

## INTRODUCTION

### Objectives, Definitions, Enforcement, Exemption etc., in the Gas Cylinder Rules, 2004.

**Objective of the Gas Cylinder Rules** : Compressed gases viz., permanent gas, liquefiable gas or gas dissolved in liquid when filled in a metallic container pose potential hazard when explode. Hence, Govt. of India, Department of Labour vide Notification No. M-1272(1) dated 28/09/1938 has declared compressed gas filled in metallic container as an 'explosives' under Section 17 of the Explosives Act, 1884 (IV of 1884) within its meaning. The Central Government in exercise of power under Section 5 & 7 of the said Act had promulgated the rules namely **Gas Cylinder Rules, 2004** to regulate filling, possession, transport and import of such gases. The objective of these Rules is to ensure safety of the public engaged in the activity of filling, possession, transport and import of such gases.

#### Definitions- In these rules unless the context otherwise requires, -

- i) **"Act"** means the Explosives Act, 1884 (4 of 1884);
- ii) **"Auto LPG"** means liquefied petroleum gas meant for automotive fuel conforming to specification IS:14861;
- iii) **"Chief Controller"** means the Chief Controller of Explosives, Government of India;
- iv) **"composite cylinder"** means a cylinder made of resin impregnated continuous filament wound over a metallic or a non-metallic liner. Composite cylinders using non-metallic liners are referred to as all-composite cylinders;

1

(v) **"compressed gas"** means any permanent gas, liquefiable gas or gas dissolved in liquid under pressure or gas mixture which in a closed gas cylinder exercises a pressure either exceeding 2.5 kgf/cm<sup>2</sup> abs (1.5 kgf/ cm<sup>2</sup> gauge) at +15<sup>0</sup> C or a pressure exceeding 3kgf/ cm<sup>2</sup> abs (2 kgf/ cm<sup>2</sup> gauge) at + 50<sup>0</sup> C or both; *Explanation* – Hydrogen Fluoride falls within the scope of compressed gas although its vapour pressure at 50<sup>0</sup> C is 1.7 to 1.8 atmospheric gauge;

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

(vii) **"Controller"** includes the Joint Chief Controller of Explosives, the Deputy Chief Controller of Explosives, the Controller of Explosives and the Deputy Controller of Explosives;

(viii) **"Compressed Natural Gas (CNG)"** means mixtures of hydrocarbon gases and vapours, consisting mainly of Methane in gaseous form, which has been compressed for use as automotive fuel;

(ix) **"CNG mother station"** means CNG facilities connected with natural gas pipeline and having a compressor meant primarily to fill mobile cascades of daughter station. Such stations may also have stationary cascade for CNG dispensing to vehicles;

(x) **"CNG online station"** means CNG facilities connected with natural gas pipeline and having a compressor primarily to fill stationary cascades for dispensing CNG to vehicles;

(xi) **"CNG daughter station"** means CNG facilities not connected to natural gas pipeline. Such CNG dispensing station receives CNG through mobile cascade;

(xii) **"critical temperature"** means the temperature above which gas cannot be liquefied by the application of pressure alone;

(xiii) **"dissolved acetylene cylinder"** means a cylinder having a valve and with or without safety devices, containing a porous mass, a solvent for the storage of dissolved acetylene and at least sufficient acetylene to saturate the solvent at atmospheric pressure and at a temperature of +15<sup>0</sup> C;

Explanation.-Acetone or any other solvent used shall not be capable of chemical reaction with the acetylene gas or with the porous mass or with the metal of the cylinder or valve;

(xiv) "dissolved gas" means a gas which under pressure is dissolved in a fluid solvent appropriate to the particular gas as for example, acetylene in acetone or ammonia in water;

(xv) "district authority" means-

(a) a Commissioner of Police or Deputy Commissioner of Police in any town having a Commissioner of Police; and

(b) in any other place, the District Magistrate;

(xvi) "District Magistrate" includes an Additional District Magistrate, and in the States of Punjab and Haryana and in the Karaikal, Mahe and Yanam areas of the Union Territory of Pondicherry, also includes a Sub-Divisional Magistrate;

(xvii) "filling pressure" means the maximum permissible gauge pressure, converted to + 15<sup>0</sup> C, at which a gas cylinder for permanent gas or gas dissolved under pressure can be filled;

(xviii) "filling ratio" means the ratio of the weight of a liquefiable gas introduced in the cylinder to the weight of the water the cylinders will hold at 15<sup>0</sup> C;

(xix) "flammable gas" means any gas which, if either a mixture of 13 per cent or less (by volume) with air forms a flammable mixture or the flammability range with air is greater than 12 per cent regardless of the lower limit and these limits shall be determined at atmospheric temperature and pressure;

Explanation.-"flammability range" means the difference between the minimum and maximum percentages by volume of the gas in mixture with air that forms a flammable mixture;

(xx) "Form" means a Form set forth in Schedule V;

(xxi) "Gas Cylinder" or "Cylinder" means any closed metal container having a volume exceeding 500 ml but not exceeding 1000 litres intended for the storage and transport of compressed gas, including any liquefied petroleum gas (LPG) container/compressed natural gas (CNG) cylinder fitted to a motor vehicle as its fuel tank but not including any other such container fitted to a special transport or under-carriage and includes a composite cylinder, however, the water capacity of cylinders used for storage of CNG, nitrogen, compressed air, etc. may exceed 1000 litres up to 2500 litres provided the dia meter of such cylinder does not exceed 60 cm;

(xxii) "high pressure liquefiable gas" means a liquefiable gas having a critical temperature between - 10<sup>0</sup> C and + 70<sup>0</sup> C;

(xxiii) "hydrostatic stretch test" means subjecting the cylinder to a hydrostatic pressure equal to the test pressure of the cylinder and recording the permanent stretch undergone by the cylinder;

(xxiv) "hydrostatic test" means the test to which a cylinder is subjected to a hydrostatic pressure equal to the test pressure of the cylinder;

(xxv) "import " means bringing into India by land, sea or air;

(xxvi) "inert gas" means a gas which is resistant to chemical action under normally encountered conditions;

(xxvii) "inspecting authority" means a person having qualifications and wide experience in the field of design, manufacture and testing of gas cylinders and recognised by the Chief Controller as authority for inspection and certification of gas cylinder;

(xxviii) "installation" means any premises wherein any place has been specially prepared for the manufacture (filling) or storage of compressed gas cylinders;

(xxix) "liquefiable gas" means a gas that may be liquefied by pressure at  $-10^{\circ}\text{C}$  but will be completely vaporised when in equilibrium with normal atmospheric pressure (760 mm. Hg) at  $17.5^{\circ}\text{C}$  which value shall be increased to  $30^{\circ}\text{C}$  for toxic gases;

(xxx) "liquified petroleum gas" means any material, which comprises predominantly of any of the following hydrocarbons or mixture of them with vapour pressure not exceeding  $16.87\text{ kg/cm}^2$  (gauge) at  $65^{\circ}\text{C}$ :-

Propane ( $\text{C}_3\text{H}_8$ ), propylene ( $\text{C}_3\text{H}_6$ ), butane ( $(\text{C}_4\text{H}_{10})$ , (n-butane and iso-butane) and butylene ( $\text{C}_4\text{H}_8$ );

(xxxii) "low pressure liquefiable gas" means a liquefiable gas having critical temperature higher than  $+70^{\circ}\text{C}$ ;

(xxxiii) "manufacture of gas" means filling of a cylinder with any compressed gas and also includes transfer of compressed gas from one cylinder to any other cylinder;

(xxxiii) "oxidizing gas" means a gas which gives up Oxygen readily or removes hydrogen from a compound or attracts negative electrons;

(xxxiv) "permanent gas" means a gas whose critical temperature is below  $-10^{\circ}\text{C}$  that is to say a gas which cannot be liquefied under any pressure at a temperature above  $-10^{\circ}\text{C}$ ;

(xxxv) "poisonous (toxic) gas" a gas which has a maximum allowable concentration in air for human respiration not exceeding  $100\text{ mg/m}^3$  at  $15^{\circ}\text{C}$  and  $1\text{ kgf/cm}^2$  absolute pressure;

(xxxvi) "Schedule" means the Schedule annexed to these rules;

(xxxvii) "tare weight" in relation to -

(1) acetylene cylinder means the weight of the cylinder together with any fittings, permanently attached and includes the weight of valve any safety device, porous mass, requisite quantity of solvent for dissolving acetylene, and the weight of acetylene gas saturating the solvent at atmospheric pressure and temperature of  $15^{\circ}\text{C}$ ;

(2) liquefiable gas cylinder means the weight of the cylinder together with any fittings permanently attached thereto and includes the weight of valve;

(3) permanent gas cylinder means the weight of the cylinder together with any fittings permanently attached thereto and excludes the weight of valve;

(xxxviii) "test pressure" means the internal pressure required for the hydrostatic test or hydrostatic stretch test of the cylinder, as follows:- }

(1) For permanent and high pressure liquefiable gases, it should be calculated from the following:

200. t. Re

$P_h = \text{-----}$

1.25 (Do-t)

where

$P_h = \text{Test pressure in kgf/cm}^2$

$Do = \text{Outside diameter of the cylinder in mm.}$

t = Minimum calculated wall thickness of the cylinder shell in mm.

Re= Minimum specified yield strength of the material of cylinder in kgf/mm<sup>2</sup>, it is limited to 75 per cent of the minimum value of the tensile strength in the case of normalised cylinder and 85 per cent of the minimum value of the tensile strength for quenched and tempered cylinder, provided that the value of test pressure shall not exceed 80 per cent of the yield strength.

(2) For low pressure liquefiable gas - One and a half times the saturated vapour pressure of the gas at 65<sup>0</sup>C or as specified in IS:8867, whichever is higher;

(xxxix) "transport" means the moving of a cylinder filled with any compressed gas from one place to another;

(xxxx) "water capacity" means the volume of water in litres, a cylinder will hold at 15<sup>0</sup>C.;

(xxxxi) "working pressure for low pressure liquefiable gas" means the saturated vapour pressure at 65<sup>0</sup>C;

Explanation.- The values of saturated vapour pressure of different gases are specified in IS:3710;

(xxxixii) "working pressure for permanent gas" means the internal pressure of the gas in the cylinder at a temperature of 15<sup>0</sup>C;

(xxxixiii) "yield strength" means the stress corresponding to a permanent strain of 0.2 per cent of the original gauge length in a tensile test. For practical purpose it may be taken as a stress at which elongation first occurs in the test piece without the increase of load in a tensile test.

## **ENFORCEMENT**

:Under Gas Cylinder Rules, 2004, the following activities are regulated :

- 1) Issuance of the filling permission :- As per rule 3 of the Gas Cylinder Rules, 2004, no person shall fill any cylinder with any compressed gas or import, possess or transport any cylinder so filled or intended to be filled with such gas unless;
  - a) such cylinder and its valve has been constructed to a type and standard specified in schedule I, as amended from time to time by an order issued by Chief Controller of Explosives;
  - b) test and inspection certificate issued by the inspecting authority in respect of cylinder and its valve are made available to the CCE and prior approval of the said authority is obtained;
  - c) the cylinders have passed the examination and test as specified in rule 35
- 2) Licence to import gas cylinders : No person shall import any cylinder filled or intended to be filled with any compressed gas except in accordance with the condition of a licence granted under these rules – rule 29
- 3) Recognition of the cylinder testing station under rule 35 of the Gas Cylinder Rules,2004.
- 4) Filling of the cylinders with compressed gas in the licensed premises (rule 43, rule 47 and rule 50).
- 5) Storage of cylinders filled with compressed gas in the licensed premises (rule 43, 47 & 50).
- 6) Hot repairs of welded/brazed cylinders –

## **EXEMPTIONS :**

The following exemptions are allowed under Gas Cylinder Rules, 2004 :-

- 1) As per rule 3(5) of the Gas Cylinder Rules, 2004, the cylinders even if they are not conforming to the specification specified in schedule I and imported into India for filling and shipment to the country of origin or supply to foreign going vessel touching Indian Port could be filled with such gas provided –
  - a) the cylinder has passed hydraulic test or hydrostatic stretch test, as a case may be within the period specified under these rules and the pressure applied during the test shall be the test pressure marked on the cylinder;b) the cylinder is not filled with –
    - i) any liquefiable gas in excess of the filling ratio specified in IS:3710;
    - ii) any permanent gas at a pressure in excess of the pressure for which the cylinder is designed;
  - c) a separate record of the cylinder tested and filled is maintained at the filling station;
  - d) the filled cylinders are removed from the filling station and shipped off as expeditiously as possible.
- 2) Delivery & dispatch of the cylinders : As per rule 10(3) of the Gas Cylinder Rules, 2004, the restriction on delivery or dispatch of the gas cylinders shall not apply to the delivery or dispatch of the gas cylinders to the Defence Forces of the Union, Port Authorities or Railway Administration.
- 3) Licence for filling and possession : As per rule 44, no licence is needed for filling and possession in certain cases – not withstanding anything contained in rule 43, no licence shall be necessary for –
  - (a) possession of any cylinder filled with a compressed gas by a carrier or other person for the purpose of transport in accordance with the provisions of these rules;
  - (b) possession of cylinders filled with -
    - (i) liquified petroleum gas when the total quantity of gas does not exceed 100 kg at a time;
    - (ii) any other flammable but non-toxic gas when the total number of cylinders containing such gas does not exceed 25 or the total weight of gas does not exceed 200 kg., whichever is less, at a time;
    - (iii) any non-flammable non-toxic gas when the total number of such cylinders does not exceed 200 at a time;
    - (iv) any toxic gas when the total quantity of such cylinders does not exceed 5 at a time;

## **LICENSED PREMISES UNDER GAS**

### **CYLINDER RULES, 2004.:**

**Under the Gas Cylinder Rules, 2004 different types of licenses are granted for different purposes.**

**The license for import of cylinders is granted in Form D.**

**The license in form E & E is granted in form G for Dispensing of cylinders with compressed gas.**

**The license for storage of filled gas cylinders is granted in Form F.**

**The licenses in form E & F are granted for LPG bottling plants and CNG filling stations.**

## FORM D - IMPORT OF CYLINDERS

No person shall import any cylinder filled or intended to be filled with any compressed gas except in accordance with the condition of a licence granted under these rules – Rule 29. Only such cylinders which has been specified in Schedule I of the Gas Cylinder Rules, 2004 as amended from time to time by the Chief Controller of Explosives are permitted to be imported.

### Applicant Action:

The following documents are required to be submitted by the applicant :-

- 1) An application in form 'B' duly filled in and signed.
- 2) Manufacturers test & inspection certificate complete in all respects pertaining to each lot of cylinder and valve.
- 3) In case cylinders are desired to be imported duly filled with gas, filler's certificate in respect of item 3(vi)(vii)(ix) of the form 'B' shall be furnished.
- 4) Demand draft drawn for the amount as shown in Schedule V drawn on any Nationalised Bank in favour of Chief Controller of Explosives payable at Nagpur .

### DEPARTMENTAL ACTION :

The documents submitted by the firm are scrutinized in respect of the following :

- 1) whether the cylinders are of a type & standard as specified in Schedule I of the Gas Cylinder Rules, 2004 and approved by the Chief Controller of Explosives;
- 2) whether filler's certificate in case of cylinders (filled) have been furnished;
- 3) whether the design paras of the cylinders are suitable for use in India;
- 4) whether the valves fitted to the cylinders are of an approved specification/make;
- 5) whether the cylinders have been subjected to periodic examination & test (if due);
- 6) whether appropriate licence fee has been received.
- 7) whether the application holds valid licence in form E/F or Gas Cylinder Rules, 2004

(wherever applicable) If answer of above is in affirmative, licence in form 'D' of Gas Cylinder Rules, 2004 shall be issued.

### FORM –E

Generally licence in Form E is required along with Form F (for storage) and the procedure for obtaining the various types of licences for 'filling and storage' of gas cylinders has been described later in this manual in the following heads:

- a. Non-toxic/non-flammable/flammable gases other than LPG/DA/CNG
- b. LPG bottling Plant
- c. Dissolved Acetylene cylinder filling Plant

### Form F ( Gas Cylinders Rules )

Purpose:

The licence in Form-F under Gas Cylinder Rules 2004 is required for storage i.e., possession of cylinders filled with compressed gas.

### Authority :

The licence in Form-F is granted by respective Circle offices of the Department of Explosives. But when storage shed of cylinders is attached to the gas filling plant, the licence is granted for storage of cylinder in the filling plant along with licence for filling by the Chief Controller of Explosives, Nagpur.

### Exemptions :

No licence needed for possession in certain cases as per Rule-52 of Gas Cylinder Rules, 2004.

- (a) possession of any cylinder filled with a compressed gas by a carrier or other person for the

purpose of transport in accordance with the provisions of these rules;

(b) possession of cylinders filled with -

(i) liquified petroleum gas when the total quantity of gas does not exceed 100 kg at a time;

(ii) any other flammable but non-toxic gas when the total number of cylinders containing such gas does not exceed 25 or the total weight of gas does not exceed 200 kg., whichever is less, at a time;

(iii) any non-flammable non-toxic gas when the total number of such cylinders does not exceed 200 at a time;

(iv) any toxic gas when the total quantity of such cylinders does not exceed 5 at a time;

(v) acetylene gas contained in cylinders in dissolved state when the total quantity of

**Procedure:** Various on-line steps adopted for grant of licence in Form-F are as under:

Submission of drawings and the other required documents by the applicant to the licensing authority for construction approval of the proposed premises.

Approval of the drawing by the licensing authority for construction of the facilities in the proposed premises.

After completion of construction of the facilities, submission of drawings and the other required documents by the party to the licensing authority for grant of licence of the premises.

**Grant of licence by the licensing authority.**

The details of the above step by step procedure are as under:

**Submission of documents by applicant for construction approval (Applicants Action) :**

Applicant must submit the following documents to the licensing authority for prior approval for construction of facilities:

Demand draft of Rs 400 as scrutiny fee. The B/D should be drawn on any nationalised bank, in favour of appropriate authority and should be payable at appropriate place as applicable for the concerned licensing authority.

Application form-C duly filled in and signed by the applicant/authorised employee. Typed copy of form-C (given in the Gas Cylinders Rules, 2004) is acceptable. Please note that no column of the form should be left blank.

Inapplicable columns should be filled as NA i.e., not applicable. Full postal address with pin code should be written. No overwriting or major corrections will be accepted. Minor correction should be initialed.

Letter of indent from the Oil Company/supplier (in case of LPG cylinders). Three copies of drawings (blue print or computerised one without hand correction). All dimensions must be shown in metric system. Each copy of drawing must show the details of site, layout, construction, sectional and elevation view and necessary noting as stated below:

**Regarding site:**

The site plan must show the proposed premises and details of all the structures like roads, road-directions, residential area, other buildings, structures, adjoining properties, name of the adjoining factories, approach road, the distances from the km stone, road junction etc. lying within at least 100 meters radius on all sides around the premises, as per scale. Specific clearance observed by the proposed premises with regards to the nearest building and any open source of fire or over-head electric line coming within the 100mtrs radius should be clearly indicated. The area where the truck is to be parked for loading and unloading of cylinders should also be marked and the same should be fenced.

**Note:**

i) The purpose of the site plan is to identify the location of the premises. In many cases the area up to 100 is open land. So site showing 100 meters open land does not fulfill the main purpose.

Sometimes reference structures lie much beyond 100 s. Therefore all such reference structures (even not coming within the scale of the drawing) for example the nearest km stone, road crossing with road map directions, temple, village, schools, hospitals, canals, rivers, railway line or other such immovable reference structures along with approach road to the premises may also be incorporated in the site details for easy identification of the location and approach to the premises.

ii) The applicant should ensure and confirm that the site selected for the proposed premises should have a clear title or undisputed legal status.

iii) The proposed premises should have proper access and approach road for the purpose of

inspection, fire-fighting and rescue operation, movement of fire-tenders etc.

iv) The proposed site should no way interfere or bring legal confrontation with other Acts and Rules administered by the Central Govt., State Govt., local authority etc. and in no way adversely affect the public interest.

v) The proposed site should have preferably open land surrounding it and should not be vulnerable to natural calamities.

**Regarding layout plan:**

The layout of the premises should show the plan view of the storage shed, the length and breadth of the shed, position of door and ventilator of the shed, the safety distance all round the shed (if any like in case of LPG godown), boundary wall/fencing, position and width of door of godown and gate of boundary etc in magnified scale.

**Regarding sectional/elevation view:-**

The sectional view of the godown must show the constructional detail of walls, roof, its thickness, position of ventilators etc.

**Regarding noting :-**

All important noting as given above should be incorporated in the drawing.

The drawing must indicate Khasra/Survey/Kila no. and full address of the situation of the premises including pin code No.

**Note:-**

1. The safety provisions in the Rules are slightly different for different types of compressed gases. For examples: the safety provisions for LPG, toxic, flammable, non-flammable non-toxic etc. are different. Hence, elaboration regarding safety provisions have been stated below under three heads for different type of compressed gases as under:-

**LPG storage godown**

**Toxic cylinders storage shed**

**Non-toxic non-LPG cylinders storage shed**

**LPG storage godowns**

1. The following distances shall be kept clear at all times, between any building, public place, public road or any adjoining property which may be built upon and the storage shed used for the storage of liquefied petroleum gas cylinder:

Quantity of compressed gas in Cylinder clear Kg. Metres	Minimum distance to be kept
0 -- 101	--
101 -- 2000	3
2001 -- 3000	4



3001 -- 4000	5
4001 -- 6000	6
6001 -- 8000	7
8001 -- 10000	8
10001 -- 12000	9
12001 -- 20000	12
over 20000	15

Provided that the distance specified above may be reduced by the Chief Controller (i) where screen walls are provided or other special precautions taken, or (ii) where there are special circumstances which in the opinion of the Chief Controller would justify such reduction.

2. The construction of the godown/shed should be made from non-inflammable materials only. walls of brickcement.

Roof of RCC, Asbestos etc. door of iron etc. The trusses should be made of iron.

3. The door of the godown should preferably be double leaf one and should open outwards .

4. The height of the boundary wall/fencing should be 1.8mtrs.

5. The width of the main gate should not be more than 1.2mtrs.

6. The storage shed should be made of suitable non-flammable materials having cemented floor with mastic flooring. The floor of the shed shall be at least 25 mms thick mastic flooring conforming to IS 1195.

7. The shed shall be adequately ventilated on each wall near the ground level and near or in the roof. The ventilators should be provided with double layer of non-corroding metal wire gauge of mesh not less than 11 per linear cms.

The size of each of the ventilators should be 0.75 x 0.25 sq mts.

8. Double leaf steel door opening outside should be provided and shown in the drawing accordingly.

The length of storage shed should not be more than 1- 1/2 time of width of storage shed. A floor area of 10 square meters for every 1000 kgs. of LPG in cylinders may be proposed.

9. The chowkidar/sales room should be beyond safety distance and boundary. No portion of door of windows of proposed chowkidar/sales room etc. should open towards the safety zone of the godown).

**Approval of drawing (Departmental Action :**

The documents submitted by the applicant should be verified and proper scrutiny should be exercised as follows:-

The application form submitted by the party is checked to confirm that the proper mailing address, signature of the party and all other relevant columns have been duly filled in by the applicant. No overwriting or major corrections will be entertained. Minor correction if any, are attested by the applicant.

**Verification of drawing (Departmental Action :**

The following check are carried out:- In the site plan of the drawing whether proper road direction with approach is shown for exact identification of location. Khasra no., distances from other existing structures etc. has to be shown in the plan. If most of the distances are given but in case there is any inadvertent omission regarding distance from proposed premises to few surrounding structure/facilities then such distance(s) are read as per scale given in the drawing.

Sectional view are properly shown or not. Necessary noting and full address of the situation of the premises have been incorporated in the drawing. Drawing is preferably signed by the applicant or

**authorised employee (in case of company).**

**Any other additional instruction of CCE/Licensing authority and various guideline.**

**FORM D - IMPORT OF CYLINDERS**

No person shall import any cylinder filled or intended to be filled with any compressed gas except in accordance with the condition of a licence granted under these rules – Rule 29. Only such cylinders which has been specified in Schedule I of the Gas Cylinder Rules, 2004 as amended from time to time by the Chief Controller of Explosives are permitted to be imported.

**Applicant Action:**

The following documents are required to be submitted by the applicant :-

- 1) An application in form 'B' duly filled in and signed.
- 2) Manufacturers test & inspection certificate complete in all respects pertaining to each lot of cylinder and valve.
- 3) In case cylinders are desired to be imported duly filled with gas, filler's certificate in respect of item 3(vi)(vii)(ix) of the form 'B' shall be furnished.
- 4) Demand draft drawn for the amount as shown in Schedule V drawn on any Nationalised Bank in favour of Chief Controller of Explosives payable at Nagpur .

**DEPARTMENTAL ACTION :**

The documents submitted by the firm are scrutinized in respect of the following :

- 1) whether the cylinders are of a type & standard as specified in Schedule I of the Gas Cylinder Rules, 2004 and approved by the Chief Controller of Explosives;
- 2) whether filler's certificate in case of cylinders (filled) have been furnished;
- 3) whether the design paras of the cylinders are suitable for use in India;
- 4) whether the valves fitted to the cylinders are of an approved specification/make;
- 5) whether the cylinders have been subjected to periodic examination & test (if due);
- 6) whether appropriate licence fee has been received.
- 7) whether the application holds valid licence in form E/F or Gas Cylinder Rules, 2004

(wherever applicable) If answer of above is in affirmative, licence in form 'D' of Gas Cylinder Rules, 2004 shall be issued.

**FORM –E**

Generally licence in Form E is required along with Form F (for storage) and the procedure for obtaining the various types of licences for 'filling and storage' of gas cylinders has been described later in this manual in the following heads:

- a. Non-toxic/non-flammable/flammable gases other than LPG/DA/CNG
- b. LPG bottling Plant
- c. Dissolved Acetylene cylinder filling Plant

**Form F ( Gas Cylinders Rules )**

**Purpose:**

The licence in Form-F under Gas Cylinder Rules 2004 is required for storage i.e., possession of cylinders filled with compressed gas.

**Authority :**

The licence in Form-F is granted by respective Circle offices of the Department of Explosives. But when storage shed of cylinders is attached to the gas filling plant, the licence is granted for storage of cylinder in the filling plant along with licence for filling by the Chief Controller of Explosives, Nagpur.

**Exemptions :**

No licence needed for possession in certain cases as per Rule-52 of Gas Cylinder Rules, 2004.

- (a) possession of any cylinder filled with a compressed gas by a carrier or other person for the purpose of transport in accordance with the provisions of these rules;
- (b) possession of cylinders filled with -

- (i) liquified petroleum gas when the total quantity of gas does not exceed 100 kg at a time;
- (ii) any other flammable but non-toxic gas when the total number of cylinders containing such gas does not exceed 25 or the total weight of gas does not exceed 200 kg., whichever is less, at a time;
- (iii) any non-flammable non-toxic gas when the total number of such cylinders does not exceed 200 at a time;
- (iv) any toxic gas when the total quantity of such cylinders does not exceed 5 at a time;
- (v) acetylene gas contained in cylinders in dissolved state when the total quantity of

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Submission of drawings and the other required documents by the applicant to the licensing authority for construction approval of the proposed premises.  
Approval of the drawing by the licensing authority for construction of the facilities in the proposed premises.  
After completion of construction of the facilities, submission of drawings and the other required documents by the party to the licensing authority for grant of licence of the premises.

Grant of licence by the licensing authority.

The details of the above step by step procedure are as under:  
Submission of documents by applicant for construction approval (Applicants Action) :

Applicant must submit the following documents to the licensing authority for prior approval for construction of facilities:

Demand draft of Rs 400 as scrutiny fee. The B/D should be drawn on any nationalised bank, in favour of appropriate authority and should be payable at appropriate place as applicable for the concerned licensing authority.

Application form-C duly filled in and signed by the applicant/authorised employee. Typed copy of form-C (given in the Gas Cylinders Rules, 2004) is acceptable. Please note that no column of the form should be left blank.

Inapplicable columns should be filled as NA i.e., not applicable. Full postal address with pin code should be written. No overwriting or major corrections will be accepted. Minor correction should be initialed.

Letter of indent from the Oil Company/supplier (in case of LPG cylinders). Three copies of drawings (blue print or computerised one without hand correction). All dimensions must be shown in metric system. Each copy of drawing must show the details of site, layout, construction, sectional and elevation view and necessary noting as stated below:

Regarding site:

The site plan must show the proposed premises and details of all the structures like roads, road-directions, residential area, other buildings, structures, adjoining properties, name of the adjoining factories, approach road, the distances from the km stone, road junction etc. lying within at least 100 meters radius on all sides around the premises, as per scale. Specific clearance observed by the proposed premises with regards to the nearest building and any open source of fire or over-head electric line coming within the 100mtrs radius should be clearly indicated. The area where the truck is to be parked for loading and unloading of cylinders should also be marked and the same should be fenced.

Note:

- i) The purpose of the site plan is to identify the location of the premises. In many cases the area up to 100 is open land. So site showing 100 meters open land does not fulfill the main purpose. Sometimes reference structures lie much beyond 100 s. Therefore all such reference structures (even not coming within the scale of the drawing) for example the nearest km stone, road crossing with roadmap directions, temple, village, schools, hospitals, canals, rivers, railway line or other such immovable reference structures along with approach road to the premises may also be incorporated in the site details for easy identification of the location and approach to the premises.
- ii) The applicant should ensure and confirm that the site selected for the proposed premises should have a clear title or undisputed legal status.
- iii) The proposed premises should have proper access and approach road for the purpose of inspection, fire-fighting and rescue operation, movement of fire-tenders etc.
- iv) The proposed site should no way interfere or bring legal confrontation with other Acts and Rules

administered by the Central Govt., State Govt., local authority etc. and in no way adversely affect the public interest.

v) The proposed site should have preferably open land surrounding it and should not be vulnerable to natural calamities.

**Regarding layout plan:**

The layout of the premises should show the plan view of the storage shed, the length and breadth of the shed, position of door and ventilator of the shed, the safety distance all round the shed (if any like in case of LPG godown), boundary wall/fencing, position and width of door of godown and gate of boundary etc in magnified scale.

**Regarding sectional/elevation view:-**

The sectional view of the godown must show the constructional detail of walls, roof, its thickness, position of ventilators etc.

**Regarding noting :-**

All important noting as given above should be incorporated in the drawing.

The drawing must indicate Khasra/Survey/Kila no. and full address of the situation of the premises including pin code No.

**Note:-**

1. The safety provisions in the Rules are slightly different for different types of compressed gases. For examples: the safety provisions for LPG, toxic, flammable, non-flammable non-toxic etc. are different. Hence, elaboration regarding safety provisions have been stated below under three heads for different type of compressed gases as under:-

**LPG storage godown**

**Toxic cylinders storage shed**

**Non-toxic non-LPG cylinders storage shed**

**LPG storage godowns**

1. The following distances shall be kept clear at all times, between any building, public place, public road or any adjoining property which may be built upon and the storage shed used for the storage of liquefied petroleum gas cylinder:

Quantity of compressed gas in Cylinder clear Kg. Metres	Minimum distance to be kept
0 -- 101	--
101 -- 2000	3
2001 -- 3000	4
3001 -- 4000	5

4001 -- 6000	6
6001 -- 8000	7
8001 -- 10000	8
10001 -- 12000	9
12001 -- 20000	12
over 20000	15

Provided that the distance specified above may be reduced by the Chief Controller (i) where screen walls are provided or other special precautions taken, or (ii) where there are special circumstances which in the opinion of the Chief Controller would justify such reduction.

2. The construction of the godown/shed should be made from non-inflammable materials only. walls of brickcement.

Roof of RCC, Asbestos etc. door of iron etc. The trusses should be made of iron.

3. The door of the godown should preferably be double leaf one and should open outwards .

4. The height of the boundary wall/fencing should be 1.8mtrs.

5. The width of the main gate should not be more than 1.2mtrs.

6. The storage shed should be made of suitable non-flammable materials having cemented floor with mastic flooring. The floor of the shed shall be at least 25 mms thick mastic flooring conforming to IS 1195.

7. The shed shall be adequately ventilated on each wall near the ground level and near or in the roof. The ventilators should be provided with double layer of non-corroding metal wire gauge of mesh not less than 11 per linear cms.

The size of each of the ventilators should be 0.75 x 0.25 sq mts.

8. Double leaf steel door opening outside should be provided and shown in the drawing accordingly.

The length of storage shed should not be more than 1- 1/2 time of width of storage shed. A floor area of 10 square meters for every 1000 kgs. of LPG in cylinders may be proposed.

9. The chowkidar/sales room should be beyond safety distance and boundary. No portion of door of windows of proposed chowkidar/sales room etc. should open towards the safety zone of the godown).

**Approval of drawing (Departmental Action :**

The documents submitted by the applicant should be verified and proper scrutiny should be exercised as follows:-

The application form submitted by the party is checked to confirm that the proper mailing address, signature of the party and all other relevant columns have been duly filled in by the applicant. No overwriting or major corrections will be entertained. Minor correction if any, are attested by the applicant.

**Verification of drawing (Departmental Action :**

The following check are carried out:- In the site plan of the drawing whether proper road direction with approach is shown for exact identification of location. Khasra no., distances from other existing structures etc. has to be shown in the plan. If most of the distances are given but in case there is any inadvertent omission regarding distance from proposed premises to few surrounding structure/facilities then such distance(s) are read as per scale given in the drawing.

Sectional view are properly shown or not. Necessary noting and full address of the situation of the premises have been incorporated in the drawing. Drawing is preferably signed by the applicant or authorised employee (in case of company).

Any other additional instruction of CCE/Licensing authority and various guideline.

## FORM D - IMPORT OF CYLINDERS

### **Submission of documents by the applicants for grant of licence (Applicant Action) :-**

Appropriate DD as per schedule V as licence fee payable in same manner as mentioned during approval. After completion of the facilities the applicant must submit the Specimen signature of the applicant / authorised person to verify the reference to initial application filled by the applicant or authorised person of the company.

Completion report that of the construction of the facilities of premises have been completed as per the approved plan.

Three copies of the drawing which are replica of the original approved drawing. In case of conditional approval all such conditions are to be complied with.

Forwarding letter mentioning details of enclosures, Bank Draft No & date etc.

following documents:-

Note:

In case of grant of licence for LPG godown in some city for example Delhi, some additional documents are required to be submitted by the applicant to the licensing authority asunder:

1. N.O.C. from Department of Fire Service, Delhi.
2. N.O.C. from Delhi Development Authority for the allotment of plot for construction of mLPG cylinder godown on that plot.
3. In case there is any delay in allotment of land by D.D.A or allotment of plot by DDA is not possible the applicant can buy the plot from some other agency and should obtain NOC from MCDA for construction of LPG godown on the said plot.
4. The laws applicable for the purpose by the local authorities should be complied with prior to submission of documents to the Explosives Department.

### **DOCUMENTS FOR APPROVAL/GRANT OF LICENCE FOR FILLING PLANTS OF THE COMPRESSED GAS IN CYLINDERS AND ITS STORAGE FORMING PART OF THE FILLING PLANTS IN FORM 'E' & 'F' OF GAS CYLINDER RULES, 2004**

Approval of the **Non-toxic/Non-flammable/Flammable gases other than LPG/DA/CNG**:- The following documents shall be submitted by the party.

1. 4 copies of drawing drawn to scale in metric system showing site, layout and constructional details of the premises proposed to be licensed for the filling of cylinders with any compressed gas.

#### **(a) SITE PLAN :**

Site plan should clearly show all facilities i.e. road, houses/buildings, kiln, furnace, canal, market place etc., coming within 100 meters from the edge of the premises to be licensed. Specific clearance observed by the filling shed with regard to the nearest building and any open source of fire coming within 100M should be clearly indicated.

#### **(b) LAYOUT PLAN :**

- i) Layout plan should clearly show layout of the proposed shed inclusive of doors, windows, and ventilators provided therein and other facilities which are to be covered under the licence.
- ii) Filling facilities together with filling points should clearly be shown in the plan
- iii) In case filling of cylinders and storage of filled cylinders are done under the same shed, filling zone should be clearly segregated from the storage zone either by a curbed wall or by any other suitable manner which should be clearly shown in the drawing.
- iv) The filled cylinders storage zone shall observe at least 3 meters clearance from the filling points and this should be clearly indicated on the drawing.

(c) CONSTRUCTION PLAN :i) The construction plan shall show elevation view and/or sectional view of the filling shed or filling/storage shed as the case may be clearly indicating –

- a) materials of construction; and arrangements of ventilation provided in the shed.
- ii) Filling shed should be constructed on non-flammable materials and it should be adequately ventilated. The construction plan should clearly show compliance of all the above requirements.

2. Demand draft of Rs.400/- towards scrutiny fee drawn on any Nationalised Bank in favour of Chief



Controller of Explosives.

**DEPARTMENTAL ACTION :**

After scrutinizing the proposal, the approval is issued and the applicant will be asked to submit the following documents :-

**1. FOR THE GRANT OF LICENCE TO FILL COMPRESSED GAS IN CYLINDERS**

- a) An application in form 'C' duly filled and signed.
- b) Demand draft for Rs.2500/- towards licence fee.
- c) Bio-data indicating name, qualification and experience of the competent persons including plant in charge, plant supervisors operators etc. responsible for filling and storage operations as required under rule 17 of the said rules with documentary evidence.

- a) 4 copies each of the approved drawing
- b) A write-up in duplicate clearly indicating as to how you should comply with the requirement of the provisions of rules 25,26 & 35 of the said rules.
- c) Specimen signature of the persons authorized to sign the correspondence in connection with grant/renewal/amendment of licence with a copy to the Jt.C.C.E.
- d) A certificate to the effect that the facilities have been constructed as per the approved drawings.
- e) Set pressure of the safety relief valve to be installed in the main filling line.
- f) Name & address of all the partners in case of partnership firm and necessary detail of partnership. In case of company registration certificate from the register of companies and necessary memorandum of article.
- g) Particulars of the cylinders proposed to be filled with necessary references permitting filling thereof.
- h) An undertaking for installation of cylinders testing station, which will be approved by this office.

**2) FOR THE GRANT OF LICENCE TO STORE COMPRESSED GAS IN CYLINDERS.**

- a) An application in form 'C' duly filled and signed.
- b) 4 copies each of the approved drawing.
- c) A demand draft towards the licence fee as per schedule V in favour of the Chief Controller of Explosives, payable at Nagpur, on any Nationalised Bank.

**GRANT OF LICENCE :**

On receipt of the documents referred to above, the same shall be examined and licence in form 'E' & 'F' issued, if the documents are found in order. The licences shall be forwarded to respective Circle/Sub-circle offices for endorsement purpose.

**APPROVAL OF THE DISSOLVED ACETYLENE FILLING PLANTS:**

The applicant is required to submit the following documents :-

- 1. 4 copies of drawing drawn to scale in metric system showing site, layout and constructional details of the premises proposed to be licensed for the filling of cylinders with Dissolved Acetylene gas.

**(a) SITE PLAN :**

- i) Site plan should clearly show all facilities i.e. road, houses/buildings, kiln, furnace, canal, market place etc., coming within 100 meters from the edge of the premises to be licensed. Specific clearance observed by the filling shed with regard to the nearest building and any open source of fire coming within 100M should be clearly indicated.
- ii) The DA plant building of which carbide of calcium storage forms a part, shall observe not less than 15M clearance from any building and public road as well as 9M clearance from sludge pit.
- iii) The Oxygen plant and the Air intake point shall observe a clearance of 30M and 90M respectively from the DA plant building.
- iv) The location of switch room shall be at least 15M away from the DA plant unless the electrical fittings are of flame proof construction conforming to

IS:2148 suitable for use in the Acetylene laden atmosphere.

The site plan shall clearly show compliance of all the above requirements.

**(b) LAYOUT PLAN :**

i) Layout of the DA plan shall clearly show -

- a) Carbide storage room and
- b) machinery layout indicating generator, purifier, drier, gas holder, compressor and other connected facilities.
- ii) A line diagram showing the water line, air lines, low pressure acetylene lines and high pressure acetylene lines in distinct colours shall also be incorporated in the drawing.
- iii) Besides doors, windows and ventilators provided in the plant inclusive of the filling shed should be shown.
- iv) Filling facilities together with filling point provided in the filling shed should be shown in the drawing.
- v) In case filling of cylinders and storage of filled cylinders are done under the same shed, filling zone should be clearly segregated from the storage zone either by a curbed wall or by any other suitable manner which should be clearly shown in the drawing.
- vi) The filled cylinders storage zone shall observe at least 3M clearance from the filling point and this should be clearly indicated on the drawing. The layout plant shall clearly show compliance of all the above requirements.

**(c) CONSTRUCTION PLAN:**

- i) The construction plan shall show the elevation view and/or sectional view of the DA plant inclusive of the filling shed or filling/storage shed as the case may be clearly indicating –
    - a) materials of construction; and
    - b) arrangements of ventilation provided therein.
  - ii) The DA plant inclusive of the filling shed or filling/storage shed as the case may be should be constructed of non-flammable materials and should be adequately ventilated.
  - iii) The Carbide storage shed shall be adequately ventilated near the ground level and near or in the roof. The ventilators shall be provided with two, thickness of non-corroding metal wire gauge of mesh not less than 11 to the linear centimeter.
  - iv) The floor level of the carbide storage shed shall be raised at least 30cms above the ground level. The construction plan shall clearly show compliance of all the above requirements.
2. The particulars of the Acetylene generator giving name, address and the approval No. etc. Acetylene generator should be of a type and standard as approved by the Chief Controller of Explosives and certified by Bureau of Indian Standards.
3. Demand draft of Rs.400/- towards scrutiny fee drawn on any Nationalised Bank in favour of Chief Controller of Explosives.

**DEPARTMENTAL ACTION :**

On receipt of the above mentioned documents, the proposal is scrutinized and if found in conformity with the requirements of the Gas Cylinder Rules, 2004, approval to install the facilities is issued.

**Documents to be submitted for grant of licence for filling & storage of Dissolved Acetylene**

**in cylinders :-**

The firm has to submit the following documents :

- a) An application in **form 'C'** duly filled and signed.
- b) **Demand draft for Rs.2500/-** towards licence fee.
- c) Bio-data indicating name, qualification and experience of the competent persons including plant in charge, plant supervisors operators etc. responsible for filling and storage operations as required under rule 17 of the said rules with documentary evidence.

- d) 4 copies each of the approved drawing
- e) A write-up in duplicate clearly indicating as to how you should comply with the requirement of the provisions of rules 25,26 & 39 of the said rules.
- f) Specimen signature of the persons authorized to sign the correspondence in connection with grant/renewal/amendment of licence with a copy to the Jt.C.C.E.
- g) A certificate to the effect that the facilities have been constructed as per the approved drawings.
- h) Set pressure of the safety relief valve to be installed in the main filling line.
- i) Name & address of all the partners in case of partnership firm and necessary detail of partnership. In case of company registration certificate from the register of companies and necessary memorandum of article.
- j) Particulars of the cylinders proposed to be filled with necessary references permitting filling thereof.
- k) An undertaking for installation of cylinders testing station, which will be approved by this office.
- l) The certificate issued by the Acetylene generator manufacturer indicating the particulars of the Acetylene generator supplied.
- m) The particulars of the electric fittings installed.
- n) The particulars of the Acetylene cylinders owned by the applicant.

**DEPARTMENTAL ACTION :**

On scrutiny of the documents, permission is issued to the applicant to undertake the trial run for generation of the Acetylene. The trial run is to be demonstrated to the Departmental officer of concerned Circle/Sub-circle office. The inspecting officer shall allow the trial run if he is satisfied that :-

- 1) The plant/ equipment has been installed as per the layout drawing approved.
- 2) The plant observe required mandatory safety distances from other protected works.
- 3) The Acetylene generator is of the approved make and has been manufactured under BIS Certification.
- 4) The firm has approved type of the DA cylinders.

**GRANT OF LICENCE :**

On receipt of satisfactory inspection report of the trial run witnessed by the Departmental officer licence shall be issued and forwarded to respective Circle/Sub-circle offices for endorsement purpose.

**OTHER APPROVALS :**

**ADDITION/ALTERATIONS & AMENDMENT OF THE LICENCE IN FORM 'E' & 'F' .**

The following documents are required to be submitted by the applicant for effecting any addition/alterations in the licensed premises.

- 1) 4 copies of the drawing showing the addition/alterations in Red colour & deletion (if any) in Yellow colour.
- 2) **The demand draft of Rs.400/-** each for Form E and Form F drawn on any Nationalised Bank in favour of Chief Controller of Explosives, in case the amendment is required to be carried out in filling & storage premises forming part of the filling plants and in favour of Jt. Chief Controller of Explosives of respective Circle Offices, if amendment is required in case of the storage sheds.

Once addition/alterations as approved above has been carried out, the applicant is required to submit the following documents for amendment of the licence.

- 1) An application in **form 'C'** duly filled and signed.
- 2) 4 copies of the approved plan.
- 3) The original licence.
- 4) The fee for amendment of a licence (Rs.400/- each for Form E and Form F plus additional fee, if any, by which the fee that would have been payable, if the licence had originally been issued in the amended form, because it is the original fee paid for the licence)

**DEPARTMENTAL ACTION :**

After scrutiny of the documents received above and found in order, the licence is amended and forwarded to the applicant.

**PROCEDURE FOR AMENDMENT/GRANT OF LICENCE IN FORM E & F FOR LPG BOTTLING PLANTS**

(a) Documents to be submitted by the applicant for prior approval:-

- i) Site Plan :-

4 copies showing location of the proposed plant and other protected works, roads, buildings, survey no., Kilo stone etc., within 100M from the periphery of the proposed site. In case of large bottling plants of capacity over 100 tones, the facilities within 500M on all sides to be shown.

ii) Layout Plan :-

4 copies showing the particulars of facilities proposed to be constructed namely LPG bulk storage facilities, inter-distance between storage vessels, tank truck loading/unloading platform or gantry, tank wagons loading/unloading gantry, pump compressor shed, the cylinder filling shed, cylinder storage shed, bulb changing shed, fire water storage tank, fire water pump house, air compressor, DG set, security kiosks, flood light towers, internal roads, cylinder loading/unloading platform and all other facilities as proposed and various interdistances maintained by the various facilities as required under the rules given in table below :-

**TABLE - 3**

Minimum safety distances for liquefied flammable gases.

Serial No.	Water Capacity of vessel (in litres)	Minimum distance from line of adjoining property or group of buildings not associated with storage & operation.			Minimum distance between vessels
		Aboveground vessel	underground or aboveground vessels covered with earth(mound)	Aboveground vessel underground or aboveground vessels covered with earth mound)	
i)	Not above 2000	5 meters	3 meters	1 meter	1 meter
ii)	Above 2000 but not above 7500	10 meters	3 meters	1 meter	1 meter
iii)	Above 7500 but not 10 meters	5 meters	1 meter	1 meter above 10,000	
iv)	Above 10,000 but not above 20,000	15 meters	7.5 meters	1.5 meters	1 meter
v)	Above 20,000 but	20 meters	10 meters	2 meters	1 meter

	not above 40,000				
vi)	Above 40,000 but not above 3,50,000	30 meters	15 meters	2 meters or ¼th of the sum	1 meter
vii)	Above 3,50,000 but not above 4,50,000	40 meters	15 meters	of dia of adjacent	1 meter
viii)	Above 4,50,000 but not above 7,50,000	60 meters	15 meters	vessel or ½ the dia of	1 meter
ix)	Above 7,50,000 but not above 38,00,000	90 meters	15 meters	the two adjacent vessels	1 meter
x)	above 38,00,000	120meters	15 meters	whichever is greater.	1 meter

**TABLE - 4**

Minimum Safety distances (in s) 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,	30	30	15	30	50	15	60

evacuation of cylinders							
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	--

The fire water storage capacity for industry/bottling plants having maximum 100M.T. bulk storage should be sufficient for 2 hours fire fighting and plants having more than 100 tones bulk storage should be sufficient for 4 hours fire fighting. It may also be noted that the cylinder loading/unloading platform should be 15M away from the LPG shed. The layout should also ensure convenient and safe operations of the plant and tackling emergency situation.

i) Equipment layout plan :-

4 copies showing layout of various equipments proposed to be installed in the LPG sheds namely cylinder washing unit, purging unit, filling scales/corousel, evacuation arrangements, check scale, weight adjustment scale, valve testing and body-leak testing and sealing unit (all in filling sheds). In addition, valve changing and/or degassing facilities to be shown in valve changing shed, however, in small plants upto 100 tones capacity, valve changing facilities are allowed in the filling shed itself. The arrangement for stacking

the cylinders and route of conveyor, if provided should also be indicated. The vent from purging unit and evacuation vessel should be at least 1M above the roof level of the shed.

ii) Construction Plan of the Shed :-

4 copies showing details of construction like floor, columns and roof of LPG storage and handling sheds, the LPG sheds should be open on all sides and constructed of nonflammable material. The columns can be of RCC or steel structure and coated with mastic conforming to IS:1195 upto 1.5M from the floor level. The floor of LPG sheds and the coating pathways and carriers/fingers should be coated with mastic of the same specification. The roof should of ACC sheet supported on steel structure.

**NOTES :-**

1) All electrical/electronic fittings to be provided in the hazardous area should be either flameproof or intrinsically safe and approved in writing by Chief Controller of Explosives.

2) The boundary of the plant should be protected by at least 2M height brick wall with entry and exit gates and an emergency gate. Large plant for 100 tonnes storage capacity in addition to the safety distances prescribed in the rules, an additional 30M green belt shall be provided, if the plant is located in vulnerable/congested surroundings. In internal fencing & compassing, only the safety distance & hazardous area of the plant may be provided, separating the hazardous area of the operations from the nonhazardous operational area.

iii) A bank draft of Rs.900/- as scrutiny fee (including scrutiny fee of Rs.100/- paid as per SMPV Rules)

**DEPARTMENTAL ACTION :**

For granting prior approval :-

The Chief Controller of Explosives on receipt of the documents scrutinize the proposal, drawings and other documents to verify conformity with the rules and said practices. If the proposal is found satisfactory, approval will be granted. However, if there are deviations from the rules, the same will be communicated to the applicant for re-conciliation and modification of the proposal. If, however, the proposed plant is located in some vulnerable area/ near residential or other localities, Chief Controller of Explosives may call for a risk analysis report from the applicant. The risk analysis report should be made by some experts/agencies in the field and take into account all possible hazardous, failures and accident scenarios. The quantitative analysis for each type of failure and recommendations for preventing the failures and management plan to avoid/tackle emergency situations.

**The documents needed for obtaining licence in form 'E' to fill cylinders are as follows :-**

a) Application in form 'C'

a) 4 sets of as built site layout and other drawings for which prior approval was taken.

b) Requisite licence fee at the rate of Rs.2500/- per year drawn in favour of Chief Controller of Explosives, Nagpur on any Nationalised Bank.

**The documents needed for obtaining licence in form 'F' to store cylinders are as follows :**

a) Application in form 'C'.

b) 4 sets of as built site layout and other drawings for which prior approval was taken.

c) Requisite licence fee as per schedule V.

**Other additional documents :-**

1) NOC from District Authority and Pollution Control Board/Ministry of Environment & Forest.

- 2) Copy of risk analysis report, environment impact assessment report for large plants.
- 3) Copy of site emergency plan (for plants above 50MT capacity).
- 4) Write-up on all operations & checks of the plant.
- 5) Write-up on fire fighting facilities with calculation for fire water requirement.
- 6) List of electrical and electronic equipments in the hazardous area with their make, specification and Chief Controller of Explosives approval reference.
- 7) Specimen signatures of Proprietor/Partners/Directors of the applicant firm or company. Copy of Partnership Deed or Memorandum/Article of Association or SSI registration as the case may be (for parallel marketers only).
- 8) Specification of LPG with proposed source of supply.
- 9) Documentary evidence of compliance of Clause 10 & 10(A) (rating) of LPG Control Order.
- 10) Documentary evidence of approval of cylinders and valves with test certificates.
- 11) Write-up on marketing & distribution of LPG cylinders with the list of dealers/distributors with copies of licences for their storage godowns.
- 12) Bio-data of the plant in-charge, engineers with documentary evidence of their qualification & experience.

**DEPARTMENTAL ACTION :-**

The documents submitted by the applicant after completion of the plant as mentioned above are examined and scrutinized by Chief Controller of Explosives along with other documents of the plant for bulk storage of LPG to be licensed under SMPV (U) Rules. If the documents are in order, the following action is taken :-

(a) For Public Sector Plants :-

Licences are granted and sent to the Circle/Sub-circle office of the department having jurisdiction over the area for inspection and verify the facilities. If the inspecting officer is satisfied, he endorses the licence and sends to the licensee. In case of any deviations, he writes to the licensee for compliance and further action.

(b) For Parallel Marketeers :-

The matter is referred to the Circle/Sub-circle office of the department having jurisdiction for inspection of the facilities and experienced manpower available. On receipt of the satisfactory report of inspection from the office, the Chief Controller of Explosives permits trial run of the plant initially for a period of one month and grants licences which are sent to Circle/Sub-circle office for inspection of the plant during trial run and further action regarding endorsement of the licences and delivery to the licensee. In case of any discrepancy in the application or discrepancy during preliminary inspection of the plant or during trial run inspection of the plant, the matter is taken with the licensee and after getting satisfactory compliance further appropriate action is taken.

**PROCEDURE FOR APPROVAL/GRANT OF LICENCE IN FORM G FOR CNG DISPENSING STATION :**

Dispensing of CNG to motor vehicle and use of CNG as motor vehicle fuel is only few years old in the country. The system is currently in operation only in Mumbai, Delhi and one or two cities in Gujarat where pipe supply of natural gas is available. There are three types of CNG filling stations

(1) Mother Station, (2) Daughter Station & (3) On-line Station.

(1) Mother Station:- Filling station having pipe supply of natural gas and facilities for filling mobile cascades are called Mother Station. Such station may also have facilities for dispensing station. Here natural gas from pipe supply is compressed by compressor and stored in some cylinders in cascade and the gas is filled to CNG run vehicles.

(2) Daughter Station :- These are filling stations where pipe supply of natural gas is not available and the gas is stored only in cylinders in a cascade and supplied to CNG vehicle through dispenser. As & when the



pressure of gas in the cylinders connected at the station becomes less, the cascade is sent to motor station for refilling and in the meantime another stand-by cascade of cylinder is used for vehicle re-filling.

(3) On-line Station :- In On-line station natural gas from pipeline is compressed and filled into stationary cascades for dispensing into vehicles.

The safety distances to be maintained by different facilities of CNG filling stations are as under :-

<b>TABLE – I</b>	
<b>INTER DISTANCES</b>	
<b>FROM BUILDINGS AND OUTER BOUNDARIES TO GAS STORAGE UNITS</b>	
Total Capacity of gas storage units (in litres)	Min. distance from buildings and boundaries (in s)
Upto 4500	2.5
4500 to 10000	4.0
10000 to 100000	10.0

**NOTE :**

If on the side(s) towards the boundary of the installation, the clearance as above is not available, the same may be reduced to 2 s provided a 4 H-FRR RCC wall of adequate height and length covering the cylinder cascades is constructed at the boundary and adequate clear space is available on the other side of the wall.

<b>AT TABLE –II</b>								
<b>INTER DISTANCES BETWEEN FACILITIES OF NATURAL GAS</b>								
<b>HANDLING INSTALLATION</b>								
Sl.No.	Distance From (in s)	1	2	3	4	5	6	7
1.	CNG Compressor	-	3	2	3	6	6	T-1 (Min-3)
2.	CNG Dispensing Unit	3	-	2	4	6	4	-Do-
3.	Storage cascade	2	2	-	T-1	T-1(Min-6)	T-1 (Min-4)	-Do-
4.	Outer boundary wall/CLF	3	4	T-1	-	6	4	-Do-
5.	MS/HSD dispenser	6	6	T-1 (Min-6)	6	-	6	-Do-
6.	Vent of MS/HSD u/g storage tanks	6	4	T-1 (Min-4)	4	6	-	6
7.	Filling point of MS/HSD	----	----	T-1 (Min-3)	-----	-----	6	-----

**NOTES :**

- i) T-1 denotes Table –1
- ii) Distances shown as “-“ shall be any distance necessary for operational convenience.
- iii) A suitable curbing platform shall be provided at the base of the dispensing unit to prevent vehicles from

coming too near the unit.

iv) A CNG cascade having cylinders of total water capacity not exceeding 4500 liters can be mounted on top of the compressor super structure. The assembly shall observe 3 clearance around and also from the dispensing unit. This can be reduced to 2 as per

Note -1 of Table -1

Documents to be submitted by the applicant :-

- 1) Site plan showing the protected works within 100M from all sides.
- 2) Layout plan showing existing facilities of the gas station and proposed CNG facilities and the required distance maintained from each facilities.
- 3) Scrutiny fee of Rs.1000/- in case of mother/daughter station.

#### **DEPARTMENTAL ACTION :**

If the documents are in order Chief Controller of Explosives grants approval of the same. In case of any shortcomings, the same is pointed out to the applicant. Documents required for grant of licence :-

#### **FORM D - IMPORT OF CYLINDERS**

- 1) Application in form 'C'.
- 2) Requisite licence fee as per Gas Cylinder Rules, 2004.
- 3) 4 copies of as built site and layout plan as approved.

#### **DEPARTMENTAL ACTION :**

On scrutiny of the above documents and on verification of particulars of cylinders in possession of the licensee, licences are granted and sent to the licensee.

#### **RENEWAL OF THE LICENCE (Rule 55) :**

##### **Renewal of licence:—**

- (1) A licence may be renewed by the Chief Controller or Controller.
- (2) Every licence granted in Form 'E' 'F' and 'G' under these rules, may be renewed for a maximum period of ten years at a time where there has been no contravention of the provisions of the Act or any rules framed thereunder or of any condition 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 un-expired portion of the licence shall be refunded to the licensee provided that no refund of renewal fee shall be made for the year during which the Chief Controller or Controller receives the renewed licence for surrender.
- (4) Every application for the renewal of a licence shall be accompanied by the licence, which is to be renewed together with or without approved plans attached to the licence, and the renewal fee.
- (5) Every application for the renewal of a licence shall be made so as to reach the licensing authority on or 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 or 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 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 up to the date on which renewal thereof is refused.
- (7) The same fee shall be charged for the renewal of a licence for every twelve months for the grant of such renewal:  
Provided that-

- (a) if the application with accompaniments required under sub-rule (4) is not received within the time specified in sub-rule (5) but received not later than three months the licence shall be renewed only on payment of a fee amounting to twice the fee ordinarily payable;
- (b) if such an application with accompaniments is received by the Chief Controller or Controller after three months from the date of expiry but not later than one year from the date of expiry, the licence may, without prejudice to any other action that may be taken in this behalf, be renewed on payment of late fee at the rate of one year licence fee for every delay of three months or part thereof:

Provided further that in the case of an application for the renewal of a licence for a period of more than one

year at a time, the fee prescribed under the first proviso, if payable shall be paid only for the first year of renewal.

(8) No licence shall be renewed if the application for renewal is received by the Chief Controller or Controller after one year of the date of its expiry..

**NOTE :** The same fee shall be charged for the renewal of the licence for each Financial Year as for the grant thereof.

**DEPARTMENTAL ACTION :**

1) Every licence granted in form E & F under these rules is renewed for three financial years where there has been no contravention of the provisions of the act or any rules framed thereunder or of any condition of the licence so renewed.

2) 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 is refunded to the licensee provided that no refund of renewal fee is made for any financial year during which the Chief Controller of Explosives receives the renewed licence for surrender.

3) Every application for the renewal of the licence shall be accompanied by the licence which is to be renewed together with approved plans attached to the licence and the renewal fee.

4) Every application for the renewal of the licence shall be made so as to reach the licensing authority at least 30 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 of Explosives renews the licence or until an intimation that the renewal of the licence is refused has been communicated to the applicant.

5) Where the renewal of a licence is refused, the fee paid 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.

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

Provided that –

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 of Explosives after the date of expiry but not later than 30 days from the date of expiry, 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 more than one financial year at a time, the fee prescribed under the first provision, if payable, shall be paid only for the first financial year of renewal.

7) No licence shall be renewed if the application for renewal is received by Chief Controller of Explosives after 30 days or the date of its expiry.

**Design Approval for cylinder/valve/regulator Manufacture of cylinder/Regulator/Valve Recognition of Testing station of cylinders Repair of cylinders Conversion of cylinders**

**APPROVED PREMISES UNDER GAS**

**CYLINDER RULES, 2004.**

**Under the Gas Cylinder Rules, 2004 different types of approvals are granted for different purposes. Approval is granted for manufacture of cylinders.**

**Approval is granted for manufacture of valves, regulators, and safety fittings.**

**Approval is granted for testing/ repairing of gas cylinders.**

**Approval is granted for conversion of gas cylinders from one gas service to another as service.**

**Approval is also granted for recognition of Testing Station.**

**Cylinder filling permission**

**PROCEDURE ADOPTED FOR VARIOUS APPROVALS UNDER GAS CYLINDER RULES, 2004 (NOT REQUIRING LICENCE) APPROVAL UNDER GAS CYLINDER RULES, 2004**

**(A) CYLINDER FILLING PERMISSION :**

Rule 3 read with Rule 45 : No person shall fill any cylinder with any compressed gas unless such a cylinder and its valves or other fittings -

- i) are of approved type and standard as per rule 3 and has been specifically approved for filling by the Chief Controller of Explosives;
- j) have passed the examination & test specified in rule 35.
- k) conform to the provisions of rule 4,5,6,7 & 8 of Gas Cylinder Rules, 2004.

**Documents to be submitted for obtaining filling permission: -**

- 1) Manufacturer's test & inspection certificate issued by the inspecting authority (Bureau of Indian Standards, Lloyd's Register or Bureau Veritas as the case may be) in respect of the cylinders giving information as appended in Schedule II of the Gas Cylinder Rules, 2004.
- 2) The particulars of the valves fitted to the cylinders.
- 3) The name and address of the owners of the cylinders indicating their filling/ storage licence particulars.
- 4) Fee as per schedule V

**DEPARTMENTAL ACTION :**

The documents as referred above are scrutinized to verify -

- 1) whether the cylinders are of approved type and standard appearing in Schedule I of the Gas Cylinder Rules, 2004;
- 2) whether the design drawing to which the cylinders conform has been approved by the Chief Controller of Explosives;
- 3) whether the cylinders in question have been manufactured under the certification of recognized inspecting agency;
- 4) whether design paras conform to the approved drawing;
- 5) whether the cylinders are suitable for the particular gas service for which the filling permission has been sought;
- 6) whether the appropriate valves have been fitted to the cylinders;
- 7) whether the owner of the cylinder holds filling/storage licence in form 'E' & 'F'; If on scrutiny of the above, the documents are found satisfactory, filling permission for particular cylinder is issued.

**(B) CYLINDERS, VALVES & REGULATORS MANUFACTURING UNIT :**

Any person desiring to fabricate cylinders, valves and regulators etc., shall submit to the Chief Controller of Explosives the following documents :-

- i) The documents as set forth in Schedule III of the Gas Cylinder Rules, 2004.
- ii) 4 copies of the detailed layout drawing of the unit showing the layout of the plant, machineries, equipment etc., installed for manufacture, quality control and test & inspection of the cylinders, valves and regulators etc.
- iii) An authenticated copy of the Certificate of Registration of the unit under Indian Companies Act or SSI.
- iv) Bio-data indicating name, qualification and experience of the technical persons responsible for (a) manufacture & (b) quality control duly supported with documentary evidence in respect of their qualification and experience.
- v) A write-up on manufacture, quality control beginning with the raw materials upto the finished items in complete compliance of the relevant specification/code of the cylinder, valve and regulator as the case may be.
- vi) 4 copies of the detailed design drawing showing all the design paras and design calculation duly vetted by Bureau of Indian Standards.
- vii) Scrutiny fee RS 2000/-

#### **DEPARTMENTAL ACTION :**

On scrutiny of the documents and if found in order, the applicant is permitted to install necessary facilities and arrange manufacturing prototypes and advised to approach Jt. Chief Controller of Explosives/Dy. Chief Controller of Explosives of respective Circle/Sub-circle offices and Bureau of Indian Standards to hold joint inspection to verify that :

- i) The complete test and manufacturing facilities has been installed;
- ii) the firm has employed technically qualified and experienced persons;
- iii) during joint inspection the firm has to demonstrate by manufacturing a trial batch in presence of the inspecting officer. The representative samples of the prototypes shall be subjected to detailed tests & examinations as prescribed under the specification/code adopted. The entire manufacturing activities and prototype testing will be witnessed jointly by above mentioned inspecting officers and a joint inspection report will be submitted to the Chief Controller of Explosives for further necessary departmental action;
- iv) the joint inspection report referred above shall be scrutinized and if found satisfactory, necessary approval shall be issued to the applicant to manufacture the cylinders, valves or regulators as the case may be under BIS certification. In case of the cylinders, valves & regulators which are manufactured as per the specification/code other than the Indian Standard, Lloyd's Register or Bureau Veritas could be considered instead of the Indian Standard by the Chief Controller of Explosives.

#### **E. HOT REPAIRS OF THE WELDED/BRAZED CYLINDERS :**

During usage of the cylinders, the foot ring and the VP ring of LPG cylinders are often damaged due to improper loading/unloading operations. The hot repairs of the cylinders for replacement of damaged foot ring and VP ring is permissible at the premises of manufacturer of the cylinders recognized by the Chief Controller of Explosives under the certification of Bureau of Indian Standards. The following documents are required to be submitted by the manufacturer of the cylinders for seeking approval to undertake hot repairs of the cylinders (Normally for LPG cylinders) :-

- ii) The scheme of hot repairs duly vetted by Bureau of Indian Standards.
- iii) Detailed procedure of degassing of the cylinders.
- iv) 4 copies of the site and layout plan of the premises showing the layout of the plant/equipments specially installed to undertake hot repair of the LPG cylinders. The degassing facilities to remove residual LPG contained in the cylinder shall be provided adjacent to cylinder manufacturing plant. The degassing platform (size 3M x 3M approx.) shall observe minimum 30M clearance all around within 2M high barbed wire fencing. An approach gate of 1.2M width (max.) shall be provided for approaching to degassing area. The run of the water pipeline upto degassing platform shall be shown. This requirement will vary for other gases.
- v) Scrutiny fee RS 2000/-

**NOTE :** In case no separate facilities have been installed to undertake hot repairs of the cylinders and the manufacturer proposes to utilize the existing cylinder manufacturing facilities, the permission could be considered subject to conditions that :-

- i) when hot repairs of the old cylinder is in progress no activity connected with the manufacture of the new cylinder will be undertaken;
- ii) new cylinders already manufactured and lying in the premises shall be removed to prevent any mix up.

#### **DEPARTMENTAL ACTION :**

On scrutiny of the documents submitted by the applicant and if found in order, the applicant shall be permitted to install the necessary facilities and advised to approach Jt. Chief Controller of Explosives/Dy. Chief Controller of Explosives of the concerned Circle/Sub-circle office and Bureau of Indian Standards for joint inspection. The joint inspection will include the following :

- iv) The inspecting officer shall verify the facilities available for degassing of the cylinders and any additional facilities installed for hot repairs.
- v) The inspecting officer shall witness the process followed by the applicant to undertake hot repairs of the cylinders. Stage by stage process followed by the firm right from the receipt of the cylinders till the cylinders are ready for dispatch shall be verified.

After witnessing the process, the inspecting officer shall submit joint inspection report to the Chief Controller of Explosives.

On scrutiny of the joint inspection report and if found satisfactory, approval for hot repairs under Bureau of Indian Standards Certification shall be issued.

#### **FORM D - IMPORT OF CYLINDERS**

##### **F. CONVERSION OF CYLINDERS :**

**Conversion of cylinders.-** (1) Gas cylinders designed and approved for filling with a particular gas shall not be used for filling with any other gas unless specific approval is obtained from the Chief Controller except that :-

(a) inert gases, oxygen and compressed air cylinders made to the same specification and design may be converted from one gas to another after fitting with appropriate valve and painting with appropriate identification colour without prior permission from Chief Controller, with approval of the cylinder owner.

(b) proper records of such conversions shall be maintained by the gas filler for examination of Chief Controller or Controller as and when needed.

(2) Any person desiring for conversion approval shall submit to Chief Controller the following: -

- (i) documentary evidence indicating that the cylinders have been purchased by him;
- (ii) an authenticated copy of letter permitting filling of the cylinders in the past;
- (iii) a statement in duplicate, showing manufacturer's serial numbers of the cylinders in ascending order;
- (iv) a certificate to the effect that the cylinder(s) had not been converted to any other gas service in the past;
- (v) scrutiny fee as specified in Schedule V.

##### **G. CYLINDER/VALVE/REGULATOR DESIGN APPROVAL :**

The applicant whose manufacturing unit has been approved for manufacturing cylinder, valve or regulator along with scrutiny fee as per schedule V as the case may be, shall submit the drawing of cylinder, valve or regulator for prior approval to the Chief Controller of Explosives duly vetted by Bureau of Indian Standards under whose certification the said cylinder, valve or regulator are to be manufactured. The design drawings/design calculation shall be scrutinized and approval issued if found in order. In case of change in material, water capacity, dia, wall thickness and methodology of manufacturing cylinders, change in the nature of the heat treatment, fresh joint inspection will be ordered and the procedure as stated above (in Para 'B') shall be followed for approval of the design drawing.

##### **H. RECOGNITION OF THE CYLINDER TESTING STATION**

###### **Rule 35(2):**

No person shall fill any cylinder with any compressed gas unless the cylinder has been examined and subjected to hydrostatic test or hydrostatic stretch test as specified in the code issued by Bureau of Indian Standards or approved in writing by the Chief Controller of Explosives. The periodicity of such examination and testing shall be as per IS:8868-1988.

Any person desiring to obtain recognition in respect of the cylinder testing station shall submit the following documents as specified under Schedule IV of the Gas Cylinder Rules, 2004 :-

###### **(1) Documents for recognition of the Testing Station for Non-Toxic/Non-Flammable Gases :**

The following documents shall be submitted by the applicant :- i) Set-up of the testing station. Qualifications and experience of the Manager, Supervisors and Operators etc, engaged in your employment for testing of cylinders (please furnish documentary evidence in support of the above personnel).

ii) Details of set of Rules, Code, Specification and/or Regulations ( applying to the cylinders which you would test) available with you. iii) Details of equipments available with you for the purpose of testing of cylinders.

iv) Accuracy of the equipment with regard to hydrostatic test apparatus, weighing equipment, working pressure gauge and calibrated pressure gauge.

v) Periodicity of calibration of equipment and how it is done with regard to working pressure gauge, calibrated pressure gauge, weighing equipment and test weights.

vi) Details of working conditions prevalent in your testing station.

vii) The stage by stage process of testing the cylinders beginning with the receipt of a cylinder in you

testing station ending with the completion of test.

- viii) The code marks of test to be stamped by you on cylinders.
- ix) A sample calculation of permanent stretch.
- x) 4 copies of layout plan of testing station.
- xi) Scrutiny fee RS 2000/-

**2. Documents to be submitted by the applicant for recognition of the LPG cylinder testing station :**

- ii) Set-up of the testing station. Qualifications and experience of the Manager, Supervisors and Operators etc, engaged in your employment for testing of cylinders (please furnish documentary evidence in support of the above personnel).
- iii) Details of set of Rules, Code, Specification and/or Regulations ( applying to the cylinders which you would test) available with you.
- iv) Details of equipments available with you for the purpose of testing of cylinders.
- v) Accuracy of the equipment with regard to hydrostatic test apparatus, weighing equipment, working pressure gauge and calibrated pressure gauge.
- vi) Periodicity of calibration of equipment and how it is done with regard to working pressure gauge, calibrated pressure gauge, weighing equipment and test weights.
- vii) Details of working conditions prevalent in your testing station.
- viii) The stage by stage process of testing the cylinders beginning with the receipt of a cylinder in you testing station ending with the completion of test.
- ix) The code marks of test to be stamped by you on cylinders.
- x) 4 copies of site/layout plan of testing station in relation to the surrounding facilities shall be furnished. The plan shall indicate the location of degassing facilities with degassing platform (3M x 3M approx.) observing a safety distance of not less than 30M around within the 2M high barbed wire fencing with an approach gate not exceeding 1.2M wide.
- xi) Scrutiny fee RS 2000/-

**3. Documents to be submitted by the applicant for recognition of the CNG/Hydrogen cylinder testing station :**

- i) Set-up of the testing station. Qualifications and experience of the Manager, Supervisors and Operators etc, engaged in your employment for testing of cylinders (please furnish documentary evidence in support of the above personnel).
- ii) Details of set of Rules, Code, Specification and/or Regulations ( applying to the cylinders which you would test) available with you.
- iii) Details of equipments available with you for the purpose of testing of cylinders.
- iv) Accuracy of the equipment with regard to hydrostatic test apparatus, weighing equipment, working pressure gauge and calibrated pressure gauge.
- v) Periodicity of calibration of equipment and how it is done with regard to working pressure gauge, calibrated pressure gauge, weighing equipment and test weights.
- vi) Details of working conditions prevalent in your testing station.
- vii) The stage by stage process of testing the cylinders beginning with the receipt of a cylinder in you testing station ending with the completion of test.
- viii) The code marks of test to be stamped by you on cylinders.
- ix) A sample calculation of permanent stretch.
- x) 4 copies of site/layout plan of testing station . The site plan shall show all structures lying within 100M of the proposed testing station. The degassing platform of size (3M x 3M approx.) shall observe 15M clearance all around within 2M high barbed wire fencing. An approach gate of 1.2M width (max.) shall be provided for degassing area. The run of water pipeline upto degassing point shall be shown.
- xi) Scrutiny fee RS 2000/-

**4. Documents to be submitted by the applicant for recognition of the Testing Station for Toxic/Corrosive Gases :**

In addition to the documents as specified above in Para 1, the applicant has to submit the following :

- i) The particulars of the facilities installed by him for safe evacuation and neutralizing of the toxic/corrosive gas.
- ii) A write-up on process of safe evacuation and neutralizing of the gas.
- iii) The particulars of the competent persons technically qualified and experienced in handling of the said toxic/corrosive gas.

iv) Scrutiny fee RS 2000/-

**DEPARTMENTAL ACTION :**

On scrutiny of the documents submitted by the applicant and if found in order, the applicant shall be permitted to install the facilities and advised to approach Jt. Chief Controller of Explosives/Dy. Chief Controller of Explosives of the concerned Circle/Sub-circle office for inspection of the facilities. After the verification that the applicant has installed necessary facilities prescribed under Schedule IV of the Gas Cylinder Rules, 2004 commensurate with the nature of the gas cylinders to be subjected for periodic examination and testing and after verifying the availability of the technically qualified and experienced managers, supervisors and operators, the inspecting officer shall also witness test and examination of few cylinders in his presence and forward his report to Chief Controller of Explosives.

On scrutiny of the inspection report and if found satisfactory, recognition under rule 35(2) of the Gas Cylinder Rules, 2004 will be issued by the Chief Controller of Explosives in respect of the concerned testing station.