schedule - VI

Part 1

Safety provisions for manufacture of explosives

I.Process:

The sensitive operations and processes including cleaning, disposal of waste, shall have control mechanism (remote control, temperature control, heating medium, etc) to the satisfaction of the Chief Controller of Explosives

II. Machineries and equipments:

Vessels and machineries for making and processing explosives, electrical equipments, protection against static charge, maintenance of electrical equipments, personnel protection etc should be suitable for safe operation of the process.

Part 2

Safety provisions for Bulk Mixing Delivery (BMD) Vehicles

(1) No welding or cutting shall be performed on a bulk mixing delivery vehicle until the vehicle has been washed down and all explosive material, ingredients, oxidizer have been removed. Before welding or cutting on a hollow shaft, the shaft shall be thoroughly cleaned inside and outside and vented with sufficient ventilation.

(2) Plastic tubes shall not be used as hole liners if the hole contains an electric detonator.

(3) All spills or leaks shall be cleaned up immediately.

(4) No welding or open flames shall be used in or around any part of the delivery equipment unless it has been completely washed down and all oxidizer materials removed.

(5) Before welding or repairs to hollow loading shafts, the shaft shall be thoroughly cleaned inside and outside and vented.

(6) The entire loading and mixing equipment shall be cleaned to prevent hazardous accumulations of ingredients and before open flame work is performed on the unit.

(7) Mixing of blasting agents shall not be performed during transit.

(8) The location chosen for water gel or ingredient transfer from a support vehicle into the borehole loading vehicle shall be away from the blast hole site when the bore holes are loaded or in the process of being loaded.

(9) No person shall smoke, carry matches or any flame-producing device, or carry any fire arms while in or about bulk vehicles effecting the mixing transfer or down-the-hole loading of blasting agents at or near the blasting site.

(10) BMD vehicle shall only be driven by a capable and competent driver familiar with regulations applicable to explosive materials, and the requirements of these rules.

(11) The BMD vehicle operator shall be trained in the safe operation of the vehicle, as well as with its mixing, conveying, and related equipments. The operator shall be familiar with the general procedure for handling emergency situations.

(12) Caution shall be exercised in moving the vehicle in the blasting area to avoid driving the vehicle over or dragging hoses over firing lines, cap wires, or explosive materials. The driver shall obtain the assistance of a second person to guide the driver's movements when moving the vehicle in the charging area.

(13) Material shall not be mixed while vehicle is in motion.

(14) Pneumatic loading from bulk mixing delivery vehicles into blast holes primed with electric blasting caps or other systems sensitive to static-electricity shall be provided with semi conductive discharge hose and suitable earthing device to prevent the accumulation of static charges.

(15) When electric power is applied by a self-contained motor-generator located on the vehicle, the generator shall be separated from the discharge point of the explosives. The generator or the battery shall be provided with a cut-off switch in a readily accessible position.

(16) Wiring shall be so fixed and protected so as to minimize accidental damage or undue wear.

(17) The BMD vehicle body and equipment shall be electrically continuous with the vehicle chassis. The frame of the mixer and all other equipment that may be used shall be electrically bonded. Bonding points and bonding cables for effective grounding shall be provided.

Part-3

Safety provisions for transport of explosives by water

(1) Notice of loading on or unloading from ships or vessel. —No explosive shall be loaded on or unloaded from a ship or vessel within the limits of a port unless 48 hours' notice in writing of the intended time and place of such operation has been given to the Conservator of the port.

(2) Steamer fires and lights.—No explosives shall be loaded on or unloaded from any ship or vessel —

(a) unless the engine room fires have been previously carefully banked up, and all other fires and lights extinguished;

(b) while the ship or vessel is attached to or alongside of any steam vessel or steam tug unless the engine room fires of such steam vessel or steam tug, have previously been carefully banked up and all other fires and lights have been previously extinguished:

Provided that nothing in this rule shall prevent the employment of an artificial light or ship's signal lights of a type approved in writing by the Chief Controller in areas outside the port limits and by the Conservator of the port within the port limits:

Provided further that a steam tug may be employed at the port of Chennai to place boats alongside a ship carrying explosives or to remove them but no loading or unloading operations shall be carried on so long as a tug is within a distance of 50 metres from the ship.

(3) Storage.—No explosives shall be stowed in a ship except in accordance with regulations contained in the Merchant Shipping Carriage of Dangerous Goods Rules, 1978.

(4) Conveyance of explosives on special trade passenger ships.—Any authorised explosives satisfying the requirements of these provisions may be transported in a properly constructed magazine on a trade passenger ship to which Part VIII of the Merchant Shipping Act, 1958 (44 of 1958-Annexure II) applies being a home trade ship as defined in clause (16) of section 3 of the said Act:

Provided that—

(a) the consignor satisfies the certifying officer referred to in section 243 of the Merchant Shipping Act, 1958 (44 of 1958-AnnexureII) that no other means of conveying the explosives are available;

(b) the magazine complies in all respects with the specifications for magazines in ships laid down by the Board of Trade and is approved by the Surveyors of the Mercantile Marine Department;

(c) the explosives are packed and marked in accordance with these rules;

(d) detonators are not carried in the same hold as other explosives; and

(e) the hold containing the magazine does not contain any other hazardous or flammable goods at any time during which the magazine is in use for the carriage of explosives.

(5) Conveyance of explosives on passenger vessels.—

(1)The following explosives may be carried in a passenger vessels, namely:

(a)any explosives not exceeding 2.5 kilogrammes in weight other than a fulminate (Class 5), ammunition containing its own means of ignition (Class 6, Division 3) or fireworks (Class 7); and

(b)detonators not exceeding 200 in number and certified in writing by the licensee not to contain in the aggregate more than 225 grammes of explosives:

Provided that—

(i) previous notice is given to the person in charge of the vessel in which the explosive is intended to be conveyed;

(ii) all the precautions by fire or explosion;

(iii) Detonators are not carried in the same compartment as other explosives.

(2)Nothing in these provisions shall apply to explosives carried in a passenger vessel under (1).

(6)Anchorage of vessels carrying explosives.—

(1)Every vessel having explosives on board and entering a port shall be anchored at such anchorage as the conservator of the port shall appoint in this behalf and shall not leave such anchorage without the general or special order of the Conservator of the port and subject to such conditions as may be specified in the order.

(2)Such anchorage shall in no case be the same as that for vessels laden with petroleum and shall be at such distance from the anchorage for vessels laden with petroleum as to render it impossible for a fire originating at the former anchorage to affect vessel anchored at the later.

(7)Red flag or warning light to be exhibited.—Every vessels having explosives on board exceeding 50 kilogrammes in weight shall while approaching or leaving a port and during the time that it remains within the limits of the port or on any inland water exhibit conspicuously—

(a) between sunrise and sunset a red flag not less than 1 metre square, and

(b) between sunset and sunrise a single red light visible all round the horizon.

(8) Vessels to lie singly.—Every vessel wholly or partly laden with explosive shall lie singly and be kept at a distance of at least 50 meters from any other vessel except during the actual transhipment of explosives, when one boat may lie alongside on each side of a ship, boat or floating magazine and two ships may lie alongside each other.

(9)Vessels not to lie alongside magazine, jetties, etc.—No vessel having any explosive on board shall lie alongside any vessel, floating magazine, quay wharf, jetty and land or landing stage except for the purposes of loading or unloading and then only during the time necessary for the actual loading or unloading of such vessel and shall proceed on its voyage without delay except such delay as may be unavoidable in consequence of tide or weather.

(10)Loading and unloading prohibited while a vessel is underway.—No explosives exceeding 450 kilogrammes in weight and no detonators shall be loaded or unloaded while a vessel is underway.

Explanation.—A vessel is 'underway' when she is not at anchor or moored or made fast to the shore or a ground.

(11)Place of loading and unloading within a port area.—Explosives shall within the limits of a port, be loaded from, landed at, brought into or deposited upon, only such quay or other place as the Conservator of the Port may by general or special order direct.

(12)Cushion to be used.—A cushion properly stuffed with oakum and covered with leather, or one of such other kind as the Conservator of the port may from time to time approve, shall be used in shipping an explosive in any vessel or in landing it upon any wharf or other landing place within the limits of a port.

(13)Ships to handle explosives with despatch.—

(1) Ships arriving in a port with explosives intended to be landed at the port shall discharge them with all reasonable despatch, and ships taking explosives on board shall proceed to sea with all reasonable despatch.

(2) No ship or boat shall retain on board any cargo of explosives and remain in the port for a period longer than three days :

Provided that the conservator of the port in consultation with Chief Controller may extend such period under such conditions as deemed fit if he is satisfied that such extension of period is considered necessary.

(14)Boats to be licensed.—

(1)No boats shall be used for the transport of explosives exceeding 1,000 kilogrammes in weight except under and in accordance with the conditions of the licence granted—

(a) by the Conservator of the port in the case of a boat plying within the limits of a port, or

(b)by an officer appointed by the Central Government in the case of a boat plying in areas outside port limits.

(2)The licence shall specify the maximum quantity of explosives the boat is authorised to carry which quantity shall be fixed in consultation with the Chief Controller.

(3)Every licence granted under these provisions shall remain valid for a period of—

(a) four months in the case of a boat plying within the limits of a port; and

(b) one year in the case of a boat plying in areas outside port limits.

(4)The licence referred to (1) shall be granted or renewed in such form and on payment of such fees as may be specified by the Central Government.

(5)A copy of every licence granted in (1) shall be forwarded to the Chief Controller.

(6)Every person in charge of any boat licensed under (1) shall, when required so to do by an officer mentioned in Explosives Rule 2008 produce the licence of such boat for inspection.

(15)Buoy to be carried.—

(1)Every boat carrying explosives within the limits of a port shall carry on deck a buoy with a rope 27 metres in length and 7.50 centimetres in diameter, one end of the rope being attached to the buoy and the other end to the boat. The rope shall be attached to such part of the boat as is most clear of spars gear or other obstruction and at such point as is approved by the licensing authority.

(2)The buoy shall be a drum painted red measuring not less than 55 centimetres in length and 35 centimetres in diameter, properly strapped with an iron band in the middle and having a ring attached for securing the rope.

(16)Smoking, fire, dangerous articles and other cargo prohibited.—The following shall not be permitted on board any boat which has explosives on board—

(a) fire or light of any description other than the warning lights;

(b) smoking;

(c) any substance of an inflammable nature or liable to spontaneous ignition;

(d) any substance liable to cause or communicate fire or explosion;

(e) any other cargo, unless the carrying of such other cargo, has been specially authorised in writing by the Conservator of the port within port limits or by Chief Controller in areas outside port limits:

Provided that nothing in this rule shall apply to the transport of explosives in a mechanically propelled boat subject such conditions as may be specified by the Chief Controller.

Part-4

Safety provisions for transport of explosives by rail

(1)**Rail vans to be approved.**—No explosives other than safety fuse and fireworks shall be transported by rail except in a van specially constructed for the carriage of explosives and of a type approved by the Chief Controller and the Railway Board.

(2)**Making of railway carriage.—**

(1)On each side of every railway carriage containing any explosive there shall be affixed in conspicuous characters by means of a securely attached label or otherwise the word "Explosives".

(2)Nothing in (1) shall apply in a carriage containing explosives transported in accordance with the provisions of Explosives Rule 2008.

(3)**Transport of explosives with ordinary goods**.—Notwithstanding anything contained in earlier provision, the following explosives may be transported by any train other than a passenger or mixed train in a carriage not carrying any article or substance liable to cause or communicate fire or explosion:

(a) any quantity of safety fuse for blasting;

(b) any other explosive approved by the Chief Controller for the purpose of this rule provided such explosive is packed in metallic cases or cylinders which fulfil all the requirements of these rules and are of a pattern approved by the Indian Railways and the Chief Controller.

(4)**Position of railway carriages.**—Every railway carriage containing explosive shall be placed as far away as practicable from the engine and shall be close-coupled to the adjoining carriages not loaded with explosives or other articles or substances of flammable or hazardous nature, provided that—

(a) on the Darjeeling-Himalayan Railway carriages containing explosives need not be close-coupled;

(b) on the Nilgiri and Karaikal-Peralam Railways, only one carriage need intervene between the engine and carriages containing explosives;

(c) on the electrified section of Railways when trains are hauled by electric locomotives, no carriages need intervene between the engine and the carriage containing explosives.

(5)**Maximum quantity of explosives to be transported by rail**.—Not more than 5 carriages containing explosives shall at any one time be loaded or unloaded at or on any railway station or wharf and not more than 10 carriages containing explosives shall be attached to or transported by any one train.

(6)**Prohibition on passenger or mixed trains.**—No explosive shall be transported by any passenger or mixed train.

(7)**Despatch of explosive vans by mixed train**—Notwithstanding anything contained in these rules, any explosive may be transported by a mixed train in vans specially approved on any line or section on which goods trains are not running subject to the following conditions, namely:-

(a) not more than three such vans containing explosives shall be hauled at any one time.

(b) there shall be not less than three carriages between the vans containing explosives and the engine and between such vans and the passenger carriages.

(c) the vans containing explosives shall be close-coupled to the adjoining carriages and to each other.

(d) immediately on entering on any section upon which goods trains are running, the vans containing explosives shall be detached from the mixed train.

(8)**Conveyance of explosives by passenger or mixed train—**Notwithstanding anything contained in these rules, the following explosives may be transported by passenger or mixed trains:

(a) safety fuses for blasting.

(b) explosives of the Class 3 (Nitro-compound) other than propellants, in the form of cartridges not exceeding in the aggregate 2.5 kilogrammes in weight, provided no detonators are carried in the same compartment.

(c) detonators to the number of 200 if the amount of explosives in the package or package containing detonators does not exceed in the aggregate 225 grammes provided—

(i)a certificate to such effect is tendered by the consignor; and

(ii)no other explosive is carried in the same compartment.

(d) sporting powders and propellants packed in double packages prescribed in Schedule II, provided—

(i) the explosive is contained in tin canisters containing not more than 5 kilogrammes each packed in a stout wooden case with a completely park-proof outer cover of tin or zinc or in a metal case or cylinder of a pattern approved by the Chief Controller;

(ii) no outer case contains more than 12.5 kilogrammes of explosives; and

(iii) the total consignment by one train does not exceed in the aggregate 37.5 kilogrammes.

(9)**Receipt of consignment of explosives by railways.—**Consignments of explosives intended to be transported by rail shall be received only—

(a)by a servant authorised by the Indian Railways concerned to receive dangerous goods; and

(b)at such times between sunrise and sunset and at such places within railway premises as the Indian Railways may specify in this behalf.

(10)**Shunting. —** No shunting of carriages containing explosives shall be carried out on any railway save under the superintendence of duly authorised officer who shall be responsible that—

(a) when the train is being marshalled carriages loaded with explosives shall not be shunted by a locomotive unless they are separated from any engine by not less than three carriages containing no explosive or easily inflammable substance;

(b) during the shunting of carriage containing explosive, the speed of all movements shall not exceed 8 kilometers an hour; and

(c) no loose shunting take place.

(11)**Delivery to and from railway premises.** — (1) Packages containing any explosive shall be removed by the consignee from the station, wharf or depot of the railway to which they have been transported as soon as practicable and with all due diligence after arrival.

(2)If the packages are not removed within the twelve hours of daylight following their arrival the packages and contents may be forthwith returned to the consignor at his risk and expense.

(3)Every package containing an explosive shall until removed, returned or despatched be kept in a safe place under the special direction of the Station Master at a safe distance from the station buildings under the police guard if necessary and shall be completely covered with tarpaulins or other suitable material.

(12) **Power of Indian Railways.**—(1) Where Indian Railways suspects that an explosive or carriage or package containing an explosive does not comply with any of these rules, it may-

(a)prevent the entry of such explosive, carriage or package upon their premises or refuse to receive or transport them; or

(b)at any time open or require such carriage or package to be opened to ascertain the facts.

(2)If any explosive or any carriage or package containing explosives is found not to comply with any of these rules, the Indian Railways may return such explosives carriage or package to the consignor at his risk and expense.

(3)Where any explosive or any carriage or package containing explosive not complying with these rules cannot in the opinion of the Indian Railways be returned to the consignor under (2) without undue risk, it may in consultation with the Chief Controller and in such manner as he may specify, destroy at the consignor's risk and expense the explosives or the contents of the carriage or package.

(13)**Explosives not to be carried across railway bridges**—No explosives shall be carried otherwise than by rail across any railway bridge which reasonable facilities for the transport thereof by rail are afforded by the Indian Railways:

Provided that nothing in this rule shall apply to—

(a) safety fuses for blasting in any quantity; or

(b) gunpowder or nitro-compound not exceeding 5 kilogrammes or any quantity of ammunition, Class 6, Divisions 2 and 3.

Schedule VII

Specifications

The specifications laid down in this Schedule are for general guidance only. Approval of the Chief Controller shall be obtained separately for each case.

Specification 1: Specification of Explosives manufacturing factories other than that of fireworks

1. Site, layout, construction and safety distance

A. Concept of safety distance:

The location, construction and traversing of process buildings should be such that an explosion in one building does not initiate explosion in another through blast, shock , or missiles and it should cause no or little damage to personnel or property in such other buildings. Therefore the safety distances for different quantities of the different catagories of explosives (X, Y and ZZ) under Explosives Rules, are classified in three types viz. Inter Process Distance (IPD) between process buildings, Middle Safety Distance (MSD) from process buildings to facilities like highways, railways, navigable waterways, dams or reservoirs etc. and Outside Safety Distance (OSD) from process buildings to outside property, which may be built-up or inhabited, have been prescribed in the Tables 1, 2 and 3 in Schedule VIII annexed to these rules.

B. Layout of facilities:

The layout of different buildings should be made observing at least the minimum safety distances prescribed and taking the maximum advantage of the natural topography. Hill slopes and dense forests serve as natural protection. The difference in the ground level in a hilly area can be utilized with advantage in placing sensitive explosives buildings concealed or protected with very little additional traversing being necessary. Explosive buildings on a flat ground or on a plateau with built up area downhill are not at all desirable for the same reason.

C. Construction:

(a)**Roof and Walls**—Process buildings are constructed of strong but light walls and strong roof. Cement brick walls 22.5 centimetres thick and 15 centimetres RCC roofs are recommended. The light wall, in case of an explosion, creates light missiles, which can be contained by the vertical inner face traverse provided all-round. In some cases when the force of explosion can be safety and easily let off through one side, one of the four walls may be very weak. Examples are nitration buildings with the weak side facing an hill slope or forest and detonator press cubicles with back side open. The strong roof intercepts missiles from another exploding building, which

may otherwise be falling through the roof initiating an explosion. The RCC slab roof also can come down and smoother the effects of explosion when the same takes place dislodging and breaking the walls.

(b)**Doors—**Process buildings should have easily accessible doors opening outwards except in case of non-manned remote controlled rooms. Each process building shall have adequate number (minimum 2) of exits for quick escape of personnel in the event of a mishap. The doors should be of wood painted with a suitable fire resistant paint.

(c)**Windows—**ventilators: Number and size of windows and ventilators shall be decided on the basis of actual requirements. Frames may be of steel or wood. No exposed iron or steel is allowed. It should be either galvanized or adequately covered with paint. Iron frames is not preferred where acid fumes are likely to corrode or explosive dust may accumulate in cracks and crevices. The glass panes for the windows and ventilators should be wired glass type.

(d)**Surface and finishing**—The floor, wall and ceiling should be finished smooth and free from cracks and crevices. Depending on the nature of chemicals handled, special protection on floor and lower wall may be necessary. Mastic floor or antistatic rubber matting on floor is essential in some cases. In chemical plants the drains for taking out liquor and washing shall have chemical resistant plastic or mastic lining.

2.Traverses

A Types of traverses:

The most commonly used traverses are natural angle traverse (NAT) of earthen mounds for storage buildings and vertical inner face traverse (VIFT) for process buildings. The traverses should be at least 2.4 metres wide at the explosives stack level. The minimum width T and 1 metre for NAT, the top being at least

0.6m above the explosives stack level. The tow of the traverse should not be more than 1 to 1.5 metres away from the building to be protected. If more clearance becomes essential, the height of the traverse is to be increased proportionately maintaining the same angle of protection. The inner face of the VIFT is a vertical masonry wall, strong enough to bear the load of the earth filling at the back.

A semi VIF traverse is similar to VIFT except that above the stack level, the inside surface is inclined and not vertical reducing the top thickness to 1 metre.

B. Sectional view showing types of traverses :

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The construction of the buildings and traverses are required to be strictly as per the specifications. There is no scope for any compromise in the material and dimensions. RCC roof or wall with reinforcement only for namesake, a traverse located at 5m or farther from the building or a VIFT with little earth behind the vertical wall serve no purpose.

C.Internal Wall as Traverse:

Buildings handling small quantity of explosives can be effectively traversed by its own walls of adequate construction. The following table shows the recommended wall thickness for different quantities of explosives.

Weight of explosives kilogrammes	RCC wall (preferred thickness) millimetres	Brick wall thickness millimetres
5	225	340
7	225	450
12	225	570
18	300	700
35	450	Not permitted
50	600	Not permitted

D.Partition Walls :

A processed building having several rooms or compartments can have partition walls of adequate dimensions and constructions. Such walls can delay substantial transmission of explosion from one side to the other side of the wall, thus preventing simultaneous detonation. The wall thickness for different quantities of explosives are given in the table below:—

Weight of explosives in kilogrammes	Wall thickness in centimetres for preventing of reinforcement by volume*		
	0.20%	0.5%	0.7%
0 - 75	10	10	10
>75-100	15	15	10
>100-150	20	20	15
>150-200	25	25	20
>200-250	30	25	25
>250-300	30	30	25
>300-350	35	35	30

* The wall if made of brick should be twice the thickness of RCC wall with 0.2% reinforcement.

The safety distance of such a process building having rooms or compartments separated by partition walls as above can be based on the explosive content of any of the compartment, which is the largest.

3.Explosive Limit—Person Limit:

Limiting the quantity of explosives handled in a building and the number of persons employed therein are obviously to reduce the adverse effects of an explosion. It is desirable that the minimum quantity of explosives and the minimum number of persons absolutely necessary for an operation or process should only be allowed in the relevant building from the point of view of safety.

The recommended limit on quantity of explosives and number of persons shall also depend on the sensitivities and properties of explosives handled. In case of sensitive initiating explosives the limits should be as low as possible. For keeping the reasonably low, it may be neces several sub-operations in different buildings.

Specification—2: Specifications of magazines other than that of fireworks

1.General :

The basic considerations in the construction of magazines are security to ensure that the contents are kept out of the hands of unauthorised persons, to maintain them in good conditions and to reduce the risk of accidental explosion. This calls for a construction, which will resist illegal entry as much as possible and is well ventilated. In choosing a site for a magazine, consideration should be given to protection of life and property offered by natural features of the ground in the event of a fire and/or an explosion. The suitability of a site and the amount of explosives that may be stored are determined by its distance from public thoroughfares; residential or industrial areas, railways etc. as specified in the table of safety distance in Schedule VIII. Naturally a site obscured from public view either by natural or artificial means is preferred.

Apart from the rules and regulations concerning the storage of explosives, certain conditions should be observed from the point of view of care for the materials concerned for example, improper storage may lead directly to misfires later on. In all cases, places of storage should be dry, well ventilated and protected from extremes of temperature as much as possible. Stocks should be drawn upon in strict rotation. Any surplus from the day's work being returned to the magazine should be kept separately for use on the following day.

Safety Fuse and detonators should be kept in perfect condition for obtaining good results. Therefore, at all times during transport, handling and storage, they should be protected from moisture and contact with oil, grease, kerosene or other liquids. Detonators shall not be stored with other explosives.

2.Materials of construction of magazine :

Magazines may be of heavy construction, i.e. steel, reinforced concrete, brick, stone or preformed concrete blocks. Maximum security is attainable only with steel or reinforced concrete structures. The internal dimensions of the magazine shall be such that there is ready access to all explosives.

3.Construction of the magazine :

A magazine shall be well and substantially and shall be made and close so as to prevent unauthorised persons from having access thereto and to secure it from danger. Magazines can be of the following types:

*Type 'A' magazine:

Type 'A' magazine shall be of a type approved by the Chief Controller and shall primarily have the following -

(a) Walls of reinforced concrete at least 225 millimetres thick or brick or stone at least 450 millimetres thick set in cement mortar. Concrete shall have a minimum compressive strength of 2,500 lb/sq.inch at 28 days (the required strength will be reached by a mixture consisting of 1 part cement, 1-½ parts sand, 3 parts of aggregate by volume). Reinforcement should consist of square mesh, hard-drawn steel wire fabric, providing a cross-section area in each direction of not less than 0.21 sq. inch of 2 ft. of wall. The reinforcement shall be covered by not less than 50 millimetres of concrete on either side. The bricks and concrete blocks shall conform to relevant Indian Standard Specifications. Commercial grade steel is satisfactory for use in construction. The cement mortar shall consist of not less than one part of cement and three parts of clean sand.

(b) Interior, and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel and the detaching of grit, iron, steel or similar substances in such manner as to come into contact with explosives. Such interior benches shelves and fittings shall be kept free from grit and otherwise clean; and in the case of any explosive that is liable to be dangerously affected by water, due precautions shall be taken to exclude it therefrom.

(c) Roof shall be of reinforced concrete at least 150 millimetres thick.

(d) One ventilator at the top and bottom in each opposite side wall of the magazine shall be provided where the weight of explosive stored is up to and including 500 kilogrammes and minimum two in the top and bottom of each wall shall be provided where the weight of explosive stored exceeds 500 kilogrammes. Number of the ventilators may be increased as desired by the licensing authority. The ventilators shall be 22.5 centimetres x 11.25 centimetres. Z type fitted with frame of iron bars set firmly in the wall on the outer face, the bars to be of 2.35 square centimetres, (3/8" sq.) iron set angle-wise with the frame. The inner opening to be protected with brass wire gauge of 3 meshes per c

(e) External doors —

(i)that opens outwards and when closed fit tightly;

(ii)to be constructed of steel plate at least 5 millimetres, thick with or without internal lining of wood.

(f) Every internal door —

(i)made of wood;

(ii) locks and fittings of non-ferrous metal.

(g) External door-locks should be of "dead lock" type.

(h) A separate room for storage of detonators or other explosives of Class 6 Division 3 if stored within the magazine. Such room shall have independent entrance and a minimum air-gap of 1 metre from any other room in the magazine and the thickness of the wall of the detonator storage room facing any other room in the magazine shall be minimum 60 centimetres.

(i) Wooden trestles or raised cement platform for storage of explosive packages.

(j) A porch if necessary shall be

(i)of the same construction as the remainder of the magazine; and

(ii) used only for keeping all tools or implements used in connection with the magazine or the changing of clothe and shoes.

(k) 25 x 50 mm furring strips fastened to the wall, vertically on 300 millimetres centres starting 130 millimetre from floor and continuous to the stacking line, around the usable portions of the walls to provide air circulation and to prevent cases of explosives being stacked directly against the walls.

(l) A minimum 12 millimetre red line painted on the interior walls of the magazine at a height of 2.5 metres from the floor level. This line indicates the maximum height to which explosives may be stacked. The licensing authority may specify lower stacking height if deemed necessary.

(m) An internal volume not less than 0.4 cubic metre for each 100 kilogrammes of explosives. In addition sufficient space shall be provided for passage between stocks of packages if required by licensing authority.

(n) Sufficient number of windows for proper lighting inside the magazine. The windows shall open outside constructed of steel plate at least 5 millimetre thick with or without internal lining of wood.

zType 'B' magazine (portable magazine):

Type 'B' magazine shall be of a type approved by Chief Controller and shall primarily have the following —

(a)Walls of steel plate at least 5 millimetres thick;

(b)A roof of steel plate at least 5 millimetres thick;

(c)Interior lining at least 10 millimetres thick on walls, doors and ceiling and 25 mm thick on door and consisting of closed fittings boards or wood joined together by tongue and groove joints in such a way that no iron or steel is exposed on the interior sides, ceiling, floor or doors;

(d)An internal volume not less than 0.4 cubic metre for each 100 kilogrammes of explosives. The maximum internal volume shall not be more than 2 cubic metres.

(e)Ventilation by means of vents which shall be adequately protected;

(f)External hinges of steel welded to the door and to the frame of the magazine;

(g)A lock of "dead lock" type for external door.

zType 'C' magazine (small brick cement magazine for storage of explosives up to 100 kilogrammes and one box of detonators):

Small brick cement magazine shall primarialy have the following:

(a) The magazine shall be constructed of brick masonary or cement concrete on plinth 1 metre above ground level with 45 centimetres thick walls and 15 centimetres thick RCC roof.

(b)The detonator room and high explosives room shall be at 1.5 metres separation distance as per the sketch.

(c)The magazine rooms shall be fitted with steel doors of thickness not less than 5 millimetres, opening outside with efficient locking arrangements.

(d)The rooms shall have one Z type ventilator fitted with frame of iron bars set firmly in the wall on the outer face, the bars to be of 2.35 square centimetres, (3/8 square inch) iron set angle wise with the frame. The inner opening should be protected with brass wire gauge of 3 meshes per centimetre.

(e)The magazine shall be fitted with lightning conductor as per IS 2309.

Specification 3: Specification of fireworks manufacturing factory and store house and magazine for fireworks or safety fuse

1. Manufacturing factory for fireworks:

A. Mixing / Filling building:

The basic consideration in construction of a mixing/filling building is to ensure safe handling, good maintenance and upkeep, to reduce the risk of fire, friction or impact and to minimize the loss of lives in case of accidents. The building shall be provided with adequate number of doors. The place of mixing/filling shall be dry.

The mixing/filling building should have walls built of brick, stone or concrete. The bricks and concrete shall conform to relevant Indian Standard Specifications. The cement mortar shall consist of not less than one part of cement and three parts of clean sand. The interior of the mixing/filling building shall be kept clean and shall as far as practicable be kept free from grit.

Mixing/filling building shall have :

(a) wall constructed of brick and cement to a thickness of 34 centimetres and the roof to a thickness of 15 centimetres of RCC .

(b) blast wall of 34 centimetres thick constructed of brick and cement or 23 centimetres of RCC in front of doors at a distance of 1 to 2 metres. The blast wall shall be 0.5 metre wider than the door opening on both sides and shall have a height of 2 metres.

(c) an explosives limit of 5 kilogrammes for white powder rooms and 12.5 kilogrammes for black powder rooms and the man limit shall be 2 numbers.

(d) three or four doors in two walls.

(e) doors made of wood or wooden frame lined with aluminium sheet of suitable thickness and shall be fitted with non-ferrous hinges.

(f) doors that open outwards.

(g) its locking system provided from outside only.

(h) floor covered with non-sparking and non-conducting rubber sheet.

(i) lightning conductor provided as per IS 2309 of 1969 if mixing / filling is done by electrically operated machine.

B. Manufacturing / Process Sheds:

a. The manufacturing/process shed shall be situated at ground level, with walls built of brick or stone with cement, or of concrete. The bricks and concrete shall conform to relevant Indian Standard Specifications.

b. The walls shall be of 23 centimetres thick with cement and brick or of 15 centimetres thick RCC.

c. The roof shall be of G.I. sheets or 10 centimetres thick RCC.

d. Four doors shall be provided.

e. The doors shall be made of wood or of wooden frame covered by G.I. sheet, fitted with non-ferrous hinges or with ferrous hinges so lined or painted as to prevent the exposure of any iron or steel.

f. The doors of different process buildings shall not face each other.

g. If doors of adjacent sheds face each other, a screen wall of brick and cement to a thickness of

23 centimetres shall be provided at a distance of 1 to 2 metres from the door.

h. All the doors shall open outwards.

i. The shed shall have a floor area of minimum nine square metres.

j. The shed shall have a floor of smooth finish.

C. Blast wall:

The blast wall shall be built of bricks, stone or concrete. The bricks and concrete shall conform to relevant Indian

Standard specifications. The cement mortar shall consist of not less than one part of cement and three parts of clean sand. The blast wall shall be constructed at a distance of one to two metres from the door or from the boundary wall of the building. The height of the blast wall shall be 2 metres and the width shall be 0.5 metre wider than the door opening on both

sides. The blast wall shall be provided around mixing and filling sheds which have the approved explosive limit of 5 kilogrammes and approved man limit of 2. The licensing authority may specify higher height of blast wall if deemed necessary. The thickness of the blast wall shall be decided in accordance with the licensed limit of the building and the materials used in its construction, as specified in the table appended below :

Quantity of explosives in kilogrammes not exceeding	Thickness of wall in centimetres	
	RCC	Brick
2.5	23	34
5	23	34
7	23	45
12	23	57
18	30	60
35	45	70
50	60	75

D. Drying Platform:

The basic considerations in the construction of drying platform are to ensure that the fireworks items are dried securely by keeping them out of reach of persons engaged in other activities and to prevent any grit, dust or moisture from coming into contact with the fireworks. The drying platform shall always be kept dry.

The drying platform shall have a platform of bricks, stone or concrete with a floor area of minimum 9 square metres to a maximum of 15 square metres. The height of platform shall be 1 to 1.5 metres. The bricks and concrete shall conform to relevant Indian Standard Specifications. The cement mortar shall consist of not less than one part of cement and three parts of clean sand. However, drying platform used for drying of sparklers may have a floor area on the ground filled with sand and lined with bricks or a floor area spread on the ground with stone jelly and cement.

Where any platform is located directly in the line of the door of any process building, a blast wall in front of such door of the said building shall be provided as per specification 6 attached to this schedule. In case where drying platforms lie adjacent to each other, a blast wall shall be constructed in the intervening space at 1 to 2 metres away from any one of such platforms lying adjacent to each other.

In the case of a fuse cutting-cum-drying platform, such platform may be built at a distance of 18 metres from process buildings and shall observe an outer safety distance of 45 metres. Such drying platform shall have a screen/blast wall at a distance of 1 to 2 metres from the platform, with a height equal to half of the length of the side perpendicular to the screen wall/blast wall. The construction of the screen/blast wall shall be as per specification 6 attached to this schedule. A temporary roof may be provided by erecting 4 pillars or poles if necessary for protection from direct sunlight.

E. Transit building :

The basic considerations in construction of a transit building are to ensure that the contents are kept out of the hands of unauthorised persons, to maintain them in good condition and to reduce risk of fire. This calls for a construction which will resist illegal entry as much as possible and be well ventilated. The place of a storage should be dry and it should be possible to draw stocks

The transit building should have walls built of brick, stone or concrete. The bricks and concrete shall conform to relevant Indian Standard Specifications. The cement mortar shall consist of not less than one part of cement and three parts of clean sands. The interior of the transit building shall be kept clean and all benches, shelves and fittings shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel and the detachment of any grit, iron, steel or substances shall be in such manner as not to come in contact with the materials stored and such interior, benches, shelves and fittings shall as far as practicable be kept clean and free from grit.

(a)It should have a cement brick wall of 45 centimetres thick and RCC roof of 15centimetres thick.

(b)The transit building shall have adequate number of ventilators as desired by the licensing authority. The ventilators shall be provided at the top and the bottom of the walls as suggested by the licensing authority. The ventilators shall be 22.5 centimetres x 11.25 centimetres fitted with suitable frames firmly set in the walls on the outer face. The bars shall be of minimum 2.35 square centimetres set angle-wise with the frame. The inner opening shall be protected with wire gauge of minimum 3 mesh per centimetre.

(c)Only one door shall be provided.

(d)The door shall be made of wood fitted with non-ferrous hinges.

(e)The door shall open outwards.

(f)If the door faces the drying platform or the door of any other process building, a blast wall (34 centimetres brick cement or 23 centimetres RCC) in front of doors at a distance of 1 to 2 metres. The blast wall shall be 0.5 metre wider than the door opening on both sides and shall have a height of 2 metres.

(g)That transit building may not be provided with lighting conductor unless otherwise specified by the licensing authority.

2. Magazine for storage of fireworks or safety fuse:

The basic considerations in construction of a magazine are to ensure that the contents are kept out of the hands of unauthorised persons, to maintain them in good condition and to reduce risk of fire. This calls for a construction which will resist illegal entry as much as possible and is well ventilated. The place of a storage should be dry and it should be possible to draw stocks in strict rotation.

The magazine should have walls built of brick, stone or concrete. The bricks and concrete shall conform to relevant Indian Standard Specifications. The cement mortar shall consist of not less than one part of cement and three parts

of clean sands. The interior of the storehouse shall be kept clean and all benches, shelves and fittings shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel and the detachment of any grit, iron, steel or substances in such manner as not to come in contact with the materials stored and such interior, benches, shelves and fittings shall as far as practicable be kept clean and free from grit.

a. The magazine shall have adequate number of ventilators as desired by the licensing authority. The ventilators shall be provided at the top and the bottom of the walls as suggested by the licensing authority. The ventilators shall be 22.5 centimetres x 11.25 centimetres fitted with suitable frames firmly set in the walls on the outer face. The bars shall be of minimum 2.35 square centimetres set angle-wise with the frame. The inner opening shall be protected with wire gauge of minimum 3 mesh per centimetres.

b. The magazine shall have a minimum 12 mm red line painted on the interior walls at a height 3 metres from the floor level. This line indicates maximum height to which explosives may be stacked. The gang way space of minimum 30 centimetres shall be provided around the usable portion of the walls to provide air circulation. In addition sufficient space shall be provided for passage between the stacks of packages if required by the licensing authority. The licensing authority may specify lower stacking height if deemed necessary.

c. The magazine shall have sufficient number of wooden windows for proper lighting inside. The windows shall open outwards.

d. The magazine shall have external doors that opens outwards and when closed fit tightly to be constructed of wood with or without lining of steel plate.

e. The magazine shall have sm

f. The roof of the magazine may be made of G. I. sheet or A.C. sheet.

g. The magazine shall have a floor area of 2 square metres per tonne of fireworks or 10,000 metres of safety fuse.

h. The magazine shall have a floor area of 16 square metres per tonne of paper caps or amerces.

i. The magazine shall have a floor area of 8 square metres per tonne of serpent egg.

j. The paper caps or amerces or colour matches which contain chlorate may be kept under this store house shall be separated by an intervening partition wall made of brick, stone or concrete to prevent explosion or fire in the one communicating with the other.

k. The magazine shall be fitted with lightning conductor as per IS 2309.

3. Store House for fireworks :

(1) The storehouse shall be single storied building with 23 centimetres thick walls built of brick or stone mortar, or concrete and roof of 15 centimetres thick RCC.

(2) The storehouse shall maintain open safety distance of 3 metres on all sides, which shall be protected by 1.8 metres high boundary wall or fencing.

(3) The storehouse shall have a floor area of not less than 12 square metres and not more than 40 square metres for storage of fireworks.

(4) The door of storehouse shall be made of wood or other suitable materials and open outwards. If shutter door is provided, there shall be hinges provided at the top of the shutter door to lock the shutter leaf in open position.

Specification 4: Specification for a road van for carriage of explosives.

Part - I (General) :

(1) Air space between body and cab. - A clear space of at least fifteen centimetres shall be left between the body and cab.

(2) Driver's cab.—The cab shall be fitted and covered externally with 0.914 millimetres aluminium sheeting. The wood if used shall be treated as to render it non-flammable.

(3) Cab-doors shall be fitted having windows of non-splinter type glass.

(4) Wind screen.—A substantially framed wind-screen shall be fitted with the portion in front of the driver's seat pivoted on strong brass quadrants for opening.

(5) Fuel tank.—The fuel tank (petrol) shall be in front of the fire screen described under item (11) below. It should be so located as to minimise the possibility of its being damaged should the vehicle be involved in an accident Steel guards should be provided if required by approving authority.

(6) Fuel cut-off.—A quick acting cut off (for petrol lines) shall be fitted on the feed pipe in an easily accessible position and shall be capable of being operated without the necessity of lifting the bonnet and shall be so located as not to be involved in a fire in the engine.

(7) Exhaust pipe and Spark Arrestor.—The whole of the Spark Arrestor and exhaust piping shall be in the front of the fire-screen described in item 11.

(8) Fire extinguisher.—Two chemical fire extinguishers of minimum 2 Kilogrammes shall be provided. The fire extinguisher should be capable of dealing with petroleum fire.

(9) Self Starter.—A self starter shall be provided.

(10) Lighting.—Electric head, side and tail lamps shall be provided and shall be operated from the dash board. All electric wirings and battery cables shall be fully enclosed and maintained in good operating condition.

(11) Fire Screen.—Shall consist of only ply asbestos and 18 gauge steel sheets fitted to the whole of the driver's cab and extending to within 300 mm of the ground. The part extending from bottom of the cab to within 390 mm of the ground shall be carried on an iron angle frame of light construction.

(12) Body.—A body conforming t ication shall be fitted.

(13) Spare Wheels.—One spare wheel inclusive of outer cover and inner tube shall be carried for each size of wheel on the chassis.

(14) Painting and Marking.—Body and cab shall be painted and marked and lined with a colour approved by the licensing authority. The van should be painted with aluminium or white paint. The letter 'E' should be written prominently on the sides and rear of the van. The name and address of the licensee and the licence number should be written in small letters on one side. Vehicles holding inter-state or national permits shall be painted as per directions of Road Transport Authority. However, another circle of 60 centimetres diameter in red colour should be painted on one of the flaps of rear door of van with letter 'E' inscribed in the circle.

(15) Total maximum load.—The total maximum load for a vehicle shall be equal to or exceed gross vehicle weight rating.

(16) Inspection.—The whole of the work shall be to the satisfaction of the licensing authority who shall have free access at any time to the workshop fabricating the body and who may reject any material or workmanship which does not comply with this specification.

Part - II :

(1) The body framing is to be constructed of best selected, teak thoroughly seasoned and free from all defects. All joints are to be morticed and tenoned or half checked, depending upon their position in the structure, and securely fixed with screws. The joints are to be coated with white lead before assembly. All parts of the framing, which will be in contact with the outer metal panelling, are also to be thoroughly coated with which lead before panelling is fixed thereto. Iron plates, knees, etc., may be used for stiffening the framing where they are considered necessary, but no such iron work must be exposed in the interior of the completed van body.

(2) Flooring.—This is to be constructed of teak boarding tongued and grooved 22.2 millimetres, thick and about 152.4 millimetres or 177.8 millimetres in width. It is to be recessed into the soleplate of the van body and below it is to be fixed a sheet of 0.914 millimetres (20 S.W.D.) aluminium sheet. The flooring is to be supported by bearers about 28.6 millimetres thick by 50.8 millimetres wide, fitted between the soleplate and screwed on the top of the cross-members of the chassis frame.

The sill of the doorway has to have a fall outwards of 6.4 millimetres and it should be covered with a brass plate full width of the doorway, 63.5 millimetres wide inside, and having its outer edge turned downwards, and secured in position with brass screws.

(3) Body panelling and lining.—The roof, floor, sides, ends and doors of the van are to be covered externally with .014 millimetres (20 S.W.G.) aluminium sheeting and inner lining may be of asbestos or wood so treated as to be rendered non-flammable or with such other material as may be approved in writing by the licensing authority. This must have a smooth surface, free from distortion or any dents, and it is to be fitted to the framing in sections of convenient size. The roof beading is of aluminium 19 millimetres × 4 millimetres and ends to a distance of 25.4 millimetres the end turnover, being relieved at intervals of 152.4 millimetres to allow

the sheeting to lie flat on the framing. At all places where sheeting is fixed to the body framework, it has to be covered by a beading. The roof beading is of aluminium 19 millimetres x 4 millimetres whilst a wooden weather beading is run round the sides and ends where the joint with roof sheeting takes place. At other places aluminium leading 19 millimetres x 4 millimetres has to be used, excepting only the bottom joint of the sides which is covered by a wooden rail 25.4 millimetres wide 38.1 millimetres deep, and the central cover joint of the doors, which is formed with flat mild steel strap 38.1 millimetres wide.

The interior of the van body has to be lined with 20 S.W.G. aluminium sheeting throughout, sides end, roof and doors, the lining has to be fitted in as few sections, as possible and in all cases brass screws must be used for securing same.

(4) Doors.—Double doors are to be fitted at the rear ends of the body and they are to be a close fit all round the framing, panelling and lining of same being similar in all respects to the body works. They are to be levelled along the bottom to make a watertight joint with the brass covered still of the doorway, and the central joint of doors must also bevelled and covered with stapping as previously mentioned. The doors are to be hung on strong mild steel crook and bank hinges. The band section being 29.7 x 8 millimetres and these in turn are to be securely fix section 44.4 x 8.0 millimetres on the rear

frame posts of the van body. The hinges are to be so constructed and set that the doors will swing right round against the van body side, and facilities are to be provided for fixing the doors in this position.

A slot is cut in the clip and for the reception of a brass H. & T.V. padlock on the left-hand side of the doors.

There shall be no opening in the body of the vehicle except through the doors at the back. No holes shall be drilled in the chassis, unless allowed by the maker for the purpose of securing the van body.

(5) Body dimensions.—The inside dimensions of the body shall be suitable for the quantity of explosives proposed to be carried. The body shall be of such dimensions and fitted in such a manner as to keep the vehicle stable during transport of explosives.

Specification 5: Type A - Specification for compressor mounted motor truck or tractor for possession and transport of explosives

(1) A Compressor mounted tractor intended for possession and transport of explosives for well sinking shall have the compressor securely fixed with the tractor chassis.

(2) The fuel tank, additional fuel tank and exhaust shall be placed in front of the driver's seat.

(3) At the back of the driver's seat and on the top of the compressor unit, a securely fixed platform for housing the boxes of explosives shall be provided. The platform shall maintain a minimum clearance of 15 centimetres from the driver's seat horizontally, and from all pressure parts of the compressor vertically. Provision for placing air intake tube and filter below the platform may be made.

(4) Two separate wooden boxes with locking arrangements for keeping high explosives and detonators shall be provided. The box for high explosives shall be of adequate dimensions to accommodate 25 kilograms package of explosives and 100 meters detonating fuse. The box for detonators shall be of adequate dimensions to accommodate 200 numbers ordinary or electric detonators and shall have internal thermocole lining. Empty space in the detonator box shall be packed with pieces of thermocole to prevent movement of detonators during transport.

(5) Two separate steel boxes of the type approved by the Chief Controller of Explosives for keeping the above wooden boxes containing high explosives and detonators shall be securely fixed on the platform with a minimum clearance of 1 meter between the boxes. These boxes shall be made of at least 3 millimetres thick steel sheet. The steel box for keeping wooden box containing high explosives shall have a small compartment for keeping safety fuse. Both these fixed steel boxes shall have side doors fixed with hinges covering full length of the box and shall be provided with locking arrangement.

(6) A vertical screen wall made of at least 6 millimetres thick steel sheet shall be securely fixed to platform behind the driver's seat covering the length of the platform and height of the steel boxes.

(7) The drilling rods and other tools shall be kept in fixtures or boxes fitted in any place in front of the vertical screen wall behind the driver's seat.

(8) One dry chemical fire extinguisher of minimum 2 kilograms capacity shall be provided.

(9) Two separate steel boxes of the type approved by the Chief Controller of Explosives for keeping the above wooden boxes containing high explosives and detonators shall be securely fixed on the platform with a minimum clearance of 1 metre between the boxes. These boxes shall be made of at least 3 millimetres thick steel sheet. The steel box for keeping wooden box containing high explosives shall have a small compartment for keeping safety fuse. Both these fixed steel boxes shall have side doors fixed with hinges covering full length of the box and shall be provided with locking arrangement.

Type B - Specification for a motor truck for carriage of explosives together with compressor unit.

(1) A clear air space of at least fifteen centimetres shall be left between the body and the cab.

(2) The deriver's cab shall be fitted and covered externally with .914 metre (20 S.W.G.) aluminium sheeting.

(3) The cab doors shall be fitted having windows of non-splinter type glass.

(4) A substantially framed windscreen shall be fitted with the portion in front of diver's seat pivoted on strong brass quadrants for opening.

(5) The fuel tank shall be below the floor level and at least 0.5 metres from the boxes carrying explosives. It should be so located as to minimise the possibility of its being damaged should the vehicle be involved in

an accident.

(6) A quick acting cut off (for petrol lines) shall be fitted on the feed pipe in an easily accessible position and shall be capable of being operated without the necessity of lifting the bonnet and shall be so located as not to be involved in a fire in the engine.

(7) The Spark arrestor and exhaust piping shall be below the cab and shall not be below the body.

(8) A chemical fire extinguisher of minimum 2 kilogrammes shall be provided. The fire extinguisher should be capable of dealing with petroleum fires.

(9) A self-starter shall be provided for the engine.

(10) Electric head, side and tail lamps shall be provided and shall be operated from the dashboard. Electric troches (dry cell type) may be carried for use for lighting during emergency.

(11) One spare wheel inclusive of outer cover and inner tube shall be carried for each size of wheel on the chassis.

(12) No holes shall be drilled in the chassis unless allowed by the maker for the purpose of securing body.

(13) The flooring is to be constructed of teak boarding tongued and grooved at least 21 millimetres thick and about 150 millimetres or 175 millimetres in width.

(14) Base of the compressor should be minimum 150 millimetres high from the floor or the truck body.

(15) A mild steel tray shall be provided underneath the compressor and shall be of such size and placed in such a way that all the oil dripping from the compressor shall fall in the tray.

(16) The exhaust pipe of the compressor shall face away from the boxes carrying explosives and shall be fitted with an efficient spark arrestor.

(17) Only approved type of boxes will be used for carrying explosives and such boxes shall be firmly fixed to the body in such a way that there is no movement of the boxes when the truck is in motion. The empty space in the detonator box shall be filled with thermocole pad, foam pad or other similar suitable material to protect movement of detonators during transport.

(18) Not more than two boxes for carrying explosives shall be fitted to any truck. One of the boxes shall be used for carrying high explosives and the other for detonators. The boxes shall be fixed in such a way that their doors do not open face to face.

(19) The distance between the explosives boxes shall be minimum 1,000 millimetres. The distance between compressor and the explosives boxes shall be minimum 1500 millimetres.

(20) A suitable fire screen shall be provided between the cab and the boxes carrying explosives.

(21) A suitable asbestos or G.I. sheet screen shall be provided between the explosives boxes and the compressor leaving adequate space for movement of operator for removing explosives from boxes.

(22) The space between the fire screen under clause 20 and the asbestos screen under clause 21 above shall be suitably covered so as to protect from weather.

(23) Not more than 25 kilogrammes of high explosives, 200 numbers of detonators and 200 metres of safety fuse shall be carried in the truck.

(24) The detonator box shall be fixed away from the battery side and the battery shall be carried in the cab below driver's seat.

Specification 6: Specification of metal cases for conveyance of explosives

Type A —

General :

The body to be of wrought iron, mild steel, hard rolled brass, muntz metal, or zinc, riveted or welded, fitted at both ends with a substantial flange of same materials or of gunmetal for the attachment of lid and bottom; if of iron or steel to be thoroughly galvanised after making up or to be effectively painted. Thickness shall not be less than 1.257 millimetres (18 BG- .0495 inches) or, if of zinc, not less than 9.5 millimetres.

The bottom to be of same materials as body or of gunmetal; if of iron or steel, to be thoroughly galvanised, securely riveted to flange of body or

forming part of such flange. Thickness not less than 3.2 millimetres or of zinc not less than 9.5 millimetres.

Alternatively the bottom may be made of mild steel of 4.8 millimetres thick, thoroughly galvanised and dished so that fits tightly over the body made of mild steel as above but without a bottom flange. The body to project at least 25.4 millimetres into the dished bottom and the edges of the dished end and of the body to be welded continuously to the body and to the bottom of the dished end respectively.

The lid to be of same materials as body or of gunmetal; if of iron or steel, to be thoroughly galvanised. Thickness not less than 1.6 millimetres at centre, and not less than 3.2 at rim, or if of zinc, not less than 9.5 millimetres throughout.

The lid to be secured by not less than four good screws, bolts or swing bolts, with or without a substantial hinge, which may take the place of one of the four screws, bolts, or swing bolts.

A washer of leather, India rubber or other suitable material to be between the lid and the flange, unless the lid is fitted with a projecting ring into a depression in the flange.

All rivet heads to be well finished, and the inside of the package to be free from rough edges or burrs.

The whole to be of good material and workmanship and to be maintained in a efficient condition.

Type B—

Duralumin Containers :

Dimensions of container inside to be 902 millimetre. Deep by 308 millimetre wide by 267 broad.

The body of container to be of 1.626 millimetre (No.16 S.W.G.) sheet in one piece riveted with 8.00 millimetre (5/6ths inch) diameter rivets 25.4 millimetre pitch at seam. 50.8 millimetres pitch at other three corners, having 31.8 m. by 31.8 by 4.8 millimetre angle riveted on top and round bottom with 8 millimetre diameter rivets 25.4 pitch.

Bottom of containers to be of 3.25 millimetres (No. 10 S.W.G.) sheet fitted with 31.8 millimetre by 31.8 millimetre by 4.8 angle all round and riveted with 8 millimetre diameter rivets. Corner pieces 2.642 millimetres (No. 12 S.W.G.) sheet to be riveted to angle and to bottom plate with 8 millimetres diameter rivets.

Cover of container to be of 2.032 millimetres (No. 14 S.W.G.) sheet fitted with 37.6 millimetre by 25.4 millimetre by 4.8 millimetre angle all round and riveted with 8.0 millimetre diameter rivets. Corner pieces 2.042 millimetre (No. 12 S.W.G.) sheet to be riveted to angle and cover plate with 8.00 millimetre diameter rivets.

Cover to be fastened to container by four 12.7 millimetre with worth set pins with washer.

Rubber joint 31.8 millimetre by 3.2 millimetre thick to be riveted to underside of cover plate by twelve 6.3 millimetre diameter rivets, 15.9 millimetre diameter holes to be bored in cover and joint to suit 12.7 millimetre set pins.

Two Duralumin drop down handles to be riveted to body of container.

Type C -

The body to be of wrought iron or mild steel, thoroughly galvanised, thickness not less than 18 B.G. (0495 inch) fitted at the top with a flange 12.7 millimetre thick made of the Aluminium Alloy (12.5 percent to 14.5 percent zinc; 2.5 percent to 3 percent copper; remainder Aluminium).

The bottom to be of the Aluminium Alloy, not less than 12.7 millimetre thick at the rim, and not less than 4.8 millimetre thick at the centre, and provided with a protection 25.4 millimetre high and at least 6.3 millimetre thick, so made as to be a close fit inside the body, to which it shall be riveted with rivets 6.3 millimetre diameter.

The lid to be of the Aluminium Alloy, not less than 12.7 millimetre thick at the rim and not less than 6.3 millimetre thick at the centre and secured by eight screwed studs to the flange.

A washer of leather India rubber, or other suitable material shall be between the lid and the flange unless the lid is fitted with a projecting ring fitting into a depression in the flange.

All rivet heads to be well finished and the inside of the package to be free from rough edges or burrs.

Specification 7 : Specification of BMD vehicle

The Bulk Mixed Delivery Vehicle normally called as BMD vehicle is specially designed for carrying non-explosive matrix along with other ingredients like Ammonium Nitrate, gassing agent etc. in separate containers mounted on a vehicle chassis to the blasting site. T nk, control panel, hydraulic oil tank, radiator,

hose reel with pump, hydraulic pump, product pump, air receiver, gassing agent pump, water pump and a drivers cabin mounted on the chassis. The mounting of various containers on the chassis is done in such a way that the vehicle is stable during movement both in empty and laden condition.

BMD vehicle shall meet the following requirements:—

(1) The vehicle must be in good mechanical condition and all the tanks and other equipments mounted there on shall be properly secured to the vehicle to avoid any damage during movement of the vehicle.

(2) The vehicle must be strong enough to carry a load without difficulty and be constructed of non-combustible materials, compatible to the ingredients and /or premix, to be contained or transported .

(3) There shall be separate compartment for each ingredient or premix, each provided with separate means of filling and discharge so as to eliminate possibility of accidental mixing of ingredients during transit or otherwise. The compartment containing liquid shall be provided with shut-off valve.

(4) No parts of the equipments and fittings shall be projected outside the vehicle.

(5) The vehicle shall be provided with means and mechanisms for controlling and monitoring various essential parameters like temperature, flow , density and the control panel displaying the status of above parameters and control switches shall be located in a conspicuous position visible and accessible to the operator.

(6) The cabin of the vehicle shall be provided with non-splinter type glass.

(7) The vehicle shall be provided with essential tools secured in a box.

(8) All moving parts of the mixing system must be designed to prevent heat build up.

(9) Shafts or axles which contact the product must have outboard bearings with a minimum of one-inch clearance between the bearings and the outside of the product container. Special attention must be given to the clearances on all moving parts.

(10) When electrical power is supplied by a self-contained motor-generator located on the vehicle, the generator shall be separated from the discharge point of the explosives. The generator or the battery shall be provided with a cut-off switch in a readily accessible position.

(11) Wiring shall be so fixed and protected so as to minimise accidental damage or undue wear.

(12) The BMD vehicle body and equipment shall be electrically continuous with the vehicle chassis. The frame of the mixer and all other equipments that may be used shall be electrically bonded. Bonding points and bonding cables for effective grounding shall be provided.

(13) During mixing or loading, a positive grounding device and a semi-conductive hose shall be used to prevent accumulation of static electricity. The supervisor shall evaluate all system to ensure that they will adequately dissipate static electricity under potential field conditions.

(14) The flexible hoses used to deliver explosives directly in the boreholes shall be electrically and mechanically continuous.

(15) The exhaust of the vehicle shall be fitted with spark arrestor approved by the Chief Controller.

(16) At least two multipurpose fire extinguishers of suitable size and capable of fighting electrical and fires shall be provided on each vehicle in an easily accessible position.

(17) The BMD vehicle shall be marked with the words " BMD vehicle attached to the SMS support plant licence number …..".

(18) The name and address of the licensee along with phone number shall also be marked at a conspicuous place legibly for contact in the event of emergency.

(19) Fuel cut-off system located in the driver's cabin shall be provided.

(20) The ratio of the height of centre of gravity of the vehicle in laden condition to the distances between centres of outer rear tyres shall not exceed 0.9.

Typical Sketch of BMD Vehicle

Schedule VIII

Tables of safety distances

The following safety distances shall be observed in the factories licensed for manufacture of explosives or from the magazines licensed for storage of high explosives. If the quantity of explosives to be stored is in between any two stages shown in the table, the safety distance required for higher stage should be observed.

Notes : (1) When two or more storage magazines are located on the same property, each magazine must comply with the minimum distances specified from inhabited buildings, railways, and highways, and, in addition, they should be separated from each other by not less than the distances shown for "Separation of Magazines," except that the quantity of explosives contained in cap magazines shall govern in regard to the spacing of said cap magazines from magazines containing other explosives. If any two or more magazines are separated from each other by less than the specified "Separation of Magazines" distances, then such tow or more magazines, as a group, must be considered as one magazine, and the total quantity of explosives stored in such group must be treated as if stored in a single magazine located on the site of any magazine of the group, and must comply with the minimum of distances specified from other magazines, in habited building, railways, and highways.

(2)This Table applies only to the manufacture and permanent storage of commercial explosives. It is not applicable to transportation of explosives or any handling or temporary storage necessary or incident thereto. It is not intended to apply to bombs, projectiles, or other heavily encased explosives.

Table - 1

Table of safety distances (in metres) for manufacturing factory, magazine of category "ZZ"

Quantity in kilogrammes	To and between magazine or magazine office etc.		To and between process buildings	To Railway, Road etc.	To Dwelling H offices, factori
	M	UM			
50	10	14	18	21	45
100	11	17	21	33	45
150	13	19	24	40	45
200	14	21	26	45	52
300	16	24	30	45	68
400	18	27	34	45	82
500	19	29	37	48	95
600	21	31	42	54	107
700	22	32	45	60	119
800	23	34	49	65	129
1000	24	36	56	74	148
1250	26	39	64	86	171
1500	28	42	72	96	192
1750	29	44	79	106	211
2000	31	46	85	113	226
2500	33	49	97	129	257
3000	35	52	106	142	283
3500	37	55	114	152	304
4000	38	57	122	163	325
4500	40	60	129	172	343
5000	41		135	180	359
6000	44		145	194	387
7000	46		155	206	412
8000	48		163	217	434
10000	52		177	236	471
12500	56		192	255	510
15000	60		206	280	560
17500	63		216	290	580

20000	65	226	303	605
25000	71	244	325	650
30000	75	259	345	690
35000	79	273	365	730
40000	82	285	380	760
45000	86	296	395	790
50000	89	307	410	820
60000	94	327	435	870
70000	99	343	458	915
80000	104	359	480	960
90000	108	373	498	995
100000	112	387	515	1030
112500	116	402	540	1075
125000	120	417	555	1110
136000	124	428	575	1145
150000	128	446	590	1180
175000	135	466	625	1245
200000	141	487	650	1300

¹Hkkx II¹[k.M 3(i)º Hkkjr dk jkti=k % vlk/kj.k

Table - 2

Table of safety distances (in metres) for manufacturing factory, magazine of category "Y"

Quantity in kilogrammes	To and between magazines or magazine office etc	To and between process buildings	To railway, Road etc	To Dwelling Houses offices, factories etc.
50	10	12	12	45
100	10	15	15	45
150	10	17	17	45
200	10	19	18	45
300	10	22	21	45
400	10	24	23	45
500	10	26	25	45
600	10	27	26	45
700	10	29	27	45
800	10	30	28	45
1000	10	32	32	46
1250	10	35	33	52
1500	10	37	36	57
1750	10	39	38	61
2000	10	41	40	65
2500	12	44	43	73
3000	13	46	46	80
3500	14	49	48	86
4000	15	51	50	92
4500	16	53	52	98
5000	16	55	54	110
6000	18	58	57	117
7000	19	62	61	123
8000	21	64	63	128
10000	23	69	69	138
12500	26	75	72	149
15000	28	79	78	158
17500	30	83	82	167
20000	32	87	86	174
25000	36		93	187

30000	40	100	98	199
35000	43	105	104	210
40000	46	110	108	219
45000	48	114	113	228
50000	51	118	118	236
60000	56	126	128	251
70000	60	132	138	264
80000	64	138	148	276
90000	68	144	158	287
100000	72	149	168	297
112500	76	155	180	309
125000	80	160	192	320
136000	84	165	203	329
150000	88	170	217	340
175000	95	179	242	358
200000	101	195	265	375

Table - 3

Table of safety distances (in metres) for, magazine of category "X"(fireworks)

Quantity in kilogrammes	To and between magazines or magazine office etc	To and between process buildings	To railway, Road etc	To Dwelling Houses offices, factories etc.
1	2	3	4	5
50	10	10	8	45
100	10	10	9	45
150	10	10	10	45
200	10	10	11	45
300	10	10	13	45
400	10	10	14	45
500	10	10	15	45
600	10	10	16	45
700	10	10	17	45
800	10	10	17	45
1000	10	10	18	45
1250	12	12	19	45
1500	12	12	19	45
1750	12	12	19	45
2000	13	13	20	45
2500	14	14	21	45
3000	16	16	21	45
3500	16	16	22	45
4000	17	17	22	46
4500	17	17	23	47
5000	20	20	23	49
6000	20	20	24	50
7000	22		24	50

8000	22	22	25	53
10000	24	24	26	53
12500	24	24	26	55
15000	25	25	27	55
17500	25	25	27	57
20000	26	26	28	58
25000	27	27	29	60
30000	28	28	29	60
35000	30	30	30	61
40000	30	30	30	61

1	2	3	4	5
45000	30	30	30	64
50000	30	30	30	64
60000	30	30	30	66
70000	30	30	30	66
80000	30	30	30	66
90000	30	30	30	67
100000	30	30	30	67
112500	30	30	30	69
125000	30	30	30	69
136000	30	30	30	70
150000	30	30	30	70
175000	30	30	30	71
200000	30	30	30	71

Table - 4

Safety distances (in metres) to be observed in a factory for manufacture of sparklers only

From	Capacity in kilogrammes of the shed	Man Limit	To Mixing shed	To Dipping shed	To Drying plat-form	To Packing shed	To Transit shed	To Raw material or empty frames shed	To Dwelling house, protected works
Mixing shed	50	2	6	6	9	9	9	15	15
Dipping shed	200	8	6	6	3	9	9	15	15
Drying Platform	200	8	9	3	3	9	9	15	15
Packing shed	200	4	9	9	9	9	9	15	15
Transit shed	200	2	9	9	9	9	9	15	15
Raw material/ empty frames shed-			15	15	15	15	15	-	-

Table - 5

Safety distance (in metres) for storage of sparklers only.

From the magazine of storage capacity in kilogrammes	To and between the magazine, own sparklers manufacturing shed or magazine office	To railway, public road	To dwelling house, protected works
50 to 35000	15		15
35001 to 70,000	15		15
70,001 to 200000	15		15

Table-6

Safety distance (in metres) to be observed by various process and storage sheds of fireworks manufacturing factory

Explosives Limit of the shed in kilogr	Man	To mixing/ filling shed mmes	To dipping shed	To drying platform	To manu- facturing shed	To fuse wrapping shed	To transit shed (fireworks) of capacity in kilogrammes			Transit shed (quick match/micro cord/ fuse) of capacity in			To transit shed (pellet) of capacity in kilogrammes	To raw material shed	To dwelling house, protected works or out side safety distances
							300	400	500	100	150	200			
5 hed	2	18	18	18	18	18	30	34	37	21	24	26	18	45	45
5	2	18	12	18	12	12	30	34	37	21	24	26	18	45	45
25	4	18	12	12	12	12	30	34	37	21	24	26	18	45	45
25 hed	4	18	12	12	12	12	30	34	37	21	24	26	18	45	45
10 hed	2	18	12	12	12	12	30	34	37	21	24	26	18	45	45
300	2	30	30	30	30	30	30	34	37	30	30	30	30	45	45
400	2	34	34	34	34	34	34	34	37	34	34	34	34	45	45
500	2	37	37	37	37	37	37	37	37	37	37	37	37	45	45
100	2	21	21	21	21	21	21	34	37	21	24	26	21	45	45
150	2	24	24	24	24	24	24	34	37	24	26	28	24	45	45
200	2	26	26	26	26	26	34	34	34	26	28	30	26	45	45
50 (pellet)	2	18	18	18	18	18	18	18	18	37	18	18	18	45	45
X shed		45	45	45	45	45	45	45	45	45	45	45	45	X	X

Note — The distances specified in the table are not applicable to buildings forming part of the same factory premises. The distance between two fireworks manufacturing sheds shall be the sum of the distances required from each of the sheds to the intervening magazine or the sum of the distances required from each of the sheds to the intervening traverse, whichever is greater. The distance between two magazines shall be the sum of the distances required from each of the magazines to the intervening traverse. The distance between any two buildings not mentioned in the table shall be the sum of the distances required from each of the buildings to the intervening traverse. The distance between any building and a magazine shall be the sum of the distances required from the building and the magazine to the intervening traverse. The distance between any building and a traverse shall be the distance required from the building to the traverse. The distance between any two traverses shall be 2 metres. The distance between any two buildings shall be 2 metres plus the sum of the distances required from each of the buildings to the intervening traverse

From	Mixing/filling	Dipping shed	Drying	Manufacturing	Fuse wrapping	Transit shed (fireworks)	Transit shed (quick match/ micro cord	Transit shed	Raw material
¹Hkkx II¹[k.M 3(i)º	Hkkjr dk jkti=k % vlk/kj.k								

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Table-7

Safety distance (in metres) to be observed in transit building for storage of micro fuse and/or quick match

Capacity in kilogrammes	Safety distance from process and drying platform	Safety distance form protected works or fencing
100 kilogrammes	21	45
150 kilogrammes	24	45
200 kilogrammes	26	45

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