The Static and Mobile Pressure Vessels (Unfired) Rules 1981

CHAPTER I
PRELIMINARY

1. **Short title and commencement**-(1) These rules may be called the Static and Mobile Pressure Vessels (Unfired) Rules, 1981.
(2) They shall come into force on the date of their publication in the Official Gazette.

2. Definition—In these rules, unless the context otherwise requires, --

(a) "Act" means the Indian Explosives Act, 1884 (4 of 1884);

(b) "approved" means a drawing, design, specification or code approved by the Chief Controller ;

(bb) "bottling plant" means a premises where cylinders are filled with compressed gas"

(c) "Chief Controller" means the Chief Controller of Explosives;

(d) "Competent person" means a person or an organisation recognised by the Chief Controller, for such gases and for such period as may be specified as competent for carrying out tests, examination, inspections and certification for installations and transport vehicles as stipulated in these rules, if such a person or organization possesses the qualifications, experience and other requirements as set out in Appendix II to these rules and is recognized as per procedure laid down in rule 11-A: Provided that the Chief Controller may relax the retirements of qualifications in respect of a competent person if such a person is exceptionally experienced and knowledgeable but not the requirements in respect of the facilities at his command;

(e) "Compressed Gas" means any permanent gas, liquefiable gas or gas dissolved in liquid, under pressure or gas mixture which in a closed pressure vessel exercise a pressure exceeding two atmosphere (gauge) at the maximum working temperature and includes Hydrogen Fluoride. In case of vessel without insulation or refrigeration, the maximum working temperature shall be considered as 55^0 C.;

(f) "Controller of Explosives" includes Jt. Chief Controller of Explosives, the Deputy Chief Controller of Explosives, Deputy Controller of Explosives and Assistant Controller of Explosives;

(g) "corrosion" means all forms of wastage, and includes oxidation, scaling, mechanical abrasion and crosion;

(gg) "critical temperature" means the temperature above which gas cannot be liquefied by the applicantion of pressure alone,"

(ggg) "cylinder" or "gas cylinder" means any closed metal container intended for storage and transport of compressed gas having the same meaning as assigned to it in clause (xvi) of rule 2 of the Gas Cylinder Rules, 1981,"

(h) "design" includes drawings, calculations, specifications, models codes and all other details necessary for the complete description of the pressure vessel and its construction;

(i) "design pressure" means the pressure used in the design calculations of a vessel for the purpose of determining the minimum thickness of the various component parts of the vessels ;

(ii) "dispenser" means an equipment installed in liquefied petroleum gas dispensing station, meant for dispensing liquefied petroleum gas as automotive fuel to motor vehicles,"

(j) "district authority" means—(i) in towns having a Commissioner of Police, the Commissioner or a Deputy Commissioner of Police; and (ii) in any other place, the District Magistrate;

(k) "filling density" means the ration of weight of liquifiable gas allowed in a pressure vessel to the weight of water that the vessel will hold at 15^0 C;

(kk) "fill point" means the point of the inlet pipe connection of a vessel where hose is connected for filling the compressed gas into the vessel,"

(l) "flammability range" means the difference between the minimum and maximum percentage by volume of the gas in mixture with air that forms a flammable mixture at atmospheric pressure and ambient temperature'

(m) "flammable compressed gas" means gas 13 percent or less of which when mixed with air forms a flammable mixture or whose flammable range with air is greater than 12 percent;

(n) "Form" means the Form appended to these rules;

(o) "gas free" in relation to a pressure vessel means the concentration of flammable or toxic gases or both if such pressure vessel is within the safe limits specified for persons to enter and carry out hot work in such vessels;

(p) "Inspector" means a professional organization recognized by the Chief Controller for certifying pressure vessels and their fittings after carrying out stage wise inspection during fabrication as stipulated in the rules so as to ensure that the pressure vessels are designed and constructed in accordance with IS:2825 or any other Code approved by the Chief Controller, if the constituent members of the organization possesses the qualifications and experience and other requirements as set out in Appendix II to these rules and the recognition is granted as per procedure laid in rule 11A;

(q) "installation" means any place which has been specially prepared for the storage of compressed gas in pressure vessels;

(r) "liquefiable gas" means any gas that may be liquefied by pressure above -10^0 C, but will be completely vaporized when in equilibrium with normal atmospheric pressure (760 mm Hg) at 30^0 C;

(ra) "liquefied petroleum gas" included hudrocarbon gases in liquefied state at normal ambient temperature by the application of pressure, and conforming to the Indian Standard Specification No.: IS:4576,"

(rb) "liquefied petroleum gas dispensing station" means a premises used for storing and dispensing liquefied petroleum gas as automotive fuel to the motor vehicles,"

(rc) "motor vehicle", means a vehicle having the meaning assigned to it in sub-section (28) of section 2 of the Motor Vehicle Act 1988 (59 of 1988),"

(rd) "petroleum service station", means a premises used for storage of petroleum for the purpose of fuelling motor vehicles, and licenced in Form – XII of the Petroleum Rules, 1976,"

(s) “permanent gas” means a gas whose critical temperature is lower than -10^0 C;

(t) “Pressure vessel” means any closed metal container of whatever shape, intended for the storage and transport of any compressed gas which is subjected to internal pressure and whose water capacity exceeds one thousand liters and includes inter connecting parts and components thereof upto the first point of connection to the connected piping and fittings, but does not include containers wherein steam or other vapour is or is intended to be generated or water or other liquid is or is intended to be heated by the application of fireor the products of combustion or by electrical means, heat exchangers, evaporators, air receivers, steam type digestors, steam type sterilizers, autoclaves, reactors, calorifiers, pressure piping components such as separators or strainers and vessels containing a liquid under a blanket of compressed inert gas;

(u) “safety relief device” means an automatic pressure relieving device actuated by the pressure upstream of the valve and characterized by fully opened pop action, intended to prevent the rupture of a pressure vessel under certain conditions of exposure ;

(v) “source of ignition” means naked lights, fires, exposed incandescent materials, electric welding arcs, lamps, other than those specially approved for use in flammable atmosphere, or a spark or flame produced by any means;

(vv) “ tank truck loading or unloading gantry” or “hard stand” means the position of parking of tank truck or mobile pressure vessel for loading or unloading of compressed gas into or from it,”

(w) “transport” means the transport of a pressure vessels filled with any compressed gas from one place to another but does not include movement of the vessel from one place to another in the same premises;

(x) “vehicle” means a mechanically propelled carriage designed to transport by land compressed gas in a pressure vessel mounted thereon, and shall not include a vessel forming the barrel of a rail tank wagon;

(y) “vessel” means a pressure vessel;

(z) “water capacity” means capacity in litres of the pressure vessel when completely filled with water at 15^0 C.

3. General exemptions. – Nothing in these rules shall apply to vessels which form part of a processing plant. For the purpose of this rule vessels forming part of a processing plant shall mean vessels in which a unit process or unit operation is carried out and vessels which contain, as a precess requirement, a compressed gas received from and consumed in the same processing plant, provided that the water capacity of the vessel(s) shall be such that the gas stored therein at the maximum working pressure shall not exceed the requirement for feeding the consuming point(s) for a period not exceeding 16 hours at the designed flow rate.

4. Restriction on filling and manufacture.—(1) No person shall fill any compressed gas in any vessel or transport any vessel filled with any compressed gas unless such vessel has been manufactured in accordance with a type or standard or code as specified under Rule 12.

(2) No person should manufacture any vessel approved under sub-rule (1) without the prior approval of the Chief Controller –

(3) Any person seeking approval of the Chief Controller under sub-rule (2) shall submit to him

(a) the particulars specified in Appendix – I to these rules; and

(b) a scrutiny fee of Rupees five hundred in the manner specified under rule 11.

(4) No person shall import any vessel without prior approval of the Chief Controller

(5) Any person seeking the approval of the Chief Controller under sub-rule(4) shall submit to him

(a) a test and inspection certificate of the vessel from the manufacturer or the inspecting agency of the country of origin;

(b) the design details of the vessel, its fittings and particulars of specifications of the materials used in construction thereof; and

(c) a scrutiny fee of rupees five hundred in the manner specified under rule 11"

5. Restriction on delivery and despatch.—(1) No person shall deliver on despatch any compressed any compressed gas filled in a vessel to any person other than the holder of a storage licence issued under these rules or to a port authority or a railway administration.

(2) No compressed gas delivered or despatched under sub-rule (1) shall exceed the quantity which the person to whom it is delivered or despatched is authorised to store under the licence held by him.

6. Repair to pressure vessels.—(1) No person shall carry out any repairs, additions or alterations to any vessel unless the proposed repairs, additions or alterations and their method of execution have been approved by the Chief Controller. Any such repairs, additions or alterations approved by the chief Controller shall be carried out in the manner and by practices acceptable under the design code referred to in Rule 12:

Provided that nothing in this rule shall apply to the replacement of any of the fitments of the vessel which does not involve any heating.

(2) Before any repairs, additions or alterations are carried out to any vessel, the same shall be completely emptied and purged with an inert gas.

(3) Complete record of repairs, additions or alterations referred to in sub-rule 91) shall be maintained and made available to the chief Controller and his permission shall be obtained before recommissioning the vessel.

7. Purging of pressure vessels used for flammable gases.—(1) Before using any new vessel or before the refilling of any existing vessel which has been made gas-free, air contained therein shall be purged by an inert gas or by the gas for which the vessel is to be used.

(2) If the vessel is purged by means of a flammable gas, the flammable mixture so formed shall be vented from the vessel only after taking adequate precautions to prevent its ignition.

8. Prohibition of employment of children and intoxicated persons.—No person under the age of eighteen years or who is in a state of intoxication shall be employed for the loading, unloading or transport of any vessel containing compressed gas, or in any premises licensed under these rules.

9. Prohibition of smoking, fires, lights, etc.—No person shall smoke and no matches, fires, lights or articles or substance, capable of causing ignition of any flammable gas shall be allowed, at any time in proximity to a place where any compressed gas is stored, handled or transported in a vessel.

9A. Supervision and Operation within the Licenced premises – The operation of the licenced premises shall be under the supervision of persons having knowledge of the equipments being used in the premise and who is/are trained in handling the compressed gas, and other

operators shall be conversant with the hazards associated with the compressed gas and fire fighting operation."

10. Special precautions against accidents.—(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 any compressed gas is stored, handled of transported in a vessel.

(2) All empty vessels which had contained, any flammable or toxic gases, shall, except when they are opened for the purposed of filling or cleaning, or for rendering the gas-free, but kept securely closed until they have been cleaned or freed or the gas, as the case may be.

(3) Every person storing compressed gas in a vessel and every person in charge of, or engaged in the storage, handling and transport of such gas in vessels, shall at all times—

(i) comply with the provisions of these rules and the conditions of any licence issued thereunder;

(ii) observe all precautions for the prevention of accident by fire or explosion; and

(iii) prevent any person from committing any act referred in sub-rule (1).

11 Procedure for payment of fees—All fees payable under these rules be paid through Crossed demand draft on any nationalized bank in favour of the Chief Controller of Explosives, Nagpur and in cases where the amount payable does not exceed Rs.100, the payment may be made by cash, money order, postal order or cheque drawn on a local bank.

11-A Procedure for grant and revocation of recognition to competent person and inspector:-

(i) Anybody intending to be recognized as Competent Person or Inspector shall submit to the Chief Controller an application in the form prescribed in Appendix III. Every application shall be accompanied by a scrutiny fee of Rs.500 for application for competent Person and Rs.1000 for application for Inspector. The Chief Controller shall register such application and within a period of sixty days of the date of receipt of the application either after having satisfied himself with regard to competence and professional ethics recognize the application as a competent person or an Inspector as the case may be, or reject the application specifying the reasons therefore.

(ii) The Chief Controller may after giving an opportunity to the Inspector or Competent Person of being heard revoke the recognition -

(a) If he has reason to believe that an Inspector or Competent Person has violated any condition stipulated in the letter of recognition or has carried out a test, examination and inspection or has acted, in a manner inconsistent with the intent or the purpose of these rules; or

(b) for any other reason to be recorded in writing.

CHAPTER I

CONSTRUCTION AND FITMENTS OF PRESSURE VESSELS

12. Design code. – (1) Vessels shall be designed, constructed and tested in accordance with the Indian Standard 2825; as amended from time to time, or such other standard or code approved by the Chief Controller.

(2) A test and inspection certificate issued by the manufacturer of the vessel duly countersigned by an Inspector that the vessel meets with the requirements of the standard or code referred to in sub-rule (1) shall be furnished to the Chief Controller.

13. Design pressure.— The design pressure of a vessel shall not be less than –

(a) the vapour pressure of the gas in the vessel at 55^0 C, if the vessel is meant for the storage of liquefiable gases:

Provided that if the vessel is insulated, the vapour pressure of the gas in the vessel shall correspond to the maximum temperature that is likely to be attained by the gas in the vessel;

(b) the developed pressure of the gas in the vessel at 55^0 C, if the vessel is meant for the storage of a permanent gas.

14. Design of vessels for gases at low temperature –

(1) *Refrigerated vessels.—*

(i) Vessels used for storage of refrigerated gases shall be designed in accordance with low temperature requirements under the Design Code referred to in sub-rule (1) of Rule 12.

(ii) The capacity of the refrigeration system shall by adequate to maintain the gas in the vessel at a temperature so that its vapour pressure does not exceed the design pressure of the vessel and shall also remain below the pressure-setting of the relief valve on the vessel.

(2) *Insulated vessels:-*

(i) The shell of the vessel and its manhole nozzle shall be insulated with a material approved by the Chief Controller. The entire insulation shall be covered with a metal jacket of a thickness not less than 3 mm. nominal and flashed around all openings so as to be weather-tight.

(ii) The insulation shall be of sufficient thickness so that the thermal conductance at 15^0 C (expressed in calories or sq. cm. Per hour per degree centigrade temperature differential) does not exceed the limit prescribed by the Chief Controller.

15. **Filling capacity and filling pressure –** (1) The Maximum quantity of liquefiable gas filled into any vessel shall be limited to the filling density of the gas and shall be such that the vessel shall not be liquid-full due to expansion of the contents with rise of the temperature to 55^0 C. If vessel is uninsulated, or to the highest temperature which the contents are likely to reach in service, if the vessel is refrigerated or insulated, this requirement shall be applicable irrespective of the ambient temperature of the product at the time of filling.

(2) No vessel shall be filled with any permanent gas in excess of its design pressure.

16. **Markings on pressure vessels .—**Every vessel shall have a metal plate permanently fixed to it showing the following particulars which shall be visible from the ground level, namely:-

(i) manufacturer's name and identification marks;

(ii) the standard or code to which the vessel is constructed;

(iii) official stamp of the Inspector;

(iv) design pressure in Kg/Cm^2 ;

(v) date of initial hydrostatic test and the subsequent test;

(vi) hydrostatic test pressure in Kg/Cm^2 ;

(vii) water capacity in liters;

(viii) gas capacity, if filled with liquifiable gas; and

(ix) name or chemical symbol of the gas for which the vessel is to be used.

17. **Painting of vessels . –** Vessels shall be adequately painted externally to prevent corrosion and shall have a reflecting surface.

18. **Fittings –**

(1) General.—

(i) Fittings. – Each vessel shall be provided with each of the following fittings all of which should be suitable for use with the gas at pressures not less than the design pressure of the vessel to which they are fitted and for temperatures appropriate to the characteristics of the gas and operating conditions, namely, --

- Pressure relief valve connected to the vapour space;
- Drains;
- Contents gauge or maximum level indicator;
- Pressure gauge connected to the vapour space;
- Means of measuring the temperature of the contents of the vessel.

(ii) Vessel connections. – Connections of vessels shall be designed and attached to the vessels in accordance with the Design code referred to in Rule 12. All static vessels for storage of corrosive, flammable or toxic gas in liquefied state shall not have more than one pipe connection to the bottom for inlet or outlet, apart from the drainage. The drainage pipe, if provided, shall be extended beyond the shadow of the vessel and provided with two shut-off valves. No drainage pipe shall be provided direct from spherical vessel. The bottom inlet or outlet pipe for spherical vessel shall be integrally welded to the vessel and extended upto three metres beyond the shadow of the vessel, at the end of which, combination of manual and remote operated valve shall be provided;"

(2) Pressure relief. –

(i) every vessel shall be provided with two or more pressure relieving devices in accordance with the provisions of the Design Code referred to in Rule 12;

(ii) the relief valves shall be spring loaded and shall be set-to-discharge and reach full flow conditions as required by the Design code referred to in Rule 12;

(iii) weight loaded relief valves shall not be permitted;

(iv) the relief valves be so designed that they cannot be inadvertently loaded beyond the set pressure;

(v) the design of the valves shall be such that the breakage of any part will not obstruct free discharge of the liquid under pressure;

(vi) safety relief valves on any vessel shall be set to start-to-discharge at a pressure not in excess of 110 per cent of the design pressure of the vessel and shall have a total relieving capacity sufficient to prevent the maximum pressure in the vessel of more than 120 per cent of the design pressure;

(vii) each safety relief valve shall be plainly and permanently marked with the pressure in Kg/Cm^2 at which it is set to discharge, with the actual rate of discharge of the device in cubic metres per minute of the gas at 15^0 C and at atmospheric pressure, and with manufacturer's name. The rated discharge capacity of the device shall be determined at a pressure of 120 per cent of the design pressure of the vessel;

(viii) connections of safety relief devices shall be of sufficient size to provide the required rate of discharge through the safety relief valves;

(ix) safety relief valves shall be so arranged that the possibility of tampering is minimised and if the pressure setting or adjustment is external, the safety relief valve shall be provided with suitable means of sealing adjustment;

(x) each safety relief valve shall be provided with shut-off valve between it and the vessel. The arrangement of the shut-off valve installed between the safety relief valve and the vessel shall be so designed as to afford full required capacity flow through at least one of the safety relief valves;

(xi) safety relief valves shall have direct communication with the vapour space of the vessel;

(xii) for vessels other than those mounted on the vehicles of over 4500 litres water capacity, relief valves shall be fitted with extended vent pipes adequately supported and having outlets at least 2 metres above the top of the vessel and at least 3.5 metres above the ground level and the vent pipes shall be fitted with loose-fitting rain caps;

(xiii) relief valves shall be tested by a Competent Person for correct operation not less than once in a year and a record of such test shall be maintained. The test certificate shall be issued in the prescribed proforma. Relief valves shall be tested for correct operation not less than once in a year and a record of such test shall be maintained.

(3) Shut-off and emergency shut-off valves.---

(i) all liquid and vapour connections on vessels, except those for relief valves, plugged openings, and those where the connection is not greater than 1.4 mm diameter opening shall have shut-off valves located as close to the vessel as practicable;

(iii) Provided that the emergency shut-off valves is not required in cases where the connection to a vessel is not greater than 3 mm diameter for liquid and 8 mm diameter for vapour, or for vessels meant for storage of non-corrosive, non-flammable or non-toxic gas".

(4) Liquid level gauging device.—

(i) a vessel used for liquefiable gas or dissolved gas shall be equipped with a liquid level gauging device to afford ready determination of the amount of liquid in the vessel at any time;

(ii) all liquid level indicators shall be suitable for operation at the design pressure of the vessel;

(iii) every vessel shall, in addition, be equipped with a fixed maximum level indicating device depending upon the liquefiable gas or dissolved gas filled in the vessel;

(iv) gauging devices that require bleeding of the contents of the vessel such as a rotary tube, fixed tube and slip tube shall be designed in such a manner that the same cannot be completely withdrawn in normal gauging operations.

(5) Pressure gauge. – Every vessel shall be provided with at least one pressure gauge.

19. **Periodic testing of pressure vessels in service..—**

(1) All vessels shall be hydraulically tested by a competent person at a pressure marked on the vessel at intervals of not more than five years after the date of first test, provided that in the case of vessels, containing corrosive or toxic gases, the periodic test shall be done at an interval of two years. In case of vessels which are so

designed, constructed or supported that they cannot be safety filled with water or liquids for hydraulic testing or which are used in services where traces or water cannot bo tolerated, the Chief Controller may permit pneumatic testing alongwith non-destructive tests instead of hydraulic testing, as per procedure laid down in vessel fabrication code; after satisfying himself about the adequacy of the safety precautions undertaken;

(2) the competent person carrying out the test as required under sub-rule (1) shall issue a certificate of test in prescribed proforma.

20. **Precautions to be observed in carrying out hydraulic test.—**

In carrying out the hydraulic test referred to in Rule 19, the following precautions shall be observed, namely:-

(i) before the test is carried out, each pressure vessel shall be thoroughly cleaned and examined externally, and as far as practicable, internally also for surface defects, corrosion and foreign matter. During the process of cleaning and removal of sludge, if any, all due precautions shall be taken against fire or explosion, if such sludge is of pyropheric nature or contains spontaneously combustible chemicals;

(ii) as soon as the test is completed, the vessel shall be thoroughly dried internally and shall be clearly stamped with the marks and figures indicating the person by whom the test has been carried out and the date of test and a record shall be kept of all such tests;

(iii) any vessel which fails to pass the hydraulic test or which for any other reason is found to be unsafe for use shall be destroyed or rendered unsuitable under intimation to the Chief Controller.

CHAPTER III

STORAGE

21. **General -**

(1) All vessels meant for storage of compressed gas shall be installed entirely above-ground, that is to say, no part of the vessel shall be buried below the ground level.

(2) Vessels and first stage regulating equipment shall be located in the open.

(3) Vessels shall not be installed one above the other.

(4) Vessels within a group shall be so located that their longitudinal axes are parallel to each other.

(5) No vessel shall be located within the bonded area of petroleum or other flammable liquid storages.

(6) Sufficient space shall be provided between two vessels to permit fire-fighting operations.

(7) Two or more vessels installed in batteries shall be so installed that the top surface of the vessels are on the same plane.

(8) Vessels with their dished ends facing each other shall have screen walls in between them.

(9) Notwithstanding anything contained in sub-rules(1) to (8) above, vessels for storage of liquified petroleum gas can be placed underground or covered by earth in such

manner and subject to such conditions as may be specified by a notifications by the Central Government.

9(1) The underground vessels shall be placed within concrete or brick masonry pit with a gap of 1.0 metre between the walls of the pit and the vessel as well as in between the vessels.

9(2) The underground vessels shall be installed on a firm foundation and firmly secured to the foundation so as to prevent movement of floatation.

9(3) The udnerground vessels or above ground vessels covered by earth (Mound) shall be :-

9(3)a designed to withstand external pressure due to load of the earth cover.

b) provided with external anti-corrosive coating or cathodic protection to prevent corrosion ;

c) covered by earth, sand or any other non-corrosive material free from abrasive particles likley to damage the anti-corrosive coating of the vessel-the thickness of the covering material above the top surface of the vessel shall not be less than 0.5 metre;

d) having the discharge level of the safety relief valves at least 2 meters above the top surface of the vessel, but in any case not less than 3 meters from the ground level;

c) fitted with the necessary pipings, fittings, valves and other mounting on top of vessel in such a manner that they can be operated and maintained without disturbing the earth cover. In case of above ground vessel with earth cover (mound), liquid outlet pipe at the bottom may be allowed provided the control valve and emergency valve of this line is just outside the earth cover for the purpose of operation and maintenance from outside.

4) The above ground vessels to be covered by earth (mound) shall be installed on concrete foundation or compacted sand.

5) Unless inherently resistant to erosion, the earth cover (mound) of above ground vessel shall be provided with mechanisms to prevent erosion of covering soil (mound)

(10) Aboveground vessel for storage of corrosive, flammable or toxic gas in liquefied state shall be provided with enclosure wall all around the ground. The minimum distance between vessel and enclosure wall shall be the diameter of the vessel or five meters, whichever is less. The ground shall be graded to form a slope away from pumps, compressors or other equipments. The height of the enclosure wall shall be thirty centimeters on the upper side and gradually increasing to maximum sixty centimeters on the lower side, at the end of which a shallow sump for collection of the spilled liquid, if any, shall be provided. The minimum separation distance between the vessel and the sump shall be , -

(a) diameter of the vessel, in case of vessels with water capacity not exceeding forty thousand litres,

(b) fifteen metres, if the water capacity of the vessels exceeds forty thousand litres ."

22. **Locations of Pressure Vessels**.—(1) Each vessel shall be located with respect to the nearest building or group of buildings or line of adjoining property which may be built on and with respect to other vessels and facilities in accordance with the distances specified in the Tables below:-

TABLE 1

Minimum safety distances for corrosive , toxic or permanent flammable gases

Sl. Nos	Water capacity of vessel(in litres)	Minimum distance from building or group of buildings or line of adjoining property	Minimum distance between pressure vessels
(i)	Not above 2000	5 metres	1 metre
(ii)	Above 2000 but not above 10,000	10 metres	1 metre
(iii)	Above 10,000 but not above 20,000	15 metres	1.5 metres
(iv)	Above 20,000 but not above 40,000	20 metres	2 metres
(v)	Above 40,000	30 metres	2 metres

TABLE 2

Minimum safety distances for non-corrosive, non-flammable or non-toxic gases

Sl. Nos	Water capacity of vessel(in litres)	Minimum distance from building or group of buildings or line of adjoining property	Minimum distance between vessels
(1)	(2)	(3)	(4)
(i)	Not above 2000	3 metres	1 metre
(ii)	Above 2000 but not above 10,000	5 metres	1 metre
(iii)	Above 10,000 but not above 20,000	7.5 metres	1.5 metres
(iv)	Above 20,000 but not above 40,000	10 metres	2 metres
(v)	Above 40,000	15 metres	2 metres

TABLE - 3

Minimum safety distances for liquefied flammable gases

Sl. No	Water capacity of vessel(in litres)	Minimum distance from building or group of buildings or line of adjoining property		Minimum distance between vessels	
		Above ground level	Underground or aboveground vessels covered with earth(mound)	Above ground level	Underground or aboveground vessels covered with earth(mound)
(1)	(2)	(3)	(4)	(5)	(6)

(i)	Not above 2000	5 metres	3 metres	1 metre	1 metre
(ii)	Above 2000 but not above 75,00	10 metres	3 metres	1 metre	1 metre
(iii)	Above 75,00 but not above 10,000	10 metres	5 metres	1.5 metres	1 metre
(iv)	Above 10,000 but not above 20,000	15 metres	7.5 metres	2 metres	1 metre
(v)	Above 20,000 but not above 40,000	20 metres	10 metres	2 metres	1 metre
(vi)	Above 40,000 but not above 3,50,000	30 metres	15 metres	2 metres or 1/4th of the sum of diameter of adjacent vessel or ½ the diameter of the two adjacent vessels, whichever is greater	1 metre
(vii)	Above 3,50,000 but not above 4,50,000	40 metres	15 metres		1 metre
(viii	Above 4,50,000 but not above 7,50,000	60 metres	15 metres		1 metre
(ix)	Above 7,50,000 but not above 38,00,000	90 metres	15 metres		1 metre
(x)	Above 38,00,000	120 metres	15 metres		1 metre

TABLE – 4

Minimum Safety distances (in meters) between facilities associated with storage of liquefied flammable gas in petroleum refinery, gas processing plants, storage terminals and bottling plants.

(A) FOR TOTAL STORAGE ABOVE 100 TONNES

From/To	Storage Vessel	Property line/ buildings not associated with storage and operation	Sheds for filling storage, evacuation of cylinders	Tank Truck loading/ unloading gantry	Tank Wagon gantry	Pump/ compressor Shed	Fire Water Pump room
Storage Vessel	Table -3	Table - 3	30	30	50	15	60
Property line/ buildings not associated with storage and operation	Table -3	-----	30	30	50	30	--
Sheds for filling storage, evacuation of cylinders	30	30	15	30	50	15	60
Tank Truck loading/ unloading gantry	30	30	30	30	50	30	60
Tank Wagon gantry	50	50	50	50	50	30	60
Pump/compressor Shed	15	30	15	30	30	---	60
Fire Water Pump room	60	---	60	60	60	60	---

(B) FOR TOTAL STORAGE NOT ABOVE 100 TONNES

From/To	Storage Vessel	Property line/ buildings not associated with storage and operation	Sheds for filling storage, evacuation of cylinders	Tank truck unloading/ loading gantry	Fire Water Pump room
Storage Vessel	Table-3	Table 3	Table - 3	15	30
Property line/buildings not associated with storage & operation	Table-3	-----	15	15	--
Sheds for filling storage, evacuation of cylinders	Table - 3	15	15	15	30
Tank truck unloading/loading gantry	15	15	15	15	30
Fire Water Pump room	30	--	30	30	--

TABLE - 5

Minimum Safety distances (in metres) between facilities associated with storage and dispensing of liquefied petroleum gas in liquefied Petroleum gas dispensing station as automotive fuel to motor vehicles.

To/ From	LPG Storage Vessels	Fill point of LPG Storage vessel and Centre of LPG Tank-Truck unloading hard stand	LPG Dispenser	Property line	Petroleum Class A or B service Station licensed in Form XII of Petroleum Rules 1976		
					Fill point of petroleum class A/B tanks	Vent pipe of petroleum class A/B tanks	Petroleum Class A/B dispensing pump
LPG Storage Vessels	Table-3	9 (aboveground/ mounded vessels exceeding 7500 litres capacity) 6 (aboveground/ mounded vessels not exceeding 7500 litres capacity) 3 (underground vessel)	9 (above-ground vessels not exceeding 20,000 litres capacity or underground/ mounded vessels) 15(above-ground vessels exceeding 20,000 litres capacity)	Table-3	9	9	9
Fill point of LPG Storage vessel and Centre of LPG Tank-Truck unloading hard stand	9 (aboveground/ mounded vessels exceeding 7500 litres capacity) 6 (aboveground/ mounded vessels not exceeding 7500 litres capacity) 3 (underground vessel)	--	6	9	6	6	6
LPG Dispenser	9 (aboveground vessels not exceeding 20,000 litres capacity or under-ground/ mounded vessels) 15 (aboveground	6	--	6	6	6	6

	vessels exceeding 20000 litres capacity)						
Property line	Table-3	9	6	--	3	4	6

2. If the aggregate water capacity of a multi-vessel installation is 40,000 litres, the minimum safety distances from any vessel to the property line/group of buildings shall not be less than –

   a) Thirty metres for corrosive, toxic or flammable gases ;

   b) Fifteen metres for non-corrosive, non-toxic or flammable gases ;

3. The number of above ground storage vessels in one group shall not exceed six. Spherical and cylinderical vessels shall be installed in separate groups. Minimum seperation distance between two such groups of vessels shall be the distance from the vessel to property line in accordance as mentioned in Tables 1,2,3, as the case may be , or thirty metres whichever is less. Each such group of vessels shall be covered under separate licence under these rules.

4. The distances specified above may be relaxed by the Chief Controller in cases where he is of the opinion that the additional safety measures have been provided.

Explanation : - The distances specified above are required to be measured from the nearest point on the periphery of the vessel."

23. **Foundations for pressure vessels.—**

(1) *General* – The materials, principles, methods and details of design and construction of foundations and supports of vessels shall comply with approved specifications, standards or codes.

(2) *Ground conditions* – A thorough knowledge of the ground condition shall be obtained by the person installing the vessel with particular reference to establishing an allowable bearing pressure, total and differential settlements expected, risk of floatation and possible deterioration of original conditions.

(3) *Materials.—*

(i) The choice of materials for construction shall be determined by the ground conditions, loading and detailed design constructions.

(ii) The materials may be of –

(a) brick-work masonry;

(b) re-inforced concrete; or

(c) steel plate, steel pipe or structural steel.

(4) *Loading.*—The greatest combined effect of static and imposed loading shall be used for design as under:-

(a) Static loading : weight of vessel and its contents;

(b) test loading if tested by water;

(c) wind loading;

(d) operational loading such as vibration or thermal (natural and operational).

(5) *Settlement.*—Any particular differential settlement shall be limited to prevent excessive stress in the connected pipe work and vessel shell.

(6) *Vessel supports.—*

(i) the design of supports for vessels shall follow the standard or code to which the vessel is constructed;

(ii) the spacing of vessel support shall be decided after close consideration of vessel-shell stressing and transmission of the loading to the ground;

(iii) the design of supports for vessels shall provide flexibility to allow for movement of the vessel as a result of pressure and thermal expansion.

(iv) the vessel shall be securely anchored or weighed or provided with adequate pier height to avoid floatation due to flood water;

(v) in case of structural steel supports such supports, excluding vessel saddles or supporting feet 45 cm or less in height, shall be encased in fire-resisting materials of adequate thickness.

24. **Fencing.—**

(1) The area where vessels pumping equipment, loading and unloading facilities and direct fired vaporisers are provided, shall be enclosed by an industrial type fence at least 2 metres high along the perimeter of the safety zone.

(2) Every fence shall have at least two means of exit and the gates of such exits hall open outwards and shall not be self-locking.

25. **Cleanliness.—**An area of three metres around the vessel shall be kept free from readily ignitable materials, such as weeds and long dry grass.

26. **Earthing.—**

(1) All vessels used for storage of flammable liquefiable gases shall be electrically connected with the earth in an efficient manner.

(2) Pipelines conveying flammable liquids shall be adequately prepared for electrical continuity and connected with the earth in an efficient manner.

27. **No Smoking.—**A permanent notice with letters at least 5 cms in height prohibiting smoking and naked lights shall be fixed to the fence surrounding the area where flammable or oxidising gases are stored and the notice shall be visible from outside.

28. **Fire protection.—**All vessels used for the storage of flammable compressed gases shall be protected against fire hazards as under,--

(i) provision shall be made for an adequate supply of water and fire protection in the storage area in accordance with the provision of the rules and the regulation applicable in that area. The application of water may be by hydrants, hoses and mobile equipments, fixed monitors or by fixed spray systems which may be automatic. Control of water flow should be possible from outside any danger area. The fire water system shall be designed with medium velocity sprinklers for above ground storage vessels, filling sheds, loading or unloading area, and pump the single largest risk area and with additional requirements for hydrant points. In plants referred to in Table 4-A of rule 22, the quantity of water available shall be sufficient for four hours of fire fighting, and in plants referred to in Table 4-B of rule- 22, the same shall be for two hours of fire fighting. For other installations not covered under Tables 4-A and 4-B, the fire water storage shall be as approved by the Chief Controller.”,

(ii) hydrants, where provided, shall be readily accessible at all times and so spaced as to provided for the protection of all vessels;

(iii) sufficient length of fire hose shall be provided and be readily available. The outlet of each hose line shall be equipped with a combination jet and fog nozzle. The hoses should be maintained well and periodically inspected;

(iv) mobile equipment , fixed monitors or fixed spray systems shall be designed to discharge water at a rate sufficient to maintain an adequate film of water over the surface of the vessel and supports under fire conditions;

(v) consideration shall be given to the provision of mobile or fixed water spray systems giving suitable and effective protections for vehicle loading and unloading areas;

(vi) at least two dry chemical powder type fire extinguishers of 9 kg. Capacity each shall be installed at each point of access to the installations.

(vii) In liquefied Petroleum Gas dispensing station for fuelling motor vehicles, having only underground or earth covered (mounded) liquefied petroleum gas storage vessels, two numbers seventy kilograms dry chemical type fire extinguishers shall be provided. In dispensing stations having above ground liquefied petroleum gas storage vessels, hydrants with minimum water pressure of seven kilograms per square centimetre shall be provided at convenient positions for alround coverages of storage vessels and handling area, and water sprinklers with spray density of ten litres per minute per square metre shall be provided. The fire water pump shall be preferably diesel engine driven with capacity to deliver water at the rate and pressure specified above. The minimum fire water storage at the premises shall be that needed for fighting fire atleast for one hour."

29. **Loading and unloading facilities. –**

(1) *Pumps.—*

(i) pumps may be centrifugal or positive displacement pumps;

(ii) design materials and constructions of pumps shall be suitable for the type of gas to be handled and they shall be designed for the maximum outlet pressure to which they will be subjected to in operation;

(iii) positive displacement pumps shall have a by-pass valve or other suitable protection against over pressure.

(2) *Compressors.—*

(i) the design, material and construction of compressors shall be suitable for the type of gas which they are to handle and they shall be designed for the maximum outlet pressure to which they will be subjected to in operation;

(ii) compressors other than multi-stage compressors shall take suction from the vapour space of the vessels being filled.

(3) *Transfer systems.—*

(i) transfer systems shall be so designed that the risk of a gas of a higher vapour pressure being transferred to equipment designed for gas of a lower vapour pressure is minimised;

(ii) there shall be positive means of rapidly shutting off flow, located at a safe distance from the vessel which is being filled or emptied;

(iii) automatic alarm device to indicate the approach to maximum permissible height or automatic shut-off valves shall be used to prevent over filling.

(4) *Hoses.—*

(i) the hoses for liquid transfer shall be designed to withstand not less than four times the maximum operating pressure they will carry in service;

(ii) the hoses shall be mechanically and electrically continuous.

(5) In the tank-truck loading or unloading gantry, number of bays for parking tank-trucks shall not exceed eight, and number of such gantries in a premises shall not exceed two.

(6) Rail tank wagon loading or unloading shall be restricted to a maximum of half a rak (six hundred tonnes). If full rake handling is required, it shall be placed in two separate gantries with fifty meters distance in between them.

(7) All valves on the vessel and pipelines in the premises shall be permanently marked in a manner clearly indicating the direction of opening and closing."

30. **Transfer operations.—**

(1) Before transfer of gas,--

(i) every vehicle shall be carefully examined at the installation to ensure that it complies in all respects with the requirements of these rules and shall be completely emptied before it is passed for filling;

(ii) a visual check shall be made of the surroundings for unusual or dangerous situations before any filling or discharging procedure is commenced;

(iii) warning notices, as necessary, shall be displayed;

(iv) the receiving vessel shall be checked to ensure that it has sufficient ullage to receive quantity of gas being transferred to it;

(v) the inter-connecting system, that is pipework-fittings, valves or hoses, shall be checked to ensure that it is in safe working condition and that only valves and other fittings required in the transfer operations or any other operations proceeding simultaneously, are open.

(2) During transfer the receiving vessel shall be checked to ensure that it is not being filled above its safe filling capacity or beyond its design pressure.

(3) On completion of transfer before the vehicle is allowed to leave the licensed premises it shall be weighed over a weigh-bridge to ascertain the quantity of the compressed gas filled therein if the vehicle is filled with a liquefiable gas.

(4) When filling the vessels on vehicles with compressed gas, the following procedure shall be complied with in addition to the other requirements, namely:--

(i) the place where the vehicle is parked shall be properly levelled;

(ii) the vehicle shall be prevented from accidental movement during the transfer operation. The parking brake of the vehicle shall be on and the engine shall remain stopped, except when it is necessary to drive the pump. Where necessary, wheel chock blocks shall be used;

(iii) any driving units or electrical equipment not required and not specifically designed for the transfer operation shall be stopped or isolated;

(iv) the vessel mounted on a vehicle shall be electrically bonded to the fixed installation before any flammable liquefied gas transfer operations is carried out;

(v) before a vehicle is moved, the electrical and the liquid and vapour connections shall be disconnected care being exercised to avoid spillage. Where wheel chock blocks have been used they shall be removed. The vehicle shall be checked to ensure that it is in safe working order and the

surrounding areas checked to ensure that any liquefied flammable gas that may have leaked or has to be vented has safely dispersed.

(5) For keeping attention during operations—

(i) a competent person shall remain in attendance during all the operations connected with the transfer and ensure that all the requirements of these rules are complied with;

(ii) if it is necessary to discontinue a vehicle loading operation temporarily, the loading hose, shall be disconnected from the vehicle for the period of such discontinuance.

(6) The person is charge of transfer operations shall ensure that transfer operations are stopped in the event of –

(i) any leakage;

(ii) a fire occurring in the vicinity;

(iii) a servere electrical storm occurring in the vicinity in the case of an operation which involves venting of flammable gas.

30A Dispenser for liquefied petroleum gas dispensing station - The dispenser and connected fittings used for dispensing liquefied petroleum gas in motor vehicles provided in the liquefied petroleum gas dispensing station shall be design, constructed, tested and maintained in accordance with the requirement laid down in Schedule II of these rules and be of a type approved in writing by the Chief Controller.

30B. Special Provisions for filling fuel tanks of motor vehicles and unloading of tank-truck in liquefied petroleum gas dispensing station –

(i) Liquefied Petroleum Gas shall not be filled in fuel tank of motor vehicle while the engine of the vehicle is running.

(ii) During the period of unloading of liquefied petroleum gas from tank-truck to the storage vessels, operation of dispensing liquefied petroleum gas to motor vehicles shall not be carried out."

31. **Electrical apparatus and installations.—**

(1) No electrical wire shall pass over any storage vessel.

(2) All electrical wires installed within the safety zone of any storage vessel for the storage of flammable compressed gases shall consist of insulated cables of approved type. The cables shall be mechanically continuous throughout and effectively earthed away from the vessels.

(3) For pump rooms used for pumping flammable compressed gases –

(i) all electrical meters, distribution boards, switches, fuses, plugs and sockets shall be of flame-proof construction complying with the requirements of IS:2148 : 1968 and the frames shall be effectively earthed;

(ii) all electrical fixed lamps shall be enclosed in a well glass flameproof fitting conforming to IS:2206 (Part I) : 1962.

(4) All electrical portable hand lamps shall be of a type approved by the Chief Controller.

31A. Classification of hazardous area for flammable gases (1) A hazardous area for flammable gases shall be deemed to be –

a) A division ‘0’ area if inflammable gases of vapours are expected to be continuously present in the area ;

b) a division ‘1’ area, if inflammable gases of vapours are expected to be continuously present in the area under normal operating conditions; or

c) a division ‘2’ area, if inflammable gases of vapours are expected to be continuously present in the area only under abnormal operating conditions or failure or rupture of an equipment.

2. If any question arises as to whether hazardous area is a division ‘0’ area or a division ‘1’ area or a division ‘2’ area, the decision thereon of the Chief Controller shall be final.

31B. Extent of hazardous area – The extent of hazardous area for liquefied petroleum gas dispenser shall be as under –

(i) Entire space within the dispenser enclosure cabinet and forty six centimeters horizontally from the exterior of enclosure cabinet and upto an elevation of one hundred and twenty two centimeters above dispenser base and the entire pit or open space beneath the dispenser shall be division ‘1’

(ii) Upto forty six centimeters vertically above the surrounding ground level and horizontally beyond forty six centimeters upto six meters on all sides of the dispenser enclosure cabinet shall be division ‘2’

32. **Lighting of storage and operating areas.—**operations shall not be carried out during the night unless adequate artificial lighting of approved type are available and used.

33. **Certificate of safety.—**A certificate of safety in the proforma prescribed by the Chief Controller and signed by a competent person shall be furnished to the licensing authority before any vessel is used for the storage of any compressed gas or whenever any addition or alteration to the installations or foundations for the vessel is carried out.

CHAPTER IV

TRANSPORT

34. **Application.—**The rules in this Chapter shall apply to the transport of compressed gas by vehicles.

35. **Vehicles for transport of compressed gas.—**

(1) every vehicle for the transport of compressed gas shall be of a type approved, in writing, by the Chief Controller.

(2) where approval is sought to a vehicle under sub-rule (1) or to any of its special safety fittings, 12 numbers of detailed drawing drawn to scale and a scrutiny fee of rupees fifty shall be forwarded to the Chief Controller.

(3) if the Chief Controller, after receipt of the drawing under sub-rule (2) and after making such further inquiries as he deems necessary, is satisfied that the vehicle or the special safety fittings, as the case may be, meets with the requirements laid down in these rules, he shall approve the drawing and return to the applicant one copy thereof duly endorsed.

36. **Design.—**

(1) Every vessel used for the transportation of compressed gas shall be constructed and tested in accordance with the requirements of Rule 12 and shall meet with the requirements of sub-rules (2), (3) (4) and (5) of this rule.

(2) The design stress shall include an allowance to enable the vessel to withstand shocks normally encountered by movements on road, such as, acceleration and deceleration for a minimum of 3g. when the vessel is self-supporting, the vessel design shall provide for carrying the additional stresses normally carried by the chassis frame.

Provision shall be made for distributing the localised stresses arising from attachments to the vessels.

(3) Mounting of vessels on the chassis or under-frame shall be done in such a manner as to keep the vibrations to the minimum.

(4) All attachments to the vessel shall be protected against accidental damage which may result from collision, over-turning or other operational cause.

(5) All vessels shall be designed to withstand the most severe combined stresses to which they may be subjected to by the pressure of the gas, the pumping pressures and shock loading caused by transport conditions.

37. **Protection of valves and accessories.—**

(1) All valves and accessories shall be safeguarded against accidental damage or interference.

(2) Valves and accessories shall be mounted and protected in such a way that risk of accidental rupture of the branch to which the valve or accessory is connected is minimised.

(3) Valves or accessories situated at the rear of a vehicle shall be protected by the rear cross member of the frame of the vehicle against damage and shall comply with sub-rule (2).

38. **Equipment.—**

(1) Piping, fittings, pumps and meters.—

(i) All pipings, fittings, pumps and meters permanently mounted on the vehicle shall be designed to withstand the most severe combined stresses imposed by the following, namely:-

(a) the maximum designed pressure of the vessel;

(b) the super imposed pumping pressure of the shock loading caused by road movements;

(ii) the materials used for vessel equipment shall be sufficiently ductile to withstand rough usage and accidental damage. Brittle materials such as cast iron shall not be used.

(2) Protection of piping and equipment.—

(i) all piping and equipment shall be adequately protected to minimise accidental damage which may be caused by rough usage, collision or over-turning;

(ii) any equipment or section of piping in which liquid may be trapped shall be protected against excessive pressure caused by thermal expansion of the contents.

(3) marking of connection. – All connections on the vehicle which require manipulation by the operator of the vehicle should be clearly marked to prevent incorrect operation. The form of this marking should correspond with the operating procedure laid down for the vehicle.

39. **Vehicle design considerations.—**

(1) General.—The vessels shall be securely attached to the chassis of the vehicle in such a manner as to take care of the forward movement of the vessel due to sudden deceleration of the vehicle.

(2) Design safety requirements – Mechanical:

(i) the engine of the vehicle shall be of an internal combustion type;

(ii) where the fuel system is gravity-fed, a quick action cut-off-valve shall be fitted to the fuel feed pipe in an easily accessible and clearly marked position;

(iii) the engine and exhaust system together with all electrical generators, motors, batteries, switch-gears and fuses shall be efficiently screened from the vessel or the body of the vehicle by a fire-resisting shield or by enclosure within an approved fire-resisting compartment;

(iv) when the equipment referred to in clauses (I), (ii) and (iii) are mounted forward of the back of the driving cab, the cab can be considered to act as an acceptable shield, provided the back, the roof and the floor of the cab, are of fire-resisting construction for the full width of the cab, without any openings in the back or roof, and that the back extends downwards to the top of the chassis ;

(v) when the cab construction does not conform to the equipments mentioned above, a separate fire resisting sheld should be installed extending upwards without any openings from the top of the chassis to the top of the vessel;

(vi) in any case, where windows are provided in the shield, they should be fitted in fire-resisting framing with wired glass or other heat-resisting material and shall not be capable of being opened;

(vii) when the equipment referred to in clauses (i), (ii) and (iii) are mounted to the rear of the back of the cab, it shall be contained wholly within an approved fire-resisting compartment;

(viii) in any case where the fuel used to proper a vehicle gives off a flammable vapour at a temperature less than 65^0 C, the fuel tank shall not be behind the shield unless the following requirements are complied with, namely:-

(a) the fuel tank is protected from blows by stout steel guards or by the frames of the vehicle;

(b) the fill pipe of the fuel tank of the vehicle is provided with a cover having locking arrangement ;

(c) the fuel feed apparatus placed in front of the fire-resisting shield is used to lift the contents of the fuel tank.

(ix) where a transfer pump is driven by the engine of the vehicle, provision shall be made to stop the engine from outside the cab.

(3) Design safety requirements – Electrical :

The following requirements shall be complied with in connection with the electrical and antistatic properties of the vehicle, namely :-

(i) The Electrical system shall have –

(a) the battery in an easily accessible position ;

(b) readily accessible cut-off switch of not less than 300 Amps rating ;

(c) wiring so fixed and protected as to minimise accidental damage or undue wear.

(ii) The vessel shall be electrically continuous with the chassis.

(iii) The vehicle shall be provided with a bonding point or bonding cable.

(iv) Tyres shall be of the “anti-static” type.

(4) Design safety requirements – General :

(i) There shall be a clear space of at least 15 cm between the back of the cab and the front of the vessel.

(ii) The rear of the vessel shall be protected by a robust steel bumper and this bumper shall be—

(a) attached so that collision stresses will be transmitted to the frame work of the vehicle or, in the case of an articulated vehicle to the frame work carrying the wheels of the vessel ;

(b) situated at least 7.5 cm to the rear of the rear-most part of the vessel ;

(c) extended on each side of the vehicle to at least the maximum width of the vessel.

(iii) the maximum weight of the liquefied gas for which the vehicle is designed should not exceed the difference in weight between the unladen weight of the vehicle and the maximum gross weight permitted for that class of vehicle under the appropriate transport regulations.

40. **Marking of vehicle.—** All vehicles shall be conspicuously marked on the vessel to show the product which is being carried.

41. **Fire protection.—**

(1) Two serviceable fire extinguishers of suitable size and type shall be provided on each vehicle, one on each side and should be accessible from outside the cab.

(2) A person, while in, or attending, any vehicle conveying flammable gas, shall not smoke or use matches or lighters.

(3) No fire, artificial light or article capable of causing fire or explosion shall be taken or carried on any vehicle carrying flammable gas.

42. **Operations.—**

(1) Drivers shall be carefully selected and given appropriate training in driving and safe handling of the equipment and the compressed gas carried in the vehicle.

(2) When loading or discharging of a vehicle takes place within the operator's own premises, a competent person shall be present throughout the operations.

(3) When discharge is in progress, at a customers premises, the driver shall remain with his vehicle in such a position so as to be able to stop the discharge immediately in an emergency.

(4) Every vehicle shall be constantly attended to by at least one person who is familiar with the rules in this Chapter :

Provided that nothing in sub-rule shall apply to vehicles which are left in places previously approved for the purpose by the Chief Controller.

(5) In the event of an over-night stop away from home base, prior arrangements shall be made for the safe parking of the vehicle overnight. In an emergency, a driver may seek the co-operation of the local police in finding suitable parking facilities for his vehicle.

43. **Certificate of Safety.—**A certificate of safety in prescribed proforma signed by a competent person shall be furnished to the licensing authority before any vehicle is used for the transportation of any compressed gas to the effect that the vehicle meets with the provisions of the rules in this Chapter.

44. **Inspection and maintenance of vehicles.—**

(1) The licensee for any vehicle shall ensure that it is at all times road-worthy, and that it is in a fit condition to fill, transport and discharge its load safely.

(2) An examination of the vehicle to check that the vehicle is maintained as per sub-rule(1) shall be carried out every six months by a competent person and a certificate in the prescribed proforma shall be issued by him.

CHAPTER V

LICENCES

45. **Licence for storage of compressed gas.—** No person shall store any compressed gas in any vessel except under and in accordance with the conditions of a licence granted under these rules.

46. **Prior approval of specification and plans of vessels and premises proposed to be licensed.—**

(1) Every person desiring to obtain a licence to store any compressed gas in any vessel shall submit to the Chief Controller---

(i) specifications and plans drawn to scale in triplicate clearly indicating—

(a) the manner in which the provisions prescribed in these rules shall be complied with;

(b) the premises proposed to be licensed, the are of which shall be distinctly coloured or otherwise marked;

(c) the surrounding area lying within 100 metres of the edge of all facilities which are proposed to be licensed;

(d) the position, capacity, materials of construction and ground and elevation views of all vessels, all valves and fittings, filling and discharge pumps and fire-fighting facilities where provided and all other facilities forming part of the premises proposed to be licensed; and

(ii) a scrutiny fee of rupees one hundred paid in the manner specified in Rule 11

(2) If the Chief Controller, after scrutiny of the specifications and plans and after making such inquiries as he deems fit, is satisfied that compressed gas can be stored in the premises proposed to be licensed, he shall return to the applicant one copy each of all the specifications and plans signed by him conveying his sanction which may be subject to such conditions as he may specify.

46A No Objection Certificate – (1) An applicant for a new licence other than a licence in Form IV, shall apply to the District Authority with two copies of site plan showing the location of the premises proposed to be licence under these rules for a certificate to the effect that here is no objection to the applicant's receiving a licence for storage of compressed gas in pressure vessel at the site proposed, and the District Authority shall, if he sees no objection, grant such certificate to the applicant who shall forward it to the Chief Controller with his application.

2. Every certificate issued by the District Authority under sub-rule (1) above shall be accompanied by a copy of the plant of the proposed site duly endorsed by him under official seal.

3. The Chief Controller, may refer an application not accompanied by a certificate granted under sub-rule (1) to the District Authority for his observation.

4. If the District Authority, either on a reference being made to him or otherwise, intimates to the Chief Controller that any licence which has been applied for should not, in his opinion, granted, such licence shall not be issued without the sanction of the Central Government.

5. Notwithstanding anything contained in sub-rules (1) to (4) above, all licences granted or renewed under the said rules prior to the date on which the above provisions come in force, shall be deemed to have been granted or renewed under these rules.

47. Licence for transport of compressed gas.—

(1) No compressed gas filled in a vessel shall be transported by a vehicle except under and in accordance with the conditions for a licence granted under these rules.

(2) Nothing in this rule shall apply to the transport of compressed gas filled in a vessel by a railway administration.

48. Grant of licence.—A licence prescribed under these rules shall be granted by the Chief Controller on payment of the fees specified in the Schedule I attached to these rules.

49. Application for licence.—A person wishing to obtain a licence under these rules shall submit to the Chief Controller—

(1) an application—

(a) in Form I, if the application is in respect of a licence to store compressed gas in pressure vessels;

(b) in Form II, if the application is in respect of a licence to transport compressed gas in pressure vessel by a vehicle;

(c) in Form –IA, if the application is in respect of a licence to store and dispense liquefied petroleum gas as automotive fuel;

(ii) a certificate of safety under rule 33 or rule 43 as the case may be;

(iii) a test and inspection certificate as required under sub-rule (2) of rule 12;

(iv) four copies of the drawings approved by the Chief Controller under rules 35 and 46;

(v) licence fee as specified in the schedule-1;

(vi) No Objection Certificate from the District Authority in respect of storage of compressed gas in pressure vessels alongwith the site-plan duly endorsed;

(vii) Copy of The Registration Certificate of the vehicle issued under Motor Vehicles Act, 1988 (59 of 1988) in respect of mobile pressure vessels for transport of compressed gas ."

(2) four copies of the drawings approved by the Chief Controller under Rules 35 and 46

50. Period for which licences may be granted or renewed.--

(1) A licence in Form III or Form-V for the storage of a compressed gas in a pressure vessel, or in Form IV for the transport of the compressed gas in a pressure vessel by a vehicle shall be granted or renewed subject to a maximum three years and shall remain in force until the 31st day of March of the year upto which the same is granted or renewed

(2) Notwithstanding anything contained in sub-rule (1), the Chief Controller may, if he is satisfied that a licence is required for a specific work which is not likely to last upto the 31st day of March of the year upto which the licence is granted or renewed, grant or renew a licence for such period as is necessary.

51. Particulars of licence.—

(1) Every licence granted under these rules shall be subject to the conditions specified therein and shall contain all the particulars which are contained in the form specified under these rules.

(2) One copy of the plan or plans for the licensed premises, signed in token of approval by the Chief Controller, shall be attached to the licence which shall form part of such licence and an identical copy shall be filed for record in the office of the Chief Controller.

(3) Every licensed premises under these rules shall have prominently marked thereon the number of the licence held for it.

(4) The emergency telephone numbers of local fire service, police and the principal marketing company or supplier of the compressed gas, and emergency instructions shall be conspicuously displayed in the licensed premises.

(5) **Power of licensing authority to alter conditions,--** Notwithstanding anything contained in Rule 51, the Chief Controller may omit, alter or add to any of the conditions specified in the Form of a licence.

52. Prior approval necessary for alteration in the licensed premises..—

(1) No alteration shall be carried out in the licensed premises until the plan showing such alteration has been approved in writing by the Chief Controller.

(2) A person wishing to carry out any alteration in the licensed premises shall submit to the Chief Controller.—

(i) three copies of a properly drawn plan of the licensed premises showing in distinct colour or colours the proposed alteration and the reasons therefor;

(ii) a scrutiny fee of rupees fifty paid in the manner specified in Rule 11.

(3) If the Chief Controller, after scrutiny of the plan showing the proposed alteration and after making such enquiries as he deems fit, is satisfied that the proposed alteration may be carried out, he shall return to the licensee one copy of the plan signed by him and conveying his sanction subject to such condition or conditions as he may specify.

(4) The holder of a licence shall apply to the Chief Controller for the amendment of the licence as soon as the sanctioned alteration has been carried out.

54. **Amendment of licence –**

(1) Any licence granted under these rules may be amended by the Chief Controller.

(2) The fee for amendment of a licence shall be rupees ten plus 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.

(3) A licensee who desires to have his licence amended shall submit to the Chief Controller –

(i) an application duly filled in and signed in Form I or in Form –I-A or Form –II , as the case may be

(ii) where any alteration in the licensed premises has been carried out, three copies of the properly drawn plan showing the alteration sanctioned under Rules 53 by the Chief Controller;

(iii) fee for the amendment of the licence as specified in sub-rule (2);

(iv) a certificate of safety, if required under Rule 33.

55. **Renewal of licence.—**

(1) A licence granted under these rules may be renewed by the Chief controller.

(2) Every licence granted under these rules, may be renewable for three financial years where there has been no contravention of the Act or the rules framed thereunder or of any conditions of the licence so renewed.

(3) Where a licence which has been renewed for more than one year is surrendered before its expiry, the renewal fee paid for the unexpired portion of the licence shall be refunded to the licencee, provided that no refund of renewal fee shall be made for any financial year during which the Chief Controller receives the renewed licence for surrender.

(4) Every application for renewal of the licence shall be made in Form – I, or Form-I-A or Form – II, as the case may be, and shall be accompanied by the licence prescribed fee .

(5) Every application for the renewal of a licence shall be made so as to reach the licensing authority at least thirty days before the date on which it expires, and if the application is so made, the licence shall be deemed to be in force until such date as the Chief Controller renews the licence or until an intimation that the renewal of the licence is refused has been communicated to the applicant.

(6) Where the renewal of a licence is refused, the fee paid for the renewal shall be refunded to the licensee after deducting therefrom the proportionate fee for the period beginning from the date from which the licence was to be renewed upto the date on which renewal thereof is refused.

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

(i) if the application with accompaniments required under sub-rule (4)is not received within the time specified in sub-rule (5) , the licence shall be renewed only on payment of a fee amounting to twice the fee ordinarily payable;

(ii) if such an application with accompaniments is received by the Chief Controller after the date of expiry but not later than thirty days from that, the licence may, without prejudice to any other action that may be taken in this behalf, be renewed on payment of twice the fee ordinarily payable :

Provided further that in the case of an application for the renewal of a licence for a period of more than one financial year at a time, the fee prescribed under clause (i) or clause (ii) of the first proviso, if payable , shall be paid only for the first financial year of renewal.

(8) No licence shall be renewed if the application for renewal be received by the Chief controller after thirty days of the date of its expiry.

56. **Refusal of licence.—**

(1) The Chief Controller refusing to grant, amend, renew or transfer a licence, shall record his 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 a fee of rupees five paid in the manner specified in Rule 11.

57. Suspension and cancellation of licence.—

(1) Every licence granted under these rules shall be liable to be suspended or cancelled, by an order of the chief Controller for any contravention of the provisions of the Act or these rules or of any condition contained in such licence, or by an order of the

Central Government if at any time the continuance of the licence in the hands of the licensee is deemed objectionable :

Provided that –

(i) before suspending or cancelling a licence under this rule, the holder of the licence shall be given an opportunity of being heard;

(ii) the maximum period of suspension shall not exceed three months; and

(iii) 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 55.

(2) Notwithstanding anything in sub-rule (1) an opportunity of being heard may not be given to the holder of a licence before his licence is suspended or cancelled in case—

(i) where the licence is suspended by the Chief Controller as an interim measure for the violation of the provisions of the Act or these rules, or of any condition contained in such licence or in his opinion such violation is likely to cause imminent danger to the public:

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

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

(3) The Chief Controller or the Central Government suspending or cancelling a licence under sub-rule 91), shall record his or its reasons for so doing in writing.

58. **Procedure on expiration, suspension or cancellation of licence.—**A person licensed to store compressed gas shall, on the expiration, suspension or cancellation of his licence, forthwith give notice to the Chief Controller of the nature and quantity of compressed gas in his possession and shall comply with any directions which the Chief Controller may give in regard to its disposal.

59. **Appeals.—**

(1) An appeal shall lie with Central Government against any order passed by the Chief Controller refusing to grant, amend or renew a licence or cancelling or suspending a licence.

(2) Every appeal shall be in writing and shall be accompanied by a copy of the order appealed against and shall be presented within sixty days of the order passed.

60. **Procedure on death or disability of licensee.--**

(1) If a licensee dies or becomes insolvent or is mentally incapable or is otherwise disabled, the person carrying on the business of such licensee shall not be liable to any penalty or confiscation under the Act or these rules for exercising the powers granted to the licensee during such time as may reasonably be required to allow him to make an application for a new licence in his own name for the un-expired portion of the original licence in respect of the year in which the licensee dies or becomes insolvent or mentally incapable or is otherwise disabled :

Provided that nothing in this sub-rule shall be deemed to authorise the exercise of any power under this sub-rule by any person after the expiry of the period of the licence.

(2) A fee of rupees five shall be charged for a new licence for the un-expired portion of the original licence granted to any person applying for it under this rule.

61. **Loss of licence.—**When a licence granted under these rules is lost or accidentally destroyed, a duplicate may be granted on the submission of a copy of the plan or plans identical with those attached to the licence and on payment of a fee to rupees ten paid in the manner specified in Rule 11.

62. **Production of licence on demand.—**

(1) Every person holding or acting under a licence granted under these rules shall produce it, or an authenticated copy of it, at the place to which the licence applies, when called upon to do so by any of the officers specified in Rule 69

(2) Copies of any licence may, for the purpose of this rule, be authenticated by the authority which granted the licence—

(a) on payment of a fee of rupees five in the manner specified in Rule 11 for each authenticated copy; and

(b) on the submission of a copy or copies of the plans identical with the approved plan or plans attached tot he licence.

62A. Compliance of instruction of licensing authority – if the licensing authority calls upon the holder of the licence by a notice in writing to execute any repairs in the licensed premises which are, in the opinion of such authority, necessary for the safety of the premises, the holder of the licence shall execute the repairs within such periods as may be specified in the notice.

SCHEDULE
(See Rule 48)
Licence Forms, Purposes, Licensing Authority and Licence Fees

Sl. No.	Form of licence	Purpose for which granted	Authority empowered to grant licence	Fees
(1)	(2)	(3)	(4)	(5)
1.	III	To store compressed gas in pressure vessels	Chief Controller	(a) Where the total water capacity of vessels in an installation does not exceed 5,000 litres. Rs.1000.00 (b) Where the total water capacity of vessels in an installation exceeds 5,000 litres. Rs.1000 litres for the first 5,000 litres and for every additional 1,000 litres or part thereof Rs.500.00 subject to a maximum of Rs. 10,000.
2.	IV	To transport in a pressure vessel by vehicle	Chief Controller	Rs. 1000.00
3.	V	To store and dispense liquefied petroleum gas dispensing station as automative fuel to motor vehicles	Chief Controller	Same as the licence in Form III

SCEHDULE – II
(See Rule 30A)

Design, construction, testing and maintenance of dispenser for liquefied petroleum gas dispensing station and its pipe connections :-

a) The type of the dispenser used for dispensing liquefied petroleum gas shall conform to specification and be of a type approved by the Chief Controller.
b) The dispenser shall be provided with an excess flow valve, a remote operated shut-off valve and a pipe shear provision in that order in the liquid inlet pipe.
c) The dispenser shall be installed on a firm foundation and protected against physical damage.
d) A breakaway device with excess flow valves or quick action cut-off valves on both sides of the breakaway device conforming to Underwriters Laboratory, USA, specification number 567 or equivalent shall be provided on the delivery line form the dispenser before the connection of the hose so as to prevent spillage of liquefied petroleum gas from both sides of the breakaway point in the event of its breakage.
e) The dispensing nozzle at the end of the hose shall be of self sealing type of twenty two milimetres nominal size and suitable for matching with filler connection of cylinders fitted to vehicles as fuel tanks, as specified in Australian specification AS-1425 or other established standard approved by the Chief Controller.
f) The hose for delivery of liquefied petroleum gas by the dispenser to motor vehicles shall be suitable for commercial propane. The design pressure of the hose shall be minimum thirty two kilograms per square centimeters with a safety factor of five and shall be tested at one and half times of the design pressure at an interval not exceeding one year. The hose shall be electrically and mechanically continuous.
g) The length of the hose connected to the dispenser shall not exceed five meters and fifty centimeters.
h) Clearly identified switches and circuit breakers shall be provided at easily accessible location not less than six meters away from the dispenser to cut-off power supply in the event of fire, accident or other emergency. The switches or circuit breakers shall be visible from point of dispensing liquefied petroleum gas to motor vehicles.
i) Every dispensing unit from which liquefied petroleum gas introduced into the cylinders fitted to the motor vehicles, shall be equipped with self sealing type fuelling nozzle form which the liquid released on disconnection shall not exceed fifteen millimetres.
j) All metallic liquefied petroleum gas pipings shall be rated for Propane and designed to American Standard ASME-B-31.3 with minimum design pressure of thirty two kilogrames per square centimeters with a factor of safety of four. The materials of pipe shall be low carbon or alloy-steel conforming to American Standard ASTM-SA-333 grade 6, or SA-106 grade B Schedule 80, or API-5L or equivalent. The pipeline shall be tested at one and half times of pressure if pneumatically tested. Joints of pipeline above forty millimeters diameter shall be welded or flanged. Threaded or screwed connection shall not be provided except for special fittings like excess flow valve, pump connections upto fifty millimeters diameter:.

FORM - I

(See Rules 49, 54 and 55)

Application for grant, amendment or renewal of a licence to store and dispense liquefied petroleum gas in liquefied petroleum gas dispensing station as automotive fuel to motor vehicles.

DOCUMENTS LISTED OVERLEAF MUST BE ENCLOSED WITH THIS APPLICATION IT IS FOR THE GRANT OF A LICENCE IN FORM -V

The replies to be given in this column.

1. Applicant's name**

Applicant's calling

Applicant's Full postal address

2. Situation of the premises where liquefied petroleum gas is to be stored .

State

District

Town or Village

Nearest Railway Station

3. Type of liquefied petroleum gas proposed to be stored.

4. Chemical name and composition of liquefied petroleum gas proposed to be stored.

5. Quantity of the liquefied petroleum gas proposed to be stored.

6. Particulars of the licence held for the premises under these rules and Petroleum Rules, 1976, if any.

7. i) Quantity of liquefied petroleum gas already stored
   ii) Quantity of Petroleum already stored, if any

I hereby declare that the statements made above have been checked up by me and are true and I undertake to abide by the terms and conditions of the licence which will be granted to me.

Date of Application **Signature & designation of the applicant.**

**Where the application is made on behalf of a Company the name and address of the Company and the name of the Manager or Agent should be given and the application should be signed by him. Every change in the name of the Manager or Agent shall be forthwith intimated to and his specimen signature filed with the licensing authority.

DOCUMENTS REQUIRED TO BE SUBMITTED WITH APPLICATION FOR A LICENCE IN FORM - V

(i) Four copies of specification and plans approved under Rule 46. (NOT REQUIRED FOR RENEWAL OF A LICENCE WITHOUT AMENDMENT).

(ii) Specification with certificates of dispenser, pipings, hoses and other fittings. (required for grant or amendment of licence)

(iii) Licence together with approved plans and specifications attached thereto.(NOT REQUIRED FOR THE FIRST GRANT OF A LICENCE).

(iv) Fee for the grant, amendment or renewal of a licence specified under the scheduled, sub rule (2) of rule 54 and sub-rule (7) of rule 55, as the case may be, to be paid in the manner specified in Rule 11.

(v) A certificate of safety under Rule 33 (not required for renewal of licence).

FORM - II

(See Rules 49 and 54)

Application for the grant or amendment of a licence to transport compressed gas in a vehicle

DOCUMENTS LISTED OVERLEAF MUST BE SUBMITTED WITH THIS APPLICATION

1. Applicant's name and full postal address _____
2. Particulars of the vehicle in which compressed gas is proposed to be transported _____
   (i) Make and Model _____
   (ii) Engine number _____
   (iii) Chassis number _____
   (iv) Registered number _____
   (v) Date upto which the vehicle is registered _____
   (vi) Name and full postal address of the registered owner
3. Name of the compressd gas proposed to be transported (Please state whether flammable, corrosive or toxic).
4. Chemical name of compressed gas to be transported in the vehicle
5. Water capacity of the pressure vessel and net weight of the compressed gas proposed to be transported.
6. Number and date of approval of the design drawing of the vehicle by the Chief Controller _____
7. Does (vehicle described above) fully conform to the requirements laid down in the rules and the design drawing approved by the Chief Controller.
8. Full postal address of the place where the vehicle will be normally stationed. _____

I/We declare that the particulars given above have been checked up by me/us and are correct. I/We undertake to transport compressed gas in the vehicle particulars of which are given above, in accordance with the provisions of the Indian Explosives Act, 1884 and the Static and Mobile Pressure Vessels (Unfired) Rules, 1981 framed thereunder and any other law or rule for the time being in force. I/We under stand that any contravention of the said Act and the rules framed thereunder is punishable with imprisonment for a term which may extend to two year, or with fine which may extend to three thousand rupees, or with both.

Place:

Date: **Signature of applicant**

DOCUMENTS REQUIRED TO BE SUBMITTED WITH THIS APPLICTION

(1) Two copies of drawing approved under Rule 35.
(2) Safety certificate required under Rule 43.
(3) Expired licence, if the vehicle was previously licensed.
(4) Required amount of fee paid in the manner specified in Rule 11.

FORM - III

(See Rules 49 and 50)

LICENCE TO STORE COMPRESSED GAS IN PRESSURE VESSEL OR VESSELS

Licence No._____ Fee Rs. _____

Licence is hereby granted to _____ _____ valid only for the storage of _____ cubic metres _____Kgs. in _____ _____ No. of pressure vessels in the licensed premises described below and shown in the plan No. _____ subject ot the provision of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

The licence shall remain in force upto the 31st day of march 19_____.

The _____19 Chief Controller of Explosives

DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. _____ are situated _____ and consists of _____ for storage of

(a) Flammable/Corrosive/Toxic gases _____

(b) non-toxic Gases _____

and situated at _____

(Plot number) (Name of Street) (Village or Town) (Police Station) District).

Space for Endorsement or Renewals

The licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision f the Indian Explosives Act, 1884, or the Static and Mobile Pressure Vessels (Unfired) Rules, 1981 framed thereunder or of the conditions of the licence.	Date of renewal	Date of expiry	Signature and office stamp of the licensing authority

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and for contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years, or with fine which may extend to three thousand rupees, or with both.

CONDITIONS

1. The licensed premises shall not be used for any purpose other than storage and transfer of compressed gas and purposes directly connected therewith.

2. The compressed gas shall be stored only in one or more vessels of capacity……cubic metres……Kg. and in position shown in the approved plan attached hereto.

3. Every vessel shall be outside any building and shall be supported on well designed foundations.

4. The storage vessel shall at all times maintain from any other facility, building, boundary, fencing or protected works the distances specified in Table I and Table II of Rule 22.

5. A suitable hard stand for parking of the vehicle during loading or unloading of any compressed gas shall be provided . The following minimum safety distances shall be provided between the centre of the hard stand and the storage vessel or boundary line of installation; as well as between the loading or unloading points and storage vessel or boundary line of installation, -

   i) As per Table- 4(A) or Table- 4(B), as the case may be, in case of refinery, terminal and cylinder filling plants for flammable liquefied gases

   ii) Four metres and fifty centimeters in case of non-corrosive, non-toxic and non-flammable gases;

   iii) Nine meters in all other cases

6. All fitments of the vessel shall be well maintained.

7. No alteration of the position of the vessel and no replacement of the vessel shall be effected except with the previous sanction, in writing, of the licensing authority. All alterations so sanctioned under this condition shall be shown on an amended plan to be attached to the licence.

8. If the licensing authority calls upon the holder of a licence by a notice in writing to execute any repairs in the licensed premises which are, in the opinion of such authority, necessary for the safety of the premises, the holder of the licence shall execute the repairs within such period as may be specified in the notice.

9. Every vessel before being repaired or exhumed shall be made free of compressed gas and thoroughly cleaned. When a vessel is opened for cleaning or repairs, no lamp of any description either ordinary or electric, electric cables or fans and no articles, appliances or equipment capable of igniting flammable vapours shall be brought near the vessel.

10. No person shall cause to repair or repair either by the use of fire, welding, hot riveting or brazing any vessel used for the storage of flammable gas unless it has been thoroughly cleaned and gas-freed or otherwise prepared for safely carrying out such hot work and certified in writing, by a competent person, to have been so prepared. Where the vessel has been certified as gas-free, the certificate shall be preserved by the licensee for a period of not less than three months and produced to the Chief Controller, on demand.

11. No person shall enter any vessel used for the storage of a toxic or corrosive gas unless he is adequately protected by means of clothing, gas masks and such other protective equipment.

12. Compressed gas shall enter the vessel through sound pipes having no leaks at any place.

13. The vessel shall not be filled between the hours of sunset and sunrise, except in such manner and under such other condition or conditions as are specifically endorsed on the licence by the licensing authority.

14. No artificial light capable of igniting flammable vapour shall at any time be present within 9 metres of the vehicle and the loading or unloading points during the transfer of the compressed gas and no person engaged in such transfer shall smoke.

15. No compressed gas shall be removed from the vessel except b;;y means of transfer facilities marked in the plan attached hereto.

16. All electrical equipment such as motors switches, starters, etc., used for transfer of flammable compressed gas shall be of flameproof construction conforming to IS:2148.

17. Every person managing or employed on or in connection with the licensed premises shall abstain from any act whatsoever which tends to cause fire or explosion and which is not reasonably necessary and to the best of his ability, shall prevent any other person from doing such act.

18. The licensee shall provide for each licensed premises a minimum of two portable foam type or dry chemical type fire extinguishers of 9 kg. capacity each, which shall be kept ready at convenient location for immediate use in the event of any fire.

19. Except for necessary pipes and valves and approved electric lights the space within the licensed premises shall be kept entirely clear and unoccupied.

20. All valves in the premises must be permanently marked in a manner clearly indicating the direction of opening and shutting the valve.

21. Any accident, fire or explosion within the licensed premises which is attended with loss of life or serious injury to person or property shall be immediately reported to the nearest Magistrate or to the officer in-charge of the nearest police station and by express telegram to the Chief Controller of Explosives (Telegraphic address—"EXPLOSIVES" Nagpur).

22. Free access to the licensed premises shall be given at all reasonable times to any of the officers specified in Rule 69 and every facility shall be afforded to such officer for ascertaining that the rules and the conditions of this licence are duly observed.

"FORM - IV"

(See rules 49 and 50)

LICENCE TO TRANSPORT COMPRESSED GAS IN A PRESSURE VESSEL BY A VEHICLE

Licence No._____ Fee Rs._____

Licence is hereby granted to _____ to transport compressed gas by the vehicle as described below subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

This licence will remain valid upto the 31st day of March _____(year)

Date of Issue: Chief Controller of Explosives

DESCRIPTION OF THE VEHICLE

Make and Model _____ Engine Number _____

Chassis Number _____Registration Number _____

Name of the registered owner _____
Chemical name of the compressed gas to be carried in the Vehicle _____
Authorised carrying capacity of the container _____

ENDORSEMENT OF RENEWALS

Date of Renewal _____Date of Expiry _____Signature and office Stamp of the LicensingAuthority_____This licence is liable to be cancelled if the licensed vehicle is not found conforming to the requirements of chapters II and IV of the Static and Mobile Pressure Vessels (Unfired) Rules 1981, or for the contravention of any of the said rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for a term which may extend to two years or with fine which may extend to three thousand rupees, or with both.

CONDITIONS

1. The licence or its authenticated copy shall at all times be kept in the licensed vehicle and produced on demand by an officer specified in Rule 69.
2. Only responsible persons who are conversant with the conditions of this licence shall be employed for driving the licensed vehicle or attending to it.
3. The licensed vehicle shall be constantly attended to by a responsible person and by at least two persons while it is transporting compressed gas:

   Provided that the licensed vehicle may, if empty, be kept unattended in a place approved for the purpose, in writing, by the Chief Controller.
4. The licensed vehicle shall at all times carry –

   (a) at least two portable fire extinguishers of capacity not less than 9 litres and suitable for extinguishing chemical fires;

   (b) a strong flexible cable for electrical bonding in case of vehicle used for transportation of flammable compressed gas; the cable shall be at least 5 metres long and shall have at each end a suitable clamp or clip.
5. The licensed vehicle shall not be loaded or unloaded except in a place which is approved within the premises licensed for the purpose under the rules by the Chief Controller.
6. No vehicle shall discharge any compressed gas directly, into any process vessel in operation.
7. The licensed vehicle shall not be loaded if any of the fitments including vessel becomes leaky, defective or otherwise insecure.
8. Before compressed gas is loaded into or unloaded from the licensed vehicle –

   (a) its engine shall be stopped and the battery shall be isolated by a proper switch or otherwise;

   (b) its wheels shall be secured by brakes or by scotching;

   (c) its chassis shall be electrically bonded by a cable with the pipe into or from which it is to be loaded or unloaded, in case of vehicle used for transportation of flammable compressed gas;

   (d) the correct filling or discharge pipe connections are made at both ends;

   (e) a responsible person shall be in attendance and remain so until loading or unloading is over and the vehicle has been sealed.
9. Except when called upon by traffic signals or required by the licensing authority or any other officer entrusted with the job of enforcing the rules, the licensed vehicle shall not stop on any road, congested area or a place which is not a place situated within the premises licensed under the rules for the loading and unloading of vehicle.
10. No smoking and no fire or artificial light or any article capable of igniting flammable vapour shall be allowed on the licensed vehicle used for the transportation of any flammable gas.

11. The licensed vehicle shall not be used for carrying passengers.

12. The licensed vehicle shall not be allowed to be repaired :

Provided that replacement by any of the fitments of the pressure vessel may be done without involving any hot work.

13. No alteration in the licensed vehicle or its safety fittings shall be carried out without previous sanction in writing of the licensing authority. Such alteration so sanctioned shall be endorsed on the licence by an amendment.

14. Every facility shall be given at all reasonable times to any officer specified in Rules 69 for ascertaining that the rules and the conditions of this licence are duly observed.
Any accident, fire or explosion occurring in the licensed vehicle, which is attended with loss of human life or serious injury to person or property shall be immediately reported to the nearest magistrate or to the officer-in-charge of the nearest police station having jurisdiction and by express telegram to the Chief Controller of Explosives. (Telegraphic address "EXPLOSIVES" Nagpur).

FORM – V

(See rules 49 and 50)

LICENCE TO STORE AND DISPENSE LIQUEFIED PETROLEUM GAS IN LIQUEFIED PETROLEUM GAS DISPENSING STATION AS AUTOMOTIVE FUEL TO MOTOR VEHICLES.

Licence No :_____ Fee Rs. _____

Licence is hereby granted to _____valid for storage of _____kilograms of liquefied petroleum gas in _____numbers pressure vessels in the premises described below and dispensing of liquefied petroleum gas as automotive fuel to motor vehicles, subject to the provisions of the Indian Explosive Act, 1884 (4 of 1884) and the Static and Mobile Pressure Vessel (Unfired) Rules, 1981.

The licence shall remain in force upto 31st March_____the _____(Date of Issue)

Chief Controller of Explosives

DESCRIPTION OF LOCATION AND FACILITIES OF THE LICENSED PREMISES

The licenced premises, the layout, boundaries and other particulars of which are shown in the attached approved plan No. _____dated _____are situated at (address)_____and consists of :-

i) Storage vessels_____

(Identification number and water capacity) (specify whether aboveground, mounded or underground)

ii)_____numbers dispensers, make_____

iv) other facilities_____

SPACE FOR ENDORSEMENT OF RENEWALS

The licence shall be renewable without any concession in fee for three years in the absence of contravention of the provisions of the Indian Explosives Act, 1884 or Vessels (Unfired) Rules, 1981 framed thereunder, or of the condition of the licence.	Date of Renewal	Date of Expiry	Signature and Office Stamp of the Licensing Authority

This licence is liable to be cancelled if the licensed premises are not found confirming to the description and conditions attached hereto and for contravention of any of the rules and conditions under which this licence is granted. The holder of this licence is also liable for punishment under section 9 B of the Explosives Act, 1884 for the contraventions of the provisions of the said Act and the rules framed thereunder.

CONDITIONS

1. The licensed premises shall conform to the description of location and facilities and to the approved plan, as mentioned on the body of the licence.
2. The licensed premises shall be used only for the purpose it is licensed for.
3. Liquefied petroleum gas shall be stored only in one or more pressure vessels installed aboveground, underground or aboveground covered with earth (mound) as per provisions of these rules.
4. Liquefied petroleum gas storage vessel, dispenser, pumps, compressor, pipings and other fittings shall be of a design suitable for commercial propane.
5. Storage vessels shall not be installed within any building or shed.
6. A hard stand for parking the tank-truck for the purpose of unloading liquefied petroleum gas into the storage vessels shall be provided as per rules.
7. The facilities and equipments of the licensed premises shall meet the safety distance requirements as specified in Table-5 of rule 22.
8. Liquefied petroleum gas shall be dispensed only into those cylinders used as fuel tanks of motor vehicles, which are duly approved by the Chief Controller, and have passed the periodic statutory tests under Gas Cylinders Rules, conducted by a testing station recognised by the Chief Controller.
9. The type of the dispenser used for dispensing liquefied petroleum gas shall conform to a specification approved by the Chief Controller.
   a) It shall be provided with an excess flow valve, a remote operated shut-off valve and pipe shear provision in the liquid inlet pipe.
   b) The dispenser shall be installed on a firm foundation and protected against physical damage.
   c) A breakaway device with excess flow valves or quick action cut-off valves on both sides of the breakaway device conforming to Underwriters Laboratory USA, specification no 567 or equivalent shall be provided on the delivery line from the dispenser before the connection of the hose so as to prevent spillage of liquefied petroleum gas from both sides of the breakaway point in the event of its breakage.
10. The design pressure of the hose for delivery of liquefied petroleum gas by dispenser to motor vehicles shall be minimum thirty two kilograms per square centimetre with a safety factor of five and shall be tested at one and half times the design pressure at an interval not exceeding every one year. The hose shall be mechanically and

electrically continuous. The length of the hose shall not exceed five meters and fifty centimeters.

11. The dispensing nozzle at the end of the hose shall be self sealing type of twenty two millimeters nominal size and suitable for matching with filling connection of cylinders fitted to vehicles as fuel tanks, as specified in Australian Specification AS-1425 or equivalent standard approved by the Chief Controller.
12. Clearly identified switches or circuit breakers shall be provided at easily accessible location minimum six meters away from dispenser to cut-off the power supply in the event of fire, accident or other emergency. The switches or circuit breakers shall be visible from the point of dispensing liquefied petroleum gas to motor vehicles.
13. Pump used for pumping liquefied petroleum gas shall be of either centrifugal submersible or positive displacement type. Positive displacement pump shall be provided with bye-pass to prevent over-pressure.
14. Hazardous area classification for the dispenser shall be as under :-
    a) Entire space with in the dispenser enclosure cabinet and forty six centimeters horizontally from the exterior of enclosure cabinet and upto an elevation of one hundred and twenty one centimeters above dispenser base and the entire pit or open space beneath the dispenser shall be Division-2.
    b) Upto forty six centimeters vertically above the surrounding ground level and horizontally beyond forty six centimeters upto six meters on all sides of the dispenser enclosure cabinet shall be Division-2.
15. All metallic liquefied petroleum gas pipings shall be rated for Propane and designed to American Standard ASME-B-31.3 with minimum design pressure of thirty two kilograms per square centimetres with a factor of safety of four . The materials of pipe shall be low carbon or alloy-steel conforming to American Standard ASTM-SA-333, grade 6, or SA-106, Grade-B-Schedule 80; or API-5L or equivalent. The pipeline shall be tested at one and half times of the design pressure, if hydro-tested. Joints of pipeline above forty millimeters diameter shall be welded or flanged. Threaded of screwed connection shall not be provided except for special fittings like excess flow valve, pump connection upto fifty millimeters diameter.
16. No addition or alteration in the licensed premises shall be carried out without prior sanction of the licensing authority.
17. No person shall enter or cause to repair or repair either by the use of fire, welding, hot riveting or brazing any vessel used for the storage of flammable gas unless it has been thoroughly cleaned and gas-freed or otherwise prepared for safely carrying out such hot work and certified in writing, by a competent person, to have been so prepared. Where the vessel has been certified as gas-free, the certificate shall be preserved by the licensee for a period of not less than six months and produced to the Chief Controller, on demand.
18. The operation of the licensed premises shall be under the supervision of a person having knowledge of the equipments used in the premises and trained in handling compressed gas, and other operators shall be conversant with the hazards associated with the compressed gas and fire fighting operations.
19. Liquefied petroleum gas shall not be removed from the vessel except by means of transfer facilities shown in the approved plan attached to the licence.
20. Smoking, naked lights, lamps, source of fire or any other stimulant capable of igniting flammble vapours shall not be allowed inside the premises.
21. The vessel shall not be filled between the hours of sunset and sunrise, except in such manner and under such other condition or conditions as are specifically endorsed on the licence by the licensing authority.

22. All electrically equipment such as motors switches, starters, etc, used for transfer of liquefied petroleum gas shall be of flameproof construction conforming to IS:2148 or of a type approved by Chief Controller.
23. Every person managing or employued on or in connection with licensed premises shall abstain from any act whatsoever which tends to cause fire or explosion and which is not reasonably necessary and to the best of his ability, shall prevent any other person from doing such act.
24. At least two numbers of nine kilograms capacity dry chemical type fire-extinguishers shall be provided near the tank-truck unloading area and one number similar extinguisher shall be provided near each dispenser and transfer pump location. In dispensing station having aboveground liquefied petroleum gas storage vessels, hydrants with minimum water pressure of seven kilograms per square centimeters shall be provided at convenient positions for all-round coverage of liquefied petroleum gas storage vessels, and handling area and water sprinklers with a spray density of ten litres per minute per square metre shall be provided. The fire water pump shall be preferably diesel engine driven, with capacity to deliver water at the rate and pressure specified above. The minimum fire water storage at the premises shall be needed for fighting fire at least for one hour.
25. During the period of unloading of liquefied petroleum gas from tank-truck to the storage vessels dispensing operation to vehicles shall not be carried out.
26. The emergency telephone numbers of local fire service, police and the principal marketing company, and emergency instructions shall be conspicuously displayed in the licensed premises.
27. All valves on the vessel and pipelines in the premises must be permanently marked in a manner clearly indicating the direction of opening and closing.
28. If the licensing authority calls upon the holder of a licence by a notice in writing to execute any repairs in the licensed premises which are, in the opinion of such authority, necessary for the safety of the premises, the holder of the licence shall execute the repairs within such period as may be specified in the notice.
29. Any accident, fire or explosion within the licensed premises which is attended with loss of like or serious injury to person or property shall be immediately reported to the nearest Magistrate or to the officer-in-charge of the nearest police station and by express telegram to the Chief Controller of Explosives (Telegraphic address – "EXPLOSIVES' Nagpur)
30. Free access to the licensed premises shall be given at all reasonable times to any of the officers specified in rule 69 and every facility shall be afforded to such officer for ascertaining that the rules and the conditions of this licence are duly observed".

63. **Procedure on reports of infringement.--** The district authority shall inform the Chief Controller of the action taken by him on any reports of infringement of the Act or of these rules which the Chief Controller may make to him.

64. **Executive control over authorities.—**Every authority, other than the Central Government, acting under this Chapter shall perform its duties subject to the control of the Central Government :

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

CHAPTER VI

EXEMPTION

65. **Powers to exempt.—**The Central Government may, on the recommendation of the Chief Controller, in exceptional cases, by order and for reasons to be recorded in writing, exempt storage and transportation of any compressed gas in any vessel from all or any of the provisions of these rules on such conditions, if any, as may be specified in the order

CHAPTER VII

ACCIDENTS AND INJURIES

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

(i) to the Chief Controller by express telegram (telegraphic Address - Explosives, Nagpur) followed within twenty-four hours by a letter giving particulars of the occurrence; and

(ii) to the officer-in-charge of the nearest police station by the quickest route. Pending the visit of the Chief Controller, or his representative, or until instruction is received from the Chief Controller 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 through communication.

67. **Inquiry into accidents.—**

(1) Whenever a District Magistrate, a Commissioner of Police or a magistrate subordinate to a District magistrate holds an inquiry under sub-section (1) of Section 9 of the Act, he shall adjourn such an inquiry unless the Chief Controller or an officer nominated by him is present to watch the proceedings or the Magistrate has received written information from the Chief Controller that he does not wish to send a representative.

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

(3) where an accident has been attended with loss of human life, the Magistrate, before the adjournment, may take evidence to identify any body and may order the internment thereof.

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

(5) Where evidence is given at an inquiry at which the Chief Controller or an officer nominated by him is not present , of any neglect as having caused or contributed to the explosion or accident or of any defect in or about or in connection with any installation or any vehicle appearing to the Magistrate or Jury to require a remedy, the Magistrate shall send to the Chief Controller notice in writing of the neglect or defect.

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

(1) whenever an inquiry is held under Section 9-A of the Act, the persons holding such inquiry shall hold the same in open court in such manner and under such conditions as they may think most effectual for ascertaining the causes and circumstances of the accident, and enabling them to make the report under this rule :

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

(2) Persons attending as witnesses before the Court under sub-rule (1) shall be allowed such expenses as are paid 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 any dispute as to the amount to be allowed, the question shall be referred to the local Magistrate who, on a request being made to the Court, shall ascertain and certify the proper amount of such expenses.

(3) All expenses incurred in or about in inquiry or investigation under this rule shall be deemed to be part of the expenses of the Department o Explosives in carrying the Act into execution.

CHAPTER VIII

POWERS

69. **Powers of inspection, search, seizure, detention and removal.—** (1) Any of the officer specified in the first column of the Table below may exercise the powers mentioned in sub-section (1) Section 7 of the act in the areas specified in the corresponding entry in the second column of that Table:--

Officers	***Areas***
(1)	(2)
1. The Chief Controller, Deputy Chief Controller, Controllers, And Deputy Controllers of Explosives and Assistant Controllers of Explosives.	The whole of India.
2. All district Magistrates	Their respective districts.
3. All Magistrates subordinate to the District Magistrate.	Their respective jurisdictions.
4. The Commissioners of Police.	Their respective jurisdictions.
5. Deputy Commissioners of Police subordinate to the Commissioners of Police	The respective areas over which their authority extends.
6. All police officers not below the rank of a Sub-Inspector.	The respective areas over which their authority extends.

Provided that the powers of removal and destruction under clause (d) of sub-section (1) of Section 7 of the Act shall not be exercised by any Magistrate or police officer except under and in accordance with the instructions of the Chief Controller, Deputy Chief Controller, Controllers, And Deputy Controllers of Explosives and Assistant Controllers of Explosives.

(2) Every facility shall be afforded to the officers specified in sub-rule (1) to ascertain that these rules are being duly observed.

APPENDIX - I

[See Rule 4(2)]

1. Applicants name an full address.

2. Whether the applicant has manufactured any unfired pressure vessel. Yes/No

If yes—

(i) date from which such vessels were manufactured.

(ii) For whom the vessels were fabricated and there approximate numbers.

(iii) Details of the vessels manufactured.

3. Specifications of Code proposed to be adopted for the manufacture of the vessels or containers.

4. Organisational set-up with specific reference to qualifications and experience of the personnel engaged in the manufacture of vessels.

5. Organisational set-up of the inspecting personnel engaged by the applicant.

6. Process of manufacture of vessels or containers, beginning with raw material and ending with the finished vessels or containers.

7. Quality control checks or tests carried out at each stage of manufacture of vessels or containers.

8. (i) Details of the equipment installed for chemical analysis and mechanical tests.

(ii) Details of templates or gauges provided to check or test.

(iii) Steps taken to check the accuracy of testing and checking equipment and frequency of such checking.

9. Equipment available for carrying out non-destructive examination such as radio-graphy, Gamma ray, ultrasonic tests, etc.

10. List of machinery provided for manufacturing vessels or containers.

11. Name and address of the independent inspecting authority.

12. Records and certificate of tests:-

(i) Proforma of records for various tests carried out by the inspecting and certifying organisation; and

(ii) Proforma of tests and inspection certificate issued by the independent inspecting authority.

APPENDIX - II

[See rule 2(d) and 2 (p)]

QUALIFICATION AND EXPERIENCE OF INSPECTOR OR COMPETENT PERSON

Sl. No	Rule under which competency is recognised	Qualification and other requirements	Experience for the purpose	Minimum facilities
1.	Rules 12(3)	(1)Degree in chemical or Mechanical or Metallurgical or Marine Engineering from a recognised university or equivalent	(1) A minimum experience of 10 years in design, fabrication and stage-wise inspection during fabrication of pressure vessels and equipments operating under pressure. He shall be – (a)Conversant with the relevant codes of fabrication and test procedures relating to	Standard gauges and instruments conforming to national/international standards for test and examination at every stage of fabrication. Either the Inspector shall have these or these shall be available

		professional qualifications. (2) Physically fit and mentally sound for carrying out tests and examination.	pressure vessels and their fitting. (b)Conversant with the statutory requirements concerning design and safety of unfired pressure vessels.	to him. The Inspector shall be responsible for ensuring th equality and accuracy of these gauges and instrument used by him. A documented system to ensure this shall be maintained by the Inspector.
2.	Rule 18,19, 33, 43 &44	(1) Degree in Chemical or Mechanical Engineering or Marine Engineering or equivalent professional qualifications.	(1) A minimum experience of 10 years in— (a) Design and fabrication, erection , operation, maintenance and; (b) testing examination and inspection of pressure vessels or equipment operating under pressure.	Standard gauges, pumps and gadgets for hydraulic and pneumatic pressure tests, non-destructive tests, equipments for ultrasonic thickness test, ultrasonic flaw detection magnetic particle inspection and any other test that may be required by Chief Controller in specific cases. Either the Competent Person shall have these facilities or these shall be available to him. The Competent Person shall be responsible for ensuring the quality and accuracy of the gauges and equipments and the competence of any person that may be employed for performing a non-destructive test.
		(2) Physically fit and mentally sound for carrying out tests and examinations.	(2) He shall be— (a) conversant with the relevant code of practice and test procedures relating to pressure vessels; (b) conversant with statutory requirements concerning safety of unfired pressure	

vessels installations & transport vehicles.

(c) conversant with non-destructive testing techniques as are applicable to pressure vessels.

(d) able to identify defects and arrive at a reliable conclusion with regard to the safety of pressure vessels.

APPENDIX - III

[See rule 2(p) and 11A]

A. Application of recognition as competent person under the static and mobile pressure vessels (unfired) Rules, 1981.

[See rules 18,19,33,43 & 44(2)]

1. Name & Full address of the organisation :
2. Organisation status (specify whether individual or Govt., Autonomous, co-operative, Corporate or Pvt. Body registered under Company Act.)
3. Purpose for which competency is sought (Specify the rules)
4. Whether the organisation/person has been declared as a competent person under any other status, if so, give details.
5. (i) Set up of the organisation/person.

   (ii) Name & qualification (of constituent members is case of organisation).

   (iii) Experience (of constituent members in case of organisation0 with regard to fabrication, installation, maintenance in case of transport vehicles and examination and testing of pressure vessels and various fittings and in other related fields. Please refer to requirements mentioned in column 4 of Appendix II. (Please attach documentary evidence of the experience).
6. Particulars of equipment, Gauges etc. available with the Organisation for carrying out the inspection/Testings.
7. Details of the procedures followed in carrying out stage by stage inspection/test for certification under different rules.
8. Any other information.
9. Declaration

I _____ hereby, on behalf of _____ Certify the details furnished above are correct to the best of my knowledge. I undertake to -

(i) maintain the facilities is good working order and calibrated periodically;

(ii) to fulfil and abide by all the conditions stipulated in the certificate of competency and instructions issued by the Chief Controller from time to time.

Place: **Signature of the Head of the organisation**

Date: **Name & Designation**

Seal of the Institution

B. Application for recognition as an inspector coming under the purview of static and mobile pressure vessels(unfired) Rules, 1981.

[See rules 12(2)]

1. Name & Full address of the organisation :
2. Organisation status (specify whether individual or Govt., Autonomous, co-operative, Corporate or Pvt. Body registered under Companies Act.)
3. Whether the organisation/person has been declared as a competent person under any other status, if so, give details.
4. (i) Set up of the organisation.

   (ii) Name & qualification of its constituent members.

   (iii) Experience of the organisation and constituent members with regard to stage-wise inspection during fabrication of pressure vessels and various fittings and in other related fields. Please refer to requirements mentioned in column 4 in Appendix II. (Please attached documentary evidence of the experience).
5. Particulars of equipment, Gauges etc. available with the Organisation for carrying out the inspection/Testing.
6. Details of the procedures followed in carrying out stage by stage inspection/test for certification.
7. Proforma of test and Inspection certificates to be issued to various parties.
8. Any other information.
9. Declaration

I _____hereby, on behalf of _____ Certify the details furnished above are correct to the best of my knowledge. I undertake to fulfil and abide by all the conditions stipulated in the certificate of competency and instructions issued by the Chief Controller from time to time.

Place: **Signature of the Head of the organisation**

Date: **Name & Designation**

Seal of the Institution

C. Application for Grant of certificate of competency to a person for certifying storage installations or transport vehicles owned and operated by the organisation in which he is employed.

1. Name
2. Date of birth
3. Name of the organisation

4. Designation
5. Educational qualification (Copies of testimonials to be attached)
6. Particulars of professional experience (in chronological order):

Name of the organisation	Period of service	Designation	Area of responsibilities

7. Membership, if any, of professional bodies.
8. Details of facilities (examination, testing etc.) at his disposal.
9. Purpose for which competency certificate is sought (specify the rules).
10. Whether the applicant has been declared as a competent person under any statute (if so, give details)
11. Any other relevant information.
12. Declaration by the applicant.

I hereby declare that the information furnished above is true. I undertake –

(a) that is the event of my leaving the aforesaid organisation, I will promptly inform the Chief Controller;

(b) to fulfill and abide by all the conditions stipulated in the certificate of competency and instruction issued by the Chief Controller from time to time.

Place:

Date: **Signature of applicant**

I _____ certify that Shri. _____ whose particulars are furnished above, is in our employment and nominate him on behalf of the organisation for the purpose of being declared as a competant person under the rules. I also undertake that I will

(a) notify the Chief Controller in case the competent person leaves our employment;

(b) provide and maintain in good order all facilities at his dispoasal as mentioned above;

(c) Notify the Chief Controller any charge in the facilities.

Place: **Signature**
Date: **Name and Designation _____**
Telephone No._____
Telex No. _____
Official Seal

***Example : “An officer in a refinery for certifying LPG storage vessels or the installation”**