

# THE EXPLOSIVES RULES, 1983

In exercise of the powers conferred by Section 5 and 7 of the Explosives Act, 1884 (4 of 1884) the Central Government hereby makes the following rules, namely:

## CHAPTER I

### Preliminary

**1. Short title and Commencement –**

- (1) These rules may be called the Explosives Rules, 1983.
- (2) They shall come into force on the date of their publication in the Official Gazette

**2. Definitions – In these rules unless the context otherwise requires –**

- (1) “Act” means the Explosives Act, 1884 (4 of 1884);
- (2) “authorised explosives” means an explosives included in a list of authorised explosives published by the Central Government from time in the Official Gazette;
- (3) “Chief Controller” means Chief Controller of Explosives;
- (4) “competent person” means a person recognised by the Chief Controller to be a competent person or a person who holds a certificate of competency in the job in respect of which competency is required from an Institution recognised by the Chief Controller in this behalf;
- (5) “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);
- (6) “Controller” includes Joint Chief Controller of Explosives, Deputy Chief Controller of Explosives, [Controller of Explosives and Deputy Controller of Explosives];
- (7) “detonator” means a small tube of aluminium or copper or other materials approved by the Chief Controller-
  - (a) one end of which is closed and the other –
    - (i) left open of the insertion of safety fuse for the purpose of initiating explosion within the tube; or
    - (ii) fitted with wires or other device for that purpose and sealed;
  - (b) which is loaded with a charge of initiating explosives,. the charge being so designed as to produce an explosion that would communicate to other tube similarly constructed and charged;
- (7-A) “District Authority” means –
  - (a) in towns having a Commissioner of Police, the Commissioner or a Deputy Commissioner of Police;
  - (b) in any other place, the District Magistrate;]
- (8) “form” means a form specified in Schedule V;
- (9) “licensable capacity” in relation to a magazine mean the full capacity of the magazine reckoned on the basis of the floor area and required safety zone all round such magazine;
- (10) “licensed factory” means a factory in respect of which a licence issued under the rules is in force;
- (11) “licensed magazine” means a factory in respect of which a licence issued under these rules is in force;
- (12) “licensed store house” means a store house in respect of which a licence issued under these rules is in force;
- (13) “magazine” means a building specially constructed in accordance with a design approved by the Chief Controller and intended for storage of more than 5 kg of explosives;

- (14) “permitted explosives” means authorised explosives which are permitted by the Director General of Mines Safety to be used in underground coal mines;
- (15) “prohibited explosives” means explosives which are prohibited by the Central Government under Section 6 of the Act;
- (16) “protected works” includes –
  - (a) buildings in which persons dwell, work or assemble, college school, hospital, theatre, cinema house, factory, place of storage of hazardous substances,;
  - (b) any public road or railway line or navigable waterways or dams and reservoirs;
  - (c) overhead trunk high tension power lines; but does not include footpath, cart tracks not in regular use, agricultural wells and pump sets connected therewith;
- (17) “safety cartridge” means a cartridge for small arms having a diameter not exceeding 2.5 cms 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;
- (18) “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;
- (19) “safety zone” means the zone necessary for the maintenance of the distance required under the conditions of a licence to be kept clear between any licensed factory shed, magazines or store house and protected works;
- (20) “Schedule” means a Schedule annexed to these rules;
- (21) “small arm nitro-compound” means nitro-compound adapted and intended exclusively for use in cartridges for small arms;
- (22) “store house” means a building other than a magazine for storage of certain types of explosives;
- (23) “testing officer” means such officer as the Central Government may appoint in this behalf;
- (24) “transport” means movement of explosives from one place to another by land, sea or air in India but does not include movement of explosives within a licensed factory;
- (25) “transfer” with its grammatical variations and cognate expressions, includes letting on hire, lending, giving and parting with possession;
- (26) “van” means a mechanically propelled vehicle for transport of explosives by land.

### **3. Classification of explosives –**

- (1) For the purpose of these rules explosives shall be classified in the manner specified in Schedule I.
- (2) If any explosives falls within the limits of more than one class as defined in Schedule I, it shall be deemed to belong exclusively to the last in number of such classes.

### **4. Safety distance categories of explosives –**

- (1) Explosives are divided into four categories according to the risks which they present when initiated, namely –
  - (i) Category X – Those explosives, which have a fire or a slight explosion risk or both but the effect of which will be local.
  - (ii) Category Y – Those explosives, which have a mass fire risk or a moderate explosion risk, but not the risk of mass explosion.
  - (iii) Category Z – Those explosives, which have a mass explosion risk and major missile, effect.
  - (iv) Category ZZ – Those explosives, which have a mass explosion risk and minor missile effect.
- (2) If any question arises as to whether any explosives 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.

CHAPTER II  
General Provisions

5. **Prohibition of unauthorised explosives** – No person shall import, export, transport, manufacture, possess, use or sell any explosive which is not an authorised explosive;

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 explosives composition under development at a place specially approved for the purpose by the Chief Controller in a licensed factory.

6. **Procedure for authorisation of explosives** –

- (1) Any person desirous of including an explosive in the list of authorised explosives shall apply by submitting an application therefor to the Chief Controller.
- (2) The application submitted in accordance with sub-rule (1) shall be in writing and accompanied by following particulars;
  - (a) the nature and composition of the explosive;
  - (b) the limiting percentage of each ingredient of the explosive;
  - (c) any substitute or substitutes for any specified ingredient;
  - (d) in the case of a new explosive to be manufactured in India, the process by which it is proposed to carry out its manufacture;
  - (e) where an explosives is enclosed in a case or other contrivance, the dimensions of the case or other contrivance, the quantity, nature and brand of explosive contained therein, the method of function and performance characteristics of the explosive and instructions governing the use of the case or other contrivance;
  - (f) the box, wrapping or other container in which the explosive will be handled, used or displayed or otherwise distributed including the markings thereon; and
  - (g) the package in which the explosive will be transported and stored including the markings thereon.
- (3) When, in the opinion of the Chief Controller, an explosive in respect of which an application is made may 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 him, or to any other authority specified by the Chief Controller in this behalf.
- (4) No person shall send a sample of an explosive unless such person has first received the instruction referred to under sub-rule (3).
- (5) No person shall send a sample of an explosive otherwise than in accordance with instructions given by the Chief Controller under sub-rule (3).
- (6) (i) Sample forwarded under sub-rule (3) shall be subjected to such of the tests enumerated in clause (ii) of this 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 forming the explosive, and the quality of the ingredients employed in its manufacture;
    - (c) Stability – determination of stability after subjection to such varying environmental 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 sensitivity and transmission of detonation;
  - (g) Velocity of detonating;
  - (h) Determination of strength;
  - (i) Composition of gases evolved upon explosion;
  - (j) Such other tests as the Chief Controller may specify.
- (7) An explosive tested in accordance with sub-rule (6) shall be declared by the Central Government on recommendation of Chief Controller to be an authorised, explosive if, it is satisfied that such an explosive can be safely manufactured, handled, stored, transported and used.
- (8) Authorisation issued by the Central Government under sub-rule (7) in respect of any imported explosive shall be valid for one year from the date of authorisation, provided the foreign manufacturer certifies that there has been no change in the composition or any other characteristics of the explosives.
- (9) The Chief Controller may at any time subject any explosive to the tests enumerated in sub-rule (6). 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, may recommend deletion of such explosive from the authorised list.
- (10) The Chief Controller on completion of the testing of an explosive, in pursuance of sub-rule (6) shall advise the Central Government in writing –
- (a) whether or not the explosives should be declared to be an authorised explosive; and
  - (b) where the explosive is declared to be an authorised explosive, the class including any division and sub-division within which the explosive falls.
- (11)(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 United Nation's classification number and division.
- (ii) A list of authorised explosives that, by licence or permit, are authorised to be manufactured in, or imported into India shall be published by the Central Government from time to time.
- (12) 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 declared in accordance with clauses (a), (b), (c), (d) and (e) of sub-rule (2) shall be carried out without prior approval of the Central Government:

Provided that 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 this rule.

**7. Restriction on delivery and despatch of explosives –**

- (1) No person shall deliver or despatch any explosive to any one other than a person who –
- (a) 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
  - (b) is entitled under these rules to possess the explosives without a licence.

- (2) 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.
- (3) (i) No person shall receive explosives from any person other than the holder of a licence granted under these rules.  
  
(ii) No person shall receive from or transfer explosives to any person for a temporary storage or safe custody in licensed premises unless prior approval is obtained from the Chief Controller.

**8. Packing of explosives –**

- (1) No person shall import, 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) a sample of the container or package for each explosive has been tested and approved by the Chief Controller;
  - (c) the container or package is marked in accordance with Rule 9 of these rules;Provided that nothing in this rule shall apply to explosives in the process of manufacture.
- (2) An explosive which is not an authorised explosive but which is required to be transported for purposes of test in connection therewith shall be packed in such manner as may be directed by the Chief Controller with reference to such explosive.

**9. Marking of packages –**

- (1) 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 of the class and the division to which it belongs;
  - (d) the safety distance category of explosive;
  - (e) the name of the manufacturer;
  - (f) the name of the consignor and consignee; and
  - (g) the net weight of explosives:

Provided that in the case of safety fuse or fireworks, the word “Explosives” and the number of Class and Division may be omitted.

- (2) In the case of explosives used for charging for blasting viz. explosives of Class 2 or such other explosives of Class 3 Division 1 or such other explosives of Class 4 which contain liquid nitro-compound explosive, the date of manufacture and batch number shall be added.
- (3) In the case of explosives of Class 2 and Class 3, each of the cartridges containing explosives shall be printed or embossed legibly on it with –
  - (a) the word “EXPLOSIVES”;
  - (b) the name of explosives;
  - (c) weight of explosive;
  - (d) diameter of the cartridge;
  - (e) name of manufacturer; and
  - (f) in case of permitted explosive, the letter ‘P’.
- (4) In the case of fireworks, a caution or warning indicating the method of firing and precautions to be taken shall be printed on each piece of fireworks and where adequate space is not available on the fireworks, such caution or warning may be printed on a separate label and inserted in the smallest packet or carton.

**10. 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.

Provided that in case of explosives of the 6<sup>th</sup> (Ammunition) Class or 7<sup>th</sup> (Fireworks) Class 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.

11. **Competent person to be in-charge of operations** – Every person holding or acting under a licence granted under these rules shall, whenever explosives are loaded, unloaded or handled, depute a competent person experienced in the handling of explosives to be present at and to conduct the operations in accordance with these rules.
12. **Precautions to be observed in handling explosives** –
  - (1) The floor of any place or any carriage or vessel in which any explosive is or is to be laid and the ground gangway, decks and other places over which the explosive is to be conveyed during loading or unloading shall be –
    - (i) carefully examined to ensure that there is nothing thereon in contravention of these rules or likely to endanger the safety of the consignment; and
    - (ii) thoroughly cleaned and swept before and after use.
  - (2) the packages containing the explosives shall not be thrown or dropped down or rolled or pulled along the ground or floor but shall be passed from hand to hand and carefully deposited and stored.
  - (3) Where a package is to be slung, due precaution shall be taken to slung it in such a manner as effectively to prevent the possibility of a fall.
  - (4) After the handling of explosives has commenced, the operations shall proceed with due diligence and without unnecessary stoppage.
13. **Restriction on handling of explosives after sunset** – 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.
14. **Prohibition of smoking, fires, lights and dangerous substances** – No person shall smoke, and no fires, lights or articles or substances of a flammable nature or liable to spontaneous ignition, or to cause or communicate fire or explosion such as acids, petroleum, carbide or calcium, compressed gases or such other hazardous substances, shall be allowed –
  - (a) at any time within 15 meters from a place where an explosive is stored; or
  - (b) at any place where an explosive is handled, during transport one hour before and during such handling:  
Provided that nothing in this rule shall apply to the use on a ship of –
    - (i) an engine room fire, if such fire has been previously carefully banked up, or
    - (ii) any artificial light or ship's signal lights or of a type approved in writing by the Chief Controller in areas outside port limits and by the Conservator of the Port within port limits.
15. **Prohibition of matches, etc** - No person on, in or near any place where explosives are stored or handled or on any carriage conveying explosives shall –
  - (a) have in his possession any matches, fuses or other appliances for producing ignition or explosion or any knives or other articles made of iron or steel; or
  - (b) wear boots or shoes with iron nails or shod or strengthened with iron, unless such boots or shoes are covered with leather, rubber, felt or other material, in the form of overshoes or otherwise.
16. **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 as provided in these rules.

**17. Employment of children, intoxicated persons and certain other persons** – No person shall employ, allow or engage a person –

- (a) who has not completed the age of 18 years, or
  - (b) who is in a state of intoxication, or
  - (c) who is of unsound mind,
- for manufacture, storage, sale, loading, unloading or transport of explosives or to enter any premises licensed under these rules.

**18. Precautions against danger from water or exposure to the sun or heat -**

- (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 sun-drying of gunpowder or fireworks or drying of explosives in a licensed factory under controlled conditions.

**19. Special precautions against accident and the exclusion of unauthorised persons –**

- (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:

Provided that nothing in this sub-rule shall apply to any act which is necessary for the purpose of the manufacture, storage or handling during transport of any explosive or any article present therein.

- (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 –
  - (a) comply with provisions of these rules and the conditions of any licence relating thereto;
  - (b) observe all due precautions for the prevention of thefts and of accidents by fire or explosion;
  - (c) prevent unauthorised person from having access to the explosives;
  - (d) prevent any other person from committing any such act as is prohibited under sub-rule (1).

**20. Restrictions on transport of certain types of explosives** – Notwithstanding anything contained in these rules, no person shall transport without approval of Chief Controller –

- (a) Nitro-glycerine or Ethylene glycol dinitrate or any explosives of Class 5 in any vehicle in any quantity, except within the licensed factory solely for the purpose of manufacture of explosives;
- (b) Any explosive that is not authorised explosives or any explosive which is deteriorated or is in a damaged condition.

CHAPTER III  
**Import and Export**  
Part I  
*General*

**21. Restriction on import or export –**

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

- (2) No licence shall be granted for import or export of any explosives unless –
  - (a) the explosive is an authorised explosives;
  - (b) the explosive, if of the 3<sup>rd</sup> (Nitro-compound class) or 4<sup>th</sup> (Chlorate mixture) is certified in Form I by the testing officer to have passed the tests specified in Schedule II; and
  - (c) the explosive is certified to have passed such analysis or examination, if any, as the Chief Controller or the Customs Collector at his discretion by order in writing, may require in order to determine its composition or condition.
- (3) No person shall be granted an import or export licence unless he is the holder of a licence for possession in a magazine or a store house authorised for the class and quantity of explosives intended to be imported or exported.
- (4) Notwithstanding anything contained in sub-rule (3) the explosives in quantities exceeding the licensed capacity indicated in the licence may be imported with prior permission of the Chief Controller provided adequate advance arrangements are made by the importer to distribute directly from the port of import, the explosives to the other licensed magazine or licensed store houses.

## PART II

### *Import or Export by Sea*

#### **22. Import or export by sea –**

- (1) No explosives shall be imported or exported by sea except at the ports of Bombay, Cochin, Calcutta at Diamond Harbour, Madras, Tuticorin or Visakhapatnam:  
Provided that exports only of explosives in such quantities as may be specified by the Chief Controller, may be done at the ports of Kandla and Mormugao.
- (2) The quantities of explosives, manner of handling during discharge from or loading into a ship shall be carried out in accordance with the provision of rules regulating the handling of explosives at the ports of Bombay, Calcutta and Madras issued under the Act and respective port rules and byelaws.

#### **23. Declaration by importer –** A person holding an import licence granted under these rules shall furnish a declaration –

- (a) in Form 14 to the Chief Controller as soon as ship carrying explosives sails from the port of loading;
- (b) in Form 15 as soon as any shipment of explosives is cleared from the port of import.

#### **24. Declaration by master of ship or by the ship's agent –**

- (1) The master of every ships carrying explosives or the agent for such ship shall give the Conservator of the Port not less than 48 hours' notice of its intended arrival at the port.
- (2) The master of every ship carrying explosives shall deliver to the pilot before entering any port, a written declaration in Form 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 be made by master of the ship.

- (3) Every declaration delivered to a pilot under 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 Customs Collector of the port.

#### **25. Declaration by exporter or his agent –**

- (1) The exporter or his authorised agent shall give the conservator of the port not less than 48 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 said officer.

- (2) The exporter or his authorised agent shall produce before the conservator of a port:-
  - (a) licence granted under these rules for export of explosives in question;
  - (b) a certificate issued by exporter to the effect that the explosives have been packed and marked in accordance with these rules and are safe for transport by sea.

**26. Sampling procedure from imported explosives –**

- (1) When the master of, or the agent for, a ship has made declaration required by Rule 24, such officer as the Customs Collector of the port may authorise in this behalf shall go on board the vessel and obtain samples of all such explosives as is intended to land at the port and are required by or under these rules to be tested, analysed or examined.
- (2) The master shall deliver to the officer referred to in sub-rule (1), without charge samples of all the explosives of which samples are required to be taken under that sub-rule. 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.
- (3) If the taking of any samples under sub-rule(1) 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.

**27. Despatch of samples to the testing officer –**

- (1) The officer taking a sample of any explosives under Rule 26 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.
- (2) In the case of a Nitro-compound or a Chlorate mixture the date and batch number referred to in sub-rule (2) of Rule 9 shall also be affixed to the sample.

**28. Testing of samples –**

- (1) The testing officer shall test, analyse or examine, as the case may be, the samples and shall without delay forward to the Customs Collector a certificate in Form I in duplicate under his signature certifying whether the explosives have satisfied the prescribed tests, analysis or examination.
- (2) The Customs Collector shall as soon as practicable and ordinarily within 24 hours after receipt of the report of the testing officer forward a copy each of the certificate in Form I to the Chief Controller and the Controller of the area having jurisdiction.

**29. Permission to land explosives –**

- (1) No imported explosives shall be permitted to be landed by the Customs Collector 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 satisfied the prescribed tests, analysis or examination and after making such other enquiries as considered necessary.
- (2) If the Customs Collector, after receiving the permission under sub-rule (1) and the licence for import of such explosive under these rules and after making such further enquiries as he deems necessary, is satisfied that the explosives can lawfully be imported, he shall permit it to be landed.
- (3) Nothing in this rule shall affect the power of Customs Collector to design the explosives under any other law for the time being in force.
- (4) The imported explosives shall be removed from the port premises by the importer as expeditiously as possible.

PART III  
*Import or Export by Land*

- 30. Import or export by land** – No licence for import or export of explosives shall be granted without the previous sanction in each case, of the Central Government and under such conditions and restrictions as it may impose in consultation with Chief Controller.

PART IV  
*Import or Export by Air*

- 31. Prohibition of certain explosives** –
- (1) No explosive shall be imported or exported by air except at the ports of Bombay, Delhi, Calcutta and Madras or any other International airport authorised for this purpose by the Central Government from time to time.
  - (2) Any explosive which is not included in Schedule VI shall not be imported or exported by air.
  - (3) A person holding a licence for import or 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 Incharge of the Airport Collector of Customs and the Chief Controller giving full particulars of the explosives intended to be imported or exported.
  - (4) No person shall bring explosives to the airport for export by air without prior consent in writing of Officer Incharge of the Airport.
  - (5) 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.
  - (6) Explosives meant for export shall be brought to be airport after making proper arrangements and only after the aircraft is ready for loading explosives and explosives so brought to the airport shall be loaded directly into the aircraft.
  - (7) If for any unforeseen circumstances explosives brought to the airport cannot be removed from the airport or loaded into the aircraft such explosives shall be stored in an isolated shed under guard as directed by the Officer Incharge of the Airport and all due precautions against theft, fire or explosives shall be taken.

CHAPTER IV

PART I  
Transport  
*General*

- 32. Licence for transport and issue of passes.** –
- (1) No person shall transport explosives except under and in accordance with the conditons of a licence granted under these rules.  
Provided that nothing in this sub-rule shall apply to—
    - (i) the transport of any explosives within the licensed factory or from the licensed factory to the licensed magazine or store house situated within the licensed factory;
    - (ii) the transport of any explosives imported under a licence in Form 27 from the place of import to the place of destination specified in the licence for import of explosives;
    - (iii) the trnsport of any explosives for the possession of which no licence is necessary (see rule 114);

- (iv) the transport by the holder of a licence in Form- 23 of any of the explosives covered by his licence in such quantity as he may require for his private use;
  - (v) the transport of safety fuse and fireworks provided the same are not transported with any corrosive or flammable material.
- (2) Every consignment of explosives transported under licence shall be accompanied by a pass issued by the consignor in Form 16.
- (3) Such pass shall be attached to the way-bill, invoice or despatch note as the case may be.
- (4) A copy of every pass issued under sub-rule (2) shall forthwith be sent by the consignor to—
- (i) the licensing authority who issued the licence for transportation of explosives;
  - (ii) the Controller of Explosives in whose jurisdiction the place from which the consignment is sent is situated;
  - (iii) the Controller of Explosives in whose jurisdiction the place to which the consignment is sent is situated.

**33. Restrictions on transportation of different explosives in the same carriage.**—Any explosives of 5<sup>th</sup> (Fulminate) class or detonator or any other explosives of 6<sup>th</sup> (Ammunition) Class containing its own means of ignition or initiation, or an explosive of 7<sup>th</sup> (Fireworks) class shall not be transported in the same carriage, or save as provided in rule 49 in the same vessel and shall not be conveyed or handled with any explosives not of the class and division to which it belongs.

**34. Certificate of safety.**—

- (1) Before transporting or tendering for transport an explosive of 3<sup>rd</sup> (Nitro-compound) class or of the 4<sup>th</sup> (Chlorate mixture) class, the consignor shall attach to the consignment not a valid certificate in Form I or certified copy thereof granted by testing officer.

- (2) The certificate referred to in sub-rule (1) shall be valid for a period of 12 months from the date on which it was granted:

Provided that in the case of explosives containing Nitro-glycerine which are not used as propellants such certificate shall lapse on the 31<sup>st</sup> July following and fresh certificate may at the discretion of the Railway Administration concerned, be demanded for explosives to be transported by rail during the period from 1<sup>st</sup> April to 31<sup>st</sup> July if the original certificate has been granted earlier than 30<sup>th</sup> of September preceding.

**35. 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.

**36. Maximum consignments allowed.**—The quantity of explosives transported shall not exceed-

- (i) 10 tonnes or half the carrying capacity of a Railway wagon whichever is less;
- (ii) 10 tonnes or the maximum carrying capacity of a road van licensed under these rules by a Regional Transport Authority, whichever is less, in any one carriage other than a Railway wagon:

Provided that if the explosives to be transported is of 2<sup>nd</sup> class the quantity of explosives shall not exceed 15 tonnes or the maximum carrying capacity of the van whichever is less;

- (iii) one tonne in any animal drawn carriage;
- (iv) 22.5 tonnes in any one boat;
- (v) quantity specified in Schedule VI in any one aircraft.

**37. Despatch of explosives to carriers for transport.**—

- (1) No person shall despatch any explosives to a carrier other than the Railway Administration for the purpose of transport.

- (2) No person shall despatch any explosive to the Railway Administration 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 has been packed and marked in accordance with rules 8 and 9;
    - (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 a Railway administration has by any notice of regulation for the time being in force notified that it will not receive.

**38. 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 assemble or any flammable or other hazardous 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 22.00 hours at a well-illuminated place approved by the Chief Controller.
- (4) Nothing in Rule 13 and sub-rule (1) shall apply to any operations connected with the transport of explosives by passenger train or by a “pick up” or “van “ goods train used for the transport of small consignments or in the brake van of mixed train.

**39. Carriage or vessel or aircraft to be in readiness for loading.—**No explosives 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.

**40. Carriage or vessel or aircraft to be in charge of a competent person.—**

- (1) A carriage other than a railway carriage or vessel or aircraft transporting explosives shall at all times be in charge of and constantly attended by competent person experienced in the handling of explosives and appointed by the owner of such carriage or aircraft or master of the vessel. Such person shall supervise all loading or unloading operations and shall take all due precautions in regard to explosives until completion of the receipt and storage or discharge thereof.
- (2) The person in charge of a carriage or aircraft or vessel shall not drive, conduct or manoeuvre such carriage or vessel or aircraft in a dangerous or negligent manner.

**41. Protection from fire or explosion.—**

- (1) No carriage or aircraft or vessel shall be used for transporting explosives unless all iron or steel therein with which a package containing any explosive is likely to come in contact is effectually covered with lead, leather, wood, cloth or other suitable material.
- (2) Where the weight of the explosives transported in any carriage exceeds 1000 kgs. they shall be placed in the interior of the carriage which shall be enclosed on all sides with wood or metal so as effectually to protect the explosives from communication of fire and the carriage shall be locked.
- (3) Where the weight of the explosives transported in any vessel exceeds 1000 kgs. they shall be placed in the hold of the vessel which shall have a closed deck and closely fitting hatches and double, water-tight bulk heads shall be provided at each end of the hold where the explosives are stowed and the hatches shall be locked.
- (4) Where the explosives carried in carriage or vessel do not exceed 1000 kgs. in weight, the explosives shall, unless they are conveyed in the manner specified in sub-rule (2) or sub-rule (3), as the case may be, be completely covered with fireproof cloth tarpaulin or any

- other suitable material as effectually to protect the explosives from communication of fire.
- (5) All doors, hatches and covering of every compartments or hold containing explosives in or on any carriage or vessel shall be kept closed and secured except when explosives are being loaded or unloaded into, onto or from it.
- (6) When explosives are being carried or on a carriage or aircraft or vessel, they shall be kept away from anything whether in the carriage or vessel or elsewhere that would be liable to cause them to ignite or explode.
- 42. Delay in transit to be avoided.**—If the quantity of explosives transported in any carriage or vessel exceeds 2.5 kgs. the person or persons incharge of such carriage or vessel shall not stop or delay at any place for a longer time than may be reasonably necessary, not stop unnecessarily at any place where such stopping would be attended with danger to public.
- 43. Repairs to conveyance.**—Before any repairs or alterations are commenced in any part of a 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.
- 44. Small quantities of fireworks exempted.**—Nothing contained in rules 35, 40 and 41 shall apply to the transport of manufactured fireworks in the custody of a person entitled to possess them without a licence under rule 14 provided that not more than 2.5 kgs. of manufactured fireworks, securely packed, shall be so transported in any motor vehicle licensed for conveyance of more than six passengers.
- 45. 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 in rule 36 for any one carriage or boat, such carriages or boats shall not approach within 50 metres of one another:  
Provided that—
- (a) nothing in this rule shall apply to the transport of explosives by rail;
  - (b) 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.

## PART II

### Transport by water

- 46. Notice of loading on or unloading from ships.**—No explosive shall be loaded on or unloaded from a ship 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.
- 47. Steamer fires and lights.**—No explosives shall be loaded on or unloaded from any ship—
- (a) unless the engine room fires have been previously carefully banked up, and all other fires and lights extinguished;
  - (b) while the ship 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 Madras 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.
- 48. Stowage**—No explosives shall be stowed in a ship except in accordance with regulations contained in the Merchant Shipping Carriage of Dangerous Goods Rules, 1978 (Annexure I).

- 49. Conveyance of explosives on special trade passenger ships.**—Any authorized explosives satisfying the requirements of clauses (b) and (c) of sub-rule (2) of rule 21 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-Annexure II) 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.

- 50. 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 kgs. 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 gms 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 are taken to prevent accidents by fire or explosion;
  - (iii) Detonators are not carried in the same compartment as other explosives.
- (2) Nothing in rules 13, 40, sub-rule (5) of rules 41, 47, 51 to 54 and 57 shall apply to explosives carried in a passenger vessel under sub-rule (1).

- 51. 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.

- 52. Red flag or warning light to be exhibited.**—Every vessels having explosives on board exceeding 50 kgs. 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.

- 53. 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 transshipment 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.

- 54. 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.

- 55. Loading and unloading prohibited while a vessel is underway.**—No explosives exceeding 450 kgs. 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.

- 56. 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.

- 57. 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.

- 58. 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

- 59. Boats to be licensed.**—

- (1) No boats shall be used for the transport of explosives exceeding 1,000 kgs 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 sub-rule (1) 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 in sub-rule (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 sub-rule (1) shall be forwarded to the Chief Controller.
- (6) Every person in charge of any boat licensed under sub-rule (1) shall, when required so to do by an officer mentioned in rule 179, produce the licence of such boat for inspection.

- 60. 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 length and 7.50 cms. 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 under rule 59.

- (2) The buoy shall be a drum painted red measuring not less than 55 cms. In length and 35 cms. In diameter, properly strapped with an iron band in the middle and having a ring attached for securing the rope.
- 61. Smoking, fire, dangerous articles and other cargo prohibited.**—The following shall not be permitted on board any boat which has explosives on board—
- (i) fire or light of any description other than the warning lights referred to in rule 52;
  - (ii) smoking;
  - (iii) any substance of an inflammable nature or liable to spontaneous ignition;
  - (iv) any substance liable to cause or communicate fire or explosion,
  - (v) any other cargo, unless the carrying of such other cargo, has been specially authorized 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 III

#### *Transport by Rail*

- 62. 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.
- 63. 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 sub-rule (1) shall apply in a carriage containing explosives transported in accordance with the provisions of clause (b) of rule 64 or rule 69.
- 64. Transport of explosives with ordinary goods.**—Notwithstanding anything contained in rule 62, 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 Railway Administration and the Chief Controller.
- 65. 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.



- 66. 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.
- 67. Prohibition on passenger or mixed trains.**—No explosive shall be transported by any passenger or mixed train.
- 68. Despatch of explosive vans by mixed trains.**—Notwithstanding anything contained in rule 67, any explosive may be transported by a mixed train in vans specially approved under rule 62 on any line or section on which goods trains are not running subject to the following conditions:
- (a) Not more than 3 such vans containing explosives shall be hauled at any one time.
  - (b) There shall be not less than 3 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.
- 69. Conveyance of explosives by passenger or mixed trains.**—Notwithstanding anything contained in rules 62 and 67, the following explosives may be transported by passenger or mixed trains:
- (i) Safety fuses for blasting.
  - (ii) Explosives of the 3<sup>rd</sup> (Nitro-compound) class, other than propellants, in the form of cartridges not exceeding in the aggregate 2.5 kgs. in weight, provided no detonators are carried in the same compartment.
  - (iii) 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 gms. provided—
    - (a) a certificate to such effect is tendered by the consignor; and
    - (b) no other explosive is carried in the same compartment.
  - (iv) Sporting powders and propellants packed in double packages prescribed in Schedule II, provided—
    - (a) the explosive is contained in tin canisters containing not more than 5 kg. Each packed in a stout wooden case with a completely spark-proof outer cover of tin or zinc or in a metal case or cylinder of a pattern approved by the Chief Controller;
    - (b) no outer case contains more than 12.5 kg of explosives; and
    - (c) the total consignment by one train does not exceed in the aggregate 37.5 kgs.
- 70. 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 Railway Administration concerned to receive dangerous goods; and
  - (b) at such times between sunrise and sunset and at such places within railway premises as the Railway Administration may specify in this behalf.
- 71. 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 marshaled 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.
- 72. 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.
- 73. Power of railway administration.—**
- (1) Where a Railway Administration suspects that an explosive or carriage or package containing an explosive does not comply with any of these rules, the Administration 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 Railway Administration 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 Railway Administration be returned to the consignor under sub-rule (2) without undue risk the Administration 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.
- 74. 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 Railway Administration:  
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 kgs. or any quantity of ammunition, Class 6, Divisions 2 and 3.

PART IV  
Transport by road

- 75. Streets, public places and other specified areas.—**
- (1) No person shall transport or cause to be transported any explosive on any road within the limits of a municipality or contonment where such road is specifically prohibited for plying vehicles carrying explosives.
  - (2) Nothing in sub-rule (1) shall apply to—
    - (a) any explosive of 7<sup>th</sup> (fireworks class, or safety fuse; or
    - (b) other explosives not exceeding 5 kgs. in weight.
- 76. Licence for road vans.—**No person shall transport or cause to be transported any explosives in a road van unless such vehicle is licensed under these rules to carry explosives.

Provided that nothing in this rule shall apply to transport of safety fuse any fireworks.

- 77. Restriction on transport of explosives by vehicles other than road vans.—**  
(1) No explosive shall be transported by any carriage which is not a road van:  
Provided that any explosive may be transported by any carriage, which is not a road, van if the distance from the place of loading to the place of destination does not exceed 10 km. 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.  
(2) Nothing in sub-rule(1) shall apply to transport of safety fuse or fireworks.
- 78. Loading of explosives.—**  
(1) The person incharge 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 not move and will be protected against friction and bumping; and  
(b) should it become necessary to unload any of the explosives, those remaining can be restowed 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.
- 79. Restriction on use of towed vehicles.—**No person shall transport explosives in any towed vehicle or tow any vehicle transporting explosives.
- 80. Carriage of explosives with other substance prohibited.—**No other goods shall be carried with explosives in any vehicle:  
Provided that not more than 1000 kgs. of fireworks may be carried along with other goods not being flammable and hazardous in nature.
- 81. 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 regularly checked to see that—  
(a) the fire extinguishers are filled and in working order;  
(b) the electric wiring is completely insulated and firmly secured;  
(c) the fuel tank and feed lines have no leaks;  
(d) the chassis, engine, inside and bottom of the body are clean and free from surplus oil and grease;  
(e) the brakes and steering apparatus are in good condition; and  
(f) the spare tyre and wheel are in a fixed position.  
(4) Explosives shall not be loaded on or in a vehicle unless the vehicle has been periodically serviced in accordance with the instructions specified in the service manual by the manufacturer of the motor vehicle.  
(5) The fuel tank or a vehicle carrying or containing an explosives shall not be filled except in case of necessity, in which case the engine shall be stopped, the ignition shut-off and the tank filled only at a place where filling is not a danger to the public safety. The driver of the road van shall supervise filling of fuel tank keeping a fire extinguisher ready by his side.  
(6) 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, stops at places where the public safety would be endangered shall be avoided:

Provided that where a road van transporting or containing explosives is parked over night due to the reasons beyond the control of licensee 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 or 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.

- (7) 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.
- (8) Routes passing through centres of dense habitation shall, as far as possible, be avoided.
- (9) A road van while transporting explosives shall always be attended to by at least one able-bodied person (in addition to the driver) who is capable of looking after the vehicle.
- (10) When there is a convoy of two or more vehicles transporting explosives, where practicable, a space of at least 300 meters shall be maintained between each such vehicle.
- (11) Road van transporting explosives shall not be driven past fires of any kind on or near the highway or other thoroughfare.
- (12) 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 safely clear.
- (13) The original licence for van granted under these rules or attested copy of the same shall always be carried in the vehicle.

**82. 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 also provide reflectors in such position as to convey an effective warning of the presence of the road van to the drivers of other vehicles.

**83. Wheel chocks.-** Four wheel chocks shall be carried in or on a licensed vehicle at all times when explosives are being carried in or on the vehicle.

**84. Vehicle on fire.—**If any fire occurs on a vehicle containing explosives the driver shall take all practicable steps to ensure that all other traffic is stopped at least 300 metres from the vehicle and that all persons in the vicinity are warned of the danger.

**85. 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 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 a 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 incharge 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 van or are removed from the vehicle and stored under proper security at a safe distance from the highway and at least 300 metres from any inhabited premises;
- (c) inform the licensee who shall in turn inform 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.

**86. Fire extinguishers to be provided.—**

- (1) Every road van shall be provided with 2 fire extinguishers of minimum 2 kgs. capacity. One of the extinguishers shall be capable of dealing with electric fires and the other with engine fires, tyre fire or such other similar fires in a van. The fire extinguishers shall always be kept in good working condition.
- (2) Fire extinguishers shall be located where they will be convenient and ready for immediate use. Fire extinguishers shall also be examined and recharged according to the manufacturers' recommendations.

**CHAPTER V  
Manufacture of Explosives**

**87. Licence for manufacture.—**

- (1) No person shall manufacture any explosive at any place except in a factory or premises licensed under these rules.
- (2) The licensee shall be responsible for all operations in connection with the manufacture of explosives which may be conducted in the licensed premises.

**88. No licence needed for manufacture in certain cases.—** Notwithstanding anything contained in rule 87, no licence to manufacture shall be necessary for manufacture at a Government or industrial laboratory or a laboratory of an educational institution and under the supervision of a qualified person of a quantity of explosive not exceeding an amount reasonably necessary for the purpose of chemical experiment and test and not intended for practical use or sale, subject to the following conditions, namely:

- (a) The Chief Controller shall be given prior intimation of the nature of the explosives and the quantity of explosives proposed to be manufactured in the laboratory together with the name and address of the institution and the particulars and experience of the person conducting the experiment.
- (b) If the Chief Controller on receipt of the information under clause (a) above is of the opinion that it would not be safe to conduct such experiment he may, in writing, prohibit conducting the experiment.
- (c) All precautions shall be taken to prevent injury to persons or damage to property and all provisions of the Act and these rules shall be observed as far as they are otherwise applicable.
- (d) No experiment shall be conducted to make any explosive, which is specifically prohibited under section 6 of the Act.

**89. 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:
  - (a) the detail 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 the proposed method of treating effluents and waste explosives;

- (b) the nature and composition of the explosives;
  - (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;
  - (e) physical and chemical characteristics of final product;
  - (f) prescribed scrutiny fee.
- (3) The Chief Controller, after scrutiny of the Project Report and after making such further enquiries as may be considered necessary, may if he is satisfied, approved the process for each explosive separately.
- (4) 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 Chief Controller.
- (5) The Chief Controller may cause at any time any test on any raw material, ingredients or explosives to ascertain if these conform to the particulars given under sub-rule (2).

**90. Restriction on authorised person.—**

- (1) A factory licensed under these rules for manufacture of explosives shall be surrounded by a wall or barbed wire fencing at least 2 metres high of such strength and construction as to effectively prevent entry of unauthorised persons.
- (2) The area enclosed by such wall or fence shall cover the safety zone required to be kept clear from any of the process buildings or sheds.
- (3) The licensee shall at his own expense provide for safe custody of the factory a guard which shall be of such strength as the District Authority may consider to be sufficient.

**91. 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.

**92. 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 present, or in the course of manufacture is liable to be, shall, be a 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.

**93. Provision of mounds.—**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 Chief Controller: Provided that the licensing authority may allow blast walls in place of substantial mound if such blast walls can be provided for the purpose.

**94. Restriction of articles liable to spontaneous ignition.—**Oiled cotton, oil rags and oil waste and any article liable to spontaneous ignition shall not be taken into any danger building 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.

- 95. 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.
- 96. Particulars to be exhibited on process building.**—There shall at all times be prominently exhibited clearly and legibly:
- (a) on every process building in the licensed factory the same distinguishing number as mentioned in the approval plan attached to the licence;
  - (b) inside every process building a notice showing—
    - (i) maximum quantity of any explosives or ingredients for such explosives that may be in the building at any one time as authorised by the licensing authority;
    - (ii) the maximum number of persons who may be in the building at any one time as authorised by the licensing authority.
- 97. Prohibition of smokingj.**—Except in places especially approved by the licensing authority, no person shall smoke in any part of the licensed factory.
- 98. Protection against lightning.**—
- (1) Every process building shall have attached thereto one or more efficient lightning conductors designed and erected in accordance with the specification laid down in Indian Standard Specification No.2309 as amended from time to time.
  - (2) The connections to various parts and 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 competent person holding a certificate of competency in this behalf from the State Electricity Department. A certificate showing the results of such test and the date of last test shall be hung up in a conspicuous place in the process buildings:
- 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.
- 99. Suspension of work during thunderstorms.**—Whenever a thunderstorm appears to be imminent in the vicinity of the process building, every person engaged in or about the building shall be withdrawn to a safe distance and the building shall be kept closed and locked until the thunderstorm has ceased or the threat of the same has passed:
- Provided that where an operation is in process, stopping of which would in itself contribute a danger in which case the operation shall be carried on to point at which it can be suspended with safety, and no such operation shall be commenced during the storm.
- 100. Removal of foreign matter from ingredients.**—No substance shall be made or mixed into an explosive in or on licensed premises unless it has been thoroughly treated by sifting or other effective means for the detection and removal of all foreign objects and matter that might cause danger if not removed.
- 101. Protection against fire.**—
- (1) Due provision shall be made by the use of suitable working clothes without pockets and suitable shoes and searching and otherwise, or by some or all of such means to prevent the introduction into any danger building, of fire, matches or any substance or article likely to cause explosion or fire, and for preventing the introduction of any iron, steel or grit into any part of the danger building where it would be likely to come into contact with explosive over wholly or partially mixed ingredients thereof.
  - (2) Nothing in sub-rule (1) shall apply to the use of such artificial lights as may be approved by the Chief Controller for the purpose of manufacture.

- 102. 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 store house, 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.
- 103. Repairs to building.—**
- (1) 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 process of removal.
  - (2) 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 a competent person. A copy each of such permit shall be preserved for a period of three months and presented on demand by an inspecting officer.
  - (3) If major repairs are done to a building or any part thereof including any machinery therein, that building or part of it shall not be taken into use unless the same is permitted by the licensing authority.
- 104. Employment of competent persons.—**No explosives shall be manufactured in any building or part thereof except under the supervision of a competent person employed by the licensee. Such competent person shall be fully conversant with the process of manufacture of explosives, hazards connected therewith and the provisions of these rules.
- 105. Employment of young persons.—**Any person who has completed the age of 18 years but not 21 years, shall only be employed after he submits to the employer an evidence of his age from a registered Medical Practitioner, or a birth certificate.
- 106. 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.
- 107. Maintenance of buildings, plants and equipment.—**
- (1) Every building in or on licensed premises shall always be maintained in a fit condition.
  - (2) All plants and equipment in a licensed factory shall be regularly serviced and maintained in a proper and fit condition by the licensee. A record of all such servicing and maintenance shall be maintained till the time of next servicing and maintenance. In case of any major repairs or replacement to any machinery or equipment, such record should be preserved till replacement of such machinery and equipment.
- 108. Facilities for testing.—**Proper testing facilities as approved by Chief Controller 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:  
Provided that the Chief Controller 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.
- 109. 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 shall be properly collected and stored in a safe place till finally disposed of by the method approved by the licensing authority.
- (2) Adequate facilities for safe destruction under the supervision of a competent person 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).
- 110. Stoppage of manufacture of explosives.**—If 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 Chief Controller may issue an order in writing directing the licensee to discontinue forthwith the manufacture of such explosive till such time the operation or the composition is rectified to the satisfaction of the Chief Controller.
- 111. Exclusion from list of authorised explosives.**— If the Chief Controller of Explosives stops the manufacture of any explosives under Rule 110 or if any explosive is not manufactured for a continuous period of two years such explosives may be excluded from the list of authorised explosives by the Central Government.
- 112. Maintaining records.**—The licensee of a factory shall keep upto date records in the prescribed forms and produce the same before an inspecting officer. Such records shall be retained for a period of minimum 2 years.

## CHAPTER VI

### Possession, Sale and Use

#### Part I

##### *General*

- 113. Licence for possession, sale and use -**
- (1) No person shall possess, sell or use any explosives except under and in accordance with a licence granted under these rules.
- (2) The licensee shall be responsible for all operations in connection with the possession, sale or use of explosives, which may be conducted in the premises covered by the licence.
- 114. No Licence needed for possession and sale in certain cases.**—
- (1) Notwithstanding anything contained in rule 113, no licence shall be necessary for the possession—
- (a) of any explosive by a carrier or other person for the purpose of transport, when the same is being kept or transported in accordance with the provisions of Chapter IV regulating transport of such explosives;
- (b) by any person of manufactured fireworks in any quantity not exceeding 25 kgs. provided that the fireworks—
- (i) are obtained and intended by such person for immediate use and not for sale and are possessed by him for a period not exceeding 14 days;
- (ii) are kept in a substantial receptacle which is exclusively appropriated to the keeping of explosives and is closed and secured so as to prevent unauthorised persons from having access to the explosives;
- (c) by any person for his own private use and not for sale of gunpowder not exceeding 5 kgs. in any State, other than Bihar, Kerala, Tamilnadu and West Bengal and of small

arm nitro-compound not exceeding 5 kgs. except in the State of Kerala or 20 metres of safety furies for blasting or of soaked liquid oxygen explosives in blast holds;

- (d) by Railway Administration 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 provided that the provisions of the Act and these rules are otherwise complied with;
- (e) 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 25 kgs. when carried in an aircraft and 50 kgs. when kept at an aerodrome; and
- (f) sale from a shop of amorces (an explosives of class 7 and division 2) in quantity not exceeding 12.5 kg.

Provided that in respect of clauses (b) and (c) the Central Government may prohibit the possession of any explosive or prescribe any conditions under which the explosives can be possessed without a licence when considered necessary for the security of public peace.

- (2) Notwithstanding anything contained in rule 113, no licenses shall be necessary for the sale of such explosives manufactured by the Armed Forces of the Union and Ordnance Factories or other establishment of such Forces as are sold or delivered to any person who is in possession of a valid licence issued under these rules for the class and quantity of explosives so sold or delivered.

**115. Possession in the licensed premises only.**—A person holding licence for possess of explosives granted under these rules shall store the explosives only in premises specified in the licence.

**116. Protection from lighting -**

- (1) Every magazine shall have attached thereto one or more efficient lighting conductors designed and erected in accordance with specification laid down in Indian Standard Specification No.2309 as amended from time to time.
- (2) The connections to various parts of earth resistance of the lighting 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 competent person holding a certificate of competency in this behalf from the State Electricity Department. A certificate shown the results of such test and the date of the last test shall be hung up in conspicuous place in the building.

**117. Precautions during thunderstorm.**—Whenever a thunderstorm appears to be imminent in the vicinity of a magazine or store house 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 closed and locked until the thunderstorm has ceased or the threat of its has passed.

**118. Building to be kept clean.—**

- (1) 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 girt.
- (2) A cemented trough at least 15 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 store house without dipping overshoes or feet in such a trough so as to remove any fit or dust.
- (3) Oiled cotton, oiled rags or oiled waste or any articles liable to spontaneous ignition shall not be taken into any magazine or store house used for storage of e explosives.

- 119. Maintenance of records.**—Every person holding a licence granted under these rules for possession, sale or use of explosives shall maintain records in the prescribed Forms and shall produce such records on demand to an inspecting officer.
- 120. Repairing of licensed magazine or store house.**—Before repairs are done to any magazine or store house or part thereof used for storage of explosives, that magazine or store house shall be cleaned by removal of all explosives and by thorough washing.
- 121. Prevention of introduction of hazardous articles.**—The licensee or his authorized agent for the time being in-charge of a magazine or store house shall prevent persons employed or engaged in or about the magazine or store house from taking hazardous articles or substances therein by maintaining an effective system of search and also providing them and making them wear, whenever they are in the magazine or store house, working clothes, without pockets, and with suitable shoes.
- 122. Premises to be kept locked.**—
- (1) Any 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.
  - (2) The keys of the licensed magazine shall, at all times be kept secured in licensee's own custody or of his authorized agent and shall be produced for opening the magazine or store house whenever so required by an inspecting officer. The name and address of the person with whom the keys will be kept shall be intimated to the licensing authority and the Controller of Explosives having jurisdiction.
- 123. Guards to be provided.**—
- (1) The licensee shall at his own expenses provide for round the clock safe custody of the magazine or store house a guard which shall be of such strength as the District Authority, may consider it to be sufficient.
  - (2) The licensee shall provide a shelter for the watchman on duty near the magazine or storehouse.
- 124. Repacking or opening of packages.**—
- (1) No repacking containing explosives shall be opened in magazine or storehouse.
  - (2) Repacking of explosives shall be done, where necessary in an approved open sided shed having smoothly finished cemented floor at a distance as approved by licensing authority.
- 125. 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 package. In case the outer package gets damaged so that the explosives contained therein cannot be stored or transported, such explosives shall be repacked only after the same are examined by a Controller of Explosives.
- 126. 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 Chief Controller may issue a permit, on payment of the prescribed fee to a holder of licence in Form 22 and such holders of licence in Form 21 who also have licence in Form 20 (for the class of explosives) for keeping of explosives in excess of the licensed quantity entered in the licence when he is satisfied that such excess storage is essential and unavoidable due to circumstances beyond the control of the licensee. The validity of such permit shall not exceed 30 days—
    - (i) the licensing authority shall not issue any permit for excess storage of explosives if the magazine or store house cannot observe the requisite safety distances for the total quantity entered in the licence plus the additional quantity of explosives so permitted;
    - (ii) no permit for storage of explosives in excess of the licensed capacity shall be granted if the specified distances on the licence around the magazine or store house or the floor space in the specified rooms for storage of each kind of explosives is not adequate for keeping of the total quantity of explosives, including the excess quantity applied for.

- (3) The licensing authority may refuse to grant a permit for excess storage of explosives if such excess storage is of a repeated nature.
- (4) No explosive in excess of the licensed quantity shall be stored in the magazine or storehouse unless a permit in this behalf is obtained from the licensing authority by a letter or telegram.
- 127. Permit for temporary possession of manufactured fireworks in excess of the licensed quantity.**—A permit may be granted by the licensing authority to a holder of licence in Form 24 to possess in addition to a quantity permitted by the licence, any quantity of manufactured fireworks so that the total quantity permitted to be stored does not exceed 125 kgs. for a period not exceeding 15 days at a time provided that—
- (a) no rule or condition of the licence other than that prescribing the maximum quantity of firework to be possess is infringed;
- (b) the applicant pays prescribed fees for excess storage.
- 128. Quantity of explosives to be purchased in a given period of time.**—A holder of a licence to possess, sell or use explosives shall purchase only such quantity of explosives in a given period as may be specified in the licence.

*PART II*  
**Magazines**

- 129. Storage in a magazine.**—An explosive if stored in a magazine shall be stored either in Mode ‘A’ or Mode ‘B’ magazine as specified in Schedule VII.
- 130. Restriction use of Mode ‘B’ magazine.**—Mode ‘B’ magazine shall be used for storage of explosives required for use for a temporary period for a specific purpose and such magazine shall not be used for sale of explosives.
- 131. Mound of 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.
- 132. Magazine or storehouse to be at ground level.**—A magazine or a storehouse shall be constructed at ground level only as a single storey building.

*PART III*  
**Store House**

- 133. Restrictions on storage.**—No explosives, other than fireworks and safety fuse, shall be stored in any storehouse.
- 134. Construction of store house.**—
- (1) A store house shall be well and substantially built of brick, stone or concrete and shall be so made and closed as to prevent unauthorised persons having access thereto and to secure it from danger of fire from without. Storehouse shall be well ventilated.
- (2) Where a store house forms part of a building, the other parts of which are used for any other purpose, it shall be separated therefrom by suitable fire proof partitions and the walls, floor, roof and doors shall be of fire proof materials. Such storehouse shall not be used for storage of more than 150 kgs. of fireworks or fifty thousand metres of safety fuse and shall be provided with independent entrance and such other measures as may, in the opinion of the licensing authority, be deemed necessary in the interest of prevention of fire or accident. Such store house shall be at a minimum distance of 15 metres from any other premises used for storage of explosives, flammable substances or other hazardous materials and shall not be used for sale of explosives:  
Provided that such storehouse may be used for sale of explosives manufactured within a licensed factory for manufacture of class 1 and/or class 7 explosives not exceeding 15 kgs. at a time, if such storehouse is situated within such factory.

*PART IV*

**Possession of Small Arms Nitro-Compound or Fireworks and Safety Fuse for Sale in Form 24**

**135. Construction of premises.—**

- (1) All explosives on the premises shall be kept in a brick; stone or concrete building which is closed and secured so as to prevent unauthorised person from having access thereto.
- (2) The premises shall have a floor area of minimum nine square metres.
- (3) The premises shall independent entrance and exit.
- (4) If the premises are situated in a building used for other purposes also, such premises shall not be situated under a staircase and shall be so located as not to obstruct any passage in from or to the building in case of fire or accident.
- (5) The premises shall be situated at ground level.

**136. 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.
- (3) A receptacle or package containing fireworks 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, dust free and spark proof receptacle.
- (5) A receptacle that contains fireworks shall—
  - (a) not to be used otherwise than as a container for fireworks;
  - (b) not to be opened except when fireworks are being placed in or taken from it;
  - (c) at all times to be kept clean and free from dust and grit;
  - (d) not have in it any matches including Bengal Matches; and
  - (e) not have in it any means of artificial lighting.

**137. Safety distances to be maintained.—**The premises licensed in Form 24 for storage and sale of small arms nitro-compound, fireworks or safety fuse shall be at a distance of minimum 15 metres from any such premises or any other premises used for storage of similar explosives, flammable or hazardous materials.

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

*PART V*

**Sale of Explosives**

**139. Explosives to be sold from licensed premises.—**No person shall sell explosives from any premises other than those licensed under these rules.

**140. Defacing of marking prohibited.—** No person who sells any explosives shall alter or deface any printing or marking on the explosives or the packages thereof.

**141. Restriction on sale of explosives.--**

- (1) No person shall sell any explosives to any person who is not authorized to possess such explosives under these rules.
- (2) No person shall sell, deliver or cause to be delivered to any person any explosive that has deteriorated or is defective.
- (3) A licensee selling explosives to a holder of licence in Form 23 shall endorse the transactions on such licence form.

**142. Explosives not to be exposed for sale.—**An explosive shall not be hawked, sold or exposed for sale upon any highway, street, public thoroughfare or public place.

- 143. Small packages to be clearly marked.**— 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:
- (1) name of the explosives;
  - (2) class and division according to Schedule I;
  - (3) quantity of explosives packed;
  - (4) licence number of the magazine from where the explosives were supplied and packed;
  - (5) name of the person who packed the explosives;
  - (6) date of packing;
  - (7) name of the consignee.

*PART VI*  
**Use of Explosives**

- 144. Competent persons to be employed.**—No person shall use explosives for blasting purposes unless he employs a qualified shot-firer holding a Shot-Firer's Permit granted under these rules:

Provided that for blasting operations in mines coming under the purview of the Mines Act, 1952, such shot-firer shall have qualifications prescribed in the regulations framed under the said Act.

- 145. Restriction on preparation of charges.**—

- (1) An explosive of one description shall not be converted into an explosive of another description and an explosive shall not be unmade or resolved into its ingredients.
- (2) The explosives of Class 2 or Class 3 shall be used in their original cart ridge packing and such cartridges shall not be cut to remove explosives for making cartridges of different sizes.
- (3) The licensee shall get prior approval of the authority, which granted his licence for preparation as is allowed by these rules.

- 146. 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.
- (2) Explosives shall not be taken to a point nearer than 50 metres from any site until such site is ready for charging.
- (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 taken.
- (5) The containers used for carrying explosives from regional 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. 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.

- 147. Explosives to be examined before use.**—

- (1) Explosives before use shall be visually examined for any visible defects and any defective explosives shall not be used.
- (2) Any explosives showing signs of deterioration of any kind should be reported immediately to the licensing authority and such explosive set-aside for examination by such authority.
- (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 experience persons. Where freezing is likely to occur only low freezing explosives shall be used.
- 148. 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 10 metres of the holes unless otherwise specified to the contrary by the licensing authority.
- (3) When charging is completed, any surplus explosives detonators and 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 prematurely in any hole.
- (4) The holes which have been charged with explosives shall not be left unattended till the blasting is completed.
- (5) Care shall be taken to ensure that fuse or wires connected to the detonators are not damaged during the placing of stemming material and tamping.
- 149. Suitable warning procedure to be maintained.—**The licensee or a competent person appointed by the licensee to be incharge 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.
- 150. 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 cms. And should then be made clean and bright for a minimum length of 2.5 cms. And the ends to be joined should be twisted together so as to have a positive metal contact.
- 151. 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.
- 152. Person incharge to be responsible.—**The licensee or a competent person employed by him to be incharge of blasting operations shall take all precautions against fire or accident involving explosives.
- 153. Blasting operations in mines.—**Nothing in rules 146, 148 to 151 shall apply for blasting operations in mines under the purview of the Mines Act, 1952, and such operations shall be carried out according to regulations framed under that Act.

## CHAPTER VII

### *Licences*

- 154. Application for licence.—**
- (1) A person desiring to obtain or renew or amend a licence under these rules shall submit an application in writing in the authority empowered to grant, renew or amend such a licence.
- (2) The application shall be signed by the licensee or applicant himself, as the case may be, or by a person authorized by him in writing in this behalf, and shall, in the latter case, be accompanied by such authorisation.
- (3) Every application for grant of a licence to manufacture explosive shall consist of following:
- (a) an application in Form 3;
- (b) plans of the proposed buildings and the site drawn to scale. These site plan should show full approach road net work to the factory/or premises;

- (c) a description of situation, character and construction of all mounds, buildings (production, non-production, stores, administrative, etc.) and safety distances observed by each building;
  - (d) description of process/work to be carried out in each building or part thereof;
  - (e) a description of plant and equipment and its location provided in each building or part thereof;
  - (f) a description of explosives and ingredients thereof, whether wholly or partially mixed that will be present in any building or machine at any one time;
  - (g) a description of maximum number of persons to be employed in each building;
  - (h) a description of any special constructions which the applicant may propose by reason of special circumstances, arising from the locations, situation or construction of any building or works, or the nature of process or otherwise;
  - (i) prescribed scrutiny fee;
  - (j) in case where applications is made in the name of a company, the names and addresses of Directors and partners and the name, address correspondence in respect of licence applied for. Any change in such names and addresses should be immediately communicated to the licensing authority.
- (4) Every application for grant of a licence in Form 21, Form 22 or Form 24 to possess explosives for sale or use shall consist of the following:
- (a) an application in Form 4 or Form 5, as the case may be ;
  - (b) plans drawn to scale of the proposed premises and of the site on which such premises are situated. The site plan should clearly show the complete approach road net work, nearby land marks, distances from nearby protected works;
  - (c) drawings of the premises and the mounds, if provided;
  - (d) in case where the application is made in the name of the company, the name and address of the Directors and partners and the name, address and specimen signatures of person authorized to sign correspondence in respect of licence applied for. Any change in such names and addresses should be immediately communicated to the licensing authority.
- (5) Application for grant of a licence in Form 23 shall consist of the following:
- (a) an application in Form 5 for licence as per preamble (b) and (c) or Form 6 for licence as per preamble (a) of the licence Form 23, as the case may be;
  - (b) plans showing site, location and construction details of the premises. The site plan should clearly show complete approach road one work surrounding areas, landmarks and safety distances observed.
- (6) Application for grant of a licence in Form 25 for a Road Van shall consist of the following:
- (a) an application in Form 7;
  - (b) drawings of the Road Van showing the complete details of construction and other ancillary equipment provided;
  - (c) prescribed scrutiny fee.
- (7) An application for grant of a licence in Form 26, Form 27, Form 28 or Form 29 shall consist of the following:
- (a) an application in Form 8, Form 10, Form 11 or Form 12 as the case may be;
  - (b) prescribed scrutiny fee.
- (8) An application for grant of a Shot-Firer's Permit shall consist of following:
- (a) an application in Form 9; and
  - (b) prescribed scrutiny fee.

**155. Grant of licence.—**

- (1) (a) Licence may be granted by the authorities specified in column (4) of Schedule IV in the Form specified in column (2) for the purpose specified in column (3) thereof on payment of fees specified under these rules:

Provided that no new licence in Forms 20,21 and 22 shall be granted unless the provisions of rule 156 have been complied with:

Provided further that the licensing authority may waive all or any of the provisions of rule 156, if—



- (i) 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 applicant;
  - (ii) the premises for which the new licence is required are situated within the same survey number, in which the applicant has an existing premises and a current valid licence for the same and the required safety distances are available within the safety distance of such existing premises.
- (b) No licence for manufacture of explosives other than liquid oxygen explosives shall be granted or renewed to a person for his factory not registered under the Factories Act, 1948 (63 of 1948) unless he executes a bond in Form 19 in favour of the President of India indemnifying person injured or dependants of deceased workers in the event of an accident in the factory [and amount of RS 10,000 for factories manufacturing up to 15 kg of gunpowder or fireworks at any one time], an amount of Rs.25, 000 for factories manufacturing up to 200 kgs. of gunpowder or fire works at any one time and Rs.50,000 in every other case:
- (2) (a) Licensing authority may grant a license for the period deemed necessary but not exceeding—
    - (i) six months to import explosives in Form 27 and to export explosives in Form 28;
    - (ii) fifteen days to possess explosives in Form 23 as specified therein;
    - (iii) one month for public display of fireworks in Form 29;
  - (b) Every other licence granted or renewed under these rules shall remain in force until the expiry of the financial year immediately following the financial year in which it was issued.
  - (c) Notwithstanding anything contained in clause (b), the licensing authority where it is satisfied that a licence is required for a specific work or festival which is not likely to last up to expiry of the financial year for which the licence is granted or renewed may grant or renew a licence for such period as is actually necessary:  
 Provided that the date so specified does not extend beyond the expiry of the financial year following the year in which the licence is granted or renewed.
- (3) An applicant for grant of a new licence in Form 24 or Form 29 may apply to the district authority for a certificate to the effect that there is no objection to the applicant receiving licence for the site proposed and the district authority shall, if he sees no objection, grant such certificate to applicant who shall forward that certificate to licensing authority with his application.
  - (4) The licensing authority may refer an application not accompanied by a certificate granted under sub-rule (3) to district authority for his observations.
  - (5) If the district authority, either on reference being made to him, or otherwise, intimates to the Chief Controller, as the case may be, that any licence which has been applied for should not in his opinion be granted, such licence shall not be issued without the sanction of the Central Government.
  - (6) No licence to import explosives shall be necessary in cases where the explosives imported—
    - (i) is not intended to be stored on the port of import but is intended to be transported direct to a territory not being part of India;
    - (ii) can be possessed without a licence under rule 114.
  - (7) An application for a licence to use explosives shall, if the operation are to be carried on within 100 metres of a railway line, obtain from the Railway authority concerned a certificate to the effect that there is no objection to the applicant receiving a licence for the site proposed and forward a certificate to the licensing authority with his application.
  - (8) (i) A cultivator applying for a licence in Form 23, shall obtain a certificate from agricultural fieldman or a Gram Sewak or any other local authority to the effect that—
    - (a) the certifying authority has inspected the site and is satisfied that the leveling of ground is necessary or removal of tree stumps is necessary or sinking of wells is necessary or sinking of wells has been partly completed, as the case may be;
    - (b) further work which is necessary is not possible without blasting and forward the certificate to the licensing authority with his application.

- (ii) A person other than a cultivator shall obtain a certificate from local authority having jurisdiction to the effect that the certifying authority has inspected the site and is satisfied that the work for which explosives are required is not possible without blasting.
- (9) An application of grant of a licence to manufacture Ammonium Nitrate Fuel Oil Explosives (ANFO) for own immediate use or to possess for own use liquid oxygen explosives at lights coming under the purview of the Mines Act, 1952, shall be accompanied by a certificate from the Chief Inspector of Mines that the site where such explosives are to be manufactured, possessed and used is under the Control of the applicant and comes under the purview of the Mines Act, 1952 and the applicant is authorized to use liquid oxygen explosives or ANFO explosives and conduct mining operations in the area proposed to be covered by the licence.
- 156. Procedure to be observed before a licence in Form 20, 21 or 22 is granted.—**
- (1) A licensing authority on receipt of application and the particulars is provided under sub-rule (3) or (4) of rule 154 shall scrutinise the documents and forward to the applicant a statement showing the distances in Form 17 which should in his opinion be kept clear in and around the factory or magazine premises or any part thereof and from other building and works. On receipt of the statement the applicant shall enter the exact distance which can actually be so kept clear, shall sign the statement and shall return it together with any representation which he may desire to make to the licensing authority.
- (2) After considering any representative made by the applicant under sub-rule (1) and after making such enquiries as deemed necessary, the licensing authority may further scrutinise the application and ask the applicant to make changes considered necessary.
- (3) After receiving correct documents as per requirements of these rules, the licensing authority shall refer the application to—
- (i) the district authority concerned together with a description of enquiries to be carried out, a draft licence and a statement in Form 18 showing the distances which he considers should be kept clear in and around the factory, magazine or store house;
  - (ii) any other authority for such enquiry as deemed necessary.
- (4) Upon receipt of the said application the district authority shall forthwith cause notice to be published of such application and of the time and place at which he will be prepared to hear it, and calling upon any person objecting to the establishment of the factory or magazine or store house on the proposed site to give notice of such objection to him and to the applicant of not less than seven clear days before the day fixed for hearing the application together his name, address and calling and a short statement of the grounds of his objections. The day of hearing the application shall be a day following as soon as practicable, after the expiration of the period of one month referred to in sub-rule (6).
- (5) Where the site of the proposed factory or magazine lies within 1.5 km. of the limits of the jurisdiction of any town planning municipal authority or port authority, the applicant shall prepare, for service on such authority, a notice of the application and of the said day of hearing.
- (6) The notice under sub-rule (4) shall be published and the notice under sub-rule (5) served at the expense of the applicant by the district authority not less than one month before the said day of hearing.
- (7) On the day fixed for the hearing or any day to which such hearing may be adjourned from time to time, the district authority shall hear any objection preferred in accordance with sub-rule (4) and by any authority referred to in sub-rule (5) and shall make such enquiry as he may deem necessary.
- (8) On completion of the enquiry the district authority shall forward the application, statement and plans to the licensing authority together with a report of the procedure followed by him and whether he has any objection to the applicant receiving a licence at the site proposed.
- (9) The district authority shall complete his enquiry under sub-rules (4) to (7) and forward the report to the licensing authority as expeditiously as by the licensing authority.

- (10) If the district authority objects to the grant of the licence on any of the grounds specified in sub-rule (3), no licensee shall be granted by the licensing authority except with the sanction of the Central Government.
- (11) Notwithstanding anything contained in this rule, provisions of sub-rules (3) to (10) except rule 3(ii) shall not apply in case of an application or to the manufacture of Ammonium Nitrate Fuel Oil explosives (ANFO) at site of use coming under the purview of the Mines Act, 1952.
- 157. Procedure to be followed for grant of a licence in Form 22 to possess small quantity of explosives for own use**—Notwithstanding anything contained in sub-rules (3) to (7) of rule 156, where the licensing authority is the Chief Controller or a Controller and where the quantity of explosives proposed to the applicant may apply to the district authority together with an application in Form 5, statement in Form 17 and the necessary plans for the grant of a licence for the site proposed and the district authority shall, if he sees no objection after conducting enquiries as required under these rules, grant such certificate to the applicant who may forward it to the licensing authority together with his application.
- 158. Procedure to be observed for grant of a shot-firer's permit -**
- (1) The Chief Controller or any authority authorised by him in this behalf shall conduct such examination and enquiries as deemed necessary before granting a permit to any shot-firer:  
Provided that no examination of the shot-firer may be necessary if the Chief Controller is satisfied that applicant possess requisite qualifications and experience.
- (2) The applicant shall pay prescribed fees for the examination, if any, under sub-rule (1).
- 159. Procedure on grant of No Objection Certificate by the district authority.**—The licensing authority on receipt of No Objection Certificate from the district authority for grant of a licence may make such other enquiries as deemed necessary and take further action for grant of licence:  
Provided that if the licensing authority does not receive the No Objection Certificate under rule 156(8) within the time limit or any extension thereof, such authority may advise the applicant accordingly and take further action as deemed necessary.
- 160. Refusal of No Objection Certificate** —The authority refusing to grant No Objection Certificate as required under rule 156, shall record in writing its reasons for such refusal and communicate such reasons and facts of the case to the licensing authority. The reasons for not issuing No Objection Certificate may be communicated to the applicant if demanded, unless in the opinion of the licensing authority such reasons cannot be divulged in the public interest.
- 161. Procedure on grant of a licence for a magazine, store house or to manufacture explosives**—
- (1) Two copies of every licence granted by the Chief Controller or the Controller shall be forwarded to the district authority and in case the licensing authority is the Chief Controller, the original licence shall be forwarded to the Controller in whose jurisdiction the premises are situated.
- (2) If the Controller after inspection, is satisfied that all the requirements of these rules and the conditions of the licence have been complied with, he shall further endorse the licence, but unless and until so endorsed the licence shall not come into force:  
Provided that when a licence cannot be endorsed forthwith it shall come into force from such date as the licensing authority may order in writing.
- (3) If the Controller of Explosives decides not to endorse a licence, he shall immediately return the licence to the licensing authority together with a statement of his reasons for not endorsing it.
- (4) On receipt of statement referred to in sub-rule (3), the licensing authority after making such enquiry, if any, as he may consider necessary communicate his decision to the applicant and the district authority.
- 162. Procedure on grant of a licence to possess and sell explosives, to transport explosives or to possess explosives for own use by cultivators or other persons.**—

- (1) A copy of every licence granted to possess and sell explosives in Form 24 or to transport explosives in Form 26 shall be forwarded to the district authority concerned.
- (2) The district authority shall forward a copy of every licence granted by him in Form 23 or Form 24 to the Chief Controller having jurisdiction over the area.

**163. Particulars of licence.**—Every licence granted under these rules shall be held subject to the observance of these rules and the conditions endorsed on it and shall contain all particulars which are contained in the Form prescribed for it by these rules.

**164. Amendment of licence.**—

- (1) Any licence granted under these rules may be amended by the authority empowered to grant the licence provided that amendment shall not be 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 therefor;
  - (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.

**165. Renewal of licence.**—

- (1) 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 authorized by the Chief Controller in this behalf: Provided that a licence which has been granted by the district authority may be renewed without any alteration by a Sub-Divisional Magistrate or an Executive Magistrate or a Taluka Magistrate duly authorized by the district authority in the behalf.
- (2) The Controller authorized by the Chief Controller under sub-rule (1) may, and when so required by the Chief Controller, shall require the licensee to follow the procedure laid down under sub-rule (1) of the rule 156 before renewing licence in Form 20 or Form 21 or Form 22.
- (3) 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 at least 30 days before the date on which the licence expires, and if the application is so made, 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.
- (4) Every application under sub-rule (3) for renewal of the licence shall be accompanied by the following documents:
  - (i) application in Form 13;
  - (ii) the original licence together with its enclosures and approved plans, Schedules and Forms;
  - (iii) prescribed renewal fee.
- (5) The same fee shall be charged for the renewal of a licence for each year as for grant thereof: Provided that if the application for renewal is not received within the time specified in sub-rule (3), the licence shall be renewed only on payment of double fee as ordinarily payable for the license. Provided further that if the renewal application together with complete documents specified under sub-rule (4) is received by the licensing authority after the date of expiry but not later than 30 days 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 double the fee ordinarily payable for the licence.
- (6) 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 (5), if payable, shall be paid only for the first financial year of renewal.
  - (7) Every licence granted under these rules other than a licence granted for a specified period shall be renewable for two years where there has been no contravention of the Act or the rules framed thereunder or of any condition of the licence so renewed.
  - (8) 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.
  - (9) No licence shall be renewed if the application for renewal is received by the licensing authority after 30 days of the date of its expiry.
  - (10) When a licence is renewed by the Chief Controller a Controller, an intimation to that effect shall be sent to the district authority concerned and when a licence is renewed by the district authority, intimation to that effect shall be sent to the Controller having jurisdiction.

**166. Refusal to amend or renew a licence.—**

- (1) The licensing authority refusing to amend or renew a licence shall record its 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 rules framed thereunder.
- (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.
- (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 upto the date from which renewal thereof is refused.

**167. Suspension and revocation of licence.—**

- (1) An order of suspension or revocation of a licence shall take effect from the date specified therein and shall be deemed to have been served if sent by post to the address of the licensee entered in the licence.
- (2) The suspension of a licence shall not debar the holder of the licence from applying for its renewal in accordance with the provisions of rule 165.

**168. Procedure on expiration, suspension or revocation of licence.—**

- (1) A licensee on the expiration, suspension or revocation of his licence forthwith give notice to the licensing authority of the description and quantity of explosives in his possession and shall comply with any directions which the licensing authority may give in regard to their disposal.
- (2) The licensing authority may grant for a term not exceeding three months from the date of expiration, suspension or revocation, as the case may be, a temporary licence for the possession and sale of the explosives actually held at the time of the issue of the temporary licence.
- (3) The fee chargeable for a licence granted under sub-rule (2) shall bear the same proportion to the fee charged on the expired or revoked licence as the period covered by the temporary licence bears to a full year.

**169. Appeals.—**

- (1) An appeal against an order of licensing authority Refusing to grant or renew a licence or suspending or revoking a licence or varying the condition of a licence shall lie—
  - (i) if the order is passed by the Chief Controller to the Central Government;
  - (ii) if the order is passed by the Controller to the Chief Controller.
- (2) Every appeal shall be preferred in accordance with the provisions of the Act and shall be presented within 30 days of the date of the communication of such order.
- (3) Every appeal shall be accompanied by fees specified in rules 176 and 177 and the fees shall be refunded to the appellant if the appeal is upheld by the appellate authority.
- (4) Appeal against the order of the district authority refusing grant of No Objection Certificate shall lie with the authority immediately superior to such authority. Such an appeal shall be filed in accordance with the procedure laid down by such appellate authority.

**170. Procedure to be followed by the appellate authority.** — 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 final orders.

**171. Procedure on death or disability of licence-**

- (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 licensee's death or his mental incapability or his insolvency or disability.
- (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—
  - (a) the date of death, insolvency, mental incapability or other disability; and
  - (b) the stock of all explosives kept at the licensed premises and shall await the directions of the licensing authority with regard to the disposal of such explosives.

**172. Loss of licence.**—Where a licence granted under these rules or an authenticated copy thereof granted under rule 173 is lost or accidentally destroyed, a duplicate may be granted on payment of fees, specified in rules 176 and 177.

**173. Procedure of licence or pass on demand.**—

- (1) Every person holding or acting under a licence granted under these rules shall, when called upon to do so by any officer specified in sub-rule (1) of rule 179, produce it, or an authenticated copy of it, at such time and place as may be directed by such officer.
- (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 officer specified in sub-rule (1) of rule 179.
- (3) Copies of any licence may, for the purposes of this rule, be authenticated free of charge by the authority, which granted the licence.

**174. 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 effect the powers of executive control of the Chief Controller over the officers subordinate to him.

## CHAPTER VIII

### Fees

**175. Procedure for payment of fees.**—The fees payable under these rules shall be paid in the following manner:

- (1) Fees payable to Chief Controller shall be paid by a crossed Postal Order or a Crossed Bank Draft drawn in favour of Chief Controller of Explosives, Nagpur. The Bank should

- be drawn on any nationalised bank and payable at Nagpur. Fees upto Rs.100 in each case, may also be paid in cash at the office of the Chief Controller.
- (2) Fees payable to a Controller of Explosives shall be paid by a Crossed Postal Order or a Crossed Bank Draft drawn In favour of the Controller of Explosives to whom the payment is made. The Bank Drafts shall be on any nationalized bank payable at the station where office of Controller to whom payment is to be made is located. Fees upto Rs.100 in each case, may also be paid in cash at the office of Controller concerned.
- (3) Fees payable to District Authority or any other authority under these rules shall be paid in such manner as may be specified by that authority.

**176. Fees other than licence fees.**—The following fees other than licence fees shall be payable under these rules:

(1) For inclusion of any explosive in the authorised list of explosives (see rule 6)	
(i) Scrutiny fee for each proposal.	Rs. 50.00
(ii) Testing fee for each sample explosives.	Rs.200.00
(2) To test each sample of imported explosives (see rule 28)	Rs. 10.00
(3) (i) for testing each sample to issue certificate of safety in Form 1 (see rule 34)	Rs. 10.00
(ii) to renew each certificate issued under (i) above without fresh test.	Rs. 5.00
(iii) for testing each sample to renew certificate issued under (i) above after fresh test.	Rs.100.00
(4) Scrutiny fee for approval of manufacturing process for any new explosives (see rule 89).	Rs.200.00
(5) For storage of explosives in excess of licensed capacity at any one time (see rule 126)	Rs.200 for first 15 days and Rs.100.00 for every additional 5 days or part thereof
(6) For permit for temporary possession of fireworks in excess of licensed quantity (see rule 127)	Rs. 50.00
(7) Scrutiny fee for application for grant of a licence to manufacture (see sub-rule (3) or rule 154 -	
(i) any explosives other than those mentioned under (ii), (iii), (iv) and (v) below	Rs.200.00
(ii) site mixed ammonium nitrate and fuel oil explosives	Rs. 50.00
(iii) Liquid Oxygen explosive	Rs. 50.00
(iv) (a) Fireworks and/or Gunpowder in a quantity not exceeding 12.5 Kgs. at a time.	Rs. 20.00
(b) Fireworks and/or Gunpowder in a quantity exceeding 12.5 Kgs. but not exceeding 200 Kgs. at a time.	Rs.100.00
(c) Fireworks and/or Gunpowder in a quantity exceeding 200 Kgs. at a time	Rs.200.00
(v) Coloured matches	Rs.200.00
(8) Scrutiny fee for application for grant of each licence to	Rs.100.00

import or export explosives (see sub-rule (7) of rule 154)	
(9) Scrutiny fee for application for grant of each licence to transport explosives (see sub-rule (7) of rule 154)	Rs. 20.00
(10) Scrutiny fee for each application for grant of a licence for a road van (see sub-rule (8) of rule 154)	Rs. 50.00
(11) Scrutiny fee for each application for grant of a Shot-Firer's Permit (see sub-rule (9) of rule 154)	Rs. 5.00
(12) For examination for grant of Shot-Firer's Permit (see rule 158)	Rs. 20.00
(13) (a) Scrutiny fee for application for amendment of each licence (see rule 164) -	
(i) to manufacture any explosives other than fireworks and/or Gunpowder in a quantity not exceeding 12.5 Kgs. at a time;	Rs. 50.00
(ii) to manufacture fireworks and/or Gunpowder in a quantity not exceeding 12.5 Kgs. at a time;	Rs. 5.00
(iii) in any other Form other than Form 23;	Rs. 20.00
(iv) in Form 23.	Rs. 5.00 (free of charge to cultivators)
(b) Amendment fee for each licence (see rule 164) -	
(i) other than a licence in Form 23 or a licence in Form 20 to manufacture fireworks and/or Gunpowder in a quantity not exceeding 12.5 Kgs. at a time;	Rs. 30.00
(ii) In form 23;	Rs. 5.00 (free of charge to cultivators)
(iii) to manufacture fireworks and/or Gunpowder in a quantity not exceeding 12.5 Kgs. at a time.	Rs. 5.00
(c) Scrutiny fee for a proposal for any change in the manufacturing process of explosives.	Rs. 50.00
(d) Scrutiny fee for a proposal for any change in the composition of an authorised explosive.	Rs.100.00
(14) For appeal against an order of a licensing authority (see rules 169 and 178) -	
(i) if such appeal is preferred to Central Government or Chief Controller.	Rs.100.00
(ii) if such appeal is preferred to immediate official superior to district authority.	Free of charge
(15) For issue of a duplicate copy of licence (see rule 172).	Rs. 50.00
(16) For approval of -	
(a) a packing box or container.	Rs.500.00
(b) a new design of equipment, machinery or composite vehicle used for manufacture and transport of explosives.	Rs.500.00
(c) a magazine 'Mode B'	Rs.500.00
(17) Lighting Conductor testing fee for each test.	Rs. 50.00



**177. Licence Fee –** (1) The following fees shall be payable per year for each licence issued under these rules:

(i) to manufacture explosives	
(a) of classes 2,3,4 and 5 other than site mixed Ammonium Nitrate Fuel Oil explosive (Form 20).	Rs.200.00 per 1000 tonnes or part thereof of the installed annual plant capacity for each explosive subject to a maximum of Rs.5000.00.
(b) of class 6 (Form 20).	Rs.250.00 per one million metres/ numbers or part thereof of the installed annual plant capacity of each explosives subject to a maximum of Rs.5000.00
(c) of class 1 and/or class 7 (Form 20).	
(i) in a quantity not exceeding 15 Kgs. at a time;	Rs. 20.00
(ii) in a quantity exceeding 15 Kgs. but not exceeding 200 Kgs. at a time;	Rs.200.00
(iii) in quantities exceeding 200 Kgs. at a time	Rs.200.00 for the first 200 Kgs. plus Rs.150.00 for every additional 50 Kgs. or part thereof at a time subject to a maximum of Rs.5000.00
(d) of class 8	Rs.1000.00
(e) of sod. Ammonium Nitrate Oil explosive.	Rs.200.00
(ii) to possess and sell explosives (Licence Forms other than Form 24).	(a)Rs.150.00 for every 1000 Kgs. or part thereof of the licensed capacity of each explosive of class 1,2,3,4,5,6,7 or 8 subject to a maximum of Rs.5000.00 (b)Rs.50.00 for every 10000 metres/ numbers of each explosives of class 6 subject to a maximum of Rs.5000.00
(iii) to possess explosives for use (Licence	(a) Rs.100.00 for every

Forms other than Forms 23 and 29).	1000 Kgs or part thereof of the licensed capacity of each explosives of class 1,2,3,4,5,7 or 8 subject to a maximum of Rs.5000.00, and (b) Rs.40.00 for every 10000 metres/ numbers or part thereof of each explosive of class 6 subject to a maximum of Rs.5000.00
(iv) to possess and sell explosives (Form 24)	Rs.150.00
(v) to transport explosives (Form 26).	Rs.150.00
(vi) for a road van (Form 25)	Rs.300.00
(2) The following fees shall be payable for each licence to -	
(i) import explosives (Form 27)	Rs.250.00
(ii) export explosives (Form 28)	Rs.150.00
(iii) possess and use public Display fireworks (Form 29)	Rs.100.00
(iv) possess for own use explosives (Form 23).	Rs.10.00 (free of charge to cultivators)

**CHAPTER IX**  
**Power of Officers and Penalties**

**178. 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 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 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 Chief Controller within the time specified in the order and the order to the Chief Controller such appeal shall be final.
- (3) Every appeal preferred under sub-rule (2) shall be in writing and shall be accompanied by a copy of the order appealed against.
- (4) If the occupier or owner fails to comply with an order made under sub-rule(1) within the time specified in it or where an appeal is preferred under sub-rule (2), fails to comply with the order of the Chief Controller thereon within the time fixed in such order, he shall be deemed to have committed a breach of this rule.

**179. Powers of search and seizure –**

- (1) Any officer specified in column (1) of the Table below may within the areas specified in the corresponding entry in column (2) of that Table -

- (a) enter, inspect and examine any place, aircraft, carriage or vessel 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 free of charge; and
- (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 contravened:

**TABLE**

Officers (1)	Areas (2)
The Chief Controller and Controller of Explosives, All District Magistrates	All parts of India Their respective Districts
All Executive Magistrates Subordinate to the District Magistrate	Their respective jurisdiction
All Commissioners of Police and Police Officers of rank not below that of a Sub-Inspector of Police	The area over which their authority extends
The Chief Inspector of Mines and officers subordinate to him	The respective areas over which their authority extends

- (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 authority 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 Chief Controller or Controller and receipt of instructions from him as to their disposal.

**180. Power to destroy explosives and ingredients thereof –**

- (1) The Chief Controller or a Controller –
  - (a) shall destroy any explosive, whenever found –
    - (i) the manufacture, possession or import of which has been prohibited absolutely under Section 6 of the Act; or
    - (ii) If the explosive belongs to the 5<sup>th</sup> (Fulminate) class and is being manufactured, possessed, used, sold, transported, exported or imported illegally without a licence under these rules;
  - (b) May destroy or render harmless any other explosives 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 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, 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, store house or place of the owner of the explosives.
- 181. Procedure on reports of infringement** – Whenever any report is made to the district authority by the Chief Controller or Controller or Controller of an infringement of the act or of these Rules district authority shall take immediate action and shall inform the Chief Controller or the Controller, as the case may be, of the action taken by him on such report.

## CHAPTER X

### Accidents and Enquiries

- 182. Notice of accident** – The notice of an accident required to be given under Section 8(1) of the Act shall be given forthwith.-
- (a) to the Chief Controller of Explosives by Express telegram (Telegraphic address – EXPLOSIVES, NAGPUR) followed within 24 hours by a letter giving particulars of the occurrence;
  - (b) Controller of Explosives in whose jurisdiction accident has taken place; and
  - (c) To the Officer-in-charge of the nearest Police Station;
- Pending the visit of the Chief Controller, or his representative or instruction are received from the Chief Controller or his representative that he does not wish any further investigation or inquiry to be made, all wreckage and debris shall be left untouched except in so far as its 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.
- 183. Procedure at courts of inquiry.**—
- (1) The Chief Controller shall arrange with the Heads of 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.
- 184. Inquiry into accident.**—
- (1) Whenever a District Magistrate, a Commissioner of Police or a Magistrate subordinate to a District Magistrate holds an inquiry under Section 9(1) 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 the Magistrate has received information from the Chief Controller that officer does not wish to send a representative.
  - (2) The Magistrate shall, at least 21 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 Magistrate, before the adjournment, may, take evidence to identify any 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 Magistrate on points of law.

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

**185. Inquiry into more serious accidents.—**

- (1) Whenever an inquiry is held under Section 9-A 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.
- (2) 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 21 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.
- (3) Person attending as witnesses before this Court shall be allowed such expenses as are payable to witnesses attending before a civil court subordinate to the High Court having jurisdiction in the place where the inquiry is held. In case of dispute as to the amount to be allowed the question shall be referred to the local magistrate who, on request by the Court shall ascertain and certify the proper amount of such expense.
- (4) All expenses incurred in relation to an inquiry or investigation under this rule shall be deemed to part of the expenses of the Department of Explosives.

**186. Repeal and savings.—**

- (1) The Explosives Rules, 1940, are hereby repealed.
- (2) Notwithstanding such repeal—
- (i) all licenses 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; and
- (ii) 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 or under this Act or these rules.

**SCHEDULE I  
CLASSES OF EXPLOSIVES**

*(See Rule 3)*

Explosives are divided into 8 classes as follows:

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

### **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 a perchlorate 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 other liquid nitro-compound that is such explosives as Ballistite, Blasting Gelatine, Cordite, Dynamite, Gelatine Dynamite, Gelignite, etc.
- (4) Division 2 comprising any nitro-compound, which is not comprised in Division 1 that is explosives such as Ammonal, E.C. Sporting Powder, gun-cotton, Picric Acid, Smokeless Dimond, Trinitro-toluol (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 explosion, and from its great instability (that is to say, 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 silver 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, Diazobenol 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 for 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 gms 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.]<sup>20</sup>
- (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 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 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

(See rule 8)

- (1) In this Schedule unless the context otherwise requires—  
 The expression “outer package” means a box, barrel, case or cylinder of wood, metal, 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;  
 The expression “inner package” means a substantial case, bag, canister, or other receptacle, made and closed so as to prevent any explosive from escaping;  
 Wherever an explosive is distinguished as belonging to a particular class or division of a class, the reference is to the classification specified in Schedule 1;  
 the expression “propellant” means an authorised explosive of the 3<sup>rd</sup> (Nitro Compound) Class adapted and intended exclusively for use as a propelling charge in cannon or small arms.
- (2) The interior of every package shall be free from grit and otherwise clean./
- (3) Save as provided in the Table appended to this Schedule there shall be no iron or steel in the construction of any package unless the same is covered with suitable material so as effectively to prevent the exposure of such iron or steel.
- (4) A package when actually used for the packing of one explosive shall not be used for the packing of any other explosive or of any other article or substance:  
 Provided that nothing in this clause shall be deemed to prohibit—  
 (a) the packing in the same outer package of inner packages containing a propellant together with inner packages containing gunpowder or another propellant; or  
 (b) the packing in the same package of any article which is not of inflammable or explosive nature; or liable to cause fire or explosion together with an explosive of the 1<sup>st</sup> Division of the 6<sup>th</sup> (Amendment) Class.
- (5) Nothing in this Schedule shall be deemed to prohibit the use of an additional package, whether inner or outer, of a character not expressly prohibited in writing by the Chief Controller.
- (6) Use of metal bands wires on packages is prohibited unless specifically authorised by the Chief Controller in relation to packing of any explosives.
- (7) Material of which the packages and their closures are made must not be liable to attack by the contents and from harmful or dangerous compounds therewith.
- (8) Packages must be sufficiently rigid and strong in all their parts to prevent any loosening during transport and to meet normal requirements of such transport. Solid substances shall be firmly secured in their packages, and inner packages shall be firmly secured in outer packages. Unless otherwise specified inner packages may be enclosed in outer packages, either singly or in groups.
- (9) Cushioning material, if used, shall be suited to the nature of the contents of the package.
- (10) An explosive that is not authorised explosive shall be packed in such a manner as may be directed by the Chief Controller with reference to such explosive.
- (11) (a) The outer package shall be used only once for packing and transport of explosives.  
 (b) When the explosives contained in outer package are removed therefrom, the outer package shall be destroyed or disposed of in such a manner that it cannot be re-used for any purpose.
- (12) Where metal boxes are used, they shall be fitted with closures or safety devices yielding when the internal pressure reaches a value not greater than 3 kg/cm<sup>2</sup>. Such closures or safety devices shall not impair the strength of metal boxes. Boxes made of zinc sheet or aluminium shall be completely lined with wood or fibreboard.

TABEL

Item No.	Class	Method of packing	Amounts in any one outer package	Amount in any one inner package
(1)	(2)	(3)	(4)	(5)
1	Class 1	When the quantity in any one	50 Kgs.	2.5 Kgs.



		consignment does not exceed 2.5 kg., a single outer package. When the quantity exceeds 2.5 Kg. 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 cushioning material.	Provided that and propellants together the not exceed. 25 Kgs.	where gun are packed amount shall 2.5 Kgs.
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 Kgs.	2.5 Kgs.
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 or other soft metal or coated with the same may be used for securing the outer package, and (2) wire stiching 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.	25 Kgs.	2.5 Kgs.
5.	Class 3 Division 1 propellants.	As for Class 1	25 Kgs.	25 Kgs.
6	Class 3 Division 2 Other than Picric Acid, Wet Gun Cotton Penta Erythritol Tetranitrate RDX, Terinitro Resorcinol (Styphinic Acid).	As for Class 1	25 Kgs.	25 Kgs.
7.	Picric Acid	As for Class 1	Unlimited	Unlimited
8.	Gun Cotton so wetted with water as to be absolutely un-	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	Unlimited	Unlimited

	inflammable	loss of moisture.		
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 Kgs. (dry basis)	11.25 Kgs. (dry basis)
10.	RDX	As for PETN	22.5 Kgs. (dry basis)	11.25 Kgs. (dry basis)
11.	Tri- Nitro-Resorcinol (Styphnic Acid)	As for Class 1, provided that Trinitro-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 Kgs. of wet explosive	25 Kgs. of wet explosive
12.	Class 4 Division 1	As for Class 3, Division 1, other than propellants.	25 Kgs.	2.5 Kgs.
13.	Class 4 Division 2	As for Class 1	25 Kgs.	2.5 Kgs.
14.	Class 5	The explosives shall be packed wet containing not 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.	100 Kgs.	12.5 Kgs.
15.	Class 6, Division 1, other than Pinfire	A single outer package. Provided that clause (3) of this Schedule shall not apply to explosives of this	Unlimited	

	cartridges for pistols.	Division: Provided also that bulletted cartridges of a calibre exceeding 1.27 cm. 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.		
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. (b) Exceeding 50 number—In an inner and outer package, the cartridges being packed in inner packages with millboards as above required.	2500 in number	50 in number
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 singel 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 bulletted cartridges of a calibre exceeding 1.27 cm. And belonging to this Divison shall be packed in such a manner that the point of any bullet cannot come in contact with the cap of another cartridge. (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	10,000 in number	1,000 in number

		<p>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.</p> <p>(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 therefrom, and such case shall be placed inside an outer package in such manner and so secured as to leave a clear space of not less than 7.5 cm. 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.</p> <p>(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.</p>		
20.	Electric Detonators	As for Class 1, provided that where the number in any other package exceeds 3,000 such outer packages shall be provided with handles or other contrivance, by means of which it can be safely and conveniently carried.	5,000 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 Kgs.	0.5 Kgs.
22.	Class 7, Division 2	Single outer package, provided that clause (3) of this Schedule shall not	50 Kgs.	--

		apply to explosives of this class and Division.		
<sup>22</sup> [22(a)	Class 7 Division 3	Single outer package	25 Kgs.	--
22(b)	Class 7, Division 4	Single outer package provided that clause (3) of this Schedule shall not apply.]	50 Kgs.	--
23.	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	--	--

**SCHEDULE III**  
**METHODS OF TESTING**  
(See Rule 21)

An explosive of the 3<sup>rd</sup> (Nitro-compound) Class or of the 4<sup>th</sup> (Chlorate-mixture) Class shall comply with the tests set forth in this Schedule as applicable to such explosive.

**THE HEAT TEST AS APPLIED TO EXPLOSIVES**

**1. Apparatus and Materials employed**

Specification	Pattern No.	Article	
A		Acid, Acetic 56.8 cc. 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 cc. (for glycerine and water mixture)	1
	VI	Bottle, glass-stoppered, brown glass, 28.4 cc (for standard tint papers)	1
	VII	Bottle, glass-stoppered, brown glass, 56.8 cc (for test papers)	1
	VIII	Brush, cleaning	2
	IX	Brush, cleaning, test tube	1
	X	Burner, gas, Argand, and screen	1
	XI	Caps, for test tubes	A sufficient supply
	XII	Chalk, French	A sufficient supply
	XIII	Forceps, lifting, heat test papers	1
	XIV	Funnel, aluminium	1
	XV	Funnel, glass	1
		Glycerine 28.4 cc 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	A sufficient
		Papers, filter, 5.5 cm.	-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	1

	piercing		
XXIV	Rings, rubber, test tube	A sufficient	
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	A sufficient supply	
XXXV	Thermometers, glass, and wood case		2
XXXVI	Trays, aluminium		6
XXXVII	Tray, cordite knife		1
XXXVIII	Tubes, heat test	A sufficient supply	
XXXIX	Tubes, standard tint paper		1
XL	Tubing, rubber, Argand gas burner	A 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 A—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  $\text{CH}_3\text{COOH}$ . When 1 cc. Of N/10 potassium permanganate solution is added to 100 c.c. of the acetic acid maintained at  $15^\circ\text{C}$ , the distinctive colour is to remain for not 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 B—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 cc. Will weight 23.5 +1.0 gramme. This to be determined as follows:

A glass funnel, the stem of which is 11 cm. In length tapering, internally from 8 mm. at the top to 5 mm. at the end, is to be clamped vertically above a 50 cc cylinder so that the mouth of the latter is 7 cm. Below the lowest point of the funnel. The cylinder is to be 2.5 cm. 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 centimeter.

The French chalk is not to contain more than 0.1 per cent of soluble alkali salts calculated as  $\text{CaCO}_3$ . This is to be determined as follows:

10 grams of the chalk are to be boiled with 250 cc. 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  $100^\circ\text{C}$  till constant in weight, and then exposed under a bell-jar to saturated atmosphere at  $15^\circ\text{C}$  to  $20^\circ\text{C}$  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  $65\text{--}70^\circ\text{C}$ , and exposed to a saturated atmosphere for 24 hours. It is to be kept in a well-stoppered bottle.

#### SPECIFICATION C-GLYCERINE

The glycerine is to comply with the latest edition of British Pharmacopoeia Specification in all respects.

#### SPECIFICATION D—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  $2\pm 0.5$  mm.

The sheets, when measured with a Ciceri smith's patent fixed pressure micrometer, are to have a thickness of  $1.8\pm 0.2$  mm.

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  $100^\circ\text{C}$  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 ( $\text{Cu}_2\text{O}$ ).

It is to be supplied in sheets 50 cm. long by 15 cm. 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. cm. in diameter, each 100 papers being packed separately.

#### SPECIFICATION E—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  $18.5 \pm 0.75$  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.

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#### SPECIFICATION F—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  $\pm 0.05$  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 mm. 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 tube 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 mm. of the sample is to be removed with the spatula and rejected. A piece 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 pieces about 3.175 mm. long by means of the cordite knife, 12.7 mm. 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 mm. 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 thicknesses of filter paper are to be laid on top of one another. Sufficient 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 thicknesses 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 aluminium 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 centimeters. 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 thicknesses 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 thicknesses 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 mm. long by means of the cordite knife 12.7 mm. 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 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 mm. 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.

**(iii) The explosives in the form of grants for small arms—**

- (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.

- (a) The water bath is to be fitted up and is to be levelled and filled with water upto 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 is 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 cm. 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 be 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-I.

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<sup>0</sup> C. The tubes are to be allowed to cool to the ordinary temperature before being used again.

TABLE I

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	<sup>0</sup> C 71.1 (160 <sup>0</sup> F)	3.2 grammes	Min 7

		water.  Blating Gelatine, and Analogous preparations.	71.1 (160 <sup>0</sup> F)	3.2 grammes +6.5 grammes French chalk	10
		Cordite, Ballistic and other propellant of Class3, Division 1.	71.1 (160 <sup>0</sup> F)	1.6 grammes	10
3	2	Nitro-cellulose, pulp, compressed Gun cotton.	76.7 (170 <sup>0</sup> F)	31.3 gram mes	10
		Nitro-cellulose Propellants	76.7 (170 <sup>0</sup> F)	1.3 grammes	10

#### 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 29.4<sup>0</sup> C to 32.2<sup>0</sup> 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.

There shall be no separation from the general mass of the blasting gelatine or gelatine dynamite of any introglycerine or liquid nitro-compound under nay conditions of storage, transport or use, or when the material is subjected three times in succession to alternate freezing and thawing or when subjected to the liquefaction test herein before described.

#### 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 71.1<sup>0</sup> C(160<sup>0</sup> 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<sup>0</sup> C and 122.8<sup>0</sup> C.

#### VI- Testing Chlorate mixtures

The material must not be too sensitive and must show no tendency to increase in sensitivness 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 exceed 60<sup>0</sup> 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<sup>0</sup> 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<sup>0</sup> C and 142<sup>0</sup> C.
- (4) Insoluble matter—The total insoluble matter in acetone should 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<sub>2</sub> should not exceed 0.01%.
- (7) Alkalinity—The alkalinity, calculated as Na<sub>2</sub>CO<sub>3</sub>, 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 I 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 c.c. capacity and 100 c.c. 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 cm broad by 2 cm 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 mm. not more than 1 mm.

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 II 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, 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 weighed out.

### Preparation of the Dipping Solution:

220 c.c. 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 grammes of the starch, prepared as above, are to be suspended in 30 c.c. of distilled water and the mixture poured into the 220 c.c. 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 c.c. 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 syphoned off and used immediately for dipping the paper.

If it is desired to dip a large bath 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 cm. 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 to be suspended by the undipped 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 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 cm. below the edge of the undipped portion, 0.5 cm. strips are also cut from the other three edges. The sheets are then to be stored in ambercoloured 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 cm. by 2 cm., 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	A supply	
3.	Annulus aluminium		2
4.	Cap, light-tightpaste board		1
5.	Cylinder, glass, with rubber stopper		1
6.	Cylinder, measuring 100 c.c.		1
7.	Ferrous ammonium sulphate	A supply	
8.	Jar, cylindrical, brown glass		1
9.	Pipette 10 c.c.		1
10.	Rod, stirring, glass		1
11.	Sodium nitrite solution containing 1.7 gm. In 1 litre	A supply	
12.	Stopper, rubber, with 4 platinum hooks		1

##### Application of the Test :

The solution are to be brought to 15<sup>0</sup> C before use. 2 grammes of ferrous ammonium sulphate are weighed out and placed in the glass jar, 90 c.c. 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<sup>0</sup> C, and must be kept at the temperature of the air should be 15<sup>0</sup> C to 17<sup>0</sup> D. 10 c.c. 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 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<sup>0</sup> C for 1 hour allowed to cool in an evacuated desiccator 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 (See Rule 155)



Licensing Authority

Article No. (1)	Form of Licence (2)	Purpose for which granted (3)	Authority empowered to grant (4)
1(a)	20	To manufacture explosives other than fireworks- Gunpowder, ANFO at site and Liquefied Oxygen explosives	Chief Controller
1(b)	20	1[To manufacture fireworks and/or gunpowder (i) up to 15 kgs. (ii) more than 15 kgs. and up to 200 kgs.	District Authority Controller of Explosives, authorised by Chief Controller.]
1(c)	20	To manufacture Fireworks and/or Gunpowder more than 200 kgs. at time.	Chief Controller
1(d)	38	To manufacture ANFO explosives at site.	Controller of Explosives authorised by Chief Controller
1(e)	39	To manufacture liquefied oxygen explosives.	Chief Controller
2(a)	21	To possess for sale explosives and exceeding 2000 kgs. of Class 1,2,3,4 & 7 together with explosives of Class 6.	Controller of Explosives authorised by Chief Controller
2(b)	21	To possess for sale explosives exceeding 2000 kgs. of Class 1,2,3,4 & 7 and any quantity of Class 5,6 and 8.	Chief Controller
3(a)	22	To possess for use explosives not exceeding 2000 kgs. of Class 1,2,3,4 & 7 together with explosives of Class 6.	Controller of Explosives authorised by Chief Controller
3(b)	22	To possess for use explosive exceeding 2000 kgs. of Class 1,2,3,4 & 7 and any quantity of Class 5,6, and 8.	Chief Controller
4(a)	24	2[To possess and sell from a shop small-arms nitro-compound not exceeding 25 kgs. or fireworks not exceeding 100 kgs. of Class 7 Division 2 sub-division 2, 1000 kgs. of Class 7 Division 2 sub-division 1, or gunpowder not exceeding 25 kgs. safety fuse not exceeding 5000 metres.]	Controller of Explosives authorised by Chief Controller
4(b)		3[To possess and sell from a shop fireworks not exceeding 50 kgs. of Class 7, Division 2, sub-division 2; 400 kgs. of Class 7, Division 2, sub-division 1 or gunpowder not exceeding 15 kgs. and safety fuse not exceeding 5000 metres.]	District Authority
5(a)	23	To possess for own use Class 2 and/or Class 3 explosives not exceeding 5 kgs., electric or ordinary detonators not exceeding 10 numbers and safety fuse not exceeding 200 metres.	District Authority
5(b)	23	To possess for use small-arms nitro-compound not exceeding 5 kgs. in the State of Kerala.	District Authority
5(c)	23	To possess for use gunpowder not exceeding 5 kgs. and safety fuse not exceeding 50 metres in the State of Bihar, Kerala and West Bengal.	District Authority
6	27	To import explosives.	Chief Controller
7	28	To export explosives.	Chief Controller
8	26	To transport explosives	Controller of Explosives

9	25	For road van	Controller authorised
10	29	For public display of Fireworks.	Controller by Chief Controller
11	Special	To manufacture explosives not provided in Article 1	Chief Controller

SCHEDULE V-Forms  
FORM 1

TEST CERTIFICATE FOUR EXPLOSIVES  
(See rules 28 and 34)

Certified that samples of the explosives of the description given below have been tested and have passed the testes set forth in Schedule III as applicable to such explosive and in the caee of explosives of the 1<sup>st</sup> Division of 3<sup>rd</sup> (Nitro-compons) or 4<sup>th</sup> (Chlorate Mixture) classes, that there are no signs of liquefaction or of excluded nitro-glycerine or liquid nitro-compound.

Name and Address of Importer* ----- Consignor	Description of explosives	Number of packages	Date of manu- fecture&batch no. referrecd To in rule 9(2)	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 .....19 provided that, in cae of nitro-glycerine compounds which are not used as propellants, it shall expire on the 31<sup>st</sup> day of July following.

Date :  
Place:

Signature of Testing Officer  
Designation

\*Name of importer in case of import, and consignor in cae of transport.

Form 2  
(See rule 24)

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 Explosives	Date of manufacture, batch No. and other distinguishing marks cases	Total quantity carried Kg.Cases	Quantity to be landed at port Kg.Cases	Remarks
---------------------------	---	---------------------------------	--	---------

Form 3  
[See the 154(3)]

**Application for grant or amendment of Licence to manufacture explosives**

I .....on behalf of.....apply for grant of licence/amendment of licence No..... to manufacture explosives. I give full particulars below and enclose other documents as required.

		The replies to be Written in this column -----						
1.	Name in which licence is required to be granted (see notes below)	..... .....						
2.	Status	<table border="0" style="width: 100%;"> <tr> <td style="width: 45%;">Individual</td> <td style="width: 5%;">.....</td> </tr> <tr> <td>Company</td> <td>.....</td> </tr> <tr> <td>Society</td> <td>.....</td> </tr> </table>	Individual	.....	Company	.....	Society	.....
Individual	.....							
Company	.....							
Society	.....							
3.	Age (see notes below)	..... .....						
4.	Postal address	..... ..... .....						
	Pin code No.	.....						
	Telephone No.	.....						
	Telegraphic Address	.....						
	Telex	.....						
5.	Qualifications and experience of applicant And the technical personnel employed by him. (Give individual details and attach separate sheet if required)	..... ..... ..... .....						
6.	Situation of the premises: State District Town or village Survey No. Police Station Railway Station or Steamer Ghat	..... ..... ..... ..... ..... ..... .....						
7.	Explosives proposed to be manufactured Class Division (if any) Name and description	..... ..... ..... .....						
	Annual capacity of the Manufacturing Plant	.....						
	Quantity of explosives present at any one time in The manufacturing Plant	.....						
	Quantity of explosives proposed to be manufactured In one day	.....						
8.	Has the applicant been approved by Chief Controller If yes, please give approval letter No. and Date	..... Yes.....No..... .....						

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 ..... Yes.....No.....  
 (b) was any licence cancelled/not renewed? .....  
 (c) If yes, give details .....
11. Details of amendment proposed/Additional .....  
 information, if any .....

---

I hereby certify that the above particulars given by me are correct.

Signature of applicant.....  
 (Authorised person in case of a Company)  
 Full Name .....  
 Address .....

Date.....

---

Notes:

1. In case where application is made in the name of a Company, the names and addresses of Directors and Partners and the name, address and specimen signatures of person or persons authorised to sign correspondence in respect of licence applied for should be given on a separate sheet and enclosed with this application form.  
 Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.
2. Age to be given in case the applicant is an individual.
3. Please attach the following to application :
  - (a) Plans of the proposed buildings and the site drawn to scale. Site plan should show full approach road net work to the factory.
  - (b) A description of plant and equipment and its location provided in each building (Production, non-production, stores, administrative etc.) and the safety distances observed.
  - (c) A description of plant and equipment and its location provided in each building and part thereof.
  - (d) A description of process/work to be carried out in each building or part thereof.
  - (e) A description of explosives and ingredients thereof, whether wholly or partially mixed, that will be present in any building or machine at any one time
  - (f) A description of maximum number of persons to be employed in each building.
  - (g) A description of any special constructions or provisions which the applicant may propose by reason of special circumstance, arising from the location, situation or construction of any building or works, or the nature of process or otherwise.
4. Delete whichever is not applicable.
5. In case the applicant is for amendment of licence, only relevant documents should be submitted.

FORM 4  
 [See rule 154(4)]

**Application for grant or amendment of licence to possess and sell explosives**

I .....on behalf of.....apply for grant of a licence/amendment of licence No.....for possession and sale of explosives. I give below full particulars and enclose other documents as required.

Replies to be written in the column

1. Name in which licence is required to be granted (See notes below)
2. Status
 

Individual	.....
Company	.....
Society	.....
3. Age (see notes below) .....
4. Postal address
 

Pin Code No	.....
Telephones No.	.....
Telegraphic Address	.....
Telex	.....
5. Qualification and experience of applicant and the technical personnel employed by him (Give individual details and attach separate sheet if required). .....
6. Situation of premises –
 

State	.....
District	.....
Town or village	.....
Survey No.	.....
Police Station	.....
Railway Station or steamer Ghat	.....
7. Explosives proposed to be possessed and sold:
 

Name & Description	Class	Division if any	Quantity	
			at any one time	In one month
i.				
ii.				
iii.				
iv.				
v.				
vi.				
8. Are the premises attached to a factory licensed to manufacture explosives?  
If so, please give the licence number .....
9. Have the premises previously been licensed? If yes, please give:
 

Yes	No
(i) Previous licence No.	.....
(ii) Name & address of previous licence	.....
(iv) Reasons for cancellation/non-renewal of previous licence	.....
10. Has the applicant been convicted under any offence or ordered to execute any bond under
 

Yes	No
-----	----

Chapter VIII of Code of Criminal Procedure, .....  
 1973, during the last 10 years? If yes, please .....  
 give details .....

11. (a) Particulars of other licences, if any, .....  
 under Explosives Act, 1884 held by .....  
 the applicant during the last 10 years .....

(b) Was any licence cancelled/not renewed? Yes No .....  
 .....

(c) If yes, give details .....

12. Details of amendment proposed/ .....  
 Additional information, if any .....

I hereby certify that the information given above is correct.

Date ..... Signature of applicant .....  
 (Authorised person in case of Company)  
 .....  
 Full Name .....  
 Place ..... Address .....

Notes: -

- (1) In case where application is made in the name of a Company, the names and addresses of Directors and Partners and the name, address and specimen signatures of person or persons authorised to sign correspondence in respect of licence applied for should be given on a separate sheet and enclosed with this application form.  
 Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.
- (2) Age to be given in case the applicant is an individual.
- (3) Please attach the following to application:
  - (a) Site plan of the proposed premises. The plan should be drawn to scale and show full approach road network to the premises' nearby landmarks, and safety distances from nearest protected works.
  - (b) Plans showing construction details of the building mounds, lightning conductors etc.
- (4) Delete whichever is not applicable.

FORM 5  
 [See rule 154(4) & 154(5)]

**Application for grant or amendment of licence to possess explosives for use**

I .....on behalf of.....apply for grant of a licence/  
 amendment of licence No.....for possess explosives for use. I give below full  
 particulars and enclose other documents as required.

Replies to be written in the column

1. Name in which licence is required to be granted (See notes below) .....
2. Status
 

Individual	.....
Company	.....
Society	.....
3. Age (see notes below) .....
4. Postal address
 

Pin Code No	.....
Telephones No.	.....
Telegraphic Address	.....
Telex	.....
5. Qualification sand experience of applicant and the technical personnel employed by him (Give individual details and attach separate sheet if required). .....
6. Situation of premises –
 

State	.....
District	.....
Town or village	.....
Survey No.	.....
Police Station	.....
Railway Station or steamer Ghat	.....
7. Explosives proposed to be possessed and sold:
 

Name & Description	Class	Division if any	Quantity	
			at any one time	In one month
i.				
ii.				
iii.				
iv.				
v.				
vi.				
8. Have the premises previously been licensed? If yes, please give:
 

(i) Previous licence No.	Yes	No	.....
(ii) Name & address of previous licence			.....
iii) Reasons for cancellation/non-renewal of previous licence			.....
9. Explosives proposed to be used per day –
 

Name & Description	Class	Division	Quantity
10. Details of site where explosives will be used .....
11. Distance of site where the explosives will be used from the storage premises mentioned in item 6 .....
12. Mode of transport of explosives .....

13. Licence No. of Road Van, if used .....
14. Has the applicant been convicted under any offence or ordered to execute any bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years? If yes, please give details
- Yes                      No
- .....
- .....
- .....
15. (a) Particulars of other licences, if any, under Explosives Act, 1884 held by the applicant during the last 10 years .....
- (b) Was any licence cancelled/not renewed?                      Yes                      No
- .....
- (c) If yes, give details .....
16. Details of amendment proposed/ Additional information, if any .....

I here by certify that the information given above is correct.

Date ..... Signature of applicant .....  
 (Authorised person in case of Company)  
 .....  
 Full Name .....  
 Place ..... Address .....

Notes.-

- (1) In case where application in made in the name of a Company, the names and addresses of Director sand Partners and the name, address and specimen signatures of person or persons authorised to sign correspondence in respect of licence applied for should be given on a separate sheet and enclosed with this application form.  
 Any change in the above information should be immediatly communicated to the licensing authority and authority renewing the licence.
- (2) Age to be givne in case the applicant is an individual.
- (3) Please attach the following to application:
  - (c) Site plan of the proposed premises. The plan should be drawn to scale and show full approach road net work to the premise's nearby land marks, and safety distances from nearest protected works.
  - (d) Plans showing construction details of the building mounds, lightning conductors etc.
- (4) Delete whichever is not applicable.

FORM 6  
 [See rules 154(5)]

**Application for grant of licence to possess explosives for own use**

I hereby apply for a licence to possess explosives as mentioned below for amy own use for removal of tree stumps/levelling of ground/digging of new well/deepening of existing well/The purpose of .....A certificate No.....dated.....from.....as required under sub-rule (8) of Rule 155 of the Explosives Rules, 1983 is also enclosed.



Replies to be given in this column

- |       |  |        |
|-------|--|--------|
| 1.    | Name of the applicant  | .....  |
| 2.    | Age of the applicant   | .....  |
| 3.    | Residential address of the applicant   | .....  |
| 4.    | Location of the premises shall be used   | .....  |
|       | Survey No.   | .....  |
|       | Address  | .....  |
| 5.    | Mode of storage  | .....  |
| 6.    | Location of the premises where the explosives shall stored   | .....  |
| 7.    | Quantity of explosives proposed to be stored   | .....  |
|       | (i) Gun powder   | .....  |
|       | (ii) Nitrate Mixture   | .....  |
|       | (iii) Nitro-compound   | .....  |
|       | (iv) Safety Fuse   | .....  |
|       | (v) Electric Detonators  | .....  |
|       | (vi) Ordinary Detonators   | .....  |
| 8.    | Particulars of the licence obtained by the applicant during last two y ears  | .....  |
|       | (a) Has the applicant been convicted under any law or ordered to execute a bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last ten years? | Yes No |
|       | (b) If yes, give details   | .....  |
| 9.(a) | Particulars of licence held by the applicant under Explosives Act, 1884, during the last 10 years  | Yes No |
|       | (b) Was any licence cancelled/not renewed?   | .....  |
|       | (c) If yes, give details   | .....  |
| 10.   | Any other information  | .....  |

---

I certify that the information given by me above is correct.

Signature of the applicant.....

Date of application .....

---

Note.—(1) The applicant should attach site plan and construction plan of the premises where the explosive shall be stored.

(2)Delete whichever is not applicable.

FORM 7  
 [See Rule 154(6)]  
 Application for grant of a licence for Van for transport of Explosives

I .....on behalf of.....apply for grant of licence/amendment of licence No..... to manufacture explosives. I give full particulars below and enclose other documents as required.

		The replies to be Written in this column -----
1.	Name in which licence is required To be granted (see notes below)	..... .....
2.	Status	.....
	Individual	.....
	Company	.....
	Society	.....
3.	Age (see notes below)	..... .....
4.	Postal address	..... .....
	Pin code No.	.....
	Telephone No.	.....
	Telegraphic Address	.....
	Telex	.....
5.	Address of the premises where the vehicle is to be Normally kept.	..... .....
6.	Explosives to be carried	.....
7.	Places between which the vehicle will ply	.....
8.(a)	Will the vehicle be used for carrying explosives to Site and used for blasting	..... Yes                      No
	(b) If yes, give details of area of operation	.....
9.(a)	Description of vehicle	.....
	Make	.....
	Registration No.	.....
	Engine No.	.....
	Chassis No.	.....
	(b) Gross vehicle weight rating	.....kgs
	(c) Weight of unloaded vehicle	.....kgs
	(d) Tyres	.....

Size	Ply rating	Maximum individual Tyre load @ cold Inflation pressure	Number
Front		Kg. @	
Rear		Kg. @	

Total maximum load = Total maximum  
 Individual tyre load x number = .....

10. Description of other fittings on the vehicle .....
11. Carrying capacity permitted by Regional Transport Authority .....
- 12.(a) Has the applicant been convicted under any offence or ordered to execute a bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years? Yes No
- (b) If yes, give details .....
- 13.(a) Particulars of licence held by the applicant under Explosives Act, 1884, during the last 10 years Yes No
- (b) Was any licence cancelled/not renewed? .....
- (c) If yes, give details .....
14. Additional information, if any .....

---

I certify that the information given above is correct and that every driver of this vehicle shall be instructed in relevant provision of the Act and rules made thereunder.

Date..... Signature of applicant.....  
 (Authorised person in case of  
 Company) .....

Place..... Name in full .....

Address .....

.....

Note:-

- (1) In case where application is made in the name of a company, the names and addresses of Directors and partners and the name, address and specimen signatures of person or persons authorised to sign the correspondence in respect of licence applied for should be given on separate sheet and enclosed with this application form.  
 Any change in the above information should be immediately communicated to the licensing authority renewing the licence.
- (2) Age to be given in case the applicant is an individual.
- (3) The applicant should submit plans of the road van showing complete construction details, fittings, and safety devices. Full details of additional equipments/fittings in the vehicle should also be clearly shown.
- (4) Total maximum load must equal or exceed Gross vehicle weight rating.
- (5) Delete whichever is not applicable.

FORM 8  
[See Rule 154(7)]

Application for grant or amendment of licence to transport explosives

I .....on behalf of.....apply for grant of licence/amendment of licence No..... to manufacture explosives. I give full particulars below and enclose other documents as required.

The replies to be  
Written in this column

		-----
1.	Name of the applicant (see notes below)	..... .....
2.	Postal address	..... .....
	Pin code No.	.....
	Telephone No.	.....
	Telegraphic Address	.....
	Telex	.....
3.	Particulars of licence granted under Explosives Rules, 1983 held by the applicant from where the explosives will be transported	..... .....
	Licence No.....	for possession and sale/use
	Situation of premises	.....
	Licensed capacity—	
	Name of explosives	.....
	Class	.....
	Division, if any	.....
	Quantity	.....
	Date up to which the licence is valid	.....
4.	Particulars of place to which the explosives will be Transported	.....
5.	Mode of transport:	
	(a) Does, the applicant hod any licence under Explosives Rules, 1983 for Road vans?	Yes                  No
	(b) If yes, please give details	.....
6. (a)	Has the applicant been convicted under any offence or ordered to execute a bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last 10 years?	Yes                  No
	(b) If yes, give details	.....
7.(a)	Particulars of licence held by the applicant under Explosives Act, 1884, during the last 10 years	Yes                  No
	(b) Was any licence cancelled/not renewed?	.....
	(c) If yes, give details	.....
8.	Particulars of amendment proposed/Additional information, if any	..... .....

I certify that the particulars given by me are correct.

Date.....

Signature of applicant.....  
(Authorised person in case of  
Company) .....  
Name in full .....  
Address .....  
.....

Place.....

Note:-

- (1) In case where application is made in the name of a company, the names and addresses of Directors and partners and the name, address and specimen signatures of person or persons authorised to sign the correspondence in respect of licence applied for should be given on separate sheet and enclosed with this application form.  
Any change in the above information should be immediately communicated to the licensing authority renewing the licence.
- (2) Age to be given in case the applicant is an individual.

FORM 9  
[See Rule 54(8)]  
Application for Shotfirer's Permit

I hereby apply for a Shotfirer's Permit under Explosives Rules—

Replies to be written in the column

- 1. Name of applicant in full .....
- 2. Age of applicant .....
- 3. Postal Address .....
- Pin Code No. ....
- Telephone No. ....
- 4. Qualification and experience of applicant .....

I certify that the above particulars are true and correct.

.....  
(Signature of applicant)

Date of application .....

Note—Please enclose certified copies of certificates showing Date of Birth, Educational qualifications and experience.

FORM 10  
[See Rule 154(7)]  
Application for grant of licence to import explosives

I .....on behalf of.....apply for grant of a licence under Explosives Rules, 1983 to import explosives and furnish the following particulars:

- 1. Name in which licence is required to be granted (See notes below) .....
- 2. Status .....
- Individual .....
- Company .....
- Society .....
- 3. Postal Address .....
- Pin Code No. ....

Telephone No. ....  
 Telegraphic Address .....  
 Telex .....

4. Explosives proposed to be imported at a time  
 .....

Name & Description	Class	Division, if any	Quantity
5. Are the explosives to be imported authorised explosives			..... Yes.....No.....
6. Name and address of the manufacturer of explosives to be imported.			.....
7. Licence particulars of the premises where explosives will be stored :			.....
8. Port or place of import			.....
9. Has the applicant been convicted under any offence or ordered to execute any bond under Chapter VIII of Code			Yes No
10. (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/not renewed?			.....
(c) If yes, give details			.....
11. Additional information, if any			.....

I certify that the information given above is correct.

Signature of applicant.....  
 (Authorised person in case of a Company)  
 Name in full.....  
 Address .....

Date.....

Notes:

- In case where application is made in the name of a Company, the names and addresses of Directors and Partners and the name, address and specimen signatures of person or persons authorised to sign correspondence in respect of licence applied for should be given on a separate sheet and enclosed with this application form.  
 Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

FORM 11  
 [See Rule 154(7)]  
 Application for grant of licence export explosives

I .....on behalf of.....apply for grant of a licence under Explosives Rules, 1983 to export explosives. The necessary particulars are furnished below :  
 Replies to be given in this column

- Name in which licence is required to be granted (See notes below) .....
- Postal Address .....
- Pin Code No. ....
- Telephone No. ....

Telegraphic Address	.....		
Telex	.....		
3. Particulars of licence/s granted under Explosives Rules, 1983 held by the applicant	.....		
Licence No. ....			for possession and sale of explosives.
Situation of premises	.....		
Licensed capacity	.....		
Name of Explosives	.....		
Class	.....		
Division, if any	.....		
Quantity	.....		
4. Quantity of explosives to be exported	.....		
Name & Description	Class	Division, if any	Quantity
(i)			
(ii)			
(iii)			
(iv)			
5. Name and address of consignee	.....		
6. Place or port from which explosives will be exported	.....		
7. Name of the ship carrying explosives and likely date of sailing	.....		
8. Quantity of each explosives to be loaded on the ship	.....		
9. Transport licence No. held by applicant	.....		
10. (a) Has the applicant been convicted under the offence or ordered to execute bond under Chapter III of Code of Criminal Procedure, 1973, during the last Ten years?		YES	NO
(b) If yes, give details	.....		
	.....		
11. (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/not renewed?	.....		
(c) If yes, give details	.....		
12. Additional information, if any	.....		

---

I hereby certify that the above particulars given by me are correct.

Signature of applicant.....  
 (Authorised person in case of a Company)  
 Full Name .....

Address .....

Date.....

---

Notes: In case where application is made in the name of a Company, the names and addresses of Directors and Partners and the name, address and specimen signatures of person or persons authorised to sign correspondence in respect of licence applied for should be given on a separate sheet and enclosed with this application form.

Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.

FORM 12  
[See Rule 154(7)]  
Application for grant of licence for public display of Fireworks

I .....on behalf of.....apply for grant of a licence under Explosives Rules, 1983 for possession and use of Public Display Fireworks. The necessary particulars are given below and required documents are enclosed.

Replies to be given in this column

1. Name in which licence is required to be granted (See notes below) .....
2. Age (See note below) .....
3. Postal Address .....
- Pin Code No. ....
- Telephone No. ....
- Telegraphic Address .....
- Telex .....
4. Qualification and experience of the applicant and and competent persons employed by him. ....
5. Name , qualification and experience of the persons supervising the display .....
6. Description and quantity of fireworks to be used .....
- 7.(a) Form whom the fireworks will be obtained .....
- Name .....
- Address .....
- .....
- Form & Licence No.held .....
- Validity of licence .....
- (b) Address and licence No.of the place where the fireworks will be stocked .....
8. Description & quantity of fireworks to be displayed .....
9. Time of display and address of the place where the will be held .....
10. (a) Has the applicant been convicted under any offence or ordered to execute any bond under Chapter VIII of Code of Criminal Procedure, 1973, during the last ten years? Yes                  No
- (b) If yes, give details .....
- 11.(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/not renewed? .....
- (c) If yes, give details .....
12. Additional information, if any .....

I certify that the information given above is correct.

Signature of applicant.....  
(Authorised person in case of a Company)  
Full Name .....  
Address .....

Date.....

---

Notes:



1. In case where application is made in the name of a Company, the names and addresses of Directors and Partners and the name, address and specimen signatures of person or persons authorised to sign correspondence in respect of licence applied for should be given on a separate sheet and enclosed with this application for.  
Any change in the above information should be immediately communicated to the licensing authority and authority renewing the licence.
2. Age to be given in case the applicant is an individual.
3. Separate sheet may be attached if the space given in the form is not sufficient.

FORM 13  
[See Rule 165(4)]  
Application for Renewal of licence

Form :

To,

Dear Sir,

I/We hereby apply for renewal of licence No.....in form.....for the period from.....to.....and furnish the following information :

During the last two 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.

(ii) Licence No.....in Form.....granted under Explosives Act to me/us were cancelled/not renewed by the licensing authority.

I/We also enclosed the following documents :

(i) Licence No.....in Form.....together with approved plans and schedules.

(ii) Renewal fee of Rs.....by Cash/P.O. No...../Bank draft of.....on .....Bank .....Branch, drawn in favour of.....

Signature of Licensee.....

(Authorised person in case of company)

Place.....

Date of application.....

Note.—The complete renewal application should reach the renewal authority at least thirty days before the expiry date of licence, to avoid payment of late fees. The licence will expire if no renewal application is received on or before the expiry date.

FORM 14

Statement to be submitted to the Chief Controller of Explosives by an importer on despatch of explosives from the place or port of loading [See Rule 23(a) of the Explosives Rules, 1983].

Importers Name and address	Import licence No. granted by Central Govt. kinds and quantities permitted to be	Import licence No. granted by Chief Controller under Explosives Rules and date of expiry of licence	Name & address of the manufacture of Explosives

	imported and date of expiry of the licence.		

Kind and quantities of explosives on the ship/aircraft

Name and Description	Class & Division	Date of manufacture

Date :

Place:

Name & address of consigner	Place or port of despatch	Name of Ship/ Airlines and date of sailing/Air lift	Place or port of import	Likely date of arrival

Batch No.	Quantity	No. of packages

Signature of Importer  
(Authorised person in case of a Company)

.....  
Name in full.....  
Address.....  
.....

FORM 15

Importer's despatch Schedule [See Rule 23(b) of the Explosives Rules, 1983]

This form should be filled up as soon as any consignment of explosives is cleared from the place or port of import and forwarded in triplicate to Chief Controller of Explosives.

Importers Name and address	Import licence granted by Controller Explosives date of licence	No. by Chief under Rules and expiry of	Description of Explosives	Name & address of the manufacture of Explosives

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Particulars of despatch from place or port of import.

Name & Address of licensee to whom explosives were despatch	Licence No. and Form	Quantity of explosives despatched			
		Name & description	Class & Division	Quantity	No. of packages

Date:.....

Name and address of consigner	Quantity of explosives imported	Place or port from which explosives were forwarded	Name of ship or air lines	Date of arrival and place or port of import

Batch No. and date	Date of despatch	Mode of despatch	Road Van Licence No. if despatched by road

Signature of importer.....  
(Authorised agent in case of company)

Name in full .....  
Address .....

FORM 16  
[See Rule 32(2)]

Pass granted by the holder of Transport Licence (Explosives) 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	No. of packages	Batch Number and date
----------------------	-------	-----------------	----------	-----------------	-----------------------

- (i)
- (ii)
- (iii)
- (iv)
- (v)

While in transit from .....to . .....

3. The explosives are being transported by rail/road Van No. ....having licence No. .... till ...../Lorry No. .... other on-mechanically propelled vehicle.

- 4. Name and address of consignee.
- 5. No. and Form of Consignee's Licence No. ....
- 6. Consignee's order No. and date any quantity of each explosives ordered .....
- 7. Consignee's letter No. and date intimating ..... readiness to receive explosives.
- 8. Date of despatch of consignment .....
- 9. Approximate date on which consignment ..... should reach in destination.

Signature  
Holder of Transport  
Licence No.

FORM 17  
[See Rule 156(1)]

Distance required to be kept clear around Magazine/Store house/Factory Distance around the Magazine/Storehouse/Factory premises proposed to be licensed for storage/manufacture of .....Kg of explosives to be kept clear\* from the undermentioned building and works :

Building & Works	Distance required to be kept clear not less than		Distances actually observed (to be filled by the applicant)	Remarks
	Mounded 2(a)	Unmounded 2(b)		
1	2	3	4	5

Meters                      Meters

- 1. Room or works used in connection with the magazine .
- 2. Any other explosives magazine or storehouse or factory of the applicant.
- 3. Magazine office.
- 4. Magazine office.

5. Railway including mineral & 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/rope way.
12. Dwelling house.
13. Govt. & Public building.
14. Temple, mosque, gurudwars, church or other place of worship.
15. Shops, market place, public, recreation and sports ground, College, School, hospital, theatre, cinema or other buildings, where the public are accustomed to assemble.
16. Factory.
17. Buildings or works used for the storage in bulk of petroleum spirit, gas or other inflammable or hazardous substance.
18. Buildings or works used for the storage and manufacture of explosives or of articles which contain explosives.
19. Aerodrome.
20. Furnace, Kiln or chimney.
21. Quarry or mine pit head.
22. Power house or electric sub-station.
23. Wireless Station.
24. Warehouse or other storage buildings.
25. Elec. Power over head Transmission lines above 440 V.
26. Elec. Power over head Transmission lines above 440 V.

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Certified that I have personally checked the replies given above and that they are a true statement of the surroundings of the premises.

---

Signature of applicant.....  
(Authorised person in case of a company)

.....  
Postal Address .....

Date.....

\*The distance will be required to be kept clear not merely on the first establishment of the premises, but during the continuance of the licence.

FORM 18  
[See Rule 156(3)]

Distance required to be kept clear around Magazine/Store house/Factory licensed No.....( ) in form .....granted to.....

Distance to be maintained by the magazine/Factory/store house:

Form Every	Not less than metres
1	2

1. Room or works used in connection with the magazine .
2. Any other explosives magazine or storehouse of the applicant.

3. Magazine office.
4. Magazine Chowkidar's dwelling house.
5. Railway including mineral & 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/rope way.
12. Dwelling house.
13. Govt. & Public building.
14. Temple, mosque, gurudwara, church or other place of worship.
15. Shops, market place, public, recreation and sports ground, College, School, hospital, theatre, cinema or other buildings, where the public are accustomed to assemble.
16. Factory.
17. Buildings or works used for the storage in bulk of petroleum spirit, gas or other inflammable or hazardous substance.
18. Building or works used for the storage and manufacture of explosives or of articles which contain explosives.
19. Aerodrome.
20. Furnace, Kiln or chimney.
21. Quarry or mine pit head.
22. Power house or electric sub-station.
23. Wireless Station.
24. Warehouse or other storage buildings.
25. Elec. Power over head Transmission lines above 440 V.
26. Elec. Power over head Transmission lines above 440 V.

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Distance will be required to be kept clear not merely on the first establishment of the premises but during the continuance of the licence.

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For Chief Controller of Explosives  
 .....  
 Controller of Explosives

FORM 19  
 [See Rule 155(1)(b)]  
 FORM OF INDEMNITY BOND

To,

The President of India,

I/we .....carrying on business as manufacture(s) of fireworks and/or gunpowder and having a factory or shop at.....and I/We of .....sureties on his/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 where of these presents have been duly executed on the .....day of .....19.....

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 20  
(See Rule 155)  
[Article 1(a)—9d) of Schedule IV)

Licence to manufacture Explosives

No.

Fee Rs.....(per year)

Licence is hereby granted to.....valid only for manufacture of .....at anyone time per year at the premises described below subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain valid till 31<sup>st</sup> day of March 19.....

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 attached plans and Annexures.

Description of the licensed premises

The licensed premises shown in plan-Nos.....attached hereto are situated at .....District.....and consist of .....Postal Address of the License .....

The .....19....

Chief Controller of Explosives

.....

Controller of Explosives

Endorsement for renewal of licence :

Date of renewal	Date of expiry	Signature of licensing authority

CONDITIONS

- (1) (a) Details of construction of mounds, buildings and works connected with the factory are given in Annexure 1 attached to the licence.
  - (a) The process to be carried out in each building/part of the factory, the limitations as to the description and amount of explosives, ingredients and articles liable to spontaneous ignition or inflammable or otherwise dangerous to be allowed in each building and the maximum number of the persons to be employed in each building are given in Annexure II attached to the licence.
- (2) The materials as manufacturing process or the sequence of the operations or the operations carried out in each building or plant and equipment used for the process shall be carried out without prior approval of the licensing authority.
- (3) No change in the manufacturing process or the sequence of the operations or the operations carried out in each building or plant and equipment used for the process shall be carried out without prior approval of the licensing authority.
- (4) No work not directly connected with the manufacture of explosives as specified in the process shall be carried on in any part of the factory.
- (5) The interior of the compartments of the buildings, in which explosives are mnaufactured or handled and the fittings therein (other than machinery) 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 in contact with any explosives. The interior of such compartments shall be kept clean and free from grit.
- (6) All machinery in the factory premises shall be properly and efficiently earthed.



- (7) 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.
- (8) If the licensing authority or a Controller of Explosives calls upon the holder of the licence by notice in writing to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus which are in the opinion of such authority necessary for the safety of the premises or of the persons working in the factory, the holder of the licence shall execute the repairs, additions or alterations within the period specified by such authority.
- (9) Before repairs are done to any building or part thereof in the factory the same shall as far as practicable, be cleaned by the removal of all explosives or mixed ingredients thereof and by thorough washing, and after such cleaning the conditions of this licence shall cease to apply to such building or part thereof until the same is again brought into use.
- (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.
- (11) The licensee shall keep records and accounts of all explosives manufactured and of all stocks in hand in forms 31 & 32 and exhibit the stock books and records to any of the officers authorised under Rule 179 of Explosives Rules whenever such officer may call upon him to do so.
- (12) Accidents by fire or explosion, and losses, shortage or thefts of explosives shall be reported without delay to the licensing authority and to the officer-in-charge of the Police Station.
- (13) Work in each building shall be carried out strictly in accordance with the laid down working instructions and procedures.
- (14) 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.
- (15) 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.
- (16) 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 the regulations.
- (17) No iron or steel implements shall be used unless specially authorised by the licensing authority.
- (18) 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 Rules and the conditions of this licence are duly observed.
- (19) No workers are to enter or leave the Factory except by the gates provided for the purpose and workers shall leave the factory with all reasonable despatch after the expiration of their working hours.
- (20) No workers shall enter any danger building or part of the Factory other than those in which he or she is employed, except by the orders of the licensee or person in charge.
- (21) No person shall enter any danger building or "clean" area without first putting on the magazine boots or shoes provided, and on no account are such boots or shoes to be worn except in the danger buildings or upon the clean platforms and they are never on any pretence to be deposited where they are liable to come into contact with grit.

- (22) Every person employed in any danger building shall before commencing work put on the danger building clothing provided. No pockets are to be worn in any clothing whether outer or under clothing.
- (23) All fire Buckets are to be kept filled with clean water and ready for sue. They are not to be removed from the positions assigned to them, or used for any but fire purpose. In frostly weather steps are to be taken by frequent refilling or otherwise to prevent the formation of ice in the buckets.
- (24) All machinery in danger buildings is to be examined daily and should the plant or machinery in any danger building appear to be out of order or should anything go wrong with it, the operation of machine is at once to be stopped.
- (25) Before work is commenced in any danger buildings all exit doors shall be unlocked and arranged so that they may be easily pushed open. No exit door shall be blocked by any table, packing case or other article.
- (26) All boxes, and packages are to be lifted and carried and never dragged across the floors. No broken or defective package of explosive is to be sent out of the factory.

Additional conditions.

FORM 21  
(See Rule 155)  
[Article 2(a)—(b) of Schedule IV]  
Licence to possess and sell Explosives

No.

Fee Rs.....(per year)

Licence is hereby granted to.....valid only for possession and sale of explosives at the premises described below of the quantities of explosives specified in Additional Condition No..... subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain valid till 31<sup>st</sup> day of March 19.....

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 attached plan.

Description of the licensed premises

The licensed premises are shown on drawing

(i) No..... dated.....

(ii) No. ....dated.....

(iii) No.....dated.....

attached hereto and situated at.....

And consist of.....

Postal Address of licensee.....

The .....20....

Chief Controller of Explosives

.....

Controller of Explosives

Endorsement for renewal of licence:

Date of renewal	Date of expiry	Signature of licensing authority
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## CONDITIONS

- (1) The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.
- (2) The magazine/store house shall be used only for keeping all explosives specified in additional condition No.....of this licence and of receptacles for, or tools or implements for work connected with the keeping of such explosives.
- (3) The opening of packages and the weighting and packing of explosives shall not be carried on in the magazine/store house.
- (4) (i) Two or more description or explosives which may be permitted to be kept in the magazine/store house by additional condition No.....shall be kept only if they are separated from each other by an intervening partition of such substance 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 1 (gunpowder) 2 (nitrate-mixture), 3 (nitro-compound) and 4 (chlorate mixture), safety fuses belonging to the 1<sup>st</sup> Division of the 6<sup>th</sup> (Ammunition) Class, and such of the various explosives of the 2<sup>nd</sup> Division of the 6<sup>th</sup> (Ammunition) Class as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space ;
  - (b) the various explosives of the 1<sup>st</sup> division of the 6<sup>th</sup> (Ammunition) class may be kept with each other without any intervening partition or space :
  - (c) such of the various explosives of the 2<sup>nd</sup> Division of the 6<sup>th</sup> (Ammunition) Class as contain any exposed iron or steel, may be kept with each other without any intervening partition or space;
  - (d) the various explosives of the 3<sup>rd</sup> Division of the 6<sup>th</sup> (Ammunition) Class may be kept with each other without any intervening partition or space;
  - (e) the various explosives of the 7<sup>th</sup> (Fireworks), Class other than those containing chlorate may be kept with each other without any intervening partition or space.
- (ii) Save as aforesaid, two or more descriptions of explosives shall not be kept in the magazine/store house notwithstanding the provisions of Additional condition No.....
- (5) (i) Explosives of the 3<sup>rd</sup> (nitro compound) Class 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 a Controller of Explosives.
  - (ii) When such sanction has been given, a written certificate showing the period covered by the sanction must be obtained from a Controller of Explosives at each inspection, and must be kept by the licensee and produced on demand.
  - (iii) 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/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.
- (6) The interior of the magazine/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 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:

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 1<sup>st</sup> Division 6<sup>th</sup> (Ammunition) Class is kept.

- (7) If the lightning conductor is tested by a 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 lightning 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 lightning 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 lightning conductor.

- (8) 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 1<sup>st</sup> Division of the 6<sup>th</sup> (Ammunition) Class is kept.

- (9) The licensee shall keep records and accounts of all explosives manufactured and of all stocks in hand in forms 31 & 32 and exhibit the stock books and records to any of the officers authorised under Rule 179 of Explosives Rules whenever such officer may call upon him to do so.
- (10) 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.
- (11) 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 Rules and the conditions of this of this licence are duly observed.
- (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) 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.
- (14) Magazine/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 magazine/store house comes unfit for storage of any explosives for any reason whatsoever.
- (15) The licensee shall submit at the end of every month a return in Form 36 to the licensing authority as well as the renewal authority in the proforma prescribed from time to time so as to reach the above authorities by 10<sup>th</sup> day of the succeeding month.
- (16) Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.
- (17) The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.
- (18) 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.
- (19) The resistance of the lightning conductor to earth shall be as low as possible and in no case more than 10 ohms.
- (20) A distance of 15 metres surrounding the magazine/store house shall be kept clear of dried grass or bush or flammable materials.

- (21) Every package of explosive at the time of bringing inside the magazine/store house shall be examined for its sound condition.
- (22) Not more than 4 persons shall be allowed inside the magazine/store house at any one time.
- (23) Empty packages of the explosives shall be removed at the earliest and destroyed.

Additional Conditions.

FORM 22  
 (See Rule 155)  
 [Article 3(a)—3(b) of Schedule IV]  
 Licence to possess Explosives for use

No. Fee Rs.....(per year)

Licence is hereby granted to.....valid only for possession and sale of explosives at the premises described below of the quantities of explosives specified in Additional Condition No..... subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain valid till 31<sup>st</sup> day of March 19.....

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 attached plan.

Description of the licensed premises

The licensed premises are shown on drawing  
 (i) No..... dated.....  
 (ii) No. ....dated.....  
 (iii) No.....dated.....  
 attached hereto and situated at.....  
 And consist of.....

This licence shall remain in force till 31<sup>st</sup> 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 as per attached plans.

Postal Address of licensee.....  
 .....  
 .....  
 .....

The .....19....

Chief Controller of Explosives

\_\_\_\_\_  
 Controller of Explosives

Endorsement for renewal of licence:

Date of renewal	Date of expiry	Signature of licensing authority
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## CONDITIONS

- (1) The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.
- (2) The magazine/store house shall be used only for keeping all explosives specified in additional condition No.....of this licence and of receptacles for, or tools or implements for work connected with the keeping of such explosives.
- (3) The opening of packages and the weighting and packing of explosives shall not be carried on in the magazine/store house.
- (4) (1) Two or more description or explosives which may be permitted to be kept in the magazine/store house by additional condition No.....shall be kept only if they are separated from each other by an intervening partition of such substance 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 1 (gunpowder) 2 (nitrate-mixture), 3 (nitro-compound) and 4 (chlorate mixture), safety fuses belonging to the 1<sup>st</sup> Division of the 6<sup>th</sup> (Ammunition) Class, and such of the various explosives of the 2<sup>nd</sup> Division of the 6<sup>th</sup> (Ammunition) Class as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space ;
  - (b) the various explosives of the 1<sup>st</sup> division of the 6<sup>th</sup> (Ammunition) class may be kept with each other without any intervening partition or space :
  - (c) such of the various explosives of the 2<sup>nd</sup> Division of the 6<sup>th</sup> (Ammunition) Class as contain any exposed iron or steel, may be kept with each other without any intervening partition or space;
  - (d) the various explosives of the 3<sup>rd</sup> Division of the 6<sup>th</sup> (Ammunition) Class may be kept with each other without any intervening partition or space;
  - (e) the various explosives of the 7<sup>th</sup> (Fireworks), Class other than those containing chlorate may be kept with each other without any intervening partition or space.
- (2) Save as aforesaid, two or more descriptions of explosives shall not be kept in the magazine/store house notwithstanding the provisions of Additional condition No.....
  - (3) (a) Explosives of the 3<sup>rd</sup> (nitro compound) Class 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 a Controller of Explosives.  
  
(b) When such sanction has been given, a written certificate showing the period covered by the sanction must be obtained from a Controller of Explosives at each inspection, and must be kept by the licensee and produced on demand.
  - (5) 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/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.
  - (6) The interior of the magazine/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 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:

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 1<sup>st</sup> Division 6<sup>th</sup> (Ammunition) Class is kept.

(7) If the lightning conductor is tested by a Controller of Explosives, the licensee shall pay the fees prescribed for test. In the even of the test proving unsatisfactory, the same fees shall be payable by the licensee for each subsequent test until the lightning 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 lightning 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 lightning conductor.

(8) 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 1<sup>st</sup> Division of the 6<sup>th</sup> (Ammunition) Class is kept.

(9) The licensee shall keep records and accounts of all explosives manufactured and of all stocks in hand in forms 31 & 32 and exhibit the stock books and records to any of the officers authorised under Rule 179 of Explosives Rules whenever such officer may call upon him to do so.

(10) 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.

(11) 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 Rules and the conditions of this of this licence are duly observed.

(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) 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.

(14) Magazine/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 magazine/store house comes unfit for storage of any explosives for any reason whatsoever.

(15) The licensee shall submit at the end of every month a return in Form 36 to the licensing authority as well as the renewal authority in the proforma prescribed from time to time so as to reach the above authorities by 10<sup>th</sup> day of the succeeding month.

(16) Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.

(17) The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.

(18) 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.

(19) The resistance of the lightning conductor to earth shall be as low as possible and in no case more than 10 ohms.

- (20) A distance of 15 metres surrounding the magazine/store house shall be kept clear of dried grass or bush or flammable materials.
- (21) Every packet of explosive at the time of bringing inside the magazine/store house shall be examined for its sound condition.
- (22) Not more than 4 persons shall be allowed inside the magazine/store house at any one time.
- (23) Empty packages of the explosives shall be removed at the earliest and destroyed.
- (24) The explosives shall not be used for blasting purposes in the areas not coming within the purview of Mines Act, unless the licensee employs a qualified shotfirer holding a shot-firer's permit granted under the Explosives Rules or the person having equivalent qualifications as recognised by the Chief Controller.
- (25) The licensee and the shotfirer 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.
- (26) 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.
- (27) 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.
- (28) 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.
- (29) 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.
- (30) 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.
- (31) 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.
- (32) 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.
- (33) In the event of a misfire, if relieving hole is to be drilled it shall not be placed within 30 cm. from the misfired hole. The relieving hole shall run parallel to the misfired hole.

Additional Conditions.

FORM 23

(See Rule 155)

[Article 5(a)-(c) — of Schedule IV]

Licence to possess Explosives for own use

- (a) Class 2 and/or Class 3 explosives not exceeding 5 kgs., electric or ordinary detonators not exceeding 100 numbers and safety fuse not exceeding 200 metres.

OR

- (b) small arms nitro-compound not exceeding 5 kgs. (in the State of Kerala)

OR

- (c) Gunpowder not exceeding 5 kgs. and safety fuse not exceeding 50 metres (in the State of Bihar, Kerala and West Bengal).

No.

Fee-\*\*[ Rs. 10.(free of charge to cultivators)]

Licence is hereby granted to.....valid only for possession on the premises described below of the quantities of explosives for own use subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.



This licence shall remain in force till.....  
(See note below)

Postal address of licensee .....  
.....

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 attached plan.

Description of the licensed premises

The licensed premises are shown on drawing  
(i) No..... dated.....  
(ii) No. ....dated.....  
(iii) No.....dated.....  
attached hereto and situated at.....  
And consist of.....

District Authority

The .....

Date of renewal	Date of expiry	Signature of licensing authority
-----------------	----------------	----------------------------------

Note: The licence if granted as per clause (a) of the preamble shall be granted for a period not exceeding \*\*[3 months].

CONDITIONS

- (1) The explosives shall be kept in a substantial building constructed of non-flammable materials or in a fireproof box as may be approved by the licensing authority, separated from any dwelling house or other building another licensed premises, highway, street, public thoroughfare or public place by distance of minimum 45 metres and made and closed so as to prevent unauthorised persons from having acces thereto and to secure it from danger from without.
- (2) The interior of the building 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.
- (3) Adequate provision shall be made for the ventilation and the interior of the building or box shall be kept scrupulously cleaned.
- (4) In cae any of the explosive store is liable to be dangerously effected water, due precautions shall be taken to exclude water from the storage place.
- (5) Detonators shall not be stored along with other explosives. Detonators, if required shall be stored in a different building or fireproof box located at a distance of minimum 1.5 metres from the building or box where other explosives are stored.
- (6) The doors of the building 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.
- (7) 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.
- (8) No tools, implements, balance, weights, etc. made of iron or steel shall be kept at any time on the premises.
  - (9) All explosives exceeding 0.5 kg. In quantity shall be kept in a substantial case, bag, canister or other receptacle made and closed so as to prevent the explosives from escaping.
  - (10) All losses, shortage of stock or thefts of explosives shall be reported without delay to the nearest police station and the licensing authority.
  - (11) If this licence is granted as per clause (a) of preamble the total quantity of explosives that can be purchased <sup>\*\*</sup>[during the validity of licence shall not exceed 25 Kg. Of Class 2 and/ or Class 3 explosives, 500 Nos. of detonators and 1000 metres of safety fuse, provided that maximum quantity of explosives that may be kept at any one time shall not exceed 5 kgs. of Class 2 and/or Class 3 explosives, 100 Nos. of detonators and 200 metres of safety fuse].
  - (12) The licensee shall at the time of purchasing explosives have the following particulars endorsed upon his licence and signed by the person delivering the explosives.
    - (i) Name and address and licence No. of the person delivering explosives;
    - (ii) Name and address of the person who takes delivery of the explosives purchased;
    - (iii) The kind and quantities of explosives purchased;
    - (iv) The date of purchase.
  - (13) Explosives purchased on the strength of this licence shall not be sold or transferred to any other person.
  - (14) 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 Rules and the conditions of this of this licence are duly observed.
  - (15) The stock of explosives remaining on expiry of licence shall be intimated to the licensing authority and the licensee shall comply with instructions of such authority regarding disposal of explosives.
  - (16) The licensee for the purpose of blasting explosives shall employ a qualified person holdign a Shot Firer's Permit granted under these rules.
  - (17) Maximum quantity of explosives that may be kept at any one time shall not exceed
 

(i) Gunpowder (Class 1).....	kg.
(ii) Small arms nitro-compound.....	Kg.
(iii) Safety Fuse .....	Metres
(iv) Nitro-compounds (Class 3).....	Kg.
(v) Nitrate Mixtures (Class 2) .....	Kg.
(vi) Detonators .....	Nos.
  - (18) The licensee may by filling cartridges, making charge or otherwise adapt or prepare for use any explosive he is authorised to possess under this licence provided that—
    - (a) the total quantity of explosives on the licensed premises including the workshop in which such adaptation or preparation is carried on, shall not exceed the quantity the licensee is authorised to possess.
    - (b) no work unconnected with such adaptation, or preparation shall be carried on in the said workshop while such adaptation or preparation is being carried on.
    - (c) the said workshop shall be situated at a distance of.....metres as shown in plan No.....dated.....attached hereto.
    - (d) an explosive of one description shall not be converted into an explosive of another description and an explosive shall not be unmade or resolved into its ingredients; and
    - (e) the licensee shall give notice to the authority which granted his licence the he intends to carry on such adaptation or preparation as is allowed by this licence.

Additional Conditions

FORM 24  
(See Rule 155)  
[Article 4 of Schedule IV)

\*[Licence to possess and sell small-arms nitro-compound not exceeding 25 Kgs. or fire-works not exceeding 1000 kgs, of Class 7 Division 2 Sub-Division 1,100 Kgs. of Class 7 Division 2, sub-division 2, or gunpowder not exceeding 25 kgs. and safety fuse not exceeding 10,000 metres.]

No. \_\_\_\_\_ Fee- Rs. .... (per year)

Licence is hereby granted to.....valid only for possession and sale at the licensed premises described below of the quantities of explosives in additional condition No..... subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain in force till.....

This licence is liable to be suspended or revoked for any violation of the Act as amended from time to time or the rules framed thereunder or the conditions of this licence or if the licensed premises are not found conforming to the description as per attached plans.

Description of the licensed premises

The licensed premises are situated at .....as shown in plan--

(i) No..... dated.....

(ii) No. ....dated.....

(iii) No.....dated.....

And consist of.....

The .....

Postal address of licensee .....

.....

Controller of Explosives

.....

District Authority

Endorsement for renewal

Date of renewal	Date of expiry	Signature of licensing authority
-----------------	----------------	----------------------------------

CONDITONS

- (1) All explosives on the premises shall be kept in a substantial brick stone or concrete building which is closed and secured so as to prevent unauthorised persons from having access thereto.
- (2) The interior of every building and receptacle used for keeping explosives and the shelves and fittings therein shall be so constructed or so lined and covered as to prevent the exposue 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 is reasonably practicable, be kept free from grit and otherwise clean.
- (3) The building or receptacle in which explosive is kept must be used only for the keeping of such explosive and for no other purpose whatsoever.
- (4) Explosives of different descriptions which may be kept under this licence shall be separated by an intervening partition of such substance and character; or by such intervening space, as will effectually prevent explosion or fire in the one communicating with the other:

Provided that—

- (a) small arms nitro-compound and safety fuses belonging to the 1<sup>st</sup> Division of the 6<sup>th</sup> (Ammunition) Class may be kept with each other without any intervening partition or space;
  - (b) the various explosives of the 1<sup>st</sup> division of the 6<sup>th</sup> (Ammunition) class may be kept with each other without any intervening partition or space :
  - (c) the various explosives of the 7<sup>th</sup> (Fireworks), Class other than those containing chlorate may be kept with each other without any intervening partition or space.
- (5) Any quantity exceeding 2.5 Kgs. of an explosive of the 1<sup>st</sup> Division of the 6<sup>th</sup> (Ammunition) Class or of the 2<sup>nd</sup> Division of the 7<sup>th</sup> (Fireworks) Class and all other explosives exceeding 0.5 Kg. Must be kept in a substantial bag, canister or case made and closed so as to prevent any explosives from escaping and shall be otherwise packed and marked in accordance with the requirements of rules 8 and 9 of the Explosives Rules, 1983.
  - (6) No oil, paints, matches, lights, any article of a highly flammable 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) No tools, implements, balance, weights, etc. made of iron or steel shall be kept at any time in the licensed premises, and no person on the licensed premises shall have any iron or steel in his possession, or attached to or on his boots or shoes.
  - (8) The licensee shall keep records and accounts of all explosives manufactured and of all stocks in hand in forms 31 & 32 and exhibit the stock books and records to any of the officers authorised under Rule 179 of Explosives Rules whenever such officer may call upon him to do so.
  - (9) All sales of explosives under this licence must be effected on the premises described on the face of the licence.
  - (10) All losses, shortages of stock and thefts of explosives shall be reported without delay to the police station in whose jurisdiction the licensed premises are situated and to the licensing authority.
  - (11) 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 Rules and the conditions of this of this licence are duly observed.

Additional Conditions

FORM 25  
(See Rule 155)  
[Article 9 of Schedule IV)  
LICENCE FOR ROAD VAN

No. \_\_\_\_\_ Fee Rs.....(per year)

Licence is hereby granted to.....transport explosives by road van as described below subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain in force till.....

This licence is liable to be suspended or revoked for any violation of the Act as amended from time to time or the rules framed thereunder or the conditions of this licence or if the licensed premises are not found conforming to the description:

Description of road van

---

Make  
Registration No.  
Engine No.  
Chassis No.

Description of other fittings  
 Approved Drawing No. and Date  
 Quantity of explosives permitted to carry

---

Postal address of licensee .....

Controller of Explosives

Space for endorsement of renewals

Date of renewal	Date of expiry	Signature of licensing authority
-----------------	----------------	----------------------------------

CONDITONS

- (1) This licence is not transferable to any other road 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, 1983.
- (5) The road van shall not be used for trasport 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 road 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 coversant 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 road 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 35 and present the same on demand by an inspecting officer.

Additional Conditions.

FORM 26  
 (See Rule 155)  
 [Article 8 of Schedule IV]  
 LICENCE TO TRANSPORT EXPLOSIVES

No. \_\_\_\_\_ Fee Rs.....(per year)  
 Licence is hereby granted to.....to transport following explosives :

Sl.No.	Name	Class	Division
--------	------	-------	----------

from the premises licensed in form .....bearing licence No.....situated at.....to places specified below subject to the provisions of the Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

Places of destination---

Sl.No.	Place	District	State
--------	-------	----------	-------

This licence shall remain in force till 31<sup>st</sup> day of March, 19.....

This licence is liable to be suspended or revoked on any violation of the Act or rules framed thereunder or the conditions of the licence.

Postal address of licensee .....

.....

Controller of Explosives

Space for endorsement of renewals

Date of renewal	Date of expiry	Signature of licensing authority
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#### CONDITONS

- (1) This licence becomes void on the expiration of the terms mentioned therein or if a consignment breaks before reaching the place of destination or if the explosives is taken from or to any place other than the places mentioned in the licence.
- (2) The licensee shall transport only such explosives as he is authorised to possess under the Act and the Rules framed thereunder.
- (3) The quantity of explosives depatched to any consignee shall not exceed the quantity which such consignee is entitled to possess under a licence granted under these rules.
- (4) Each consignment of explosives shall be covered by a pass in Form 16 and that (when the explosives are transported by rail) such pass shall be attached to the way bill or the invoice s the case may be.
- (5) A copy of each pass issued for each consignment shall be sent to—
  - (i) Licensing authority;
  - (ii) Controller of Explosives in whose jurisdiction the premises from which the consignment is sent, is situated; and
  - (iii) The Controller of Explosives in whose jurisdiction the premises to which the explosives are sent is situated.
- (6) Any los, shortage or theft of explosives in transit shall be reported without delay to the licensing authority and to the police station and to the Controller of Explosives in whose jurisdiction the loss, shortage or theft is discovered.
- (7) The explosives shall be packed and marked inaccordance with Rules 8 and 9 of the Explosives Rules.

Additional Conditions.

FORM 27  
(See Rule 155)

[Article 6 of Schedule IV)  
Licence to Import Explosives otherwise than by land

No.

Fee Rs.....

Licence is hereby granted to.....to import by sea/air at any one time explosives of the description given below at the port of .....for consignment to persons mentioned below subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain in force till.....

This licence is liable to be suspended or revoked for any violation of the Act as amended from time to time or the rules framed thereunder or the conditions of this licence.

Postal address of licensee .....  
.....

The.....20.....

Chief Controller of Explosives

DESCRIPTION OF EXPLOSIVES AND CONSIGNEE

Name of explosives Class & Division	Weight	No. of packages	Consignee's name and address to whom explosives will be sent from place of import	Licence No. of the magazine/store house of the consignee	Remarks

CONDITONS

- (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 Rules 8 and 9 of Explosives Rules, 1983.
- (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 bring to or more and no such explosive shall be unloaded or transhipped from any ship or boat or aircraft except at the port authorised by this licence.
- (5) The licence 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/port and despatched to the magazine/store house for storage, the licensee shall complete the importer's transmission Schedule in Form 15 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 of Explosives authorised for the purpose.

Additional Conditions.

FORM 28  
(See Rule 155)  
[Article 7 of Schedule IV)  
Licence to Export Explosives otherwise than by land

No.

Fee Rs.....

Licence is hereby granted to.....to Export by sea/air at any one time explosives of the description given below at the port of .....for consignment to persons mentioned below subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain in force till.....

This licence is liable to be suspended or revoked for any violation of the Act as amended from time to time or the rules framed thereunder or the conditions of this licence.

Postal address of licensee .....  
.....

The.....20.....

Chief Controller of Explosives

DESCRIPTION OF EXPLOSIVES AND CONSIGNEE

Name of explosives Class & Division	Weight	No. of packages	Consignee's name and address	Remarks

CONDITONS

- (1) No explosives other than those permitted under this license shall be exported.
- (2) The quantity of explosives exported shall not exceed that authorised by this licence.
- (3) The explosives shall be packed in accordance with Explosives Rules, 1983 and the packages marked accordingly. The packages shall be safe for transport.
- (4) The explosives shall be exported only from the place specified in this licence.
- (5) The licensee shall comply with all the rules and regulations in force at the port or place of export mentioned in this licence.
- (6) The explosives shall be brought to the port or place of export only after the ship or aircraft is ready.

Additional Conditions.



FORM 29  
(See Rule 155)  
[Article 7 of Schedule IV]  
Licence to possess and use Public Display Fireworks

No.

Fee Rs.....

Licence is hereby granted to.....only for possession of .....Kgs. of fireworks at premises described below and for making public display at the premises mentioned below subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain in force till.....

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or conditions of the licence if the licensed premises are not found conforming to description as per attached plans.

Description of premises

The premises to be used for public display fireworks are situated at.....as shown in plan No.....dated.....attached herewith.

The premises for storage of fireworks are situated at .....dated ..... attached herewith.

Postal address of licensee .....  
.....

The.....20.....

Controller of Explosives

CONDITONS

- (1) The licensee shall, at least seven clear days (exclusive of Sunday and public holidays) before the holding of a public fireworks display by him or under his authority or supervision shall notify the licensing authority.
  - (a) Time and place at which the public display is to be held;
  - (b) The types of public display fireworks to be used in the display;
  - (c) The name, address and licence number of every persons from whom these fireworks have been or are to be obtained for use in display;
  - (d) Name and address of every person who will be supervising the display or assisting the licensee to supervise the display; and
  - (e) Full details of the experience which every person other than licensee, whose name is notified in paragraph (d) above has had in the conduct or supervision of public display fireworks.
- (2) The fireworks shall be stored and displayed only at the places shown in the plan attached with the licence.
- (3) A minimum distance as specified in additional condition No..... 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 proper valid licence granted to manufacture such fireworks.

- (5) No display of fireworks should be carried out when the wind velocity exceeds 50 kilo metres per hour or the control over spectators has been lost.
- (6) Only minimum persons should be employed for making and display of fireworks. The site should be constantly supervised and the persons employed should wear protective clothings, ear defenders, safety glasses and other protective devices.
- (7) Once fireworks have been taken to the site, the site must not be left unattended or unprotected
- (8) No fireworks shall be ignited inside of or closer than 15 metres of any tent, trailer, canvas shelter of motor vehicle.
- (9) No fireworks shall be ignited within 200 metres of a hospital, nursing home, schools or temples unless consent from local authorities and the owner or its agent is obtained.
- (10) No fireworks shall be set off within 200 metres of a hospital, nursing home, schools or temples unless consent from local authorities and the owner or its agent is obtained.
- (11) Adequate fire fighting equipment to cope up with any fire which can be reasonably anticipated shall be provided. The type and quantity of first-aid and other fire fighting equipment shall be determined in conjunction with the fire fighting authorities.
- (12) After the display, waster and duds etc. shall be carefully collectd and removed from the site and destroyed by burning under proper supervision.
- (13) The licensee shall follow the provisions of Act and Rules made thereunder as otherwise applicable.
- (14) No electrical wire shall be allowed within 10 metres of the area where the fireworks are laid down.
- (15) The mortars must be buried half their length in the ground and tilted of by  $10^0$  to  $10^0$
- (16) Before starting the display the supervisor must check to ensure that the fireworks are exploding over a zone free of people and that debris are also falling in that area. If not the firing must be stopped till necessary corrections are made.
- (17) 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.
- (18) No tools, implements etc. made of iron or steel 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.
- (19) The licensee shall keep records and accounts of all fireworks received, used and stock on hand.
- (20) The licensee shall follow the local bye-laws at the place of storage and display and obtain necessary permission whenever required.
- (21) 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.
- (22) If the licensing authority directs the licensee by notice in writing to make any additions/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/alterations within such period as may be specified.
- (23) 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.
- (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 the Rules and the conditions of this licence are duly observed.

Additional Condition.

FORM 30  
(See Rule 144)  
Shotfirer's Permit

GOVERNMENT OF INDIA  
DEPARTMENT OF EXPLOSIVES

No.

This is to certify that Shri ..... born on ..... passed the shotfirer's examination held on ..... Examination held in .....  
(Name of examination) (month & year of examination)  
by .....  
(authority conducting examination)

and is authorised to conduct blasting operations using explosives in areas other than Mines coming under the purview of Indian Mines Act, 1952, subject to the provisions of Explosives Act, 1884 as amended and the rules framed thereunder.

Place:

Controller of Explosives

Date:

FORM 31

(See Rule 112)

Form of account to be maintained by a licensee  
Accounts of Explosives Manufactured

Note. – This record should be kept upto-date.

Licence No..... in Form ..... of Explosives Rules, 1983

Date & Shift No.	Brand Name of Explosives	Class & Division	Dimensions of finished products	Batch Nos.
1	2	3	4	5

Quantity manufactured	Date of test	No. of packages	Magazine/Storehouse licence No. to which the explosives sent	Remarks	Signature of person in-charge/ licensee
6	7	8	9	10	11

FORM 32

(See Rule 119)

Form of account to be maintained by a licensee  
Accounts of Receipt of Explosives

Note- This record should be kept upto-date. Entries should be made daily and as and when explosives are received.

Licence No..... in Form ..... of Explosives Rules, 1983

Date	Description of Explosives	Opening	Explosives received	Quantity
------	---------------------------	---------	---------------------	----------

				balance	by licensee	
	Name	Class	Division			
1	2	3	4	5	6	7

Batch No.	Name, address licence No of supplier	Mode of transport & Road Van licence No. if transported by road.	Pass No.	Closing balance	Remarks	Signature of licensee/ person incharge
-----------	--------------------------------------	--	----------	-----------------	---------	--

FORM 33  
(See Rule 119)  
Form of account to be maintained by a licensee  
Accounts of Sale of Explosives

Note - This record should be kept upto-date. Entries should be made daily and as and when explosives are sold.

Licence No..... in Form ..... of Explosives Rules, 1983

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 No. and Date	Name, address & licence No. of person to whom explosives are sold	Mode of transport & road van licence No. if transported
9	10	11	12

Pass No.	Closing Balance	Remarks	Signature of licensee/ person incharge
13	14	15	16

FORM 34  
(See Rule 119)

Form of account to be maintained by a licensee  
Accounts of Explosives use by licensee

Note - This record should be kept upto-date. The entries should be made daily and as soon as explosives are issued for use or unused explosives returned.

Licence No..... in Form ..... of Explosives Rules, 1983

Date	Shot Firers name and permit No.	Description of explosives		
		Name	Class	Division
1	2	3	4	5

Quantity issued	No. 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 incharge	Remarks
15	16	17

FORM 35

(See condition 13 of licence Form 25)  
Form of account to be maintained by a licensee  
Accounts of Explosives transported by road van

Note - This record should be kept upto-date.

Licence No..... in Form ..... of Explosives Rules, 1983

Date	Name, address and licence No. of the consignor	Place of loading
1	2	3

Description of explosives			Bat No. & date of manufacture	Quantity transported
Name	Class	Division		
4	5	6	7	8

Pass No.	Signature of the consignor	Name, address and licence No. of the consignee	Place of loading
9	10	11	12

Date unloading of explosives	Signature of consignee	Remarks
13	14	15

FORM 36

(See condition 15 of licence Form 21 and 22)  
RETURN OF EXPLOSIVES

Received, Used, Sold, Destroyed and stolen during the month.....  
From the Explosives Magazine/Store House of .....  
Situated at District.....

-----  
Name of Explosives Class and Division Quantity  
-----

- Licence No..... in Form ..... of Explosives Rules, 1983
- Opening Balance on the 1<sup>st</sup> day of the month.
- Account of Explosives:

Date	Name of Explanation	Class and Division	Quantity
1	2	3	4
1.			
2.			
3.			
4.			

Particulars of Explosives Received

Name of Explosive	Class & Division	Quantity	Name, address & Licence No. of suppliers from whom explosives were received	Pass No.	Road Van Lic. No.
5	6	7	8	9	10

Date	Particulars of Explosives Used or Sold		
	Name of Explosive	Class and Division	Quantity
11	12	13	14

Sold					
Name of Explosive	Class & Division	Quantity	Name, address & Licence No. of person to whom explosives were sold	Pass No.	Road Van Lic. No.
15	16	17	18	19	20

4. Total Quantity of each kind of explosives Used/Sold during the month.

Used		
Name of Explosives	Class & Division	Quantity
1	2	3
1.		
2.		
3.		
4.		

Sold		
Name of Explosives	Class & Division	Quantity
4	5	6
1.		
2.		
3.		
4.		

5. Particulars of Explosives destroyed during the months

Date	Name of Explosives	Class & 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/short received during transit.

Date	Name of Explosives	Class and Division
1	2	3
1.		
2.		
3.		
4.		

Quantity	Whether theft/loss reported to police and Department of Explosives if so, give reference	Remarks
4	5	6

- 1.
- 2.
- 3.
- 4.

FORM 37  
FORM OF INDENT FOR EXPLOSIVES

Place.....  
Date.....

To,

.....  
.....  
.....

Dear Sir,

Kindly supply the following quantities of explosives to me/us:--

Sl. No.	Name	Class & Division	Quantity
1.			
2.			
3.			
4.			
5.			

I/We hold a licence No. ....in Form.....of Explosives Rules, 1983 for possession/sale/use of following quantities of explosives:

Sl. No.	Name	Class & Division	Quantity
1.			
2.			
3.			
4.			
5.			

The above mentioned licence is valid till.....

\*The licence is sent herewith for necessary endorsement as required under sub-rule (3) of Rule 141 of Explosives Rules, 1983. The licence may please be returned after the endorsement.

\*The explosives may please 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 38  
(See Rule 155)  
[Article 1(d) of Schedule IV]



Licence to manufacture ANFO Explosives at site.

No.....

Fee Rs.....per year

Licence is hereby granted to.....only for manufacture Ammonium Nitrate or impregnated with mineral Oil at any one time at the premises described below subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain valid till 31<sup>st</sup> day of March, 19.....

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or conditions of the licence of if the licensed premises are not found conforming to description as per attached plans.

DESCRIPTION OF THE LICENSED PREMISES

The licensed premises shown in plan No. ....attached hereto are situated at.....District.....and consist of.....

Postal address of the licensee.....

The.....

Controller of Explosives

Space for endorsement of renewals

Date of renewal	Date of expiry	Signature of licensing authority
-----------------	----------------	----------------------------------

CONDITONS

1. The explosives shall be manufactured in a lightly constructed shed observing at all times the safety distance specified in the approved plan attached hereto.
2. The shed shall have a smooth cemented platform standing at least 30 cms. above the surrounding ground. The floor shall be surrounded by a brick wal at test 1 metre high with opening for entrance and exist on opposite sides.
3. The manufacturing shed and the area within 9 metres therof shall be surrounded by a fencing not less than 2 metres high. The entire area so fenced off shall be kept free from rubbish, dry grass, empty bags or other combustible materials.
4. The process of manufacture shall consist of mixing or impregnation of ammonium nitrate with mineral oil. For the purpose of this condition mineral oil shall be deemed to include liquid derivatives of petroleum, coal or shall with a flash point not below 38 degrees centigrade.
5. The mixing or impregnation referred to in condition 4 shall be done in the manufacturing shed either by hand in an aluminium or internally aluminium lined wooden vessel or by a machine which has been approved, in writing, by the Chief Controller of Explosives.
6. The explosives shall be manufactured under the immediate supervision of a qualified responsible person appointed in writing by the licensee.
7. The licensee shall abstain from any act whatsoever which tends to cause fire or explosion and shall take all due precautions to prevent—
  - (i) contamination of the explosive or its ingredients with grit or any extraneous matter which is likely to increase the sensitivity of the explosive or adversely affect its characterises;
  - (ii) unauthorised persons having access to the place or places of manufacture, charging or handling of explosives or within 9 metres thereof.

8. Ingredients in excess of the quantity required for immediate use shall not be kept in the place where the explosive is manufactured or within 9 metres thereof.
9. No smoking, naked lights, matches or articles capable of producing sparks or ignition shall be allowed in the place or places where the explosives is manufactured, handled or used or within 9 metres thereof.
10. Explosive shall be manufactured in quantities required for immediate use.
11. The total quantity of explosives together with the quantity of its ingredients kept in the licensed premises shall not at any one time exceed the licensed quantity.
12. Explosive manufactured under this licence shall be tested at regular intervals to determine its cap-sensitivity. Any explosive which on test indicates cap-sensitivity shall be forthwith packed in an inner package which is of such strength as to prevent the escape of the explosive or oil and may be of polythene. The outer package shall be of wood, solid fibreboard or aluminium. Such explosive shall be removed to a magazine licensed for the storage of such explosives and the licensing authority informed in writing for instructions regarding disposal thereof. For the purpose of this condition one cartridge or bag of explosive shall be placed on an isolated soft ground, an electric detonators inserted into it and fired by a qualified, shotfirer observing all due precautions. Formation of a crater on the ground below the cartridge or bag so fired shall be taken to indicate that the explosive is cap-sensitive.
13. All spillage of explosive shall be collected and destroyed at a safe place away from the licensed premises under the supervision of experienced person.
14. All containers and mixers used for manufacturing the explosive shall after use be thoroughly cleaned with suitable detergent solution and washed with water.
15. All detonators, priming cartridges, detonating fuse and other initiating explosives shall be stored in a magazine licensed for the purpose.
16. The licensee may fill into cartridges the explosive he is authorised under this licence provided—
  - (i) such cartridges are filed only at the place marked in the approved plan attached thereto;
  - (ii) the explosive is not unmade or resolved into its ingredients;
  - (iii) no smoking, naked light, matches or any article, capable of producing spark or ignition is allowed at the place where such cartridges are filled or within 9 metres thereof.
17. No additions or alterations shall be carried out in the licensed premises without the previous sanction in writing of the licensing authority. Such additions or alterations so sanctioned shall be shown on the amended plan to be attached to this licence.
18. 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 conditions of this licence are duly observed.
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.
20. The licensee shall keep records and accounts of all explosives manufactured under this licence and used shall be exhibited to any officer authorised under Rule 179 of Explosives Rules whenever such officer may call upon him to do so.
21. The licensee shall submit at the end of every month a return showing the quantity of ANFO Explosives manufactured and use during the month to the licensing authority as well as to the renewal authority so as to reach the above authorities by the tenth day of the succeeding month.

Additional Conditions.

FORM 39

(See Rule 155)

[Article 1(c) of Schedule IV]

Licence to manufacture, possess and sell/use Liquid Oxygen Explosives

No.....

Fee Rs.....per year

Licence is hereby granted to.....valid only for manufacture .....kilograms of Liquid Oxygen Explosives at any one time and possess, sell/use the same at the premises described below subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules framed thereunder and to the conditions of this licence.

This licence shall remain valid till 31<sup>st</sup> day of March, 19.....

This licence is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or conditions of the licence of if the licensed premises are not found conforming to description as per attached plan.

DESCRIPTION OF THE LICENSED PREMISES

The licensed premises shown in plan No. ....attached hereto are situated at.....District.....and consist of.....

Postal address of the licensee.....

The..... Chief Controller of Explosives

Space for endorsement of renewals

Date of renewal	Date of expiry	Signature of licensing authority
-----------------	----------------	----------------------------------

CONDITONS

1. The explosives shall be manufactured in a lightly constructed shed observing at all times the safety distance specified in the approved plan attached hereto.
2. The manufacturing premises shall maintain at all times the safety distances prescribed in additional condition No.....
3. The process of manufacture shall consist of mixing or impregnation of ammonium nitrate with mineral oil. For the purpose of this condition mineral oil shall be deemed to include liquid derivatives of petroleum, coal or shall with a flash point not below 38 degrees centigrade.
4. Insulated approved soaking vessels shall be mounted rigidly on pneumatic tyred tractors having pneumatic/hydraulic brakes operating simultaneously with the brakes of the tractor unit and that the hitching shall allow movement around an axis but no lateral movement. The exhaust of the tractor shall be covered by an efficient spark Arrestor and shall be pointed in the forward and downward direction. Tractors/vehicles with the articulated trailers shall of a type approved in writing by the Chief Controller of Explosives.
5. The said cartridges shall contain materials as approved by the Chief Controller of Explosives.
6. The Ingredients i.e. cartridges and liquid oxygen until brought for soaking shall be stored separately.
7. Not more than four persons shall be allowed at any one time in the premises in which the explosive is being manufactured and only person actually employed n manufacturing and superintending manufacture shall be within licensed premises.

8. The cartridges of liquid oxygen explosive shall be kept in insulated soaking boxes mounted on pneumatic tyred vehicle. Boxes containing the cartridges shall be in charge of a competent person appointed in writing for the purpose by the licensee and shall transported in accordance with the provisions of the Explosives Rules, 1983 in this behalf.
9. No smoking and no fire, light, or articles or substances capable of producing ignition or explosion shall be allowed within 15 M of the place explosives are manufactured.
10. No person under 18 years of age, and no person who is in a state of intoxication shall be employed in or allowed to enter the licensed premises or allowed to transport or handle soaked liquid cartridges.
11. The licensee shall keep records and accounts of all explosives manufactured under this licence and used shall be exhibited to any officer authorised under Rule 179 of Explosives Rules whenever such officer may call upon him to do so.
12. The licensee and his authorised agent and employees shall at all times take all due precautions for the prevention of accidents by fire or explosion and for preventing unauthorised person from having access to the licensed premises and shall also obtain from any Act, which is likely to cause fire or explosion.
13. Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and to the Controller of Explosives concerned and the Chief Controller of Explosives, Nagpur.
14. There shall be kep constantly posted up in the depot in such a manner as to be easily read, a copy of the conditions of this licence in English and in the language of the District in which the licensed premises are situated. Notices shall be kept constantly posted up at the entrance of each soaking shed or compartment clearly stating the maximum quantity of liquid oxygen explosive permitted under this licence in each place at any one time.
15. 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 conditions of this licence are duly observed.
16. If the licensing authority or Controller of Explosives call upon the holder of the licensee by notice in writing to execute any repairs or make any alterations to the licensed premises or machinery, tools or apparatus, which are in the opinion of such authority, is considered necessary for the safety of the premises or of the person working therein, the holder of the licence shall execute the repairs and alterations within specified period.
17. Detonators, boosters and any explosives other than LOX shall not be stored in the licensed premises.
18. All tools and implements used in the premises shall be made only of wood, copper or bras or some soft metal or material, or shall be covered with suitable material.
19. All losses, shortage of stock and thefts of explosives shall be reported without delay to the nearest Police Station.

Additional Conditions.

**SCHEDULE VI**  
(See Rules 31 and 36)

**EXPLOSIVES PERMITTED TO BE IMPORTED AND TRANSPORTED BY AIR**

Sl.No	Name and description	Class	Division	Quantity permitted in	
				Passenger Aircraft	Cargo Aircraft
1.	*Aeroplane flares				95 Kgs.
2.	Amorces	7	2	25 Kgs.	70 Kgs.
3.	Chinese Crackers	7	2	--	95 Kgs.
4.	Detonating Fuse	6	2	25 Kgs.	140 Kgs.
5.	Roman Candles	7	2	25 Kgs.	95 Kgs.
6.	Safety Fuse	6	1	25 Kgs.	140 Kgs.
7.	Ship Distress Signals	7	2	--	95 Kgs.
8.	Smoke Candles	--	--	25 Kgs.	95 Kgs.
9.	Sparklers	7	2	25 Kgs.	95 Kgs.

10.	*Squiba Electric	--	---	25 Kgs.	70 Kgs.
11.	(Aluminium or Magnesium) Touiches	7	2	25 Kgs.	95 Kgs.
12.	Very Signal Cartridges	7	2	25 Kgs.	45 Kgs.
13.	Wheels	7	2	25 Kgs.	95 Kgs.

\*The item can be transported by air as and when included in list of Authorised Explosives.

## SCHEDULE VII

### SPECIFICATIONS

The specifications laid down in this Schedule are for general guidance only. Approval of the Chief Controller should be obtained separately for each case.

#### SPECIFICATION 1

Specification for a road van for carriage of explosives only.

##### PART 1

- (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 .914 mm. Aluminium sheeting. The wood if used shall be treated as to render it unflammable.
- (3) Cab-Doors shall be fitted having windows of non-splinter type glass.
- (4) Wind Screen.—A substantially framed win-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 Stone 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 Kgs. 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 to the second part of this specification 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/national permits shall be painted as per directions of

Road Transport Authority. However, another Circle of 60 cms 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 white 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 mm, thick and about 152.4 mm or 177.8 mm 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 mm (20 S.W.D.) aluminium sheet. The flooring is to be supported by bearers about 28.6 mm thick by 50.8 mm wide, fitted between the soleplate and screwed on the top of the crossmembers of the chassis frame.

The sill of the doorway has to have a fall outwards of 6.4 mm and it should be covered with a brass plate full width of the doorway, 63.5 mm. 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 mm. (20 S.W.G.) aluminium sheeting and inner lining may be of asbestos or wood so treated as to be rendered unflammable 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 mm. X 4 mm whilst and ends to a distance of 25.4 mm the end turnover, being relieved at intervals of 152.4 mm 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 mm. X 4 mm 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 mm. X 4 m. has to be used, excepting only the bottom joint of the sides which is covered by a wooden rail 25.4 mm wide 38.1 mm deep, and the central cover joint of the doors, which is formed with flat mild steel strap 38.1 mm 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 bevelled along the bottom to make a watertight joint with the brass covered sill of the doorway, and the central joint of doors must also bevelled and covered with stepping 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 mm and these in turn are to be securely fixed to hinge and angle plates of section 44.4 x 8.0 mm 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 2

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 driver's cab shall be fitted and covered externally with .914 m (20 S.W.G.) aluminium sheeting.
- (3) The cab doors shall be fitted having windows of non-splinter type glass.
- (4) A substantially framed wind screen shall be fitted with the portion in front of driver's seat pivoted on strong brass quadrants for opening.
- (5) The fuel tank shall be below the floor level and at least 0.5 M 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 kgs. 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 dash board. Electric torches (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 mm thick and about 150 mm or 175 mm in width.
- (14) Base of the compressor should be minimum 150 mm 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 1000 mm. The distance between the compressor and the explosives boxes shall be minimum 1500 mm.
- (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 kgs. 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 3

#### Specification of metal cases for conveyance of explosives

##### 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 not less than 1.257 mm (18 BG - .0495 inches) or, if of zinc, not less than 9.5 mm.

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 mm or of zinc not less than 9.5 mm.

Alternatively the bottom may be made of mild steel of 4.8 mm 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 mm 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 mm at centre, and not less than 3.2 at rim, or if of zinc, not less than 9.5 mm throughout.

The lid to be secured by not less than four good screws, bolts or wing bolts, with or without a substantial hinge, which may take the place of one of the four screws, bolts, or wing 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.

### SPECIFICATION 4

#### Specification of metal cases for conveyance of explosives

##### Duralumin Containers :

Dimensions of container inside to be 902 mm. Deep by 308 mm. Wide by 267 mm.

The body of container to be of 1.626 mm (No.16 S.W.G.) sheet in one piece riveted with 8.00 mm (5/6ths inch) diameter rivets 25.4 mm pitch at seam. 50.8 mm pitch at other three corners, having 31.8 mm by 31.8 mm by 4.8 mm. Angle riveted on top and round bottom with 8 mm diameter rivets 25.4 mm pitch.



Bottom of containers to be of 3.25 mm. ( No. 10 S.W.G.) sheet fitted with 31.8 mm. By 31.8 mm. By 4.8 angle all round and rivetted with 8 mm. Diameter rivets. Corner pieces 2.642 mm. (No. 12 S.W.G.) sheet to be rivetted to angel and to bottom plate with 8 mm. Diameter rivets.

Cover of container to be of 2.032 m. (No. 14 S.W.G.) sheet fitted with 37.6 mm by 25.4 mm. By 4.8 mm angle all round and rivetted with 8.0 mm. Diameter rivets. Corner pieces 2.042 mm (No. 12S.W.G.) sheet to be rivetted to angel and cover plate with 8.00 mm diameter rivets.

Cover to be fastened to container by four 12.7 mm with worth set pins with washer.

Rubber joint 31.8 mm by 3.2 mm thick to be riveted to underside of cover plate by twelve 6.3 mm diameter rivets, 15.9 mm diameter holes to be bored in cover and joint to suit 12.7 mm set pins.

Two Duralumin drop down handles to be rivetted to body of container.

## SPECIFICATION 5

### Specifications of metal cases for conveyance of explosives.

The body to be of wrought iron or mild steel, thoroughly galvanised, thickness not less than 18 B.G. (0.495 inch) fitted at the top with a flange 12.7 mm 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 mm thick at the rim, and not less than 4.8 mm thick at the centre, and provided with a protection 25.4 mm high and at least 6.3 mm thick, so made as to be a close fit inside the body, to which it shall be rivetted with rivets 6.3 mm diameter.

The lid to be of the Aluminium alloy, not less than 12.7 mm thick at the rim and not less than 6.3 mm thick at the centre and secured by eight screwed studs to the flange.

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 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 6

### Specifications of Magazines

#### 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 any 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 e.g. 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 and 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. Types 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.

#### MODE 'A' MAGAZINE

A Mode 'A' magazine shall be of a type approved by the Chief Controller and shall primarily –

- (a) have walls of reinforced concrete at least 225 mm thick or brick/stone at least 450 mm thick set in cement mortar. Concrete shall have a minimum compressive strength of 2500lb/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 in<sup>2</sup> of wall. The reinforcement shall be covered by not less than 50 mm 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) have interior, and the benches, shelves and fittings therein 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) have roof reinforced concrete at least 150 mm thick.
- (d) have one ventilator at the top and bottom in each opposite side wall of the magazine where the weight of explosive stored is upto and including 500 kgs and minimum two in the top and bottom of each wall where the weight of explosive stored exceeds 500 kgs. Number of the ventilators may be increased as desired by the licensing authority. The ventilators shall be 22.5 cm x 11.25 cm. Z type fitted with frame of iron bars set firmly in the wall on the outer face, the bars to

be of 2.35 cm<sup>2</sup> , (3/8” sq.) iron set anglewise with the frame. The inner opening to be protected with brass wire gauge of 3 mesh per centimeter.

- (e) have external doors –
  - (i) that opens outwards and when closed fit tightly;
  - (ii) to be constructed of steel plate at least 5mm, thick with or without internal lining of wood
- (f) have every internal door –
  - (i) made of wood;
  - (ii) locks and fittings of non-ferrous metal
- (g) have external door locks of “dead lock” type.
- (h) have 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 meter 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 cm.
- (i) have wooden tressels or raised cement platform for storage of explosive packages.
- (j) have a porch if necessary and any such porch shall
  - (i) be of the same construction as the remainder of the magazine; and
  - (ii) be used only for keeping all tools or implements used in connection with the magazine or the changing of clothe and shoes.
- (k) have 25 x 50 mm furring strips fastened to the wall, vertically on 300 mm centres starting 130 mm 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) have a minimum 12 mm 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) have an internal volume not less than 0.4 cubic meter for each 100 kgs of explosives. In addition sufficient space shall be provided for passage between stocks of packages if required by licensing authority;
- (n) have sufficient number of windows for proper lighting inside the magazine. The windows shall open outside and constructed of steel plate at least 5 mm thick with or without internal lining of wood.

#### MODE ‘B’ MAGAZINE

A Mode ‘B’ magazine shall be of a type approved by Chief Controller shall primarily –

- (a) have walls of steel plate at least 5 mm thick;
- (b) have a roof of steel plate at least 5 mm thick;
- (c) have interior lining at least 10 mm thick on walls, doors and ceiling and 25 mm thick on door and consisting of closed fittings boards or wood joined together by tounge

- and groove joints in such a way that no iron or steel is exposed on the interior sides, ceiling, floor or doors;
- (d) have an internal volume not less than 0.4 cubic metre for each 100 kgs of explosives. The maximum internal volume shall not be more than 2 cubic metres.
  - (e) be ventilated by means of vents which shall be adequately protected;
  - (f) have external hinges of steel welded to the door and to the frame of the magazine;
  - (g) have a lock of “dead lock” type for external door.

## SPECIFICATION 7

### SPECIFICATION OF A STOREHOUSE

The basic consideration in construction of a storehouse 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 storehouse 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 steel or substances in such manner as to come in contact with the materials stored and such interior, benches, shelves and fittings shall as far as is practicable be kept clean and free from gift. The storehouse 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 cm x 11.25 cm fitted with suitable frames firmly set in the walls on the outer face. The bars to be of minimum 2.35 cm<sup>2</sup> set angle-wise with the frame. The inner opening to be protected with wire gauge of minimum 3 mesh per cm. the storehouse shall have a floor area of 3 M<sup>2</sup> per tonne of explosives and have a minimum 12 mm red line painted on the interior walls at a height 3 M from the floor level. This line indicates maximum height to which explosives may be stacked. The gang way space of minimum 30 Cm 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.

The storehouse shall have sufficient number of wooden windows for proper lighting inside. The windows shall open outwards. The storehouse shall have smooth, stone or cement flooring.

## SCHEDULE VIII

### TABLE 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 1, the safety distance required for higher stage should be observed.

TABLE I  
TABLE OF SAFETY DISTANCES

Note – M denotes mounded : UM – denotes unmounted;  
Distances in Columns 2 to 13 are in metres

Quantity in Kg	To and between magazine or magazine office etc			To and between process bldgs			To railway, Road etc			To Dwelling Houses offices, factories etc.			Quantity in Kg	
	X	Y	ZZ		X	Y	ZZ	X	Y	ZZ	X	Y		ZZ
	M/UM	M/UM	M/UM		M/UM	M/UM	M/UM	M/UM	M/UM	M/UM	M/UM	M/UM	M/UM	
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>		<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>
50	10	10	10	14	10	12	18	8	12	21	45	45	45	50
100	10	10	11	17	10	15	21	9	15	33	45	45	45	100
150	10	10	13	19	10	17	24	10	17	40	45	45	45	150
200	10	10	14	21	10	19	26	11	18	45	45	45	52	200
300	10	10	16	24	10	22	30	13	21	45	45	45	68	300
400	10	10	18	27	10	24	34	14	23	45	45	45	82	400
500	10	10	19	29	10	26	37	15	25	48	45	45	95	500
600	10	10	21	31	10	27	42	16	26	54	45	45	107	600
700	10	10	22	32	10	29	45	17	27	60	45	45	119	700
800	10	10	23	34	10	30	49	17	28	65	45	45	129	800
1000	10	10	24	36	10	32	56	18	32	74	45	46	148	1000
1250	12	10	26	39	12	35	64	19	33	86	45	52	171	1250
1500	12	10	28	42	12	37	72	19	36	96	45	57	192	1500
1750	12	10	29	44	12	39	79	19	38	106	45	61	211	1750
2000	13	10	31	46	13	41	85	20	40	113	45	65	226	2000
2500	14	12	33	49	14	44	97	21	43	129	45	73	257	2500
3000	16	13	35	52	16	46	106	21	46	142	45	80	283	3000
3500	16	14	37	55	16	49	114	22	48	152	45	86	304	3500
4000	17	15	38	57	17	51	122	22	50	163	46	92	325	4000

1	2	3	4		5	6	7	8	9	10	11	12	13	14
4500	17	16	40	60	17	53	129	23	52	172	47	98	343	4500
5000	20	16	41		20	55	135	23	54	180	49	110	359	5000
6000	20	18	44		20	58	145	24	57	194	50	117	387	6000
7000	22	19	46		22	62	155	24	61	206	50	123	412	7000
8000	22	21	48		22	64	163	25	63	217	53	128	434	8000
10000	24	23	52		24	69	177	26	69	236	53	138	471	10000
12500	24	26	56		24	75	192	26	72	255	55	149	510	12500
15000	25	28	60		25	79	206	27	78	280	55	158	560	15000
17500	25	30	63		25	83	216	27	82	290	57	167	580	17500
20000	26	32	65		26	87	226	28	86	303	58	174	605	20000
25000	27	36	71		27	94	244	29	93	325	60	187	650	25000
30000	28	40	75		28	100	259	29	98	345	60	199	690	30000
35000	30	43	79		30	105	273	30	104	365	61	210	730	35000
40000	30	46	82		30	110	285	30	108	380	61	219	760	40000
45000	30	48	86		30	114	296	30	113	395	64	228	790	45000
50000	30	51	89		30	118	307	30	118	410	64	236	820	50000
60000	30	56	94		30	126	327	30	128	435	66	251	870	60000
70000	30	60	99		30	132	343	30	138	458	66	264	915	70000
80000	30	64	104		30	138	359	30	148	480	66	276	960	80000
90000	30	68	108		30	144	373	30	158	498	67	287	995	90000
100000	30	72	112		30	149	387	30	168	515	67	297	1030	100000
112500	30	76	116		30	155	402	30	180	540	69	309	1075	112500
125000	30	80	120		30	160	417	30	192	555	69	320	1110	125000
136000	30	84	124		30	165	428	30	203	575	70	329	1145	136000
150000	30	88	128		30	170	446	30	217	590	70	340	1180	150000
175000	30	95	135		30	179	466	30	242	625	71	358	1245	175000
200000	30	101	141		30	195	487	30	265	650	71	375	1300	200000

TABLE – 2  
SAFETY DISTANCE

Safety distances to be observed in a factory licensed under Explosives Rules for manufacture of Sparklers only

Distances are in metres

Sl No	Description of shed	Mixing shed	Dipping shed	Drying platform	Packing shed	Empty frames shed	Raw materials store	Outside safety distance	Quantity explosives Kgs
1	Mixing shed	6	6	9	9	15	15	15	50
2	Dipping shed	6	6	3	9	15	15	15	200
3	Drying Platform	9	3	3	9	15	15	15	200
4	Packing shed	9	9	9	9	15	15	15	200

ANNEXURE I TO EXPLOSIVES RULES, 1983

Extract from the Merchant Shipping (Carriage of Dangerous goods) Rules, 1978

“Rules 8 – Stowage of dangerous goods – (1) The owner, master or agent of every ship which carries any dangerous goods shall ensure that the stowage of the all dangerous goods on board complies with provision in respect of such stowage made in the Dangerous Goods Code without prejudice to the generalities in any respect specified in the said Code. The master every such ship shall ensure that –

- (a) dangerous goods are, as far as practicable stowed under deck;
  - (b) fibre board boxes, in particulars are stowed ‘under deck’ and where circumstances make it necessary to stow them ‘on deck’ for any of the causes referred to in clause (c) adequate protection is afforded to prevent them from being exposed to the weather of to sea water;
  - (c) stowage ‘on deck’ is restricted only to cases where-
    - (iii) constant supervision is required; or
    - (iv) accessibility to cargo is particularly required; or
    - (v) there is a substantial risk of formation of explosive gas mixtures, development of high toxic vapours or unobserved corrosion of the vessel.
  - (d) The packages are shaded from radiant heat, including store sunlight, where it is necessary to prevent pressure build up in or decomposition and polymerisation of their contents;
  - (e) When dangerous goods are stowed on deck they do not occupy more than 50 percent of the total open deck are and hydrants, sounding pipes and the like and accesses thereto are kept free and clear of such deck cargo;
- (4) Without prejudice to the provisions contained in sub-rule (1), the master of every ship carrying dangerous goods shall ensure that –
- (a) dangerous goods and any vehicle, container, package or receptacle containing dangerous goods are stowed in a manner which is a safe and proper manner of stowage for the goods or, as the case may be, for the vehicle, container, package or receptacle, having regard to the identity and the dangerous nature of the goods;

- (b) explosives (except ammunition) which present a serious risk are stowed in a magazine which is kept securely closed while at sea and that such explosives are segregated from detonators;
- (c) the electrical apparatus and cables in any compartment in which explosives are carried are so designed and used as to minimum the risk of fire or explosion;
- (d) when goods which given off dangerous vapours are stowed under deck the space used for such stowage is well ventilated;
- (e) special precautions against fire or explosion are taken, wherever required, while carrying inflammable liquids or gases; and ventilation adequate in the circumstances, is provided for the spaces in which the liquids or gases are carried; and
- (f) substances which are liable to spontaneous combustion are not carried unless precautions, proper in the circumstances, are taken for the prevention of spontaneous combustion of such substances.

ANNEXURE II TO EXPLOSIVES RULES, 1983  
Extracts from the Merchant Shipping Act, 1958

Section 3

Clause (16)

“Home-trade ship” means a ship not exceeding three thousand tons gross which is employed in trading between any port or place in India and any other port or places in Ceylon, Maladive Islands, Federation of Malaya, Singapore or Burma.

Clause (47-A)

“Special trade” means the conveyance of large number of passengers by sea within prescribed sea areas;

Clause (47-B)

“Special trade passenger” means a passenger carried in special trade passenger ship in spaces on the weather deck or upper deck or between decks which accommodate more than eight passengers and includes a pilgrim or a person accompanying a pilgrim;

Clause (47-C)

“Special trade passenger ship” means a mechanically propelled ship carrying more than thirty special trade passenger.

Section 238—Notice to be given of day of sailing.—

- (1) The master, owner or agent of a special trade passenger ship or a pilgrim ship so departing or proceeding shall give notice to an officer appointed in this behalf by the Central Government that the ship is to carry special trade passengers or pilgrims and of her destination and of the proposed time of sailing.
- (2) The notice shall be given—
  - (a) in the case of a special trade passenger ship, not less than twenty-hours before that time;
  - (b) in the case of a pilgrim ship at the original port of departure, if in India, and in any other case at the first port at which she touches in India not less than three days, and at all other ports not less than twenty-four hours, before that time.



243. Officers entitled to grant certificates—

The person by whom certificate A and certificate B are to be granted shall be the officer appointed under Section 238 who is hereinafter referred to as the certifying Officer.

ANNEXURE III TO EXPLOSIVES RULES, 1983

Extract from the Indian Ports Act, 1908

Section 7—Appointment of conservator.—

- (1) The local Government shall appoint some officer or body of person to be conservator of every port subject to this Act.
- (2) Subject to any direction by the Local Government to the contrary—
  - (a) in ports where there is a port-officer, the port-officer shall be conservator.
  - (b) In ports where there is no port-officer, but where there is a harbour-master, the harbour-master shall be the conservator.
- (3) Where the harbour-master is not conservator, the harbour-master and his assistants shall be subordinate to, and subject to the control of, the conservator.
- (4) The conservator shall be subject to the control of the Local Government, or of any intermediate authority which that Government may appoint.

ANNEXURE IX TO EXPLOSIVES RULES, 1983

Extract from the Board of Trade Memorandum relating to the Carriage of Dangerous Goods and Explosives in Ships  
SPECIFICATION FOR MAGAZINES

1. Unless otherwise sanctioned by the Surveyor, magazines are to be built in between decks if possible. They must be so placed that their doors are easily accessible from a hatchway.
2. Magazines may be constructed of steel, iron or wood, provided that if of steel or iron, the whole of the interior shall be thoroughly protected by paint, varnish, galvanising or other suitable coating. Provided that no gun-powder, picric acid or other bulk explosives packed in barrels be stowed in a steel or iron magazine unless the inside of the magazine, including all iron work is covered with wood or other suitable material.
3. Flooring of all magazines shall consist of 3 inch by 1 inch gratings with a mesh of not more than 4 inches square. These gratings should be portable to allow access for cleaning.
4. When magazines are constructed of wood they shall comply with the following specification, viz:
  - (a) The bulkheads to be formed of 1-1/4 inch boards secured internally to uprights 3 inches square placed not more than 2 feet apart running from deck to deck, and firmly secured top and bottom. Where the magazine is against the ship's sides and cargo battens are fitted, spaced not more than 9 inches apart, other lining is unnecessary.

Where cargo battens are more than 9 inches apart filling pieces shall be provided.

Where on iron decks, the heels of the uprights to step on and be secured to a board of 1 inch thick laid on the deck.

Boards 9 inches by 1-1/4 inches to be securely fastened to the uprights at the upper and lower ends for securing heads of shores for tomming off.

- (b) Except when built on cargo or in the square of the hatchway a magazine need not be roofed over, provided that in the case of explosive of Classes III and IV a clear space of not less than 3 inches shall be left below the bottom of the beams of the over deck.
- (c) The door of the magazine shall be a substantial construction and fitted with a strong lock.

- (d) When a magazine measures athwartships more than 40 feet, a fore and after bulkhead must be fitted, constructed of upright 3 inches square, 3 feet apart extending from deck to deck, secured at the top and bottom as for side bulkheads lined up with 1 inch boarding not more than 6 inches apart, alternately on either side of the uprights. The ship's permanent stanchions may be used in lieu of the temporary uprights when they are in the proper position and provided they are not more than 6 feet apart. If gunpowder, picric acid or other bulk explosives packed in barrels are carried, the stanchions and any other metal work inside the magazine must be covered with wood or other suitable material.
5. Every magazine shall be efficiently ventilated, but any dock ventilator into or immediately over a magazine shall be covered by two thicknesses of fine wire gauge, or fitted with a "Lawson" fireproof cowl, or other efficient fireproof covering. Steel or iron magazines unprovided with ventilators shall be ventilated into the hold by the provision of two-inch holes in the bulkhead as close to the overdeck of two-inch holes in the bulkhead as close to the overdeck as practicable.

#### MAGAZINES ON CARGO

6. When it is necessary to build the magazine on cargo the selected place is to be levelled off and the bottom formed of 3 inches by 3 inches quattering placed 2 feet apart, covered with 1-1/4 inches boarding, securely nailed. Uprights 3 inches square, 2 feet apart, running from the boards to the deck, above to fit tight and to be well driven in cleared at the bottom and well tommed off at the top.

Remainder of magazine as previously detailed.

Should the height of the proposed magazine exceed 8 feet the construction should be specially determined by the Surveyors.

#### PORTABLE MAGAZINE FOR ANY QUANTITIES UPTO TWO TONS MEASUREMENT (Size in accordance with the dimensions of the packages to go into it)

7. A frame is to made of 2 inches by 3 inches quartering floored and boarded up with 1-1/4 inch boarding. Lid to be fitted with cleats on the 'inside to keep it in its place when shipped, and fastened with hasp, staples, and a strong hanging lock of brass or galvanised iron.

#### ANNEXURE V TO EXPLOSIVES RULES 1983 Extract from the Mines Act, 1952

Sub-section (j) of Section 2-

"mine" means any excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on and includes all works, machinery tramways and sidings, whether above or below ground in or adjacent to or belonging to mine:

Provided that it shall not include any part of such premises on which a manufacturing process is being carried on unless such process is a process for coke making or the dressing of minerals.