



GOVERNMENT OF PAKISTAN
Ministry of Industries and Production
DEPARTMENT OF EXPLOSIVES

THE EXPLOSIVES RULES, 2010

BY
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PREFACE TO THE FIRST EDITION

The aim of Explosives Rules 2010, is to provide a source of ready reference to help in the often complex task of manufacturing, handling, using, transporting, storage or disposal of Explosives material, safely and with minimum risks to human life, health or damage to property/facilities or to the environment.

It is hoped that Explosives Rules 2010, will prove valuable and would serve as a guide to the general public as well as would facilitate various government functionaries concerned with administering of Explosives Act, 1884 and rules framed there under.

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Chief Inspector of Explosives in Pakistan

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PART II

Statutory Notifications (S.R.O.)

GOVERNMENT OF PAKISTAN

MINISTRY OF INDUSTRIES
(Department of Explosives)

NOTIFICATION

Islamabad, the 1st December, 2010

S. R. O. 1166(I)/2010.— In exercise of the powers conferred by Section 5 of the Explosives Act, 1884 (IV of 1884), the Federal Government is pleased to make the following rules, the same having been previously published *vide* Notification No. S.R.O. 30(KE)/2010, dated the 9th January, 2010, as required under sub-section (1) of section 18 of the said Act, namely:—

CHAPTER I

PRELIMINARY

1. **Short title and commencement.**— (1) These rules may be called the Explosives Rules, 2010.

(2) They shall come into force at once.

(3715)

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[3057 (2010)/Ex. Gaz.].

2. **Definitions.**—In these rules, unless there is anything repugnant in the subject or context,—

- (a) “Act” means the Explosives Act, 1884 (IV of 1884);
- (b) “authorized explosive” means an explosive included in a list of authorized explosives published from time to time in the official Gazette by the Chief Inspector;
- (c) “boat” means any vessel other than a ship;
- (d) “Chief Inspector” means the Chief Inspector of Explosives in Pakistan;
- (e) “conservator of the port” includes any person acting under the authority of the officer or body of persons appointed to be conservator of the port under section 7 of the Ports Act, 1908 (XV of 1908);
- (f) “detonator” means a capsule or case which is of such strength and construction and contains fulminate in such quantity that the explosion of one capsule or case would communicate the explosion to like capsules or cases when in the proximity;
- (g) “district authority” means the District Coordination Officer, District Magistrate or Political Agent;
- (h) “Form” means a form set forth in Schedule V;
- (i) “Inspector of Explosives” includes Deputy Chief Inspector of Explosives and Assistant Inspector of Explosives;
- (j) “licensed factory” means a factory in respect of which a licence issued under the rules is in force;
- (k) “magazine” means a building specially constructed in accordance with a design approved by the Chief Inspector of Explosives and intended for storage of more than five kilograms of explosives;
- (l) “protected works” include.—
 - (a) buildings in which persons dwell, work or assemble, school, institution, hospital, theater, cinema house, factory, place of worship and place of storage of hazardous material;

- (b) any public road, railway line, navigable waterways, dams or reservoirs;
- (c) overhead high tension power lines, natural gas pipelines, petroleum pipelines, sewerage or water supply lines; or
- (d) agricultural land which is not in possession of the owner of the magazine;
- (m) "permitted explosives" means authorized explosives which are permitted by the Director General of Mines Safety and to be used in underground coal mines;
- (n) "prohibited explosives" means explosives which are prohibited by the Federal Government under section 6 of the Act;
- (o) "safety cartridge" means a cartridge for small-arms having a diameter not exceeding one inch, the case of which can be extracted from the small-arm after firing and which is so closed as to prevent any explosion in one cartridge being communicated to other cartridges;
- (p) "safety fuse" means a fuse for blasting which burns 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 explosive in such quantity that the burning of such fuse would not communicate laterally with other like fuses;
- (q) "Schedule" means a Schedule to these rules;
- (r) "ship" means a vessel ordinarily used or intended to be used in sea navigation and not exclusively propelled by oars;
- (s) "small-arm nitro-compound" means a nitro-compound adapted and intended exclusively for use in cartridge for small-arms;
- (t) "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 magazine or store house and protected works;
- (u) "store house" means a building other than a magazine for storage of certain type of explosives;
- (v) "testing officer" means such officer as the Federal Government may appoint in this behalf;

- (w) "transport" means to move from one place to other in the provinces and the Capital of the Federation and includes moving from one place to another in the Provinces and the Capital of the Federation by sea or air or land across the territory in the Provinces and the Capital of the Federation;
- (x) "transfer" with its grammatical variations and cognate expressions, includes letting on hire, lending, giving and parting with possession; and
- (y) "van" means a mechanically propelled vehicle for transport of explosives by land.

3. **Classification of explosives.**—(1) For the purposes of these rules, explosives shall be classified in the manner specified in Schedule I.

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

4. **General exemptions.**—(1) Nothing in these rules shall apply—

- (i) unless otherwise expressly provided in these rules, to any explosives of the 1st Division of the 6th ammunition class other than safety fuses for the blasting;
- (ii) to the manufacture, possession, sale, transport or import of paper caps for toy pistols, or colored matches known as Bengal Lights or star matches, under such conditions and in such quantities as the Chief Inspector, or in case of transport by rail, the Railway Board, on the recommendation of the Chief Inspector, may from time to time determine or to the possession, sale, transport or import of snaps when contained in fully manufactured Christmas or bon-bon crackers; and
- (iii) to any explosive carried on board by any ship in compliance with the provisions of the Merchant Shipping Ordinance, 2001 (Ord. LII of 2001), or of any order, rule or regulation thereunder for the time being in force, provided that such explosives shall not be stored with or near any explosive carried as cargo in the ship.

(2) Where the Chief Inspector of Explosives is satisfied that in respect of any explosive of the 2nd Division of the 7th Firework class any of the requirements of these rules may be safely suspended or modified, he may by written order authorize such suspension or modification for such period and under such conditions as he may, think fit, and may at any time revoke such order.

CHAPTER II

GENERAL

5. **Prohibition of unauthorized explosives.**- (1) No person shall import, export, transport, manufacture, possess, use or sell any explosive which is not an authorized explosive.

(2) Any person desirous of including an explosive in the list of authorized explosives shall make to the Chief Inspector an application as per procedure laid down in Schedule VIII.

6. **Restriction on delivery and dispatch of explosives.**—(1) No person shall deliver or dispatch any explosives to any one in Pakistan other than a person who—

(a) is the holder of a licence to possess the explosives or the authorized agent of a holder of such a licence; or

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

(2) The explosives so delivered or dispatched shall in no case exceed the quantity which the person to whom they are delivered or dispatched is authorized to possess with or without licence under these rules.

(3) No person shall receive explosives from any person other than the holder of a licence granted under these rules.

7. **Packing of explosives.**—No explosive shall be imported, tendered for transport, possessed or soled unless it is packed in the manner as laid down in Schedule II and the package is marked in accordance with rule 8:

Provided that nothing in this rule shall apply to—

(a) explosives in the process of manufacture ; and

(b) manufactured firework possessed or transported by any person entitled under clause (b) of rule 86 to possess them without a licence.

8. **Marking of packages.**—(1) The outermost package shall be marked in conspicuous characters by means of either branding, stamping, embossing or painting or by affixing a securely attached label, with—

- (a) the word "Explosive";
- (b) the name of the explosive;
- (c) the number of the class and of the division to which it belongs;
- (d) the name of the consignor or manufacturer; and
- (e) Batch No. or Lot No. and date of manufacture:

Provided that in the case of safety fuses or gunpowder, the word "Explosive" and the number of the Class and Division may be omitted.

1. In the case of nitro-compound or of a chlorate-mixture there shall be added the date of manufacture or issue from the factory, or such sign indicating such date as may be approved by the Chief Inspector.

2. Where an outer package contains more than one explosive, it shall be marked separately in accordance with sub-rule (1) and (2) in respect of each explosive so contained.

3. Each stick of explosives (class 2, 3 and 4) shall be marked with manufacturer name and name of explosives.

9. **Relaxation of packing rules.**—Where the Chief Inspector is satisfied that in any special case any of the requirements of rule 7 and 8 may be safely relaxed, he may, by order in writing, authorize such relaxation under such conditions as he may think fit.

10. **Weight of explosives.**—(1) The weight of explosives when referred to in these rules shall not include the weight of the packing case or box in which the explosives are packed.

(2) In the case of explosives of the 6th (Ammunition) class or 7th (Fireworks) class the weight shall be deemed to be the weight of the complete article inclusive of the case or contrivance in which the explosive is contained.

11. **Precautions to be observed in handling explosives.**—(1) The floor of any place or any carriage or vessel on 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 casks or 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, deposited and stored carefully.

(3) Where a cask or package is to be slung, due precautions shall be taken to sling it in such a manner as effectually 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.

(5) No person shall handle or cause to be handled any explosive between the hours of sunset and sunrise.

12. Prohibition of smoking, fires, lights and dangerous substances.—No person shall smoke, and no fires, lights or articles or substances of an inflammable nature or liable to spontaneous ignition or to cause or communicate fire or explosion, such as sulphuric acid, petroleum, carbide of calcium or compressed gasses, shall be allowed—

- (a) at any time in proximity to a place where an explosive is stored; and
- (b) at any place where an explosive is handled, 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 is previously carefully banked up; or
- (ii) any artificial light or ship's signal lights of a type approved in writing by the Chief Inspector in areas outside port limits and by the conservator of the port within port limits.

13. Prohibition of matches, etc.—No person on, in or near any place, where explosives are handled, shall—

- (a) have in his or her 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 or Indian

rubber, felt or other material, in the form of overshoes or otherwise.

14. **Spilt explosive to be destroyed.**—Where any explosive escapes from the package in which it is contained or is spilt, such explosive shall immediately be carefully collected and destroyed.

15. **Children and intoxicated persons.**—No child under eighteen years of age and no person who is in a state of intoxication or of unsound mind shall be employed on the loading, unloading or transport, sale, use or manufacture of explosives, or be employed in or allowed to enter any premises licensed under these rules.

16. **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 or handled, depute a competent person experienced in the handling of explosives to be present at, and to conduct, the operation in accordance with these rules.

17. **Precautions against damage from water or exposure to the sun.**—(1) In the case of any explosive which is liable to be dangerously affected by water, due precaution 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:

Provided that nothing in sub-rule (2) shall apply to sun-drying of gun powder or fire-works or drying of explosives in a licensed factory under controlled conditions.

18. **Special precautions against accidents and the exclusion of unauthorized 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, handled or transported:

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

(2) Every person possessing explosives and every person in charge of or engaged in the importation, manufacture, sale, transport, export or handling of explosives shall at all times—

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

CHAPTER III

IMPORT AND EXPORT

PART I

GENERAL

19. **Application.**—The provisions of this chapter, excepting rule 22 shall not apply to the bringing into Pakistan in the course of transport of any explosive, other than an explosive, which having been imported by sea at any port specified in rule 21 has not been tested, analyzed or examined at that port as required by or under these rules.

20. **Licence and test certificate for import and export of explosives.**—(1) No explosive shall be imported or exported except under and in accordance with the condition of a licence granted under these rules.

(2) No licence for the import or export of an explosive shall be granted unless—

- (a) the explosive, if of the 3rd (Nitro-compound) class or 4th (Chlorate-mixture) class, is certified in Form EM-01 by the testing officer to have passed the test set forth in Schedule III applicable to such explosive;
- (b) the explosive is certified to have passed such analysis or examination, if any, as the Chief Inspector or the Collector of Customs at his discretion by order in writing may require in order to determine its composition or condition; and
- (c) the explosive is an authorized explosive.

(3) No person shall be granted an import or export licence unless he is the holder of a licence for possession in a magazine authorized 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 quantity indicated in the licence may be imported with the prior permission of the Chief Inspector of Explosives, provided adequate arrangements are made by the importer to distribute it directly from the port of import to the other licensed premises.

(5) Provisions of sub-rule (1) shall not apply for the explosives intended to be imported from or exported to export processing zone. The explosives transported to export processing zone shall be considered as an export.

PART II

IMPORT OR EXPORT BY SEA

21. **Import and export by sea.**—(1) No explosives shall be imported or exported by sea except at the port of Karachi, Bin Qasim, Gawadar or any other port viable for import and export of explosives.

(2) The quantity of explosives, manner of handling during discharge from or loading into a ship shall be carried out in accordance with the rules made under the Act and regulating the handling of explosives at the port and respective rules and bye-laws of the port.

(3) A person holding an import licence granted under these rules shall furnish a declaration to the Chief Inspector of Explosives—

1. in Form EM-03 as soon as ship carrying explosives sails from the port of loading; and
2. in Form EM-04 as soon as any shipment of explosives is cleared from the port of import.

22. **Declaration by master of ship or by the ship's agent.**—(1) The master of any ship carrying explosives or the agent for such ship shall give the conservator of the port not less than forty-eight hours' notice of its intended arrival at the port.

(2) The master of every ship carrying explosives shall under his signature deliver to the pilot, before entering any port, a written declaration in Form EM-02:

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

(3) Every declaration delivered to a pilot under sub-rule (2) shall be made over by him with out 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 dispatch, to the Collector of Customs of the port.

(4) The exporter or his authorized agent shall give the conservator of the port, not less than forty-eight hours, notice of his intention to bring explosives to port for export and shall not bring the explosives to any part of the port without permission in writing from the said officer.

(5) The exporter or his authorized agent shall produce, before the conservator of the port,—

- (i) licence granted under these rules for export of the explosives; and
- (ii) certificates 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.

(6) Packing of explosives so imported or exported shall be done in accordance with international standards such as IMDG and IMCO codes.

23. Procedure for delivery of samples from ship's cargo.—(1) When the master of, or agent for, a ship has made the declaration required under rule 22, such officer as the Collector of Customs of the port may authorize in this behalf, shall go on board the vessel and obtain samples of all such explosives as it is intended to land at the port and are required by or under these rules to be tested, analyzed or examined.

(2) The master shall deliver to the officer specified in sub-rule (1) without charge samples of all these explosives of which samples are to be taken under that sub-rule. Such samples shall if this officer so required, be taken from the particular packages 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 the places where consignments of explosives are stored.

24. **Dispatch of samples to the testing officer.**—(1) The officer taking a sample of any explosive under rule 23 shall affix on it name of the ship and consignee and such other distinguishing mark as he may think necessary and shall without delay forward it to the testing officer.

(2) Where the sample is a nitro-compound or a chlorate-mixture, the date or sign referred to in sub-rule (2) of rule 8 shall also be affixed on the sample.

25. **Testing of samples.**—(1) The testing officer shall test, analyze or examine, as the case may be, the samples and shall without delay forward to the Collector of Customs a report in duplicate under his signature certifying whether the explosive has satisfied the prescribed test, analysis or examination.

(2) The Collector of Customs shall as soon as practicable, and ordinarily within twenty- four hours after receipt of the report of the testing officer, forward one copy thereof to the licensing authority.

26. **Production of licence for import.**—Every person desiring to import explosives shall produce, personally or through his agent, before the Customs Collector his licence for the import of such explosives.

27. **Permission of the Collector of Customs to land explosives.**—(1) No imported explosives shall be landed except with permission of the Collector of Customs.

(2) Where the Collector of Customs, after receiving the report of the testing officer under rule 25 and the licence for the import of such explosive and after making such further enquiries as he deems necessary, is satisfied that the explosive can lawfully be imported, he shall permit it to be landed.

(3) Nothing in this rule shall affect the power of the Collector of Customs to detain the explosive 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 AIR

28. **Transportation of explosives by air.**—(1) The transportation of explosives by air shall be carried out by cargo and other permissible aircraft, and not by passenger aircraft, in accordance with the rules and regulations of

International Civil Aviation Organization (ICAO), International Air Transport Association (IATA) and Civil Aviation Authority of Pakistan (CAA).

(2) No explosives shall be imported or exported by air except at the airports of Karachi, Quetta, Lahore and Peshawar or any other international airport authorized for this purpose from time to time by the Federal Government.

(3) A person or his authorized agent holding a license for import or export of explosives by air, before bringing the explosives into the airport for import or export shall give well in advance to the officer-in-charge of the airport, the Collector of Customs and the Chief Inspector, a declaration containing full particulars of the explosives.

(4) No person shall bring explosives to the airport for export by air without prior consent in writing of officer-in-charge of the airport.

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

(6) Explosives meant for export shall be brought to the 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) Where for any unforeseen circumstances explosives brought to the airport cannot be removed from the airport and loaded into the aircraft, such explosives shall be stored in an isolated shed under guard as directed by the officer-in-charge of the airport and all due precautions shall be taken against theft, fire or misuse.

PART IV

IMPORT OR EXPORT BY LAND

29. **Import or export by land.**—No licence of explosives for import or export by land shall be granted without the previous sanction of the Federal Government and under such conditions and restrictions as it may impose.

CHAPTER IV

TRANSPORT

PART I

GENERAL

30. **Licence for transport and issue of passes.**—(1) No explosives shall be transported except under and in accordance with the conditions of a licence granted under these rules:

Provided that nothing in this sub-rule shall apply to—

- (i) the transport of any explosives imported under a licence in Form EL-08, from the port of import to the place of destination specified in the licence ;
- (ii) the transport of any explosives within the licensed factory or from the licensed factory to the licenced magazine situated within the licensed factory;
- (iii) the transport of any explosives for the possession of which no licence is necessary under rule 86; and
- (iv) the transport by the holder of licence in Form EL-04 of any of the explosives covered by his licence in such quantity as he may require for his private use.

(2) Every consignment of explosives transported under a licence shall be accompanied by a pass issued by the licensee in Form EM-05.

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

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

- (i) to the licensing authority;
- (ii) when such authority is not the licensing authority to the district authority in whose jurisdiction the place to which the consignment is sent is situated;
- (iii) to the Inspector of Explosives in whose jurisdiction the place from which the consignment is sent is situated; and

(iv) to the Inspector of Explosives in whose jurisdiction the place to which the consignment is sent is situated.

(5) Explosives manufacture company shall be responsible in all respect for transportation of explosives from the factory premises to the magazine of licence holder duly escorted in the vehicle having valid licence granted under these rules.

31. Explosives of different classes to be kept separate.—Any explosives of the 5th (Fulminate) class, or any explosives of the 6th (Ammunition) class containing its own means of ignition, or any explosives of the 7th (Fireworks) class shall not be transported in the same carriage or, save as provided in rule 48, in the vessel and shall not be conveyed or handled with any explosives not of the class and division to which it belongs.

32. Certificate of safety.—(1) Before transporting or tendering for transport any explosives of 3rd (Nitro-compound) class or of the 4th (Chlorate mixture) class the consignor shall attach to the consignment-note a valid certificate in Form EM-01 granted by an Inspector or by the testing officer, if the certificate is granted at the time when the explosive is imported, provided the original is produced for verification, a copy of such certificate certified by the consignor to be a true copy.

(2) The certificate specified under sub-rule (1) shall be valid for a period of twelve months from the date on which it is granted:

Provided that in the case of nitroglycerine compounds which are not used as propellants, such certificate shall lapse on the 31st July following and a fresh certificate may, at the discretion of the railways administration concerned, be demanded for explosives to be transported by rail during the period from the 1st April to the 31st July if the original certificate has been granted earlier than the 30th of September preceding.

(3) A fee prescribed in Part II of Schedule IV shall be payable for a certificate granted or renewed by an Inspector under this rule:

Provided that where the Inspector issuing the certificate requires a fresh test of the explosive to be made, a fee as prescribed in Part II of Schedule IV shall be charged for such test.

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

34. **Maximum consignments allowed.**—The quantity of explosives for transport shall not exceed.—

- (i) ten thousand kilograms or half of the carrying capacity of a railways wagon, whichever is less;
- (ii) eight thousand kilograms or maximum carrying capacity of a road van licensed under 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 second class the quantity of explosives shall not exceed fifteen thousand kilograms or the maximum carrying capacity of the van, whichever is less. If the explosive is intended for export outside Pakistan or from tariff area to export processing zones the quantity shall not exceed thirty thousand kilograms or the maximum carrying capacity of the van, whichever is less; or

- (iii) in any one boat twenty-five thousand kilograms or its maximum carrying capacity, whichever is less.

35. **Despatch of explosives to carrier.**—(1) No person shall dispatch any explosive to a carrier for purposes of transport unless—

- (a) he has given to the carrier or his duly authorized agent or, in the case of a railways administration, the station master a notice in writing—
 - (i) of his intention to forward such explosive;
 - (ii) certifying that the explosive has been packed and marked in accordance with rules 7 and 8;
 - (iii) stating the true name, description and quantity of explosives to be transported; and
 - (iv) giving his own name and address and the address of the consignee; and
- (b) he has received in reply an intimation in writing from such carrier, agent or, as the case may be, station master that he is prepared to receive the explosive for immediate dispatch or for deposit in an authorized magazine or place at which some person is licensed or otherwise authorized to receive it.

(2) No person shall bring, send or forward upon any railway any explosives which a railways administration has by any notice or rules or regulations or instructions, for the time being in force, notified that it will not receive.

36. Place and time of loading and unloading.—(1) Every explosive shall be loaded and unloaded at a safe distance from station building, dwelling houses, factories, public buildings and other buildings or places where persons assemble or petroleum, timber or any other inflammable material is stored or handled.

(2) No operations connected with the loading, unloading and handling of explosives shall be conducted between sunset and sunrise.

(3) Nothing in sub-rule (1) and (2) shall apply to any operations connected with transport of explosives by a passenger- train or by a pick-up or van-goods -train used for the transport of small consignments or in the brake van of a mixed train.

37. 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 in to which it is to be loaded is at that place ready to receive it.

38. 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, a competent person experienced in handling of explosives and appointed by the owner of such carriage. Such person shall supervise all loading and 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 shall not drive, conduct or maneuver such carriage or vessel or aircraft in a dangerous or negligent manner.

39. Protection from fire or explosion.—(1) No carriage or vessel or aircraft shall be used for transporting explosives unless all iron or steel therein with which a package containing explosives is likely to come in contact is effectually covered with lead, leather, wood, cloth or other suitable material not capable of gaining during friction heat energy convertible to fire.

(2) Where the weight of explosives transported in any carriage exceeds one thousand kilogram it shall be placed in the interior of the carriage which shall be enclosed on all sides with such material as specified under sub-rule (1)

so as effectually to protect the explosives from communication of fire and the carriage shall be locked.

(3) Where the weight of explosives transported in any vessel exceeds one thousand kilograms it shall be placed in the hold of the vessel which shall have a closed deck and closely fitting hatches and double watertight bulkheads shall be provided at each end of the hold where the explosives are stowed and the hatches shall be locked.

(4) Where the explosive carried in any carriage or vessel does not exceed one thousand kilograms in weight, the explosives shall, unless it is conveyed in the manner specified under sub-rule (2) or sub-rule (3), as the case may be, be completely covered with a fire proof cloth, tarpaulin or any other suitable material so as effectually to protect the explosives from communication of fire.

(5) All doors, hatches and covering of every compartment or hold containing explosives in or on any carriage or vessel shall be kept closed and secured except when explosives is being loaded or unloaded into, onto or from it.

(6) When explosives is being carried on a carriage or vessel or aircraft, it shall be kept away from such material, whether in the carriage or vessel or elsewhere, that would be liable to cause it to ignite or explode.

40. Delay in transit to be avoided.—If the quantity of explosives transported in any carriage or vessel exceeds two and a half kilograms, the person or persons in charge of such carriage or vessel shall not stop or delay at any place for a longer time than may be reasonably necessary, nor stop unnecessarily at any place where such stopping would be attended by public danger.

41. Safety distances between carriages or boats.—Where the explosives in two or more boats traveling in company are transported, such boats shall not approach within fifty meter of one another:

Provided that—

- (a) nothing in this rule shall apply to the transport of explosives by train; and
- (b) the conservator of the port may waive of the requirements of this rule within the limits of the port if in his opinion it is impracticable to secure compliance with it.

42. **Repairs to the conveyance.**—Before any repairs or alteration are commenced in any part of a carriage or vessel in which explosives are being, or have been, transported, all due precaution shall be taken to remove all such explosives, or any remnant 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 remnant of explosives remains therein.

43. **Small quantities of fireworks exempted.**—Nothing contained in rules 33, 38, and 39 shall apply to the transport of manufactured fireworks in the custody of a person entitled to possess them without a licence under rule 82, provided that not more than two and a half kilogram of manufactured fireworks securely packed shall be so transported in any motor vehicle licensed for conveyance of more than six passengers.

PART II

TRANSPORT BY WATER

44. **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 forty-eight hours notice in writing of the intended time and place of such operation has been given to the conservator of the port.

45. **Responsibility of a person in charge of a vessel.**—Whenever any explosive is being loaded into, or unloaded from a vessel, the person in charge of the vessel, or some responsible person deputed by him for this purpose, shall be present and shall supervise such loading or unloading and shall take all due precautions in regard to such explosive until the completion of the receipt and stowage or discharge thereof.

46. **Steamer fires and lights.**—No explosive shall be loaded from any ship—

- (a) unless the engine room fires have been previously carefully banked up and all other fires and lights extinguished; or
- (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 to employ an artificial light or ships signal lights of a type approved in writing by the Chief Inspector in areas outside port limits and by the conservator of the port within port limits:

Provided further that a steam tug may be employed at the port of Karachi to place boats along side 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 fifty meters from the ship.

47. **Stowage.**—No explosive shall be stowed in a ship except in accordance with the regulations issued from time to time by the board of trade to regulate the carriage of dangerous goods and explosives in ships.

48. **Conveyance of explosives on un-birtherd passenger ships.**—Any authorized explosive satisfying the requirements of clauses (a) and (b) of sub-rule (2) of rule 20 may be transported in a properly constructed magazine on an un-birtherd passenger ship to which Part IV of the Merchant Shipping Act, 1923 (XXI of 1923) applies, being a home trade ship as defined in sub-section (3) of section 2 thereof or plying to ports in the Persian Gulf:

Provided that—

- (a) the consignor satisfies the certifying officer referred to in section 157 of the Merchant Shipping Act, 1923 (XXI of 1923), that no other means of conveying the explosives are available;
- (b) the magazine complies in all respects with the specifications for magazine in ships laid down by the board of trade and is approved by the surveyors of the Mercantile Marine Department;
- (c) the explosive is packed and marked as laid down in these rules and stowed in such a manner as the Chief Inspector may by general or special order direct;
- (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 inflammable goods at any time during which the magazine is in use for the carriage of explosives.

49. **Conveyance of explosives on passenger's vessel.**—(1) In a passenger vessel the following explosives may be carried, namely:—

- (a) any explosive not exceeding two and a half kilogram in weight, other than a 5th (Fulminate) class 5, ammunition containing its own mean of ignition (class 6th, Division 3) or (fireworks) class 7th; and

- (b) detonators not exceeding two hundred and certified in writing by the licensee not to contain in the aggregate more than two hundred twenty-five grams of explosive :

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 due precautions are taken to prevent accidents by fire or explosion; ~~and~~
- (iii) detonators are not carried in the same compartment with other explosives.
- (2) Nothing in sub-rule (2) of rule 36, rules 38, 46, 50, 51, 52, 53, 54 and 57 shall apply to explosives carried in a passenger vessel under sub-rule (1).

50. Anchorage of vessel 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 general or special order of the conservator of the port and subject to such conditions as may be specified in the order.

(2) The anchorage under sub-rule (1) 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 the petroleum as to render it impossible for a fire originating at the former anchorage to affect vessels anchorage at later.

51. Red flag or warning lights to be exhibited.—Every vessel having explosives on board exceeding fifty kilograms in weight shall, while approaching or leaving a port and during the time that it remains within the limits of the port or any inland waters, exhibit conspicuously—

- (a) between sunrise and sunset, a red flag not less than one square meter; and
- (b) between sunset and sunrise, a signal of red light visible all round the horizon.

52. Vessel to lie singly.—Every vessel wholly or partly laden with explosives shall lie singly and be kept at a distance of at least fifty 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.

53. **Hatches to be closed and covered.**—The hatches of any vessel having any explosive on board shall be kept closed except when the operation of loading or unloading is being actually performed and when closed, shall be covered with tarpaulin or raw hides, securely battened down and locked.

54. **Vessels not to lie alongside magazine, jetties, etc.**—No vessel having any explosives on board shall lie alongside any vessel, floating magazine, quay, wharf, jetty, 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 four hundred fifty kilograms in weight and no detonators shall be loaded or unloaded while a vessel is underway.

Explanation.—A vessel is underway when it is not at anchor or moored or made fast to the shore or aground.

56. **Place of loading and unloading within a port area.**—Explosives, within the limits of a port, be loaded from, 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, stuffed with oakum and covered with leather and fitted with slings 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 the port.

58. **Ships to handle explosives with dispatch.**—(1) Ships arriving in a port with explosives intended to be landed at that port, shall discharge them with all reasonable dispatch, and ships taking explosives on board shall proceed to sea with all reasonable dispatch.

(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 unless such period is, under special circumstances, extended by the conservator of the port.

59. **Boats to be licensed.**—(1) No boat shall be used for the transport of explosives exceeding one thousand kilograms in weight except under and in accordance with the conditions of a 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 Federal Government in this behalf in the case of a boat plying in areas outside the port limits.
- (2) The licensee shall specify the maximum quantity of explosives the boat is authorized to carry which quantity shall be fixed in consultation with the Chief Inspector.
- (3) Every licence granted under sub-rule (1) shall remain valid for a period of—
- (a) four months in case of a boat plying within the limits of a port; and
 - (b) one year in case of a boat plying in areas outside port limits.
- (4) The licence specified under sub-rule (1) shall be granted or renewed in Form-EL-12 and on payment of such fees as specified in Part II of Schedule IV.
- (5) Every person in charge of any boat licensed under sub-rule (1) shall, when required to do so by any officer specified under rule 105, produce the licence of such boat for inspection.
- (6) A copy of every licence granted under sub-rule (1) shall be forwarded to the Chief Inspector.

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 of twenty seven meters length and seven and a half centimeter 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 drum painted red measuring not less than fifty centimeters in length and thirty-five centimeters 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 any boat which has explosives on board, namely:—

- (i) fire or light of any description other than the warning light specified under rule 51;
- (ii) smoking;
- (iii) any substance of an inflammable nature or which is liable to spontaneous ignition;
- (iv) any substance liable to cause or communicate fire or explosion; and
- (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 the Chief Inspector in areas outside port, limits:

Provided that nothing in this rule shall apply to the transport of explosives in a mechanically propelled boat subject to such conditions as may be specified by the Chief Inspector.

PART III

TRANSPORT BY LAND

62. **Streets and public places.**—(1) No person shall transport or cause to be transported any explosive in any street or public place within the limits of a municipality or cantonment except under and in accordance with the conditions of a written permit granted by the district authority.

(2) Nothing in sub-rule (1) shall be held to authorize the transport, in such street or public place, of—

- (a) any explosive of the 5th (Fulminate) class; or
 - (b) any prohibited explosive; or
 - (c) any detonators together with any other explosive.
- (3) Every permit granted under sub-rule (1) shall specify—
- (a) the maximum quantity of each explosive permitted to be transported at any one time;
 - (b) the street or public place through which, and the hours during which, transport is permitted; and

(c) the period, not exceeding twelve months, for which the permit will be valid.

(4) Nothing in sub-rule (1) shall apply to—

(a) any explosive of 7th (Fireworks) class or safety fuses; or

(b) gunpowder or other explosive not exceeding two and a half kilograms in weight.

63. **Licence of mechanically propelled vehicles.**— No explosive shall be transported in a mechanically propelled vehicle unless such vehicle is in accordance with the specifications set out in Schedule VII and licensed under these rules to carry explosives:

Provided that nothing in this rule shall apply to the transport of Chinese crackers in any vehicle in quantity not exceeding two thousand kilograms or the carrying capacity of the vehicle, whichever is less.

64. **Precautions to be observed.**—(1) The person in charge of loading explosives into a vehicle 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) where it becomes necessary to unload any of the explosives, the remaining can be stowed with as little disturbance as possible.

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

(3) No person shall transport explosives in any towed vehicle or tow any vehicle transporting explosives.

(4) No other goods shall be carried with explosives in any vehicle:

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

(5) 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 to the drivers of the other vehicles an effective warning of the presence of such road van.

(6) 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 three hundred meters from the vehicle and that all persons in the vicinity are warned of the danger.

(7) 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 authorized person accompanying the vehicle shall—

- (a) comply all requirements of law relating to road accident;
- (b) inform nearest police station;
- (c) inform the licensee who shall—
 - (i) giving full details of the explosives carried and involved in accident inform the Chief Inspector and the Inspector of Explosives in whose jurisdiction the accident has taken place; and
 - (ii) arrange for safe storage and custody of explosives till examination by the Inspector of Explosives if required, and then arrange for transport to the destination or place designated by such Inspector.

(8) In case of a break down of road van, the driver or the person in charge of the vehicle shall—

- (a) make or permit to make 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 removed from the vehicle and stored under proper security at a safe distance from the highway and at least three hundred meters from any inhabited premises; and
- (c) inform the licensee who shall in turn, giving full details of the explosives and the circumstances attending the breakdown, inform the Chief Inspector and the Inspector of Explosives in whose jurisdiction the vehicle is broken down.

(9) The licensee shall provide tracking system on his explosives van for monitoring of movement of the explosives.

(10) Security arrangements for transportation of explosives shall be the responsibility of the licensee. Who shall hire security guards preferably of professional security agency for the security of explosives van from the place of loading to the place of unloading at his own expenses.

(11) The driver of explosives van shall not be less than twenty-five years of age.

65. **Railways vans to be approved.**—No explosive shall be transported by rail except in a van specially constructed for the carriage of explosives and of a type approved by the Chief Inspector and the Railway Board.

66. **Marking of railway carriage.**—(1) On each side of every railway carriage containing any explosive there shall be affixed in conspicuous characters by means of securely attached label or otherwise the word "EXPLOSIVES".

(2) Nothing in sub-rule (1) shall apply to a carriage containing explosives transported in accordance with the provisions of clause (b) of rule 67 or rule 72.

67. **Transport of explosives with ordinary goods.**—Notwithstanding anything contained in rule 65, the following explosives may be transported by any train other than a passenger or mixed train in a carriage not containing any article or substance liable to cause or communicate fire or explosion :—

- (a) any quantity of safety fuse for blasting ; or
- (b) any other explosive approved by the Chief Inspector for the purpose of this rule:

Provided that such explosive is packed in metallic cases or cylinders which fulfill all the requirements of these rules and are of a pattern approved by the railway administration and the Chief Inspector.

68. **Position of carriage.**—Every railway carriage containing explosives shall be placed as far away as practicable from the engine and shall be closed-coupled to the adjoining carriages and shall be preceded and followed by three carriages not loaded with explosives or other articles or substances of an inflammable nature.

69. Maximum quantity of explosives to be transported by rail—(1)
Not more than five wagons when hauled by a goods train containing explosives shall at any one time be loaded at or in any railway station or wharf, or be attached to or transported by any one train.

(2) The quantity of explosives to be contained or loaded in any one such carriage shall at no time exceed ten thousand kilograms in weight in the aggregate.

70. Prohibition on passenger or mixed train.—No explosive shall be transported by any passenger or mixed train.

71. Dispatch of explosive vans by mixed train.—Notwithstanding anything contained in rule 70 any explosive may be transported by a mixed train as specified under rule 65, on any, line or section on which goods trains are not running, subject to the following conditions, namely:—

- (a) not more than three such vans containing explosives shall be hauled at any one time ;
- (b) Not less than three explosive-less carriages shall follow and precede each van containing explosives ;
- (c) the vans containing explosives shall be close coupled to the adjoining carriages and to each other; and
- (d) immediately on entering any section upon which goods trains are running, the vans containing explosives shall be detached from the mixed train.

72. Conveyance of explosives by passenger or mixed trains.—Notwithstanding anything contained in rules 65 and 70 the following explosives may be transported by passenger or mixed train, namely:—

- (i) safety fuses for blasting;
- (ii) explosives of the 3rd (Nitro-compound) class, other than propellants in the form of cartridge not exceeding in the aggregate two and a half kilograms in weight, provided no detonators are carried in the same compartment;
- (iii) not more than 200 detonators, if the weight of explosive in the package or packages containing the detonators does not exceed in the aggregate two hundred twenty-five grams, provided—

- (a) a certificate to such effect is tendered by the consignor; and
- (b) not 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 two and a half kilogram each packed in a stout wooden case with a completely spark proof outer cover of tin or zinc or in metal case or cylinder of a pattern approved by the Chief Inspector ;
 - (b) no outer case containing more than twelve and a half kilogram of explosives; and
 - (c) where the total consignment by one train does not exceed in the aggregate thirty-seven and a half kilograms.

73. **Receipt of consignment of explosives by railways.**—Consignments of explosives intended to be transported by rail shall be received only—

- (a) by servant authorized by the Railways administration concerned to receive such goods; and
- (b) at such times between sunrise and sunset and at such place within railway premises as the Railways administration may specify in this behalf.

74. **Stowing of explosives.**—(1) All packages containing explosives shall be stowed in one layer and shall be secured in such a way as to prevent movement during transit when the carriage is in motion:

Provided that, if the packages of explosives are rectangular in form and are properly secured so as to prevent movement during transit they may be stowed in any number of layers not exceeding five.

(2) Hair- cloth, hides or other suitable material shall be spread on the floor of the carriage and between each layer of packages of the explosives.

(3) There shall not be conveyed in the same carriage with any explosive, any matches or fuses, any appliance proceeding to ignition or any other article or substance of an inflammable nature or liable to cause fire or explosion, such as petroleum, carbide, compressed gasses and acids.

75. **Shunting.**—No shunting of carriages containing explosives shall be carried out on any railway, save under the superintendence of a duly authorized officer who shall be responsible that—

- (a) when the train is being marshaled, carriage 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 explosives the speed of all movements does not exceed eight kilometers per hour; and
- (c) no loose shunting takes place.

76. **Delivery to and from railways 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 forth with returned to the consignor at his risk and expense.

(3) Every package containing an explosive shall until removed, returned or dispatched be kept in a safe place under the special direction of the station master at a safe distance from the station buildings under a police guard if necessary and shall be completely covered with tarpaulins or other suitable material.

77. **Powers of railways administration.**—(1) Where a railways administration suspects that an explosive or carriage or package containing an explosive does not comply with any of these rules, it may—

- (a) prevent the entry of such explosive, carriage or package upon its 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 railways administration may return such explosive, carriage or, as the case may be, package to the consignor at his risk and expense.

(3) Where any explosive or any carriage containing explosives not complying with these rules cannot in the opinion of the railways administration be returned to the consignor under sub-rule (2) without risk, the administration, in consultation with the Chief Inspector and in such manner as he may specify, destroy at the consignor's risk and expense the explosive or the contents of the carriage or package.

78. Explosives not to be carried across railway bridges.—No explosive shall be carried otherwise than by rail across any railway bridge across which reasonable facilities for the transport thereof by rail are afforded by the railways administration:

Provided that nothing in this rule shall apply to—

- (a) safety fuses for blasting, in any quantity; or
- (b) gunpowder, or nitro-compounds or ammunition, class 6, divisions 2 and 3, in any quantity not exceeding two and a half kilograms; or
- (c) fireworks not exceeding five kilograms.

79. Conveyance of Chinese crackers.—In the case of the transport by rail of Chinese crackers of class 7 division 2, and provided that all due precautions are taken to prevent explosion, the provisions of rules 39 and 65 may be relaxed during the period from July to March, both months inclusive, under an order of the district traffic officer when the number or size of consignments offered is such that, in his judgment, serious delay would be caused in the observance of such rules.

CHAPTER V

MANUFACTURE, POSSESSION, USE AND SALE

PART I

GENERAL

80. Licence for manufacture, possession, use and sale.—(1) No explosive shall be manufactured, possessed, used or sold except under and in accordance with the conditions of a licence granted under these rules.

(2) The licensee shall be responsible for all operations in connection with the manufacture, possession, use or sale of explosives which may be conducted in the licensed premises.

81. Restriction on source of ignition.—(1) Oiled cotton, oil tags and oil waste and any article liable to spontaneous ignition shall not be taken into any dangerous 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.

(2) The licensee or his authorized agent, for the time being in charge of a magazine or store house, shall, in respect of persons employed or engaged in or about the magazine or store house and by maintaining an effective system of search, restrain such persons to take hazardous articles or substances therein and shall also provide them and make them wear working clothes, without pockets, and suitable shoes, whenever they are in the magazine or store house.

(3) No tools or other implements shall be used or allowed to be present in a magazine or store house or building used for carrying out process of manufacture (process building) unless they are of wood, copper, brass or soft metal or material or are covered with safe and suitable material.

(4) No person shall smoke near or in the magazine or store house or in any part of the licensed factory.

(5) Magazine or store or every building in a factory shall be used only for the purpose specified in the licence granted under these rules:

82. Protection against lightning.—(1) Every magazine and process building of factory shall have one or more efficient lightning conductors.

(2) The resistance of the lightning conductors to the earth shall be tested at least once every year by a qualified electrical engineer or any other competent person holding a certificate of competency in this behalf from the relevant department. A certificate showing the results of such tests and the date of the last test shall be displayed in conspicuous place in the building and copy of such certificate shall be forwarded to the licensing authority.

(3) Whenever a thunderstorm appears to be eminent in the vicinity of magazine or store house or factory, 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 or the threat thereof have ceased:

Provided that where an operation is in process, stopping of which may contribute a danger, the operation shall be carried on to a point at which it can be suspended safely, and no such operation shall be commenced during the storm.

83. Repairs to building.—(1) Before carrying out repair to any magazine or store house or any building or factory or part thereof including any equipment therein shall be thoroughly made free of explosives by a suitable process of removal.

(2) Where the repairs to the building or part thereof require use of any source of fire, the 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) Where major repairs are done to a building or any part thereof including any machinery therein, that building or part thereof shall not be taken into use unless permitted by the licensing authority.

84. Maintaining records.—The licensee of a magazine or store house or a factory shall keep up-to-date records in the prescribed form and produce the same before an inspecting officer. Such records shall be retained for a period of not less than three years. The licensee shall submit to the Chief Inspector, Inspector of Explosives having jurisdiction and concerned district authority, a report showing manufacture, purchase, possession, sale, use, theft and destruction of explosives at the end of each fortnight on the Forms as set out under Schedule V.

85. No licence needed for manufacture in certain cases.—Notwithstanding anything contained in rule 80, no licence to manufacture shall be necessary—

- (a) for the marking of category of a small quantity of explosive for the purpose of chemical experiment and not for sale or any other use; or
- (b) in the case of any person authorized under these rules to possess an explosive who by filling cartridges, making charges or drying, shifting, fitting or otherwise adapts or prepares such explosive for use exclusively for blasting purpose in his mine or quarry or in some excavation or work carried on by him or under his control :

Provided that the Federal Government may prohibit such manufacture or prescribe special conditions for such manufacture when considered necessary by the Provincial Government for the security of public peace.

86. No licence needed for possession in certain cases.—
Notwithstanding anything contained in rule 80, 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 the transport of such explosive; or
- (b) by any person, of manufactured fireworks in any quantity not exceeding twenty-five kilo-grams, 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 fourteen days; and
 - (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 access to the explosives by unauthorized person; or
- (c) by a Railways administration of flare lights for use on a railway ;
or
- (d) 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 aerodrome or at an aerodrome for use there however the maximum quantity so possessed shall not exceed twenty-five kilograms when carried in an aircraft and fifty kilograms when kept at an aerodrome; or
- (e) for the sale of such explosives manufactured by the armed forces of Pakistan 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:

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

PART II

MANUFACTURE OF EXPLOSIVES

87. **Approval of manufacturing process.**—(1) No new explosives after its inclusion in the list of authorized 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 authorized explosive shall submit to the Chief Inspector separately for each explosive a project report in duplicate containing, among other relevant data, the following particulars, namely:—

- (i) the details of the process starting from the raw materials to the finished product describing the plant and equipment, quantities of material handled, operating conditions and parameters, nature of controls and safety devices providing the proposed method of treating effluents and waste explosives;
- (ii) the nature and composition of the explosives;
- (iii) the limiting percentage of each ingredient of the explosives;
- (iv) the specifications of various raw materials including substitutes, if any, used in the process of manufacture; and
- (v) physical and chemical characteristics of final product.

(3) The Chief Inspector, after scrutiny of the project report and after making such further enquiries as may be considered necessary, may, if he is satisfied, approve 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 Inspector.

(5) The Chief Inspector may cause at any time any test on any raw material, ingredients or explosives to ascertain if these conform to the particulars given under rule 88.

88. **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 approved plan attached to the licence;
- (b) inside every process building a notice showing—
 - a. maximum quantity of any explosive or ingredients for such explosives that may be in the building at any one time as authorized by the licensing authority; and
 - b. the maximum number of persons who may be in the building at any one time as authorized by the licensing authority.

89. **Maintenance of building, plants and equipment.**—(1) 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, maintenance and repair shall be maintained till the time of next servicing, maintenance and repair.

(2) 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 approved method.

(3) Adequate facilities for safe destruction under the supervision of a competent person and a place approved by the licensing authority in the licensed premises shall be provided by the licensee for the materials collected under sub-rule 2.

(4) Proper testing facilities as approved by the Chief Inspector for physical and chemical examination of raw materials, ingredients and final products shall be provided by the licensee in the licensed premises at places approved by the Chief Inspector.

(5) Where at any time any operation in the process of manufacture of an explosive is no longer found to be safe or behavior 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 Inspector may issue an order in writing directing the licensee to discontinue forthwith the manufacture of such explosives till such time the operation or the composition is rectified to the satisfaction of the Chief Inspector.

90. **Restriction on unauthorized person.**—(1) A factory licensed under these rules for manufacture of explosives shall be surrounded by a wall or barbed wire fencing at least two meters high of such strength and construction as to effectively prevent entry of unauthorized persons. 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.

(2) 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. Interior of buildings to be suitably finished.—(1) Any building in which explosives or any ingredient thereof is kept or stored or in the course of manufacture, shall be a dangerous building and the interior of every such building 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 explosives or ingredient thereof in such building.

(2) Every building used for production, handling, storage or testing of explosive 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 Inspector.

92. Protection against fire.—(1) Due provision shall be made by the use of suitable working clothes without pockets and suitable shoes and searching by some or of such means to prevent the introduction into any dangerous 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 dangerous building where it would be likely to come into contact with explosive or wholly or partially mix ingredients thereof.

(2) Nothing in sub-rule (1) shall apply to the use of such artificial lights as may be approved by the Chief Inspector for the purpose of manufacture.

(3) 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 explosives shall be allowed to accumulate in any process building and 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 an other process in the same building shall immediately be removed from the building.

93. Employment of competent person.—(1) 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.

(2) No person below the age of 25 years shall be employed in the factory.

94. **Prevention of exposure of iron or steel in interior of vehicle, etc.**—Every vehicle and every trolley or receptacle in which finished or partly finished explosives are for the time being kept or transported in a licenced factory area shall—

- (i) unless otherwise approved, have no exposed iron or steel in its interior; and
- (ii) be closed or covered while the explosives or its ingredients are for the time being kept or transported.

PART III

POSSESSION, SALE AND USE

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

96. **Building to be kept clean.**—(1)The interior of every building or room used for storage of explosives and 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 explosives in such building and such interior benches, shelves and fittings, shall so far as is reasonably practicable, be kept clean and free from grit.

(2) A cemented trough at least fifteen centimeter deep shall be provided near each entrance of a magazine or store house. 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 filth or dust.

(3) Oiled cotton, oiled rags or oiled waste or any article liable to spontaneous ignition shall not be taken into any magazine or store house used for storage of explosives.

97. **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 it or taken out of it or when it must be kept open for some other purpose in connection with the management of such premises.

(2) The secured custody of keys of the licensed magazine shall at all times be responsibility of the licensee or his authorized agent and such keys

shall be produced for opening the magazine or store house whenever so required by an inspecting officer. The name and address of the person in custody of the keys shall be intimated to the licensing authority and the Inspector of Explosives having jurisdiction.

(3) The licensee shall at all times and at his own expenses provide for 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 and the licensee shall provide a shelter for the watch man on duty near the magazine or store house.

(4) No package containing explosives shall be opened in magazine or store house and where necessary, repacking shall be done in an approved open sided shed having smoothly finished cemented floor at a distance as approved by the licensing authority.

(5) The licensee of every magazine or store house 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 can not be stored or transported, such explosives shall be repacked only after the same are examined by an Inspector of Explosives.

(6) A holder of a licence to possess, sell or use explosives shall purchase and possess at a time only such quantity of explosives in a given period as may be specified in the licence.

98. **Restrictions on sale of explosives.**—(1) No person shall sell explosives from any premises other than those licensed under these rules.

(2) No person shall sell any explosives to a person who is not authorized to possess such explosives under these rules.

(3) No person shall sell, deliver or cause to be delivered to any person any explosives that has deteriorated or is defective.

(4) A licensee selling explosives to a holder of licence in Form EL-4 shall endorse the transactions on such licence form.

(5) No person who sells any explosives shall alter or deface any printing or marking on the explosives and the packages thereof.

(6) Notwithstanding any terms and conditions of a licence an explosive shall not be hawked, sold or exposed for sale upon any street, highway, public thoroughfare or public place.

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

- (i) name of the explosives;
- (ii) class and division as set out in Schedule I;
- (iii) quantity of explosives packed;
- (iv) licence number of the magazine from where explosives were supplied;
- (v) name of the person who packed explosives;
- (vi) date of packing; and
- (vii) name of the consignee.

99. **Use of explosives.**—(1) No person shall use explosives for blasting purposes unless he possesses a valid licence for use of explosives and employs a qualified shot-firer holding a shot-firer permit granted by a recognized organization:

Provided that for blasting operations in mines coming under the purview of Mines Act, 1923(IV of 1923), such shot-firer shall have qualifications prescribed in the regulations made there under.

100. **Precautions to be observed prior to use of explosives.**—Prior to use of explosives the following precautions shall be observed, namely:—

- (a) an explosive of one description shall not be converted into an explosive of another description and an explosive shall not be decomposed into its ingredients;
- (b) cartridge packing shall not be cut to remove explosives for making cartridges of different sizes. The licensee shall get prior approval of the authority, which granted his licence for preparation as is allowed by these rules;
- (c) explosives shall only be conveyed from the licensed premises to near the site in original unopened packages or in closed containers used solely for that purpose;

- (d) explosives shall not be taken to a point nearer than fifty meters from any site until such site is ready for charging;
- (e) explosives shall not be conveyed in any vehicle with any other materials, tools or implements other than that required for the purpose of blasting;
- (f) the licensee shall be responsible for monitoring of explosives at the site of use and he shall keep record of all kinds of explosives used and left over after day's work. Explosive left over after the day's work shall be returned to the licensed premises from which it was taken;
- (g) the containers used for carrying explosives from original packages shall be maintained thoroughly cleaned and dried and shall be kept closed when not in use. The containers shall be provided with either handles or carrying straps of adequate strength and shall be conspicuously marked with the word "Explosives"; and
- (h) 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.

101. **Precautions to be observed at the site of use.**—At the site of use of explosives the following precautions shall be observed, namely:—

- (a) explosives before use shall be visually examined for any visible defects and any defective explosives shall not be used;
- (b) any explosives showing signs of deterioration of any kind should be reported immediately to the licensing authority and such explosives set aside for examination by such authority;
- (c) gun powder which is found to be caked owing to the moisture shall not be used;
- (d) frozen nitro-glycerin explosives shall not be used until thawed under the supervision of experienced persons. Where freezing is likely occurring, only low freezing explosives shall be used;
- (e) the electric power at the blasting site shall be discontinued as far as practicable before charging the explosives;

- (f) no work other than that associated with the charging operations shall be carried out within ten meters of the holes unless otherwise specified to the contrary by the licensing authority;
- (g) 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;
- (h) the holes which have been charged with explosives shall not be left unattended till the blasting is completed; and
- (i) care shall be taken to ensure that fuse or wires connected to the detonators are not damaged during the placing of stemming materials and tamping.

102. **Precautions to be observed at the time of firing.**—(1) At the time of firing of explosives the following precautions shall be observed, namely:—

- (a) the licensee or a competent person appointed by the licensee to be in charge of use of explosives at the site shall take all precautions against fire or accident and 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;
- (b) the end of the safety fuse should be freshly cut before being lighted;
- (c) 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 rated capacity;
- (d) 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; and
- (e) for the purpose of jointing, ends of all wires and cables should have the insulation removed for a maximum length of five centimeters and then made clean and bright for a minimum length of two and a half centimeters and the ends to be jointed should be twisted together so as to have a positive metal contact.

(2) Nothing in rules 104, 105 and 106 shall apply for blasting involving explosives' operations in mines under the Mines Act, 1923 (Act IV of 1923) and such operations shall be carried out according to regulations made thereunder.

103. Possession of small arms nitro-compound or fireworks and safety fuse for sale in Form EL-05.—(1) In construction of premises, the following requirements shall be observed, namely:—

- (a) all explosives on the premises shall be kept in a building made of brick, stone or concrete and which is closed and secured so as to prevent unauthorized person from having access thereto. It shall be not less than one hundred fifty meters away from residential area, any such premises or any other premises used for the storage of similar explosives, combustible, flammable or hazardous materials;
- (b) the premises shall have a floor area of not less than ten square meters;
- (c) the premises shall have independent entrance and exit;
- (d) the premises shall be situated at ground level;
- (e) the premises shall not be a part of other building; and
- (f) the premises in which small arms nitro-compound, fireworks or safety fuse are kept shall be used only for possession and sale of such explosives and not for any other purposes.

(2) For storage and sale of fireworks, the following precautions shall be observed, namely:—

- (a) subject to other provisions of this rule, fireworks shall not be placed or kept in a shop window used for display of goods;
- (b) fireworks in the shop shall be kept in a spark proof receptacle or the original outer package in which they were received if that package is effectively sealed and in good order and condition;
- (c) a receptacle or package containing fireworks shall be kept in a position away from and clear of shop traffic and separated from all articles of a flammable or combustible nature;

- (d) where a package containing fireworks is opened for sale, the fireworks shall immediately be placed in a clean, dust-free and spark-proof receptacle;
- (e) a receptacle that contains fireworks shall—
 - (i) not be used otherwise than as a container for fireworks;
 - (ii) not be opened except when fireworks are being placed in or taken out of it;
 - (iii) at all times be kept clean and free from dust and grit;
 - (iv) not have in it any matches including Bengal Matches; and
 - (v) not have in it any means of artificial lighting.

CHAPTER VI

LICENCES

104. **Application for licence.**—(1) A person desiring to obtain or to renew or to amend a licence under these rules shall make an application in writing to the authority empowered to grant, renew or amend such a licence:

Provided that where the licensing authority is the Federal Government the application for the licence shall be made through the Chief Inspector.

(2) The application shall be signed by the licensee or applicant, 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 authorization.

(3) Every application for the grant, amendment or renewal of a licence to manufacture, possess, use, sale, transport, import or export explosives or issue of permit under these rules, shall be made in proper Form as set out in Schedule V and shall be accompanied by the particulars, as specified in the application Form.

105. **Grant of licence.**—(1) The authority specified in column 4 of Schedule-IV on receipt of an application on prescribed Form as specified in column 2 shall be competent to grant a licence for the purposes specified in column 3 thereof and on payment of the licence fee as specified in Part II of the said Schedule:

Provided that—

- (a) no licence shall be granted to any person who is under the age of twenty-five years;
 - (b) no new licence in Forms EL-01, EL-02 and EL-03 shall be granted unless the provisions of rule 106 have been complied with;
 - (c) no new licence for possession or manufacture shall be granted if the premises for which the new licence is required are situated within the same premises for which the applicant already possesses valid licence granted under these rules and the required safety distances of new premises are not available within such existing premises;
 - (d) no licence for manufacture of explosives shall be granted or renewed to a person for his factory not registered under the Factories Act, 1934 (Act XXV of 1934) unless he executes, in Form EM-08 in favour of the President of Pakistan, a bond in respect of a person injured, or dependants of a worker deceased, in the event of an accident in the factory to indemnify for an amount of twenty thousand rupees for factories manufacturing upto fifteen kilograms of gunpowder or fireworks at any one time, or an amount of fifty thousand rupees for factories manufacturing up to two hundred kilograms of gunpowder or fire works at any one time or one hundred thousand rupees in every other case.
- (2) A licensing authority under sub-rule (1) may grant a licence for the period as it may deem necessary but such period shall not exceed—
- (i) six months to import explosives in Form EL-08 and to export explosives in Form EL-09;
 - (ii) fifteen days to possess explosives in Form EL-04 as specified therein; and
 - (iii) one month for public display of fireworks in Form EL-10;
- (3) Every other licence granted or renewed under these rules shall remain in force until the 31st day of March following the date of grant of the licence or renewal thereof, as the case may be.
- (4) Notwithstanding anything contained in sub-rule (2), the licensing authority may, if it is satisfied that a licence is required for a specific work of national importance and for a short period, grant a licence for a period not exceeding six months or for such a period as is actually necessary, whichever is

less but not extending beyond the 31st of March, following the date of grant of the licence:

Provided that an Inspector of Explosives shall not grant such a licence without the concurrence of the Chief Inspector and until a certificate is obtained from the district authority under sub-rule (5).

(5) Where the licensing authority is the Chief Inspector or an Inspector of Explosives, an applicant for grant of a new licence in Form EL-05 or Form EL-10 shall make an application to the district authority for a certificate of no objection with respect to licence for the site proposed and the district authority may, if he sees no objection, grant such certificate, with site plan duly attested by him, to the applicant who may forward it to the Chief Inspector or the Inspector of Explosives, as the case may be, with his application.

(6) The Chief Inspector of Explosives or the Inspector of Explosives, as the case may be, shall refer an application, not accompanied by a certificate granted under sub-rule (5), to the district authority for his observations.

(7) Nothing in sub-rule (3) or sub-rule (4) shall be deemed to require an application for the grant of a licence for a site for which a licence was previously granted and has expired to be accompanied by a certificate granted under the said sub-rule (5).

(8) If the district authority either on a reference being made to him or otherwise intimates to the Chief Inspector or the Inspector of Explosives, as the case may be, that any licence, for which an application has been made, should not in his opinion be granted, such licence shall not be issued without the sanction of the Federal Government.

(9) One copy of the plan or plans of the premises signed in token of approval by the licensing authority shall be attached to the licence and one copy shall be filed for record in the office of the licensing authority.

(10) No licence shall be granted for the import of any kind or quantity of explosive unless the importer holds a licence for the possession of such explosive:

Provided that no licence shall be necessary in cases where explosives so imported—

- (i) is not intended to be stored at the port of import but is intended to be transported direct to a territory not being part of Pakistan; or
- (ii) may be possessed without a licence under rule 86.

(11) Where the operations to use explosives are to be carried on within two hundred meters of a railway line, an applicant for a licence therefore shall make an application to the railways authority concerned for a certificate of no objection and the railways authority if considers it expedient may issue the certificate for grant of the licence for the site proposed and the applicant shall forward the certificate to the licensing authority with his application.

(12) A cultivator or any other person applying for a licence in Form EL-04, shall make application to obtain a certificate from Tehsil Nazim or any other local authority having jurisdiction to the effect that the certifying authority has inspected the site and is satisfied that work for which explosive is required is necessary and is not possible without blasting. The certifying authority may, if considers it expedient, issue the certificate which the applicant may forward to the licensing authority with his application.

(13) An application for grant of a licence to manufacture ammonium nitrate fuel oil explosives (ANFO) for own immediate use at sites being subject of the Mines Act, 1923(Act IV of 1923) 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 being subject of the Mines Act, 1923 (IV of 1923) and the applicant is authorized to use the ANFO explosives and conduct mining operations in the area proposed to be covered by the licence.

106. Procedure to be observed before a licence for a factory or magazine is granted in Form EL-01, EL-02 or EL-03.—(1) A licensing authority on receipt of application in Form EA-01 or EA-02 or EA-03 and the particulars, prescribed in the Note (1) of the relevant Form, shall scrutinize the documents and forward to the applicant a statement showing the distances in Form EM-06 which should, in his opinion, be kept clear in and around the factory or magazine premises or any part thereof and from other buildings and protected works.

(2) On receipt of the statement the applicant shall entering therein, against each item, the exact distance which can actually be so kept clear, sign the statement and shall return it together with any presentation which he may desire to make to the licensing authority.

(3) After considering any presentation made by the applicant under sub-rule (2) when returning the statement, the licensing authority may make further such enquiries as deemed necessary for his satisfaction and 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 EM-07 showing the distances which he considers should be kept clear in and round the factory or magazine or storehouse; and
- (ii) and any other authority for such enquiry as deemed necessary by the licensing authority:

Provided that in case of a licence under sub-rule (4) of rule 105, the Chief Inspector need not make any such reference to the district authority.

(4) Upon receipt of the application under sub-rule (1) the district authority shall forthwith cause notice to be served on the applicant and published for general public likely to be affected of such application and of the time and place at which he will prepare to hear it, and calling upon any person objecting to the establishment of the factory or magazine or storehouse on the proposed site to give notice of such objection to him and to the applicant not less than seven clear days before the day fixed for hearing the application, together with his name, address and calling address and a short statement of the grounds of his objection. The day of hearing of application shall be a day following as soon as practicable after the expiration of period of one month referred to in sub-rule (6).

(5) Where the site of the proposed factory or magazine or storehouse lies within one and a half kilometers of the limits of the jurisdiction of any municipal or port authority, the applicant shall prepare, for service of 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 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 inquiry as he may deem necessary.

(8) On completion of the inquiry the district authority shall forward to the licensing authority, the application, statement and plans attested by him, together with a report of procedure followed by him and stating whether he has any objection—

- (a) to the applicant receiving a licence at the site proposed; and

(b) to the manufacturer or storage of explosives in question in his district.

(9) Nothing in this rule shall be deemed to require an application to be accompanied with the report of the district authority for the grant of a licence for a site for which a licence was previously granted and has expired.

(10) Where the district authority raise objection to the grant of the licence on any of the grounds specified in sub-rule (8), no licence shall be granted by the licensing authority except with the sanction of the Federal Government.

(11) The district authority shall complete his enquiry under sub-rules (4), (5), (6) and (7) and forward the report to the licensing authority as early as possible but not later than three months of the date of reference under sub-rule (3).

(12) Where the application is for a licence in Form EL-01, the Chief Inspector shall submit, to Federal Ministry of Defence and Federal Ministry of Interior for their no objection certificate (NOC) and Board of Investment for registration, the application together with the report of the district authority thereon and copy of draft licence containing the conditions which the Chief Inspector may consider suitable.

(13) On receipt of NOC from Federal Ministry of Defence and Federal Ministry of Interior and registration of Board of Investment, the Chief Inspector shall submit the NOCs the application, together with the report of the district authority thereon and draft licence containing the conditions which he may consider suitable, to the Federal Government which may instruct the Chief Inspector—

(a) to grant the licence with such modifications or restrictions (if any) as it may consider suitable; or

(b) to reject the application.

(14) On receipt of NOC from district authority for grant of licence in form EL-01 and copy of draft licence duly signed by district authority, the case shall be forwarded by department of explosives to Ministry of Interior, Ministry of Defence for NOC and to Board of Investment for registration. On receipt of NOCs from Ministry of Interior, Ministry of Defence and registration from Board of Investment, the Chief Inspector shall submit these NOCs, registration and application, together with the report of the district authority thereon and

draft licence containing the conditions which the Chief Inspector may consider suitable, to the Ministry of Industries which may instruct the Chief Inspector—

- (a) to grant the licence with such modifications or restrictions, if any, as it may consider suitable; or
- (b) to reject the application.

(15) On receipt of NOC and draft licence duly signed by concerned district authority for grant of licence in form EL-02 and EL-03, the case shall be forwarded by the Chief Inspector to Ministry of Interior, for obtaining NOC. Whereafter department of explosives shall consider the case for approval or otherwise.

(16) The applicant, desirous to obtain a licence in Form EL-01 for manufacture of explosives, shall deposit a refundable security of one million rupees in usual head of account of the department of explosives. Nothing in this sub-rule shall apply to the manufacturer of fire work not exceeding fifteen kilograms.

(17) The applicant, desirous to obtain a licence in Form EL-02 and EL-03 for possession, sale and use of explosives, shall deposit a refundable security of half million rupees in usual head of account of the department of explosives.

107. Procedure on grant of licence for factory or magazine or storehouse.—(1) A copy of every licence granted by the Chief Inspector or the Inspector of Explosives shall be forwarded to the district authority and in case licensing authority is the Chief Inspector, the original licence together with the approved plan shall be forwarded to the Inspector in whose jurisdiction the premises are situated.

(2) Where the Inspector of Explosives after inspection is satisfied that all the requirements of these rules and the conditions prescribed in the licence in regard to the factory or magazine or storehouse have been complied with, he shall forthwith endorse the licence and until so endorsed, the licence shall not come into force:

Provided that the Chief Inspector may, if satisfied that the explosives are required for urgent necessity, permit the licence to come into force immediately.

(3) If an Inspector 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) Upon receipt of the statement under sub-rule (3) licensing authority shall after making such enquiry, if any, as he may consider necessary, communicate his decision to the applicant and the district authority and also, in the case of a licence in Form EL-01, to the Federal Government.

108. Procedure to be followed for grant of a licence to possess and sell small quantity of explosives.—(1) Notwithstanding anything contained in sub-rules (3), (4), (5), (6) and (7) of rule 106, where the licensing authority is the Chief Inspector or an Inspector of Explosives and where the quantity of explosives proposed to possess for use does not exceed two thousand kilograms, the applicant may apply to the district authority together with an application in Form EA-03, statement in Form EM-06 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 with site plan attested by him and may forward it to the licensing authority together with the application.

(2) A copy of every licence granted to possess and sell explosives in Form EL-05 shall be forwarded to the district authority concerned.

(3) The district authority shall forward a copy of every licence granted by him for transport of explosives in Form EL-07 to the Inspector of Explosives having jurisdiction of the area.

(4) On receipt NOC from the district authority for grant of a licence, the licensing authority shall forward it to Ministry of Interior for its NOC and on receipt of NOC from Ministry of Interior he shall take further action for grant of licence:

Provided that if the licensing authority does not receive the NOC under rule 106(8) within the time limit or any extension thereof, such authority may advise the applicant accordingly and take further action as he may deem necessary.

(5) The district authority refusing to grant NOC as required under rule 106, shall record in writing reasons for such refusal and communicate such reasons and facts of the case to the licensing authority. The reasons for not issuing NOC 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.

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

110. Power of licensing authority to alter conditions.—(1) Notwithstanding anything contained in rule 109 the licensing authority may add to, omit or amend any of the conditions specified in the prescribed form of the licence.

(2) The power conferred by sub-rule (1) shall not be exercised by any licensing authority, other than the Federal Government, without the prior consent of the Chief Inspector.

111. Amendment of licence.—(1) Any licence granted under these rules may be amended by the authority empowered to grant the licence, Provided that—

- (a) the amendments shall not be inconsistent with any rule in this Chapter ; and
- (b) no licence in Form-EL-01 shall be amended except with the sanction of the Federal Government.

(2) A licensee who desires to have his licence amended shall submit to the licensing authority—

- (i) an application in Form EA-11 stating nature of the amendment and the reasons thereof;
- (ii) the original licence together with its enclosures;
- (iii) plans showing the details of the proposed amendment if such plans are required by the licensing authority for the purpose of amendment; and
- (iv) prescribed amendment fee which shall include the amount if any by which the fee that would have been payable if the licence had originally been issued in the amended form exceeds the fee originally paid for the licence .

112. 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 Inspector may be renewed without any alteration by an Inspector of Explosives duly authorized by the Chief Inspector in this behalf.

(2) The Inspector of Explosives authorized by the Chief Inspector under sub-rule (1) may, when so required by the Chief Inspector, require the

licensee to follow the procedure laid down in sub-rule (1) of rule 105 before renewing a licence in Form EL-01 or Form EL-02 or Form EL-03.

(3) Every application for the renewal of a licence shall be made so as to reach the licensing authority not less than thirty days before the date on which the licence expires and the licence shall be valid till expiry or till such date as the authority may renew the licence or, as the case may be, till intimation communicated to the applicant that the renewal of the licence has been refused.

(4) Every application under sub-rule (3) shall be accompanied by—

- (i) application in Form EA-10;
- (ii) the original licence together with its enclosures and approved plans;
- (iii) the original treasury receipt, showing deposit of the correct renewal fee and correct head of account; and
- (iv) any other information or document that may be required by the licensing authority.

(5) Such fee shall be charged for the renewal of a licence as is changed for the grant thereof:

Provided that if the application for renewal along with its enclosures under sub-rule (4), is not received within the time specified in sub-rule (3), the licence shall not be renewed except on payment of double the fee ordinarily payable for the licence.

(6) Every licence granted under these rules, other than a licence granted for a specific period, shall be renewable for one year from its date of expiry where there has been no contravention of the Act or the rules made thereunder or of any condition of the licence so renewed.

(7) If a licence is surrendered before its expiry date the renewal fee paid for the unexpired portion of the licence shall not be refunded.

(8) No licence shall be renewed if the application for renewal together with particulars specified under sub-rule (4) is received after the expiry date of the licence by the authority empowered to renew the licence.

(9) When a licence is renewed by the Chief Inspector or by the officer authorized by him, 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 concerned Inspector having jurisdiction.

(10) A licence granted under sub-rule (4) of rule 105 may be renewed by the licensing authority for a period not exceeding six months or for such a period as is actually necessary, whichever is less but not extending beyond the 31st of March, following the date on which the licence is granted or renewed if it is satisfied that the specific work of national importance shall continue after the date of expiry of the licence, provided that the licence granted under sub-rule (3) of rule 105 shall be renewed for not more than three times.

(11) Every application, alongwith all its enclosures under sub-rule (12), for the renewal of licence under sub-rule (10) shall be made so as to reach the licensing authority not less than ten days before the date on which the licence expires, and if the application is so made, the licence shall be held to be in force until such date as the authority renews the licence or until intimation that the renewal of the licence is refused has been communicated to the applicant.

(12) Every application under sub-rule (11) shall be accompanied by—

- (i) documentary proof from the concerned Government authorities showing that the work shall continue for a further period of six months or part thereof;
- (ii) application in Form EA-10;
- (iii) the original licence together with its enclosures and approved plans;
- (iv) the original treasury receipt showing the deposit of the correct renewal fee under the correct head of account; and
- (v) Any other information required by the licensing authority.

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

Provided that where the application is either not received within time under sub-rule (11) or received within time but with incomplete or incorrect enclosures specified under sub-rule (12), the licence shall be renewed only on completion of the correct enclosures and on payment of double the fee ordinarily payable for the licence, except where the complete and correct enclosures are subsequently provided or, as the case may be, completed within time under sub-rule (11) normal fee for the renewal shall be charged.

113. Refusal of licence.—(1) A licensing authority, other than the Federal Government, refusing to grant, amend or renew a licence, shall record its reasons for such refusal in writing.

(2) A copy of the order containing the reasons for such refusal shall be given to the applicant on payment of fee prescribed in Part II of Schedule IV.

114. Suspension or cancellation of licence.—(1) Every licence granted under these rules shall be liable to be suspended or cancelled by order of the licensing authority for any contravention of the Act or of any rule thereunder or of any condition in such licence or by order of the Federal Government if at any time the continuance of the licence is deemed objectionable.

(2) A licensing authority, other than the Federal Government, suspending or canceling a licence shall record its reasons for so doing in writing.

(3) A copy of the order containing the reasons for the suspension or cancellation of a licence shall be given to the holder of the licence on payment of a fee prescribed in Part II of Schedule IV.

(4) An order of suspension or cancellation of a licence shall take effect from the date specified therein and shall be deemed to have been served if sent by registered post to the address of the licensee entered in the licence.

(5) 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 112.

115. Procedure on expiration or cancellation of licence.—(1) A person licensed to manufacture, possess or sell any explosive shall on the expiration or cancellation or suspension of his licence, forthwith give notice to the Inspector of Explosives of the description and quantity of explosives in his possession and shall comply with any direction which the Inspector of Explosives may give in regard to their disposal.

(2) The Inspector of Explosives may grant for a term not exceeding three months from the date of such expiration or cancellation, as the case may be, a temporary licence for the possession or sale of the explosives actually held at the time of the issue of the temporary licence.

(3) The fee chargeable on a licence granted under sub-rule (2) shall bear the same proportion to the fee charged on the expired or cancelled licence as the period covered by the temporary licence bears to a full year.

116. **Appeals.**—(1) An appeal against any order refusing to grant, amend or renew a licence or against any order to suspend or cancel a licence shall lie—

- (i) to the Federal Government, if the order is passed by the Chief Inspector;
- (ii) to the immediate official superior of that Authority, if the order is passed by the district authority; and
- (iii) to the Chief Inspector, if the order is passed by the Inspector of Explosives.

(2) Every appeal shall be in writing, accompanied by a copy of the order appealed against and shall be presented within sixty days of the date of such order if preferred to the Federal Government, and within thirty days in all other cases.

(3) Every appeal shall be accompanied by non-refundable fees specified in Part II of Schedule IV.

(4) On receipt of the appeal which can be admitted in accordance with the Act, the appellate authority may call for record 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, shall pass final orders.

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

(2) The legal heirs or representatives of the licensee under sub-rule (1) shall as soon as possible but not later than fifteen days, shall notify to 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.

(3) New licence shall be granted to the legal heirs until they so desire by completing all formalities required under these rules.

118. Loss of licence.—(1) Where a licence granted under these rules or an authenticated copy of a licence granted under rule 124 is lost or accidentally destroyed and the licensee wishes to obtain a duplicate thereof, he shall—

- (a) immediately after loss of the licence, publish a notice in a local daily newspaper about such loss and send a copy of each of such notice to the district authority concerned and the Chief Inspector; and
- (b) after fifteen days of the publication of the aforesaid notice, apply to the district Magistrate for the issue of a no objection certificate for grant of the duplicate.

(2) The district authority may, after such inquiry as he may deem fit, issue the no objection certificate.

(3) After the receipt of no objection certificate, the licensee shall submit an application alongwith the certificate to the licensing authority and the licensing authority may grant the duplicate on payment of a fee prescribed in Part II of Schedule IV.

119. Permit for temporary storage of explosives in magazine in excess of the licensed quantity.—When it is proved to the satisfaction of the Chief Inspector that owing to the unforeseen circumstances it is necessary to store in a magazine, licensed under Form EL-02 or EL-03, a quantity of explosives in excess of that entered in the licence, the Chief Inspector may, subject to payment of a fee prescribed in Part II of Schedule IV, grant a permit for the storage of such excess in the magazine for a period not exceeding one month:

Provided that—

- (a) the excess quantity thus allowed to be stored shall not in no case exceed one third of the quantity entered in the licence;
- (b) no condition of the licence other than that prescribing the maximum quantity to be stored is infringed; and
- (c) the licensing authority may refuse to grant a permit for excess storage of explosives if such excess storage is of a repeated nature.

120. Time limit for payment of fee for permit for temporary storage of explosives in magazine in excess of the licensed quantity.—The fee assessed for payment in respect of unauthorized or excess storage shall be paid within thirty days of the receipt of the demand letter. If the fee is not paid within thirty days, an amount equal to double the fee ordinarily payable under these rules shall be payable within thirty days following expiry of the first said thirty days.

121. Permit for temporary possession of manufactured fireworks in excess of the licensed quantity.—Subject to payment of a fee prescribed in Part II of Schedule IV a permit may be granted by the licensing authority to a holder of licence in Form EL-05 to possess in addition to a quantity permitted by the licensee, any quantity of fireworks so that the total quantity permitted to be stored does not exceed one hundred twenty-five kilograms for a period not exceeding fifteen days at a time:

Provided that—

- (a) no condition of the licence other than that prescribing the maximum quantity of fireworks to be possessed is infringed; and
- (b) no permit shall be granted under this rule to any person whose licence entitled him to possess not more than twenty-five kilograms of fireworks

122. Payment of fees.—(1) Every application for grant of a licence or permit under these rules shall be accompanied by original treasury receipt showing payment of the prescribed fee under relevant head of account of the department of explosives:

Provided that where a licence or permit is granted by a district authority the application therefore shall be accompanied by the fee paid in such a manner as may be specified by that authority.

(2) If an application for the grant, renewal or amendment of a licence or for the grant of a permit is rejected, the fee paid shall be refunded by the district authority, or, if it has been paid into a treasury, by that treasury on the production of a signed order from the licensing authority directing such refund.

123. Power to exempt from payment of fees.—The Federal Government may, by general or special order after recording in writing reasons thereof, grant exemption from, or reduction of, any fee payable under these rules.

124. **Production of licence or pass on demand.**—(1) Every person holding or acting under a licence granted under these rules shall, when called upon by any officer specified in sub-rule (1) of rule 128, produce it or authenticated copy thereof, at the place to which the licence relates.

(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 by any officer specified in sub-rule (1) of rule 128.

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

125. **Executive control over authorities.**—Every authority, other than the Federal Government, acting under this Chapter shall be subject to the direction and control of the Federal Government:

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

126. **Empowerment under section 15 of the Act.**—All authorities granting licence under these rules are hereby empowered to direct by an order written on the licence that it shall have the effect of a like licence granted under the Arms Act, 1878 (Act XI of 1878).

CHAPTER VII

POWERS OF OFFICERS AND PENALTIES

127. **Dangerous practices.**—(1) In any matter which is not provided for by express provision of, or condition of a licence granted under, these rules, if an Inspector of Explosives finds any factory, magazine or place where an explosive is being manufactured, possessed, used or sold 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 Inspector may, by an order in writing, require the occupier of such factory or magazine or place, or the owner of the explosives, to remedy the same within such reasonable time as may be specified in the order.

(2) Where the occupier or owner is aggrieved or dissatisfied by an order made under sub-rule (1), he may, within the time specified in the order for its compliance, make an appeal to the Chief Inspector, and the order of the Chief Inspector on such appeal shall be final.

(3) Every appeal under sub-rule (2) shall be in writing and shall be accompanied by a copy of 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 Inspector thereon within the time fixed in such order, he shall be deemed to have committed a breach of this rule.

128. **Powers of search and seizure.**—(1) Any officer specified in the column (1) of the table below may within the areas specified in column (2) thereof —

- (a) enter, inspect and examine any place, 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 therein;
- (c) take free of charge samples of any explosives found therein; and
- (d) seize, detain or remove any explosive 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

Officer	Area
(1)	(2)
Chief Inspector, Deputy Chief Inspector of Explosives, Inspector of Explosives or Assistant Inspector of Explosives.	All parts of Pakistan to which the Act applies.
District Coordination Officer, District Magistrate and Political Agent.	Their respective districts or areas to which the Act applies.
Executive Magistrate or 1 st Class Magistrate.	Their respective areas of jurisdictions and subject to application of the Act thereto.
All police officers of rank not below of Assistant Sub-Inspector.	The respective areas over which their authority extends, subject to application of the Act thereto.

(2) Whenever any officer, other than the Chief Inspector, seizes, detains or removes any explosive or ingredients thereof or any connected documents thereof under this rule, he shall forthwith report the fact by telegram or fax to the Chief Inspector and the Inspector under whose jurisdiction the place, where such explosives were seized, falls, and whenever any officer, not being the district authority, seizes, detains or removes any explosive or ingredients thereof or any connected documents thereof under this rule, he shall forthwith report the fact by telegram or fax 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 Inspector and receipt of instructions from him as to their disposal.

(4) Chief Inspector shall be empowered to stop the supply, storage, use or sale of explosives by licensee, keeping in view the prevailing circumstances of country concerning the security environment.

129. Power to destroy illicit explosives.—(1) The Chief Inspector or Deputy Chief Inspector of Explosives or an Inspector or an Assistant Inspector of Explosives—

(a) shall destroy any explosive, wherever found and—

(i) the manufacture, possession, export or importation of which has been prohibited absolutely under section 6 of the Act; or

(ii) the explosive belongs to the 5th (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 explosive or ingredient thereof in respect of which the Chief Inspector or Deputy Chief Inspector of Explosives or Inspector or Assistant Inspector of Explosives has reason to believe that any of the provisions of the Act or these rules have been contravened, provided that no explosives shall be destroyed or rendered harmless by Deputy Chief Inspector of Explosives or an Inspector or Assistant Inspector of Explosives without the sanction of the Chief Inspector unless the matter appears to such Deputy Chief Inspector or Inspector or Assistant Inspector of Explosives, urgent and fraught with serious public danger.

(2) Whenever the Chief Inspector or Deputy Chief Inspector of Explosives or Inspector or Assistant Inspector of Explosives destroys any explosive or ingredients thereof or rendered it harmless under sub-rule (1) he shall take and keep a sample thereof, shall, if required, give a portion of the sample to the person owning the explosives or having the same under his control at the time of seizure, and shall forthwith report the circumstances to the district authority.

(3) Where any explosive or ingredient thereof is destroyed by an Inspector of Explosives, he shall report all the facts to the Chief Inspector. 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.

130. **Procedure on reports of infringements.**—Whenever any report, in respect of any infringement of the Act or these rules is made to the district authority by the Chief Inspector or Deputy Chief Inspector of Explosives or Inspector or Assistant Inspector of Explosives, the district authority shall take immediate action and shall inform the Chief Inspector or such Inspector, as the case may be, of the action taken by him on such report.

131. **Penalties.**—Whoever in breach of these rules manufactures, possesses, uses, sells, transports, exports or imports any explosive, or otherwise contravenes any of these rules shall be punishable with fine which may extend to,—

- (a) thirty thousand rupees, in the case of a person so importing or exporting or manufacturing an explosive;
- (b) ten thousand rupees, in the case of a person so possessing, using or transporting an explosive;
- (c) five thousand rupees, in the case of a person so selling an explosive; and
- (d) two thousand rupees, in any other case.

132. **Saving as to acts done in emergency, etc.**—Nothing in these rules shall render liable to any penalty the owner or master of any vessel or any carrier or other person having charge of any explosives for any contravention of these rules if,—

- (a) by reason of stress of weather, unavoidable accident or other emergency such contravention was reasonable and proper, or
- (b) such owner or master of carrier or other person was prevented from complying with these rules by the willful act, neglect or default of the consigner or other person or by the improper refusal of the consignee or other person to accept delivery of any consignment.

133. **Power to exempt.**—Notwithstanding anything contained in rule 123, the Federal Government may, on the recommendation of the Chief Inspector, in exceptional cases and after recording reasons thereof in writing, exempt conditionally or unconditionally any person from all or any of the provisions of these rules or any of the conditions of any licence held by him.

CHAPTER VIII

ACCIDENT AND INQUIRIES

134. **Notice of accident.**—(1)The notice of accident required to be given under sub-section (1) of section 8 of the Act shall be given forthwith—

- (a) to the Chief Inspector and Inspector of Explosives of their jurisdiction, by fax or express telegram on telegraphic address “Explosives” Karachi followed within twenty-four hours by a letter giving particulars of the occurrence; and
- (b) to the officer-in-charge of the nearest police station, by the quickest route.

(2) Pending the visit of the Chief Inspector or his representative, or until instruction is received from the Chief Inspector, 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 railways for the restoration of thorough communication.

135. **Procedure at the courts of inquiry.**—The Chief Inspector shall arrange with the heads of the services concerned to be represented at courts of inquiry where he so desires. In addition he will be provided with copies of proceedings of courts where the matter is of lesser interest. The heads of the services will co-operate with the Chief Inspector by informing him immediately of occurrences liable to lead to the summoning of courts of inquiry on matters of interest to the Chief Inspector as indicated by him.

136. **Inquiry into accidents.**—Whenever a district authority, or a magistrate subordinate to the district authority, holds an inquiry under subsection (1) of section 9 of the Act he may adjourn such an inquiry unless the Chief Inspector or an officer nominated by him is present to watch the proceedings or the magistrate has received written information from the Chief Inspector that officer does not wish to send a representative.

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

Provided that where the Federal Government so directs, the inquiry may be held in camera:

(2) Persons attending as witnesses before the inquiry officer shall be allowed such expenses as would be allowed to witnesses attending before a civil court subordinate to the High Court having jurisdiction in the place where the inquiry is held and 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 inquiry officer, shall ascertain and certify the proper amount of such expenses.

138. **Repeal and savings.**—(1) The Explosives Rules, 1940, and all rules and notifications issued by local or Provincial Government, under the Explosives Act, 1884 (IV of 1884), are hereby repealed, but—

- (i) any licence or duplicate thereof granted or renewed and all fees imposed or levied shall be deemed to have been respectively granted, renewed, imposed or levied under these rules; and
- (ii) any approval given, appointment made and power conferred by or under any rule or notification so repealed shall, so far as not inconsistent with the Act and these rules, be deemed to have been given, made or conferred by or under these rules.

(2) Anything not inconsistent with these rules which was permitted to be done by or under any rule in force immediately before the coming into force of these rules may, in special cases, be permitted by the Chief Inspector by order in writing to be continued for such period not exceeding two years as may be specified in the order.

SCHEDULE I
CLASSES OF EXPLOSIVES

(See rule 3)

Class No.	Name	Definition	Sub-Division
1	Gun powder	"Gunpowder" means gunpowder ordinarily so called.	
1	2	3	4
2	Nitrate-mixture	"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 explosive 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	
3	Nitro-compound	"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.	Division 1, comprising any chemical compound or mechanically mixed preparation which consists, either wholly or partly, of nitro-glycerine or some other liquids nitro-compound that is such explosives as ballistite, blasting gelatine, cordite, dynamite, gelatine dynamite, gelignite, etc. 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 diamond, trinitro-toluol. (T.N.T.)_ etc.
4	Chlorate-mixture	"Chlorate-mixture" means any explosive containing a chlorate.	Division 1, comprising any chlorate preparation which consists partly of nitro-glycerine or of some other liquid nitro-compound. Division 2, comprising any chlorate mixture which is not comprised in Division 1.

1	2	3	4
5	Fulminate	<p>“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.</p>	<p>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.</p> <p>Division 2 comprises such substances as the chloride and the Iodide of Nitrogen, Fulminating Gold and Silver, Diazobenzol and the Nitrate of Diazobenzol.</p>
6	Ammunition	<p>“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.</p>	<p>Division 1 comprises exclusively of, safety cartridges, safety fuses for blasting, railways for signal and percussion caps.</p> <p>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.</p> <p>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.</p> <p>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.</p>

1	2	3	4
7	Fireworks		<p>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 and 6, any star and any colored fire composition:</p> <p>Division 2 fireworks comprises manufactured fireworks <i>i.e.</i> 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,</p> <p>provided that a substantially constructed hermetically closed metal case, containing not more than 500 grms 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".</p>

SCHEDULE II

PACKING OF EXPLOSIVES

(See rule 7)

- (1) In this Schedule unless the context otherwise requires—

“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;

“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;

“propellant” means an authorised explosive of the 3rd (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 1st Division of the 6th (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 Inspector.

(6) Use of metal bands wires on packages is prohibited unless specifically authorised by the Chief Inspector in relation to packing of any explosives.

(7) 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.

(8) Cushioning material, if used, shall be suited to the nature of the contents of the package.

(9) (i) The outer package shall be used only once for packing and transport of explosives; and

(ii) 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.

(10) Subject to the foregoing provisions, authorized explosives of the Classes and Divisions, if any, specified in column (2) of the appended table shall be packed in the manner shown in the corresponding entry in column (3) thereof, and the maximum amounts which may be included in any one package shall not exceed those specified in the corresponding entries in columns (4) and (5) thereof.

TABLE

Item No.	Class	Method of packing	Quantity in any one outer package	Quantity in any one inner package
(1)	(2)	(3)	(4)	(5)
1	Class 1	When the quantity in any one consignment does not exceed 2.5 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.	50 Kgs Provided that where gunpowder and propellant are packed together this quantity shall not exceed 25 Kgs.	2.5 Kgs.
2	Class 2	Same as for Class 1.	25 Kgs.	2.5 Kgs.
3	Class 3 Division 1 other than Propellants.	Same 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 stitching may be used for securing the inner package if the wire is effectively prevented from coming into contact with the explosive by means of a sheet of stout cardboard or otherwise.	25 Kgs	2.5 Kgs
4	Class 3 Division 1 propellants.	Same as for Class 1.	25 Kgs.	25 Kgs.
5	Class 3 Division 2 other than picric acid, wet gun cotton.	Same as for Class 1.	25 Kgs.	25 Kgs.
6	Picric acid.	Same as for Class 1.	Unlimited	Unlimited
7	Gun cotton so wetted with water as to be absolutely un- inflammable	Same as for Class 1, provided that the inner or outer package or both of them shall be of such nature, and so closed, as to prevent any material loss of moisture.	Unlimited	Unlimited
8	Class 4 Division 1:	Same as for Class 3, Division 1, other than propellants.	25 Kgs.	2.5 Kgs.
9	Class 4 Division 2.	Same as for Class 1.	25 Kgs.	2.5 Kgs.

(1)	(2)	(3)	(4)	(5)
10	Class 5.	Packed in water. A treble package; the inner most package being a bag permeable to water, enclosed in a case containing sufficient water to ensure the explosive being kept constantly wet; 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.
11	Class 6, Division 1, other than pinfire cartridges for pistols. Pin-fire cartridges for pistols.	A single outer package, provided that clause (3) of this Schedule shall not apply to explosives of this Division. Provided also that bulleted cartridge 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. (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 in number.—In an inner and outer package, the cartridges being packed in inner packages with millboards as above required.	Unlimited 50 in number 2500 in number	-- -- 50 in number
12	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 case of such cartridges or charges may, if it satisfies the conditions required for an inner packages, be deemed to be such inner package. Other ammunition of this Division:-A single outer package.	-- 50 kgs	-- --
13	Class 6 Division 3, other than detonators and electric detonators.	Same as for Class 1, provided that bulleted cartridges of a caliber 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.	25 Kgs.	1 Kg., or 10 in number, whichever be the greater.

(1)	(2)	(3)	(4)	(5)
14	Detonators.	(a) Not exceeding 1,000 in any one consignment. As for Class 1, provided that the detonators and the spaces between the same and between the sides of the inner package and the said detonators shall all be filled as far as practicable, with fine sawdust or other similar material; a layer of felt or other soft yielding material shall be placed between both ends of all the detonators and the interior of the inner package in which the same are placed, in such manner and so secured, that both ends of the detonators will rest upon the said cotton wool or other material, every inner package, if of metal to be lined throughout with the paper or other soft material.	1000 in number	100 in number
		(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.	10,000 in number	100 in number
		(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.		
15	Electric detonators	Same 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.	5000 in number	100 in number
16	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.
17	Class 7, Division 2	Single outer package, provided that clause (3) of this Schedule shall not apply to explosives of this class and Division.	50 Kgs	--

(1)	(2)	(3)	(4)	(5)
18	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)
19	RDX	Same as for P.E.T.N.	22.5 Kgs. (dry basis)	11.25 Kgs. (dry basis)
20	Tri-Nitro-Resorcinol (Styphnic acid)	Same 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

SCHEDULE III METHODS OF TESTING

(See rule 20)

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

THE HEAT TEST AS APPLIED TO EXPLOSIVES

I.—APPARATUS AND MATERIALS EMPLOYED

Specifi- cation	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-stopper, brown glass, 28.4 cc (for standard tint papers)	1
	VII	Bottle, glass-stopper, 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.

Specifi- cation	Pattern No.	Article	
	XIII	Forceps, lifting, heat test papers	1
	XIV	Funnel, aluminium	1
C	XV	Funnel, glass	1
	--	Glycerine 28.4 cc bottle	1
	XVI	Knife, cordite	1
	XVII	Lid, Water bath	1
	XVIII	Mill, cordite	1
	XIX	Needle, piercing, heat test papers	1
	XX	Oven, water	1
D	--	Paper, filter	A sufficient supply.
D	--	Papers, filter, 5.5 cm	-Ditto-
	XXI	Papers, standard tint	-Ditto-
E	--	Papers, test	-Ditto-
	XXII	Pestle and mortar, Wedgwood ware	1
	XXIII	Plate, glass, resting heat test papers for Piercing	1
	XXIV	Rings, rubber, test tube	A sufficient supply.
	XXV	Rod, glass, flat-headed	1
	XXVI	Rods, glass, platinum wire hook	6
	XXVII	Scoop, aluminium	1
	XXVIII	Screen, burner for water bath	1
	XXIX	Sieves, rectangular, tinned, brass wire	1
	XXX	Sieves with lid and base, Circular brass	A set
	XXXI	Spatula, horn	1
	XXXII	Stand, heat test tubes	1
	XXXIII	Stand, water bath	1
	XXXIV	Stoppers, rubber, perforated	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 forceps 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.

SPECIFICATIONS OF MATERIALS

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 CH₃COOH. When 1 cc. of N/10 potassium permanganate solution is added to 100 c.c. of the acetic acid maintained at 15 °C, the distinctive colour is to remain for not more 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 gram. 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 CaCO_3 . This is to be determined as follows:—

Ten 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°C till constant in weight, and then exposed under a bell-jar to saturated atmosphere at 15°C to 20°C for 24 hours.

Note:—Before use in heat-test experiments the French chalk is to be carefully washed with distilled water, dried in a water oven at $65\text{--}70^\circ\text{C}$, and exposed to a saturated atmosphere for 24 hours. It is to be kept in a well-stoppard bottle.

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

SPECIFICATION D. (Tentative). 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 fibers is to be $2+0.5$ mm.

The sheets, when measured with a Ciceri smith's patent fixed pressure micrometer, are to have a thickness of $1.8 +0.2$ 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°C with Fehlings's solutions, diluted with twice its volume of boiling water, it is not to produce more than 1.25 per cent of its weight of cuprous oxide (Cu_2O).

It is to be supplied in sheets 50 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 $18.5+0.75$ minutes. A test differing 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 testes amongst the 32 papers tested, in which case the batch is to be condemned.

II.—PREPARATION OF THE SAMPLE TO BE TESTED

All the operations in preparing a sample for testing are to be carried out as expeditiously as possible, avoiding exposure to light, as far as practicable and the test is to be carried out as soon as the sample is prepared.

In weighing out heat test quantities, an accuracy of + 0.05 grammes is sufficient. These quantities are to be weighed out into test tubes which have been fitted with rubber rings, the lower surface of which coincides with the bottom line etched on the test tube.

Explosives of Class 3 Nitro-compound, Division 1:--

1. Dynamite and other nitro-glycerine preparation from which the nitro-glycerine can be conveniently extracted with water in the manner described for dynamite:—

- (a) the 5.5 cm glass funnel is to be placed in a hole of the heat test tube stand and 5.5 cm filter paper, folded in the usual way, placed in it;
- (b) a cartridge of the sample to be tested is to be opened at one end and rotated with one hand, while with the other the contents of the cartridge are to be loosened by means of pressure between the thumb and forefinger. The first half of the sample so loosened is to be rejected;
- (c) 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;
- (d) when the weight of the sample in the scoop has been adjusted to 13 grammes, the sample is to be transferred to the funnel and pressed down fairly tightly with the flat-headed glass rod until the surface is level;
- (e) the funnel is then to be placed in the heat test tube supported in the heat test tube stand and filled up with distilled water. The stem of the extraction funnel is not to touch the side of the heat test tube;
- (f) when 2 c.c. of nitro-glycerine have been collected in the test tube the extraction funnel is to be removed. The sample is then ready to be heat tested; and

(g) in the event of any water going through with the nitro-glycerine a fresh sample of dynamite is to be extracted.

2. **Carbonite, monobel powder, and similar friable nitro-glycerine preparations from which the nitro-glycerine 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 half 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; and
- (c) when the weight of the sample in the scoop has been adjusted to 3.2 grammes the sample is to be transferred by means of the aluminium funnel to a heat test tubes collected at the bottom by gently tapping the side of the tube with the fingers and pressed down to a height of 3 centimeters by means of the flat-headed glass rod. The sample is then ready to be heat tested.

3. **blasting gelatine, gelatine dynamite, delignite 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; and

- (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 centimeters with the flat headed glass rod. The sample is then ready to be heat tested.

4. **Cordite, ballistite and other propellants of Class 3, Nitro-compound, Division 1:--**

(1) Explosives in the form of sticks or tubes:—

- (h) the operator is to wash his hands carefully, thoroughly rinse them in distilled water, and dry them with a clean towel;
- (i) the sticks or tubes to be tested are to be wiped out with clean filter paper;
- (c) the sample is to be reduced to a condition suitable for grinding in the cordite mill by being cut into small piece about 3.175 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; and
- (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.

(2) 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 nitro-compound, 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; and
- (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 centimeters. The sample is then ready to be heat tested; and
- (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. **Tonite and analogous compressed nitro-cellulose preparation:—**

- (a) The operator is to wash his hands carefully, thoroughly rinse them in distilled water, and dry them with a clean towel;
- (b) the sample is to be held over the rectangular sieve and a sufficient quantity for the tests required is to be removed from the center of the cartridge by scraping with horn spatula;
- (c) the explosives on the sieve is then to be rubbed through with the hand and the sieve material 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 to be again 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; and
- (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.

4. Nitro-cellulose propellant –

(1) 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; and
- (h) The set of sieves and the cordite mill are to be cleaned with cleaning brush before and after the preparation of each sample.

(2) The explosives in the form of grains 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; and
- (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.

5. Ammonite, Bellite, Roburite and analogous preparation:-

- (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 half 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; and
- (c) when the weight of the sample in the scoop has been adjusted to 1.3 grammes the sample is to be transferred by means of the aluminum funnel to a heat test tubes collected at the bottom by gently tapping the side of the tube with the fingers. The sample is then ready to be heat tested.

III.—APPLICATION OF THE TEST

- (a) The water bath is to be fitted up and is to be leveled and filled with water up to the outflow. It is to be placed on a table of convenient height in such a position that the heat test tint can readily be observed by reflected light. No part of the apparatus to be exposed to direct sunlight;
- (b) the thermometer, fixed in the rubber stopper, is to be inserted in the wire cage provided for the purpose on the inner 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 the operator should touch the paper with his finger; and
- (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 °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 bath	Quantity of explosive heat tested	Time explosive should stand the test (Minutes)
3	1	Nitro-glycerine extracted from dynamite etc. by displacement with water.	71.1 °C (160 °F)	2 cc.	15
		Carbonite, monobel and similar friable nitro-glycerine preparations from which the nitro-glycerine cannot conveniently be extracted by water.	71.1 °C (160 °F)	3.2 grammes	7
		Blasting gelatine, gelatine dynamite and analogous preparations.	71.1 °C (160 °F)	3.2 grammes + 6.5 grammes French chalk	10
		Cordite, ballistic and other propellant of Class 3, Division 1.	71.1 °C (160 °F)	1.6 grammes	10
3	2	Nitro-cellulose, pulp, compressed gun cotton, tonite and analogous compressed nitro-cellulose preparations.	76.7 °C (170 °F)	1.3 grammes	10
		Nitro-cellulose propellants	76.7 °C (170 °F)	1.3 grammes	10
		Ammonite, bellite, roburite and analogous preparations.	76.7 °C (170 °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 °C to 32.2 °C and during such exposure the cylinder shall not diminish in height by more than one-fourth of its original height, and the upper cut surface shall retain its flatness and the sharpness of its edge.

Note.- If the blasting gelatine and gelatine dynamite to be tested cannot be made up in cylindrical form, the test is to be applied with necessary modifications.

TEST FOR LIABILITY TO EXUDATION

There shall be no separation from the general mass of the blasting gelatine or gelatine dynamite of any nitroglycerine or liquid nitro-compound under any 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 °C (160 °F);
- (2) it should not contain more than a minute trace of lead;
- (3) one hundred parts of the dry material shall not contain more than 0.3 part of total (free and combined) sulphuric acid, of which not more than 0.1 part shall be free sulphuric acid; and
- (4) its melting point should be between 120 °C and 122.8 °C.

VI.—TESTING CHLORATE MIXTURES

The material must not be too sensitive and must show no tendency to increase in sensitiveness on keeping.

The material must contain nothing liable to reduce the chlorate. Chlorites calculated, as potassium chloride must not exceed 0.25 per cent. The material must contain no free acid or substance liable to produce free acid. Explosives of this class containing nitro-compounds will be subject to the heat test as they belonged to class 3

Note.—These explosives will be 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.—PENTA ERYTHRITOL TETRANITRATE (PETN)

(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 tarred flat-bottomed dish and expose the dish and its contents in an oven at a temperature not exceeding 60 °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 °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°C and 142°C;
- (4) Insoluble matter—the total insoluble matter in acetone should not be more than 0.05 per cent;
- (5) Volatile matter—volatile matter should not be more than 0.15 per cent;
- (6) Acidity—the acidity, calculated as HNO₂ should not exceed 0.01%;

- (7) Alkalinity—the alkalinity, calculated as Na_2CO_3 , should not be more than 0.01%; and
- (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

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

PREPARATION AND TESTING OF HEAT PAPERS

PREPARATION

Potassium iodide:

The purest potassium iodide obtainable commercially is to be purified by triple re-crystallization 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 weighted 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 then 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 heat test paper the operator is to wear clean cotton gloves. When the sheets are dry they are to be trimmed by cutting off the unclipped end about 0.5 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 amber coloured glass jars, kept in the dark.

When batches 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, be kept dark.

TESTING OF HEAT TEST PAPER BY THE DIFFUSION TEST**Apparatus and Materials required :**

No.	Apparatus and Materials required	Quantity
1	Acheson graphite	1 piece
2	Sulphuric acid, 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 liter	A supply
12	Stopper, rubber, with 4 platinum hooks	1

Application of the Test

The solution is to be brought to 15 °C before use. 2 grammes of ferrous ammonium sulphate are weighed out and placed in the glass jar, 90 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 °C, and must be kept at that temperature throughout the experiment. The temperature of the air should be 15 °C to 17 °C. 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 and 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 °C for 1 hour, allowed to cool in an evacuated desiccators over potash for at least 16 hours before being used again.

A batch of papers is to be tested by carrying out four consecutive tests of four papers on each of two days.

SCHEDULE IV

(See rule 105)

PART I

LICENCES AND LICENCING AUTHORITY

Article No.	Form of licence	Purpose for which licence granted	Authority empowered to grant the licence
(1)	(2)	(3)	(4)
1	EL-01	(a) To manufacture explosives other than fireworks, gunpowder and ANFO at site.	Chief Inspector
		(b) To manufacture fireworks and or gunpowder (i) up to 15 kgs. (ii) more than 15 kgs and up to 200 kgs.	district authority Inspector authorized by Chief Inspector.
		(c) To manufacture fireworks and or gunpowder more than 200 Kgs at a time.	Chief Inspector
2	EL-02	(a) To possess for sale explosives not exceeding 2000 Kgs of Class 1,2,3,4 and 7 together with explosives of class 6.	Inspector authorized by Chief Inspector
		(b) To possess for sale explosives exceeding 2000 kgs. of class 1,2,3,4 and 7 and any quantity of class 5 and 6	Chief Inspector
3	EL-03	(a) To possess for use explosives not exceeding 2000 kgs. of class 1,2,3,4 and 7 together with explosives of class 6.	Inspector authorized by Chief Inspector
		(b) To possess for use explosive exceeding 2000 kgs of class 1,2,3,4 and 7 and any quantity of class 5 and 6.	Chief Inspector

(1)	(2)	(3)	(4)
4	EL-04	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 500 meters.	district authority
5	EL-05	1. To possess and sell from a shop small-arms nitro-compound not exceeding 25 kgs or fireworks not exceeding 200 kgs or gun powder not exceeding 50 kgs and safety fuse not exceeding 10000 meters.	Inspector authorized by Chief Inspector
		(b) To possess and sell from a shop fireworks not exceeding 50 kgs. or gunpowder not exceeding 15 kgs and safety fuse not exceeding 5000 meters.	district authority
6	EL-06	Grant of licence for road van.	Inspector authorized by Chief Inspector
7	EL-07	To transport explosives.	district authority
8	EL-08	To import explosives.	Chief Inspector
9	EL-09	To export explosives.	Chief Inspector
10	EL-10	For public display of fireworks.	Inspector authorized by Chief Inspector
11	EL-11	To manufacture ANFO explosives at site	Inspector authorized by Chief Inspector
12	EL-12	To transport explosives in boat	conservator of port

PART II
FEE CHART

<p>(i) To manufacture explosives-</p> <p>(a) of classes 2, 3, 4, 5 and 6 (Form EL-01) other than at site mixed ammonium nitrate fuel oil explosive;</p> <p>(b) of class 1 and or class 7 (Form EL-01),—</p> <p style="padding-left: 20px;">(i) in a quantity not exceeding 15 Kgs at a time;</p> <p style="padding-left: 20px;">(ii) in a quantity exceeding 15 Kgs. but not exceeding 200 Kgs. at a time; and</p> <p style="padding-left: 20px;">(iii) in quantities exceeding 200 Kgs. at a time; and</p> <p>(c) Ammonium nitrate fuel oil mixed at site explosives (Form EL-11).</p>	<p>Rs. 50000.00 for each class of explosives</p> <p>Rs. 200.00</p> <p>Rs.500.00</p> <p>Rs.500.00 for the first 200 Kgs. plus Rs.500.00 for every additional 50 Kgs. or part thereof at a time subject to a maximum of Rs. 15000.00</p> <p>Rs. 50000.00</p>
<p>(ii) To possess and sell explosives (other than for licence in Form EL-05).</p> <p style="padding-left: 20px;">(iii) To possess explosives for use (other than for licence in Forms EL-04 and EL-10).</p>	<p>(a) Rs.1000.00 for every 1000 Kgs. or part thereof of the licensed capacity of each class of explosive of class 1, 2, 3, 4, 5, or 7 subject to a maximum of Rs.20000 for each class, and</p> <p>(b) Rs.250.00 for every 1000 meters/ number of each explosives of class 6 subject to a maximum of Rs.20000.00 for each division.</p> <p>(a) Rs.500.00 for every 1000 Kgs or part thereof of the licensed capacity of each explosives of class 1, 2, 3, 4, 5, or 7 subject to a maximum of Rs.10000.00 for each class; and</p> <p>(b) Rs.100.00 for every 1000 meters/ number or part thereof of each explosive of class 6 subject to a maximum of Rs.10000.00 for each division.</p>
<p>(iv) To possess and sell explosives (Form EL-05)</p> <p>(v) To transport explosives (Form EL-07).</p>	<p>Rs.500.00</p> <p>Rs.500.00</p>

(vi) Grant of licence for road van (Form EL-06).	Rs.5000.00
(vii) To import explosives (Form EL-08).	Rs. 5000.00
(viii) To export explosives (Form EL-09).	Rs. 5000.00
(ix) To possess and use public display fireworks (Form EL-10).	Rs.1000.00
(x) To possess explosives for own use (Form EL-04).	Rs. 250.00
(xi) To transport explosives in boats (Form EL-12)	Rs. 500
(xii) Other fees payable under the rules shall be.—	
(a) testing fee for each sample of explosives (see rule 25);	Rs. 1000
(b) (i) testing of each explosive sample to issue certificate of safety in Form EM-01 (see rule 32),	Rs. 1000
(ii) to renew such certificate without fresh test; and	Rs. 500
(iii) to renew such certificate after fresh test;	Rs. 2000
(c) For storage of explosives in excess of licensed capacity at any one time (see rule 119);	Rs. 3000 for first 15 days and 500 for every additional five days or part thereof
(d) For permit for temporary possession of fireworks in excess of licensed quantity (see rule 121);	Rs. 500
(e) Amendment fee for each licence (see rule 111)	
(i) other than a licence in Form EL-01, EL-04, and EL-05;	Rs. 500
(ii) in form EL-04 or EL-05; and	Rs. 100
(iii) in Form EL-01;	Rs. 1000
(f) For appeal against an order of a licensing authority (see rules 116 and 118)	Rs. 1000
(i) if such appeal is preferred to Federal Government or Chief Inspector; and	Rs. 200
(ii) if such appeal is preferred to officer superior to district authority;	
(g) For issue of duplicate copy of a licence (see rule 118);	Fee equal to grant of licence fee
(i) For issue of copy of reasons of cancellation or suspension of licence or refusal of grant, amendment or renewal of licence (see rule 116).	Rs. 200
(j) For issue of lightning conductor test certificate (see condition 7 of licence in Form EL-02 and EL-03)	Rs. 500

SCHEDULE V

(See rules 20, 25 and 32)

FORMS

Form EM-01

TEST CERTIFICATE FOR EXPLOSIVES

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

Name and Address of *importer/consigner	Description of explosives	No. of packages	Date of manufacture and batch No. referred to in rule 8(2)	Remarks
1	2	3	4	5

This certificate is valid for twelve months only, that is to say it expires on the day of,20 provided that, in case of nitro-glycerine compounds which are not used as propellants, it shall expire on the 31st day of July following.

Date:

Signature of testing officer

Place:

Designation

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

Form EM-02

(See rule 22)

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 on cases	Total quantity carried in the ship		Explosives to be landed at..... port		Remarks
		Kgs.	Cases	Kgs.	Cases	
1	2	3	4	5	6	7

Dated day of 20

Signature of master or agent of ship

Form EM-03

Statement to be submitted to the Chief Inspector by an importer on dispatch of explosives from the place or port of loading [See sub-rule 3(a) of rule 21.]

Importer name and address.	Import licence No. with date of its expiry and kinds and quantity of explosives.	Name and address of consigner	Name and address of manufacturer.	Name of ship or airline and date of sailing or air lift.	Place or Port of dispatch	Place or Port of import.	Likely date of arrival.	Kind and quantity of explosives on the ship or aircraft					
								Name and description	Class and division.	Date of manufacture	Batch No.	Quantity.	No. of packages
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

Signature of importer

(Authorized person in case of a company)

Name

Address

Form EM-04

Importer's dispatch schedule [See sub-rule 3(b) of rule 211

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

Importer's name and address.	Import licence No. and its date of expiry.	Name of ship or air lines and date of its arrival with place or port of import.	Particulars of licensee to whom explosives is to be dispatched.			Particulars of despatch from place or port of import					
			Name and address.	His storage licence No. and its date of expiry.	Licensed quantity of explosives with class and division.	Name and description of explosives.	Quantity.	No. of packages	Date of despatch	Mode of despatch	Road van licence No. if dispatched by road.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

Signature of importer
(Authorized person in case of a company)

Name

Address

Form EM-05

[See rule 30(2)]

Pass granted by the holder of transport licence (explosives) for transport of a consignment of explosives.

1. No. Date

2. This pass coverspackages containing following explosives while in transit fromto

S. No.	Name and description	Class	Division if any	Quantity	No. of packages	Batch Number and date
(1)	(2)	(3)	(4)	(5)	(6)	(7)

3. The explosives are being transported by rail or road van No.
 having licence No.
4. Name and address of consignee.
5. No. and Form of consignee's licence No.
6. Consignee's order No. with date and 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 shall reach its destination.

Signature of
 holder of transport licence No.....

Form EM - 06

[See rule 106(1)]

Distance required to be kept clear in and around the magazine or store house or factory.

Distance in, and around the magazine or storehouse or factory premises proposed to be licensed for storage or manufacture of explosives at village district Province; to be kept clear* from the under mentioned buildings and works:-- Kg.

S. No.	Building and works.	Distance required to be kept clear not less than-		Distances actually observed [to be filled by the applicant]. (meters)	Remarks.
		Mounded (meters)	Un-mounded (meters)		
	(1)	(2)	(3)	(4)	(5)
	Room or works used in connection with the magazine.				
	Any other explosives magazine or storehouse or factory of the applicant.				
	Magazine office.				
	Guard room.				
	Buildings or works used for the storage and manufacture of explosives or of articles which contain explosives.				
	Railways including mineral and private railways.				

	(1)	(2)	(3)	(4)	(5)
	Canal (in active use) or other navigable water.				
	Dock or pier or jetty.				
	Public highway or public roads.				
	Private road which is a principal means of access to a mosque, church or other places of worships, hospital, college, school or factory.				
	River embankment or sea embankment or public well.				
	Reservoir or bounded tank or rope way.				
	Dwelling house.				
	Govt. and public building.				
	Mosque, gurudwaras, church or other place of worship.				
	Shops, market place, public, recreation and sports ground, college, school, hospital, theater, cinema or other buildings, where the public are accustomed to assemble.				
	Factory.				
	Buildings or works used for the storage in bulk of petroleum spirit, gas or other inflammable or hazardous substance.				
	Aerodrome.				

	(1)	(2)	(3)	(4)	(5)
	Furnace, kiln or chimney.				
	Quarry or mine pit head.				
	Power house or electric sub-station.				
	Wireless Station.				
	Warehouse or other storage buildings.				
	Electric power over head transmission lines upto 440 V.				
	Electric power over head transmission lines above 440 V.				

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

Date.....

Signature of applicant

(Authorized person in case of a company)

Postal address

.....

.....

*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 EM-07*[See rule 106(3)]*

Distance required to be kept clear in and around the magazine or store house or factory under licence No..... in form granted to.....

Distance to be maintained in and around the magazine or factory or store house or other building and works:-

From every-	Not less than meters
Room or works used in connection with the magazine.	
Any other explosives magazine or storehouse or factory of the applicant.	
Magazine office.	
Magazine chowkidar's dwelling house.	
Railways including mineral and private railways.	
Canal (in active use) or other navigable water.	
Dock or pier or jetty.	
Public highway or public roads.	
Private road which is a principal means of access to a mosque, church or other places of worships, hospital, college, school or factory.	
River embankment or sea embankment or public well.	
Reservoir or bounded tank or rope way.	
Dwelling house.	
Government and public building.	
Mosque, church or other place of worship.	
Shops, market place, public, recreation and sports ground, college, school, hospital, theater, cinema or other buildings, where the public are accustomed to assemble.	
Factory.	
Buildings or works used for the storage in bulk of petroleum spirit, gas or other inflammable or hazardous substance.	
Building or works used for the storage and manufacture of explosives or of articles which contain explosives.	

Aerodrome.	
Furnace, kiln or chimney.	
Quarry or mine pit head.	
Power house or electric sub-station.	
Wireless station.	
Warehouse or other storage buildings.	
Electric power over head transmission lines upto 440 V.	
Electric power over head transmission lines above 440 V.	

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

For Chief Inspector of Explosives

.....
Deputy Chief Inspector of Explosives/
Inspector of Explosives

Form EM - 08

[See rule 105(1) (d)]

FORM OF INDEMNITY BOND

To,
The President of Pakistan,

I or wecarrying on business as manufacture(s) of fireworks and or gunpowder and having a factory or shop at.....and I or we ofsureties on his or their behalf hereby jointly and severally agree and undertake that we shall pay to the President of Pakistan, 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 or we agree that in case the dependents of such workers may die as a result of accidents occurring in the factory or shop above mentioned 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 Pakistan 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 Pakistan to sue the Principal(s) before suing the sureties for the amounts due hereunder.

SCHEDULE ABOVE REFERRED TO

(Here full description of the immovable properties should be given)

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

In witness whereof these presents have been duly executed on theday of.....20

Full signature of licensee

Father's name in full

Age

Profession

Residence

Full signature of surety

Father's name in full

Age

Profession

Residence

Station Executed in my presence

Date..... Magistrate Class I

Form EM - 09A
(See rule 84)

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, 2010.

Date	Brand name of explosives.	Class & division.	Dimensions of finished products.	Batch Nos.	Quantity manufactured.	Date of test.	No. of packages.	Magazine or storehouse licence No. to which the explosives sent.	Remarks	Signature of person in-charge or licensee.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

Form EM – 09B

(See rule 84)

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, 2010.

Date	S. No.	Name, address and licence No of supplier	Description of Explosives received by licensee-		Quantity received.	A/U.	Batch No.	Pass No.	Mode of transport.	Road van licence No.	Remarks.	Signature of licensee or person incharge.	
			Name.	Class.									Division.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Total receipts of explosives during fortnight ending on.....													

Form EM - 09C

(See rule 84)

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, 2010.

Date.	S. No.	Name, address & licence No. of person to whom explosives are sold.	Description of explosives sold by licensee.		Quantity sold.	A/U	Batch No.	Pass No.	Mode of transport	licence No. of road van if transported.	Remarks.	Signature of licensee/ person incharge.	
			Name.	Class.									Division
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Total sale during the fortnight ending on													

Form EM - 09D
(See rule 84)

Form of account to be maintained by a licensee

ACCOUNTS OF EXPLOSIVES USE BY LICENCEE

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. of Explosives Rules, 2010.

Date.	Shot Firers name and permit No.	Explosives issued from magazine				Explosives used				Explosives returned				A/U.	No. of holes fired.	Signature of shot firer or magazine in charge.	Name of site where explosiv es used.	Remarks.
		Name	Class.	Div.	Quantity	Name.	Class.	Div.	Quantity	Name.	Class.	Div.	Quantity					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Total quantity of explosives used during the fortnight ending on																		

Form EM - 09E

(See condition 13 of licence Form EL-6)

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, 2010

Date.	Name, address and licence No. of the consignor.	Description of explosives transported.		Quantity transported.	A/U.	Batch No.	Pass No.	Name, address and licence No. of the consignee.	Date and place of loading.	Date and place of unloading.	Signature of the consignor.	Signature of consignee.	Remarks	
		Name.	Class.											Division.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Total quantity of explosives transported during the fortnight ending on														

Form EM - 10A
(See rule 84)

RETURN OF EXPLOSIVES
MANUFACTURE AND RECEIPT REPORT

[From20 to20]

At factory or explosives magazine or store house of M/S..... situated at District..... under licence No..... in Form
..... of Explosives Rules, 2010.

Date	A/U.	Kind and quantity of explosives received -			Name, address, and licence No. from whom received.	Kind and quantity of explosives manufactured.			Batch No.	No. of packages.	Shift No.	Date of test.	Magazine or licence No. to which the explosives sent.	Total (6 + 11)	Remarks		
		Name.	Class.	Div.		Quantity.	Name.	Class.								Div.	Quantity.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
		Total quantity of each kind of explosives received plus manufactured during the fortnight															

Date

Name and Signature of Licencee

Form EM - 10B

(See rule 84)

**RETURN OF EXPLOSIVES
USE REPORT**

[From20 to20]

Licence No. in Form of Explosives Rules, 2010.

Date.	Shot Firers name and permit No.	No. of holes fired.	Name of site where explosives used.	Kind and quantity of explosives used-			A/U.	Purpose of use.	Mode of transportation.	Licence No. of road van.	Remarks.	
				Name.	Class.	Division						Quantity.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Total quantity of each kind of explosives used during the fortnight												

Date.....

Name, Address and Signature of Licensee

Form EM - 10C
(See rule 84)

RETURN OF EXPLOSIVES
SALE REPORT

[From20 to20]

From factory or explosives magazine or store house of M/S..... situated at District..... under licence No..... in Form of Explosives Rules, 2010.

Date	Name, address and licence No. of person to whom explosives are sold.	Kind and quantity of explosives sold by licensee.			A/U.	Batch No.	Pass No.	Mode of transport.	Licence No. of explosive road van.	Remarks.	
		Name.	Class.	Division.							Quantity.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Total sale of each kind of explosives during the fortnight										

Signature of Licensee

Date

Form EM - 10D
(See rule 84)

RETURN OF EXPLOSIVES

DESTRUCTION/THEFT REPORT, IF ANY

[From20 to20]

From factory or explosives magazine or store house of M/S..... situated at District.....under licence No.....
in Form of Explosives Rules, 2010.

Date.	Kind and quantity of explosives destroyed or theft.			A/U.	Reasons for destruction.	Whether theft reported to police station and Dept. of Explosives, give reference.	Remarks.	
	Name	Class	Division					Quantity
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Date

Signature of Licensee

Form EM - 10E

(See Rule 84)

RETURN OF EXPLOSIVES

MANUFACTURE, RECEIPT, USE, SALE AND DESTRUCTION OR THEFT OF EXPLOSIVES REPORT

[From20 to20]

From factory or explosives magazine or store house of M/S..... situated at District..... under licence No..... in form
 of Explosives Rules, 2010.

Name.	Kind and quantity of explosives.		A/U	Opening balance.	Explosives manufactured.	Explosives received.	Total of columns (5+6+7).	Explosives used.	Explosives sold.	Explosives destroyed or stolen.	Total of columns (9+10+11).	Closing balance.	Remarks.
	Class.	Division.											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

Date

Place

Signature of Licensee

(Authorized person in case of company)

Name in full

Address

Form EM - 11

FORM OF INDENT FOR EXPLOSIVES.

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

To,

Dear Sir,

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

S. No	Name.	Class.	Division.	Quantity.	A/U.	Remarks if any.
1						
2						
3						

I/We hold a licence No.in Form.....of Explosives Rules, 2010 valid till for possession or sale or use of following quantities of explosives:-

S. No	Name.	Class.	Division.	Quantity.	A/U.
1					
2					
3					

*The licence is sent herewith for necessary endorsement as required under rule107(2) of Explosives Rules, 2010. The licence may please be returned after the endorsement.

*The explosives may please be handed over to my/our authorized representative whose signatures are attested below:

Signatures of authorized person

Attested

Yours faithfully,

(Name of indenter)

Designation

Copy forwarded to the Inspector of Explosives.....

*Strike out whichever is not applicable.

Form EA - 01

[See rule 104(3)]

Application for grant of licence to manufacture explosives

Ion behalf of..... apply for grant of licence 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/E Mail

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:
Province
District
Town or village
Survey No.
Police station
Railways station

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 process been approved by Chief Inspector.
If yes, please give approval letter No. and Date.

9. Has the applicant been convicted for any offence
during the last 10 years. If yes, give details.

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

- (b) was any licence cancelled or not renewed?
- (c) If yes, give details.

11. Additional information, if any.

.....
.....

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

Date

Signature of applicant.....

(Authorized person in case of a company)

Full Name.

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 authorized 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 the 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.

Form EA - 02

[See rule 104 (3)]

Application for grant of licence to possess and sell explosives.

Ion behalf of.....apply for grant of a licence for possession and sale of explosives. I give below full particulars and enclose other documents as required.

(Replies to be written in the relevant box)

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

Name.	National Identity Card No.

2. Status (Tick the relevant box)

Individual.	<input type="checkbox"/>
Company.	<input type="checkbox"/>
Society.	<input type="checkbox"/>

3. Age (see notes below)

In figures.	In words

4. Postal address

Pin Code No	
Telephones No.	
Telegraphic address	
Telex / E. Mail	

5. Qualification and experience of:

(a) Applicant.

Qualifications.	Experience.

(b) The technical personnel employed by him. (Attach separate sheet if required)

Name.	Designation.	Qualifications.	Experience.

10. Has the applicant been convicted for any offence during the last 10 years? If yes, please give details

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

Licence Nos.	Location of the premises	Kind and quantity of explosives-					Licence is valid or not, if not give reasons.
		Name.	Class.	Div.	Quantity	A/U	

12. Additional information, if any.

I hereby certify that the information given above is correct.

Date

Signature of applicant

Place

(Authorized person in case of company)

Full Name

Address

Notes: -

- (1) In case where application is made in the name of a Company, the names and addresses of Director and Partners and the name, address and specimen signatures of person or persons authorized 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 net work to the premises nearby land marks, 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 EA - 03

[See rule 104 (3)]

Application for grant of licence to possess explosives for use

Ion behalf ofapply for grant of a licence to possess explosives for use. I give below full particulars and enclose other documents as required.

1. Particulars of the applicant. (See notes below)

Name.	NIC No.	Age.	Contact information-			
			Postal address.	Pin code.	Tel. No.	E-mail.

2. Status (Tick the relevant box)

Individual	
Company	
Society	

3. Qualification and experience of -

(a) applicant.

Qualifications.	Experience.

8. Explosives proposed to be used per day:-

Name and description.	Class.	Division.	Quantity per day.	A/U.

9. Details of site where explosives will be used:-

Detail of site.	Nature of work.

10. Distance of site where the explosives will be used from the storage premises mentioned in item 6.

S. No.	Location of the site where explosives will be used.	Distance from storage premises (meters/kilometers)

11. Mode of transport of explosives:-

Mode of transport	Licence No. of road van	Registration No. of road van.

12. Has the applicant been convicted for any offence during the last 10 years? If yes, give details .

13. Particulars of other licences, if any, under Explosives Act, 1884 held by the applicant during the last 10 years:-

Licence Nos.	Location of the premises.	Kind and quantity of explosives.					Licence is valid or not, if not give reasons.
		Name.	Class.	Div.	Quantity.	A/U.	

14. Additional information, if any:-

I hereby certify that the information given above is correct.

Date Signature of applicant

(Authorized 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 authorized 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 net work to the premise's nearby land marks, 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 EA - 04

[See rule 104 (3)]

Application for grant of licence to possess explosives for own use

I hereby apply for a licence to possess explosives as mentioned below for my own use for removal of tree stumps/leveling of ground/digging of new well/deepening of existing well. For this purpose a certificate No.....dated.....issued by..... as required under sub-rule (9) of rule 106 of the Explosives Rules, 2010 is also enclosed.

(Replies to be given in the relevant box)

1. Particulars of the applicant:-

Name.	Age.	NIC No.	Residential address.	Location of site where explosives shall be used-	
				Survey No.	Address.

2. Particulars of the storage premises:-

Location of storage premises.	Quantity of explosives proposed to be stored-			Mode of storage.	Purpose of use.
	Name and description.	Quantity.	A/U.		

3. Particulars of the licence obtained by the applicant, if any during last five years

Licence No.	Issuing authority.	Location of site where stored.	Location of site where used.	Kind and quantity of explosives used.

4. Has the applicant been convicted for any offence under any law during the last ten years? If yes, give details.

--

5. Source of supply of explosives:-

Name and address of supplier.	Supplier's licence No.	Location of Supplier's magazine.	Name and address of shot-firer

6. 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 EA - 05

[See rule 104(3)]

Application for grant of a licence for road van for transport of explosives

I.....on behalf of.....apply for grant of licence for road van to transport explosives. I give full particulars below and enclose other documents as required.

The replies to be written in the relevant box.

1. Particulars of the applicant. (See notes below)

Name.	NIC No.	Age.	Contact information.			
			Postal address.	Pin code.	Tel. No.	E-mail.

2. Status. (Tick the relevant box)

Individual	
Company	
Society	

3. Area of operation:-

Address where vehicle is to be normally parked.	Kinds of explosives to be carried.	Places between which the vehicle will play.	If used for carrying explosives to blasting site, details of site

4. (a) Particulars of road van.

Description of vehicle					Gross vehicle weight rating	Weight of unloaded vehicle
Make	Model	Registration No.	Engine No.	Chassis No.		

(b) Tyre

Size	Ply rating	Maximum individual tyre load @ cold inflation pressure (m)	Number (n)	Total maximum load (m) x (n)
Front		Kgs. @		
Rear		Kgs. @		

5. Carrying capacity and other fittings on the vehicle.

Carrying capacity permitted by R.T.A.	Description of other fittings on the vehicle.

6. Has the applicant been convicted for any offence during last 10 years? If yes, give details.

--

7. Particulars of licences, if any, held by the applicant under the Act, during last 10 years.

Licence No.	Form of the licence	Present status	If not renewed or cancelled, 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 about relevant provisions of the Act and rules made thereunder.

Date Signature of applicant.....
(Authorized person in case of company)
Name in full
Place 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 authorized 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 of fittings and safety devices. Full details of additional equipments or fittings in the vehicle should also be clearly shown.

(4) Delete whichever is not applicable.

4. Description of explosives to be transported:-

Name	Class	Div.	Quantity	A/U	No. of packages	Batch No.	Date of loading	Place of loading

5. Particulars of place to which the explosives will be transported:-

Place of unloading	District and Province	If clearance of the concerned district authorities obtained, give details (Enclose copy of NOC)	Mode of transport.

6. Particulars of licensed road van to be used for transportation.

Name and address of licensee of road van.	Licence No.	Date of expiry of licence.	Carrying capacity.	Name and address of driver.

7. Has the applicant been convicted under any offence during last 10 years? If yes, give details.

--

8. Particulars of licence, if any, held by the applicant under the Act, during the last 10 years.

Licence No.	Form of the licence	Present status	If not renewed / cancelled, give details

9. Particulars of amendment proposed:- (To be filled in case of amendment of the licence)

10. Additional information, if any:-

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

Date.....

Signature of applicant.....

(Authorized 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 authorized 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 EA - 07

[See rule 104 (3)]

Application for grant of licence to import explosives

Ion behalf of.....apply
and furnish the following particulars for grant of a licence under Explosives
Rules, 2010 to import explosives:-

6. Particulars of licences, if any, held by the applicant under the Act, during last 10 years.

Licence No.	Form of the licence	Present status	If cancelled / not renewed, give details

7. Has the applicant been convicted for any offence during last 10 years, if yes, give details:—

8. Additional information, if any:-

I certify that the information given above is correct.

Date Signature of applicant.....

(Authorized person in case of a company)

Place Name in full.....
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 authorized 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.

4. Description of explosives to be exported:-

S.No.	Name of explosives.	Class.	Division, if any.	Quantity.	A/U.
i					
ii					
iii					
iv					
v					
vi					

5. Mode of export. (Tick the relevant box)

By air	
By sea	

6. Details about consignee:-

Name	Address	Place or port of export.	Indent No.	Remarks

7. Other information.

Name of ship/plane.	Place/port of export.	Expected date of departure.	Date of loading at licensed premises.	Date of unloading at place/port of export	Transport licence No.	Road van licence No.

8. Has the applicant been convicted for any offence during last ten years? if yes, give details

--

9. Particulars of other licences, if any, held by the applicant under the Act, during last 10 years:—

Licence No.	Form of the licence	Present status	If cancelled / not renewed, give details

12. Additional information, if any:-

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

Date Signature of applicant.....

Place (Authorized person in case of a company)
 Full Name
 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 authorized 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 EA - 09

[See Rule 112]

Application for renewal of licence

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

1. Particulars of the applicant. (See notes below):-

Name	NIC No.	Age	Address			
			Postal address	Pin code	Tel. No.	E-mail

2. Particulars of the licence to be renewed:-

Licence No.	Form of licence.	Date of expiry.	Purpose of licence.	Present status of licence.	If cancelled / suspended, give details.

3. Details of renewal fee:-

Amount (Rs.)	Mode of payment	No. and date of treasury receipt	Name of treasury	Branch	Whether applied within due date or after due date

4. Details of enclosures:- (Please tick the relevant box)

Licence in original	
Approved plans	
Schedules	
Treasury receipt in original	
Others	

5. Has the applicant been convicted for any offence during last one year? if yes, give details

--

6. Particulars of any other licence held by the applicant under the Act, which was cancelled, suspended or not renewed.

Licence No.	Form of the licence.	Licensing authority.	Present status.	If cancelled / not renewed, give details.

I certify that the information given above is correct.

Date

Signature of Licensee.....

Place

(Authorized person in case of company)

Note.—

1. To avoid payment of late fees, the renewal application with complete and correct renewal particulars should reach the renewal authority at least thirty days before the expiry date of licence. The licence will expire if no renewal application is received on or before the expiry date.

Form EA - 10

[See rule 104(3)]

Application for grant of licence for public display of fireworks

Ion behalf of.....apply for grant of a licence under the Explosives Rules, 2010 for possession and use of public display fireworks. Necessary particulars are given below and required documents are enclosed.

1. Particulars of the applicant. (See notes below):-

Name	NIC No.	Age	Address			
			Postal address	Pin code	Tel. No.	E-mail.

2. Qualification and experience of the applicant and competent persons employed by him.

S/No.	Name	Age	NIC No.	Qualification	Experience
i.					
ii.					
iii.					
iv.					
v.					
vi.					
vii.					

3. Name, qualification and experience of the persons supervising the display:-

S/No.	Name	Age	NIC No.	Qualification	Experience
i.					
ii.					
iii.					
iv.					
v.					
vi.					
vii.					

4. Details of licensed premises where the fireworks will be stocked:-

Licence No.	Form of licence	Expiry date	Location of premises	Description of explosives/fireworks	Quantity

5. Details of licensee from whom the fireworks will be obtained:-

Name	Address	Licence No.	Expiry date	Location of premises	Description of explosives/fireworks	Quantity

6. Details of display:-

Place of display	Time of display	Purpose of display	Description of fireworks to be used	Quantity of fireworks to be used	Remarks

7. Has the applicant been convicted for any offence during last ten years? If yes, give details.

8. Particulars of other licences under the Act, if any, held by applicant during the last 10 years.

Licence No.	Form of the licence.	Licensing authority.	Present status.	If cancelled / not renewed, give details.

9. Additional information, if any:-

Empty rectangular box for providing additional information.

I certify that the information given above is correct.

Date

Signature of applicant.....

(Authorized person in case of a company)

Place

Full Name

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 authorized 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.

4. Permission of District authority should be attached with the application.

Form EA - 11

(See rule 111)

Application for amendment of licence

I.....on behalfapply for amendment of licence No.in formunder Explosives Rules, 2010. I give full particulars below and enclose other documents as required.

6. Details of Amendment fee

Amount (Rs.)	Mode of payment	No. and date of treasury receipt	Name of Treasury	Branch	

7. Details of enclosures. (Please tick the relevant box)

Licence in original	
Approved plans	
Schedules	
Treasury receipt in original	
Documents in support of proposed amendment, if required	
Others	

8. Has the applicant been convicted for any offence during last one year? if yes, give details

--

9. Particulars of any other licence held by the applicant under the Act, whether valid, cancelled, suspended or not renewed.

Licence No.	Form of the licence	Licencing authority	Purpose of licence	Present status	If cancelled / not renewed, give details

I certify that the information given above is correct.

Date

Signature of licensee.....

Place

(Authorized person in case of company)

FORM EL - 01*(See rule 105)*

[Article 1 of Part I of Schedule IV]

Licence to manufacture explosives

No.....

Annual fee Rs.....

Licence is hereby granted to.....valid only for the manufacture of explosives, specified in Table 1, at any one time per year at the premises described in Table 2, subject to the provisions of Explosives Act, 1884, the rules made thereunder and to the conditions of this licence.

This licence shall remain valid till the 31st day of March, 20.....

This licence is liable to be suspended or revoked for any violation of the Act or rules made 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.

Table 1

Kind and quantity of explosives permitted to manufacture at any one time per year:-

S.No.	Name	Class	Division, if any	Quantity	A/U

Table 2

Description of the licensed premises shown on the plans attached with licence

Approval No. of plans showing the licensed premises			Situation of the premises.			Details of approved facilities at the premises.
S.No.	Approval No.	Dated	Place	Police Station	District	

Postal Address of the Licensee

The20.....

(Licencing Authority)

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.
- (b) 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 of 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 not 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 manufactured 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 not 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 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 an Inspector 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 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 EM-9A and EM-9B and exhibit the stock books and records to any of the officers authorized under rule 128 of the Explosives Rules, 2010 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 relevant 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 unauthorized 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 every day's work. Sweepings from the compartments of the building in which explosives are manufactured or handled shall be carefully collected and disposed of 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 authorized 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 incharge.
- (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.

FORM EL-02
 (See rule 105)
 [Article 2 of Part 1 of Schedule IV]
Licence to possess and sell explosives

No..... Annual fee Rs.....

Licence is hereby granted to.....valid only for possession and sale of explosives specified in Table 1, at the premises described in Table 2, subject to the provisions of Explosives Act, 1884, the rules made thereunder and to the conditions of this licence.

This licence shall remain valid till the 31st day of March, 20.....

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

Table 1
 Kind and quantity of explosives permitted to possess and sell:-

S.No.	Name	Class	Division, if any	Quantity	A/U

Table 2
 Description of the licenced premises shown on the plans attached with licence

Approval No. of plans showing the licenced premises.			Situation of the premises			Details of approved facilities at the premises
S.No	Approval No.	Dated	Place	Police station	District	

Postal Address of licensee.....

The20....

(Licencing authority)

Endorsement for renewal of licence:-

Date of renewal	Date of expiry	Signature of licensing authority

CONDITIONS

- (1) The quantity of explosives on the premises at any one time shall not exceed the licensed capacity.
- (2) The magazine or store house shall be used only for keeping all explosives specified in Table 1 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 or store house.
- (4) (i) Two or more description of explosives which may be permitted to be kept in the magazine or store house 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 1st Division of the 6th (Ammunition) Class, and such of the various explosives of the 2nd Division of the 6th (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 1st division of the 6th (Ammunition) class may be kept with each other without any intervening partition or space;
- (c) such of the various explosives of the 2nd Division of the 6th (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 3rd Division of the 6th (Ammunition) Class may be kept with each other without any intervening partition or space;
- (e) the various explosives of the 7th (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 or store house notwithstanding the provisions of Table 1 of this licence.
- (5) (i) Explosives of the 3rd (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 an Inspector of Explosives.
 - (ii) when such sanction has been given, a written certificate showing the period covered by the sanction must be obtained from an Inspector of Explosives at each inspection, and must be kept by the licensee and produced on demand; and
 - (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 or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Inspector or Inspector of Explosives may issue.
- (6) The interior of the magazine or 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 1st Division 6th (Ammunition) Class is kept.

- 7) If the lighting conductor is tested by an Inspector of Explosives, the licensee shall pay the fees prescribed for test. In the event of the test proving unsatisfactory, the same fees shall be payable by the licensee for

each subsequent test until the lighting conductor is passed by the testing officer as satisfactory:

Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day.

- (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 1st Division of the 6th (Ammunition) Class is kept.

- (9) The licensee shall keep records and accounts of all explosives manufactured and of all stocks in hand in Forms EM-9B and EM-9C and exhibit the stock books and records to any of the officers authorized under rule 128 of the Explosives Rules, 2010 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 thereunder and the conditions 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 fifteen days from the date of receipt of the notice, as may be fixed by the notice.
- (14) Magazine or store house shall at all times be kept in state of good repair or maintained in good condition. The licensee shall report to licensing

FORM EL-03

(See Rule 105)

[Article 3 of Part I of Schedule IV]

Licence to possess Explosives for use

No.....

Annual fee Rs.....

Licence is hereby granted to.....valid only for possession and use of quantities of explosives specified in Table 1, at the premises described in Table 2, subject to the provisions of Explosives Act, 1884, the rules made thereunder and to the conditions of this licence.

This licence shall remain valid till the 31st day of March, 20.....

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

Table 1

Kind and quantity of explosives permitted to possess and use:-

S. No.	Name	Class	Division, if any	Quantity	A/U

Table 2

Description of the licensed premises shown on the plans attached with licence:-

Approval No. of plans showing the licensed premises.			Situation of the premises.			Details of approved facilities at the premises.
S.No	Approval No.	Date	Place	Police station	District	

Postal Address of licensee.....

The20.....

(Licencing Authority)

Endorsement for renewal of licence:-

Date of renewal.	Date of expiry.	Signature of licensing authority.

CONDITIONS

- (1) The quantity of explosives on the premises at any one time shall not exceed the licensed capacity.
- (2) The magazine or store house shall be used only for keeping all explosives specified in Table 1 of this licence and of receptacles, 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 or store house.
- (4) (1) Two or more description of explosives which may be permitted to be kept in the magazine or store house in Table 1 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 1st Division of the 6th (Ammunition) Class, and such of the various explosives of the 2nd Division of the 6th (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 1st division of the 6th (Ammunition) class may be kept with each other without any intervening partition or space;
 - (c) such of the various explosives of the 2nd Division of the 6th (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 3rd Division of the 6th (Ammunition) Class may be kept with each other without any intervening partition or space; and
 - (e) the various explosives of the 7th (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 or store house notwithstanding the provisions of additional condition No.....
- (3) (a) Explosives of the 3rd (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 an Inspector of Explosives; and
- (b) when such sanction has been given, a written certificate showing the period covered by the sanction must be obtained from an Inspector 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 or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Inspector or Inspector of Explosives may issue.
- (6) The interior of the magazine or 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 1st Division 6th (Ammunition) Class is kept.

- (7) If the lighting conductor is tested by an Inspector of Explosives, the licensee shall pay the fees prescribed for test. In the event of the test proving unsatisfactory, another fee shall be payable by the licensee for each subsequent test until the lighting conductor is passed by the testing officer as satisfactory:

Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day.

- (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 1st Division of the 6th (Ammunition) Class is kept.

- (9) The licensee shall keep records and accounts of all explosives manufactured and of all stocks in hand in forms EM-09A and EM-09E and exhibit the stock books and records to any of the officers authorized under rule 128 of the Explosives Rules, 2010 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 made thereunder and the conditions 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 fifteen days from the date of receipt of the notice, as may be fixed by the notice.
- (14) Magazine or store house shall at all times be in good condition. The licensee shall report to licensing authority forthwith, if the magazine or store house comes unfit for storage of any explosives for any reason whatsoever.
- (15) The licensee shall submit at the end of every fortnight a return in Form EM-10(A) to EM-10(E) 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 the 5th day of the end of each fortnight.
- (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 manufacturer's 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 or 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 or store house shall be examined for its sound condition.
- (22) Not more than 3 persons shall be allowed inside the magazine or 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 the Mines Act, 1923 unless the licensee employs a qualified shot firer or the person having equivalent qualifications as recognized by the Chief Inspector.
- (25) The licensee and the shot firer shall be responsible for preparation of charges, the charging of holes and the firing of shots and shall take all precautions against fire and accident involving the explosives.
- (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 temper with empty holes or sockets left after blasting.

FORM EL-04

(See rule 105)

[Article 4 of Part 1 of Schedule IV]

Licence to possess small quantity of 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 meters. or (b) Small arms nitro-compound not exceeding 5 kgs. or (c) Gunpowder not exceeding 5 kgs and safety fuse not exceeding 50 meters]

No.....

Fee Rs. 100/-

Licence is hereby granted to.....valid only for possession of kind and quantity of explosives mentioned in Table 1, for own use at the premises described in Table 2, subject to the provisions of Explosives Act, 1884, the rules made thereunder and to the conditions of this licence.

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

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

Table 1

Kind and quantity of explosives permitted to possess and use:-

S. No.	Name	Class	Division, if any	Quantity	A/U

Table 2

Description of the licensed premises shown on the plans attached with licence

Approval No. of plans showing the licensed premises			Situation of the premises			Details of approved facilities at the premises
S. No.	Approval No.	Dated	Place	Police Station	District	

Postal Address of licensee.....

The20.....

(District authority)

Endorsement for renewal of licence:

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 thorough-fare or public place by distance of minimum 45 meters and made and closed so as to prevent unauthorized persons from having access thereto.
- (2) The interior of the building or the box, as the 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 case any of the explosive store is liable to be dangerously affected by water, due precautions shall be taken to exclude water from the storage place.
- (5) Detonators shall not be stored alongwith other explosives. Detonators, if required shall be stored in a different building or fireproof box located at a distance of minimum 1.5 meters 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 [during the validity of licence shall not exceed 25 Kg of Class 2 and or Class 3 explosives, 500 Nos. of detonators and 1000 meters 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 meters 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; and
 - (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 made thereunder and the conditions 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 holding a shot firer's permit.
- (17) Maximum quantity of explosives that may be kept at any one time shall not exceed for—
- (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; and
 - (vi) detonators Nos.
- (18) The licensee may by filling cartridges, making charge or otherwise adapt or prepare for use any explosive he is authorized to possess under this license, 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 authorized to possess;

FORM EL-05

(See Rule 105)

[Article 5 of Part 1 of Schedule IV]

Licence to possess and sell (a) small-arms nitro-compound not exceeding 25 Kgs or fire-works not exceeding 200 kgs or gunpowder not exceeding 25 kgs and safety fuse not exceeding 10,000 meters or (b) fire-works not exceeding 100 kgs or gunpowder not exceeding 15 kgs and safety fuse not exceeding 5,000 meters

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

Licence is hereby granted to.....valid only for possession and sale of explosives mentioned in Table 1 at the licensed premises described in Table 2 below, subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules made 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, the rules made thereunder or the conditions of this licence or if the licensed premises are not found conforming to the description as per attached plans.

Table 1

Kind and quantity of explosives permitted to possess and sell:-

S. No.	Name	Class	Division, if any	Quantity	A/U

Table 2

Description of the licensed premises shown on the plans attached with licence:-

Approval No. of plans showing the licensed premises			Situation of the premises			Details of approved facilities at the premises
S. No.	Approval No.	Dated	Place	Police station	District	

Postal Address of licencee.....

The20....

(Licencing Authority)

Endorsement for renewal of licence:-

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 unauthorized 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 exposure of any iron or steel, or the detaching of any grit, iron, steel or similar substance, in such manner as to come into contact with the explosives. Such interior, shelves and fittings shall, so far as 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 1st Division of the 6th (Ammunition) Class may be kept with each other without any intervening partition or space;
- (b) the various explosives of the 1st division of the 6th (Ammunition) class may be kept with each other without any intervening partition or space; and
- (c) the various explosives of the 7th (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 1st Division of the 6th (Ammunition) Class or of the 2nd Division of the 7th (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 7 and 8 of the Explosives Rules, 2010.
- (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 EM-09A and EM-09E and exhibit the stock books and records to any of the officers authorized under rule 128 of the Explosives Rules, 2010 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 made thereunder and the conditions of this licence are duly observed.

Additional Conditions

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FORM EL-06

(See rule 105)

[Article 6 of Part 1 of Schedule IV]

LICENCE FOR ROAD VAN

No..... Annual fee Rs.....

Licence is hereby granted to.....to transport explosives by road van as described below in Table 1, subject to the provisions of Explosives Act, 1884 as amended from time to time and the rules made 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, the rules made thereunder or the conditions of this licence or if the road van is not found conforming to the description.

Description of road van

Make	Model	Reg. No.	Engine No.	Chassis No.	Description of other fittings	Approved drawing No. and date	Quantity of explosives permitted to carry

Postal address of licensee

.....

(Licencing Authority)

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, 2010.
- (5) The road van shall not be used for transport of any material other than that authorized 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 conversant thereunder. Where the vehicle is not driven by the licence holder, a document signed by the licensee naming persons authorized to drive

FORM EL-07

(See rule 105)

[Article 7 of Part 1 of Schedule IV]

LICENCE TO TRANSPORT EXPLOSIVES

No..... Fee Rs.....

Licence is hereby granted to.....to transport explosives specified in Table 1, from the licenced premises given in Table 2 to places specified therein, subject to the provisions of the Explosives Act, 1884, the rules made thereunder and to the conditions of this licence.

Table 1

Quantity of explosives permitted to transport at a time:-

S.No.	Name	Class	Division if any	Quantity	A/U

Table 2

Places of loading and unloading

Place of loading						Places of unloading					
Place	District	Province	Name and address of licensee	Licence No.	Form of licence	Place	District	Province	Name and address of licensee	Licence No.	Form of licence

This licence shall remain in force till

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

Postal address of licensee

(Licencing Authority)

FORM EL-08

(See Rule 105)

[Article 8 of Part 1 of Schedule IV]

Licence to import explosives otherwise than by land

No..... Fee Rs.....

Licence is hereby granted to.....to import by sea or air at any one time explosives of the description given in Table 1 below at the port offor consignment to persons mentioned in Table 2 subject to the provisions of Explosives Act, 1884, and the rules made 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 the rules made thereunder or the conditions of this licence.

Table 1

Description of explosives to be imported:-

S.No.	Name	Class	Division	Quantity	A.U	Weight	No. of packages

Table 2

Description of consignee to whom explosives will be sent from port of import:-

Name and address	Licence No.	Form of licence	Location of his storage premises	Remarks

Postal address of licensee

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

(Licencing Authority)

CONDITONS

- (1) No explosives other than those permitted under this licence shall be imported.
- (2) The quantity of explosives imported shall not exceed that authorized by this licence.
- (3) All explosives imported under this licence shall be packed and marked in accordance with rules 7 and 8 of Explosives Rules, 2010.
- (4) No ship or boat or aircraft containing explosive imported on the strength of this licence shall bring to or move and no such explosive shall be unloaded or transshipped from any ship or boat or aircraft except at the port authorized by this licence.
- (5) The licensee shall comply with all the rules and regulations in force at the port of import mentioned in this licence.
- (6) The owner and master of the ship or boat or aircraft in which explosives are imported on the strength of this licence, shall, if and when required by an inspecting authority or the custom's authority having jurisdiction over the place of importation, allow such inspector or officer to take samples for examination of any explosive so imported.
- (7) As soon as the explosive has been cleared from the place or port and dispatched to the magazine or store house for storage, the licensee shall complete the importer's transmission schedule in Form EM-04 and forward it to the Chief Inspector.
- (8) The explosive shall be dispatched 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.

FORM EL-09
 (See Rule 105)
 [Article 9 of Part 1 of Schedule IV)]
Licence to export explosives otherwise than by land

No..... Fee Rs.....

Licence is hereby granted to.....to export by sea or air at any one time explosives of the description given in Table 1 below at the port offor consignment to persons mentioned therein subject to the provisions of Explosives Act, 1884, and the rules made 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 the rules made thereunder or the conditions of this licence.

Table 1

Description of explosives to be exported and consignee:-

Description of explosives								Name and address of consignee
S.No.	Name	Class	Division	Quantity	A/U	Weight	No. of packages	

Postal address of licensee

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

(Licencing Authority)

CONDITONS

- (1) No explosives other than those permitted under this licence shall be exported.
- (2) The quantity of explosives exported shall not exceed that authorized by this licence.
- (3) The explosives shall be packed in accordance with Explosives Rules, 2010 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.

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FORM EL-10

(See Rule 105)

[Article 10 of Part 1 of Schedule IV]

Licence to posses and use public display fireworks

No..... Fee Rs.....

Licence is hereby granted to.....only for possession ofKgs. of fireworks at premises described in Table 1 below and for making public display at the premises mentioned in Table 2, subject to the provisions of Explosives Act, 1884, and the rules made 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 made thereunder or conditions of the licence or if the licensed premises are not found conforming to description as per attached plans.

Table 1

Description of premises to be used for possession and display of fireworks.

Premises to be used for possession		Premises to be used for display	
Complete address	No. and date of plan attached with licence	Complete address	No. and date of plan attached with licence

Postal address of licensee

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

(Licensing Authority)

CONDITONS

- (1) The licensee shall, at least seven clear day's excluding gazetted 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 authorized 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 meters 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 clothing, 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 meters of any tent, trailer, and canvas shelter or motor vehicle.
- (9) No fireworks shall be ignited within 200 meters of a hospital, nursing home, schools or temples unless consent from local authorities and the owner or its agent is obtained.
- (10) 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.
- (11) After the display, waster and duds etc. shall be carefully collected and removed from the site and destroyed by burning under proper supervision.
- (12) The licensee shall follow the provisions of the Act and rules made thereunder as otherwise applicable.
- (13) No electrical wire shall be allowed within 10 meters of the area where the fireworks are laid down.

- (14) The mortars must be buried half their length in the ground and tilted of by 10°
- (15) 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.
- (16) 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.
- (17) 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.
- (18) The licensee shall keep records and accounts of all fireworks received, used and stock in hand.
- (19) The licensee shall follow the local bye-laws at the place of storage and display and obtain necessary permission whenever required.
- (20) 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.
- (21) If the licensing authority directs the licensee by notice in writing to make any additions or alterations which, in the opinion of such authority, is considered necessary for the safety of the premises or of the person working therein or the spectators the licensee shall execute such additions or alterations within such period as may be specified.
- (22) 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.
- (23) 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 made thereunder and the conditions of this licence are duly observed.

Additional Condition.

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Form EL-11

(See rule 105).

[Article 11 of Part 1 of Schedule IV]

Licence to manufacture ANFO explosives at site.

No..... Annual Fee Rs.....

Licence is hereby granted to.....only for manufacture of ammonium nitrate impregnated with mineral oil at any one time at the premises described in Table 1 below subject to the provisions of Explosives Act, 1884, and the rules made thereunder and the conditions of this licence.

This licence shall remain valid till the 31st day of March, 20.....

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

Table 1

DESCRIPTION OF THE LICENCED PREMISES:-

Location of site.	District.	Approved facilities.	Approval No. and date of plan attached with the licence.

Postal address of the licensee.....

The..... (Licencing Authority)

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 wall at least 1 meter high with opening for entrance and exist on opposite sides.
3. The manufacturing shed and the area within 9 meters thereof shall be surrounded by fencing not less than 2 meters high. The entire area so fenced 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 or coal 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 Inspector 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 characteristics; and
 - (ii) unauthorized persons having access to the place or places of manufacture, charging or handling of explosives within 9 meters 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 meters 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 meters 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 fiberboard 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 shot firer 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 authorized 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; and
 - (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 meters 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 made thereunder 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 authorized under rule 128 of the Explosives Rules, 2010 whenever such officer may call upon him to do so.
21. The licensee shall submit at the end of every fortnight a return on Forms EM-10E showing the quantity of ANFO explosives manufactured and used during the fortnight to the licensing authority as well as to the renewal authority so as to reach the above authorities by the fifth day of the fortnight.

Additional Conditions.

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Form EL-12

(See rule 59)

[Article 12 of Part 1 of Schedule IV]

Licence for the transport of explosives in boats.

Licence No.....

Fee Rs 500

Name of boat or other distinguishing mark

.....

Official No

.....

Gross tonnage, if any

.....

Name of owners

.....

The above boat is hereby licensed under rule 59 of the Explosives Rules, 2010, for the transport of explosives up to a maximum of kgs within the limits of the port of in areas outside port limits subject to the provisions of the Explosives Rules, 2010, and the Explosives Act, 1884.

The licence shall remain in force till the day of20.....

Issued at the day of 20.....

conservator of the port of

SCHEDULE VI
[See rule 106]

TABLE SHOWING DISTANCES WHICH SHOULD ORDINARY BE KEPT CLEAR IN AND ROUND MAGAZINE PREMISES

In any case where any of the items enumerated in the first column of this Table is, in the opinion of an Inspector effectively screened from a magazine either by the natural features of the ground or by good and substantial artificial mounds of earth or mine refuse, of such height that a line drawn from any part of the magazine to any part of the item in question will pass through the intervening ground or mound the distance from that item (except for quantities 500 Kgs of explosives and under) may be reduced to one-half, provided that when a natural hill so intervenes as to afford a degree of protection which, in the opinion of an Inspector justifies a further reduction, the distance shown in the Table may be reduced to one-quarter. In no case, however, is the distance from a president's residence to be less than 1.5 Kilometers.

N.B.—The figures in small italics (in brackets) are the distances to be observed when ordinary gunpowder is only to be stored or other explosives up to the equivalent of five thousand pounds of gunpowder, every half pound of such other explosive being reckoned as one pound of gunpowder. In the case of manufactured fireworks specially approved by the Chief Inspector of Explosives four pounds gross weight may be reckoned as the equivalent of one pound of other explosive.

TABLE

Under column 1 quantities of explosives are shown in Kgs. and under columns 2 to 9 distances to be kept clear are shown in meters

Quantity of explosives (kgs).	Rooms used in connection with the magazine.	Magazine's workshop or office, highway, footpath, public place, canal, dock, river or sea wall, jetty, water reservoir, dam etc.	Any other magazine, workshop, furnace, kiln or chimney etc.	Public railways.	Dwelling houses		Factory or magazine occupied by any Government with consent, place of worship, hospital, factory, public institution or building, school, any Government building, wireless station etc.	Factory or magazine occupied by any Government without consent.
					With the consent, in writing of the occupier.	Without such consent.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
250	50 [35]	50 [35]	100 [65]	100 [65]	50 [35]	100 [65]	100 [65]	880 [585]
500	50 [35]	75 [50]	150 [100]	150 [100]	75 [50]	150 [100]	150 [100]	1320 [880]
1000	50	100 [75]	200 [155]	200 [150]	100 [75]	200 [150]	200 [150]	1760 [1320]
1500	51	101 [90]	200 [175]	210 [175]	110 [90]	240 [175]	240 [175]	1780 [1540]
2000	52	102	200	215 [200]	120 [100]	280 [200]	280 [200]	1805 [1760]
2500	52	104	200	225 [210]	130 [110]	320 [255]	320 [255]	1825 [1790]
3000	53	105	200	235 [220]	140 [125]	365 [310]	365 [310]	1850 [1820]

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3500	53	106	200	240 [230]	145 [140]	405 [360]	405 [360]	1870 [1850]
4000	54	108	200	250 [245]	155 [150]	545 [415]	545 [415]	1890 [1880]
4500	54	109	200	255	165 [160]	485 [470]	485 [470]	1910 [1905]
5000	55	110	200	265	175	525	525	1930
5500	55	111	205	270	180	560	560	1950
6000	56	112	210	280	190	590	590	1970
6500	56	113	215	285	200	625	625	1990
7000	57	114	220	290	205	655	655	2005
7500	57	115	225	300	215	690	690	2025
8000	58	116	230	305	220	720	720	2040
8500	58	117	235	310	230	750	750	2060
9000	59	118	240	315	235	785	785	2075
9500	59	119	245	325	245	815	815	2095
10000	60	120	250	330	250	850	850	2110
11000	61	122	265	345	265	920	920	2145
12000	62	124	280	355	280	990	990	2180
13000	63	126	295	370	295	1060	1060	2215
14000	64	128	310	380	310	1130	1130	2255
15000	65	130	325	395	325	1200	1200	2290
16000	66	132	340	410	340	1265	1265	2325
17000	67	134	355	420	355	1330	1330	2360
18000	68	136	370	435	370	1395	1395	2395
19000	69	138	385	445	385	1460	1460	2430
20000	70	140	400	460	400	1525	1525	2465
21000	71	142	415	475	415	1590	1590	2500
22000	72	144	430	485	430	1655	1655	2535
23000	73	146	445	500	445	1720	1720	2570

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24000	74	148	460	510	460	1785	1785	2605
25000	75	150	475	525	475	1850	1850	2640
26000	76	152	490	540	490	1915	1915	2675
27000	77	154	505	550	505	1980	1980	2710
28000	78	156	520	565	520	2045	2045	2745
29000	79	158	535	575	535	2110	2110	2780
30000	80	160	550	590	550	2175	2175	2815
31000	81	162	565	605	565	2240	2240	2850
32000	82	164	580	615	580	2305	2305	2885
33000	83	166	595	630	595	2370	2370	2920
34000	84	168	610	640	610	2435	2435	2955
35000	85	170	625	655	625	2500	2500	2990
36000	86	172	640	670	640	2575	2575	3025
37000	87	174	655	680	655	2640	2640	3060
38000	88	176	670	695	670	2710	2710	3100
39000	89	178	685	705	685	2780	2780	3125
40000	90	180	700	720	700	2850	2850	3170
41000	91	182	715	735	715	2915	2915	3205
42000	92	184	730	745	730	2980	2980	3240
43000	93	186	745	760	745	3045	3045	3275
44000	94	188	760	770	760	3110	3110	3310
45000	95	190	775	785	775	3175	3175	3345
46000	96	192	790	800	790	3240	3240	3380
47000	97	194	805	810	805	3305	3305	3415
48000	98	196	820	825	820	3370	3370	3450
49000	99	198	835	835	835	3435	3435	3485
50000	100	200	850	850	850	3500	3500	3520

SCHEDULE VII

[See rule-63]

SPECIFICATIONS

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

SPECIFICATION 1

Specification for a road van for carriage of explosives.

PART 1

- (1) **Air space between body and cab.** —A clear space of at least fifteen centimeters shall be left between the body and cab.
- (2) **Driver's cab.** —The cab shall be fitted and covered externally with .914 mm. aluminum 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 wind-screen shall be fitted with the portion in front of the driver's seat pivoted on strong brass quadrants for opening.
- (5) **Fuel tank.** —The fuel tank shall be in front of the fire screen described under item (11) below. It should be so located as to minimize the possibility of its being damaged while the vehicle is met with an accident. Stone guards should be provided if required by approving authority.
- (6) **Fuel cut-off.** — A quick acting cut-off 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.**—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 or 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 of explosives must not exceed the limit prescribed under these rules.

(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.**—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 paneling are also to be thoroughly coated with which lead before paneling 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.**—Flooring 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 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 cross members 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 paneling 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 *vide*. 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, paneling and lining of same being similar in all respects to the body works. They are to be beveled along the bottom to make a watertight joint with the brass covered sill of the doorway, and the central joint of doors must also beveled and covered with stapping as previously mentioned. The doors are to be hung on strong mild steel crook and bank hinges. The band section being 29.7 x 8 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. and 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 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 unauthorized 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 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 of a type approved by the Chief Inspector and shall primarily have-

- (a) walls of reinforced concrete at least 225 mm thick or brick or stone at least 450 mm thick set in cement mortar. Concrete shall have a minimum compressive strength of 2500lb per sq. inch at 28 days (the required strength will be reached by a mixture consisting of 1 part cement, 1- ½ parts sand, and 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 0.21in 2 ft 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 Pakistan Standard Institute Specifications. Commercial grade steel is satisfactory for use in construction. The cement mortar shall consist of not less than one part of cement and three parts of clean sand;
- (b) interior and the benches, shelves and fittings therein 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 the dangerously affected by water due precautions shall be taken to exclude it therefrom;
- (c) roof reinforced concrete at least 150 mm thick;
- (d) one ventilator at the top and bottom in each opposite side wall of the magazine where the weight of explosive stored is up to 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 shall be of 9 mm iron set angle wise with the frame. The inner opening shall be protected with brass wire gauze of 3 meshes per centimeter;
- (e) external doors –
 - (i) that opens outwards and when closed fit tightly; and

- (ii) to be constructed of steel plate at least 5mm thick with or without internal lining of wood;
- (f) every internal door –
 - (i) made of wood; and
 - (ii) locks and fittings of non-ferrous metal;
- (g) external door locks of “dead lock” type;
- (h) a separate room for storage of detonators or other explosives of Class 6 Division 3 if stored within the magazine. Such room shall have independent entrance and a minimum air-gap of 1 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) wooden trestles or raised cement platform for storage of explosive packages;
- (j) 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 clothes and shoes;
- (k) 25 x 50 mm furring strips fastened to the wall, vertically on 300 mm centers 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) a minimum 12 mm red line painted on the interior walls of the magazine at a height of 2.5 meters from the floor level. This line indicates the maximum height to which explosives may be stacked. The licensing authority may specify lower stacking height if deemed necessary;
- (m) an internal volume not less than 0.4 cubic 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; and

- (n) sufficient number of windows, fitted with 13 mm (1/2") diameter steel bars, 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.

SPECIFICATION 3 SPECIFICATION OF A STOREHOUSE

The basic consideration in construction of a storehouse is to ensure that the contents are kept out of the hands of unauthorized 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 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 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 dirt.

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 shall be of minimum 2.35 cm² set angle-wise with the frame. The inner opening shall be protected with wire gauze of minimum 3 meshes per cm.

The storehouse shall have a floor area of 3 M² per ton 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, fitted with 13 mm (1/2") diameter steel bars, for proper lighting inside. The windows shall open outwards. The storehouse shall have smooth stone or cement flooring.

SCHEDULE VIII
[See rule 5(2)]

Procedure for authorization of explosives

(1) Any person desirous of including an explosive in the list of authorized explosives shall apply by submitting an application to the Chief Inspector.

(2) The application shall be in writing and accompanied by the following particulars, namely:-

- (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 Pakistan, the process by which it is proposed to carry out its manufacture;
- (e) where an explosive 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 Inspector, an explosive in respect of which an application is made may properly be considered for authorization, the Chief Inspector 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 Inspector in this behalf.

(4) No person shall send a sample of an explosive unless such person has first received the instruction referred to under paragraph (3).

(5) The sample shall be subjected to the below mentioned tests to ensure that the explosive is capable of being safely manufactured, handled, stored, transported and used,—

- (a) physical properties including consistency, reaction tendency to absorb moisture, segregation in transport or otherwise of the constituents, exudation, behavior 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, behavior on ignition, liability to spontaneous ignition and behavior on ignition;
- (e) Mechanical sensitiveness — determination of sensitiveness to friction and impact;
- (f) Air gap sensitivity and transmission of detonation;
- (g) Velocity of detonation;
- (h) Determination of strength;
- (i) Composition of gases evolved upon explosion; and

(j) Such other tests as the Chief Inspector may specify.

(6) An explosives tested shall be declared by the Federal Government, on recommendation of Chief Inspector to be an authorized, explosive if it is satisfied that such an explosive can be safely manufactured, handled, stored, transported and used.

(7) Authorization issued by the Federal Government in respect of any imported explosive shall be valid for one year from the date of authorization, provided the foreign manufacturer certifies that there has been no change in the composition or any other characteristics of the explosives.

(8) The Chief Inspector may at any time subject any explosive to the tests enumerated in paragraph (5). As a result of the tests or otherwise if the Chief Inspector is satisfied that the explosive is no longer safe for manufacture, handling, storage, transport or use, he may recommend deletion of such explosive from the authorized list.

(9) The Chief Inspector on completion of the testing of an explosive shall advise the Federal Government in writing—

(a) whether or not the explosives should be declared to be an authorized explosive; and

(b) where the explosive is declared to be an authorized explosive, the class including any division and sub-division within which the explosive falls.

(10) (i) The Chief Inspector shall maintain a list of authorized 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) corresponding United Nation's classification number and division; and

(ii) a list of authorized explosives that, by licence or permit, are authorized to be manufactured or imported into Pakistan which shall be published by the Federal Government from time to time.

(11) 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 paragraph (2) shall be carried out without prior approval of the Federal Government, provided that the Chief Inspector 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.

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MUHAMMAD SHAHID,
(Deputy Secretary CS-II).