SMPV Rules

FAQ Summary

1. What is required to store compressed gas in a vessel?

- You must obtain a license to store compressed gas in any vessel. This license must be granted under the specific rules and conditions outlined in the regulations.

2. What documents are needed to apply for a license to store compressed gas?

- Submit the following to the Chief Controller or authorized Controller:
    - Specifications and plans of the premises and vessels in triplicate.
    - Details about compliance with regulations, the area of the premises, surrounding areas, and vessel specifications.
    - Hazard and Operability (HAZOP) study and risk analysis for major installations.
    - Piping and instrumentation diagrams.
    - Any additional documents specified by the Chief Controller.
    - A scrutiny fee as outlined in Schedule I.

3. What is the process for obtaining a No Objection Certificate (NOC)?

- Apply to the District Authority with two copies of the site plan for a certificate stating there are no objections to the proposed storage location. This certificate must be forwarded to the Chief Controller with your application.

4. What if the District Authority objects to my application?

- If the District Authority objects to the license, the Chief Controller will not issue the license without the sanction of the Central Government.

5. Can I transport compressed gas without a license?

- No, you cannot transport compressed gas in a vessel without a license. This rule does not apply to transportation by railway administration.

6. How is a license granted?

- The Chief Controller or Controller grants the license upon payment of the specified fees and requisite documents. The license will contain conditions and particulars as per the prescribed forms. An authenticated copy of the license can be issued upon request.

7. What is the maximum validity period of grant of a license under SMPV Rules?

- A license for storing compressed gas in a pressure vessel (Form LS-1A or LS-1B) is granted for up to five years. A license for transporting compressed gas (Form LS-2) is also granted for up to five years.

8. Can the conditions of a license be altered?

- Yes, the Chief Controller may modify the conditions of a license as needed.

9. What is the procedure for making alterations to licensed premises?

- Submit a plan of the proposed alterations, including reasons and other documents as specified, to the Chief Controller for approval. After the alteration is approved and completed, apply for an amendment to the license.

10. How do I amend or transfer a license?

- **Amendment:** Submit an application in Form AS-1 or AS-2, relevant documents, and the original license for amendment.
- **Transfer:** Submit an application, a consent letter from the previous licensee, the original license, and additional required documents.

11. What is required for a license amendment or transfer?

- For an amendment, provide the amended plan, test certificates, and a safety certificate if applicable.
- For a transfer, provide consent from the previous licensee, new site plans, and other documents relevant to the new owner.

12. Are there any exceptions to these rules?

- Licenses granted or renewed before the new provisions came into force are deemed valid under the new rules.

13. How can a license be renewed?

A license granted under these rules may be renewed by the Chief Controller or a Controller authorized by him. The renewal application must be made in Form AS-1 or AS-2, accompanied by the original license, renewal fee, and submitted before the current license expires. If the application is made on time, the license will remain in force until renewed or refused.

14. What is the maximum period for which a license can be renewed?

Licenses granted in Form LS-1A, LS-1B, and LS-2 may be renewed for a maximum period of five years, provided there have been no contraventions of the Act, rules, or conditions of the license.

15. What happens if a renewed license is surrendered before its expiry?

If a license renewed for more than one year is surrendered before its expiry, the renewal fee paid for the unexpired portion will be refunded, except for any financial year during which the license was surrendered.

16. Are there any late fees for renewal applications submitted after the expiry of the license?

Yes, if an application is received within three months after expiry, the renewal fee will be doubled. If received after three months but within one year, a late fee equal to one year's license fee for every delay of three months or part thereof will apply.

17. What if the renewal application is received more than one year after expiry?

The license cannot be renewed if the application is received more than one year after the expiry date. In such cases, a fresh license application must be submitted, including all necessary documents and late fees for the entire period.

18. How can one appeal against a refusal or any other decision regarding a license?

Appeals can be made as follows:

- Against an order by the Controller, to the Chief Controller.
- Against an order by the Chief Controller, to the Central Government.
- Against an order by the District Authority, to the authority superior to them. Appeals must be made in writing, accompanied by a copy of the order appealed against, within sixty days from the date of the order.

19. What should be done in case of the licensee's death, insolvency, or disability?

If a licensee dies, becomes insolvent, or is otherwise disabled, the person continuing the business is not liable for penalties for the unexpired portion of the original license during the period needed to apply for a new license. A fee for the new license for the remaining period will be charged.

20. What steps should be taken if a license is lost or destroyed?

A duplicate license can be obtained by submitting a written request, an explanation of circumstances, a copy of the police complaint, two sets of identical drawings, and payment of the specified fee.

21. What information must be displayed on licensed premises?

The licensee must display the particulars of the license, operating instructions, and emergency contact numbers for local fire services, police, and gas suppliers prominently in the licensed premises.

22. What should be done if there is an accident involving compressed gases?

Records of all incidents must be maintained and presented to inspecting officers on demand. Accidents must be reported immediately to the Chief Controller or Controller, District Authority, and the nearest police station. All wreckage should remain untouched unless necessary for rescue or recovery.

23. What happens if the license is suspended or cancelled?

Upon suspension or cancellation, the licensee must notify the licensing authority and District Authority of the compressed gas in their possession and follow disposal instructions. In case of closure, the types and quantities of hazardous gases must be reported and disposed of as specified.

24. What are the powers of inspection and enforcement?

Certain officers, including the Chief Controller, District Magistrates, and Commissioners of Police, have the authority to inspect, search, seize, detain, and remove items as specified in the rules.

25. Are there protections for actions taken in good faith under these rules?

Yes, neither the Central Government, Chief Controller, nor Controller can be sued for actions taken in good faith or intended to be done in accordance with these rules.

26. What happens to licenses and approvals under the repealed rules?

Licenses and approvals granted under the repealed Static and Mobile Pressure Vessels (Unfired) Rules, 1981, will be deemed to have been granted or renewed under the new rules, and all associated fees and approvals remain valid as per the new rules.

27. Do these rules apply to vessels that are part of a processing plant?

No, vessels that are part of a processing plant are exempt, provided they meet specific conditions related to gas storage and usage.

28. Q: Can anyone fill compressed gas into a vessel or transport it?

No, only vessels manufactured according to specified standards and approved by the Chief Controller can be filled or transported with compressed gas.

29.**Q: What is required for manufacturing pressure vessels and fittings?**

Prior approval from the Chief Controller is required.

30. Q: How can a fabrication shop get approval for making pressure vessels?

Submit specified documents, including ISO certification and a scrutiny fee. The Chief Controller will inspect and approve based on the assessment.

31.Q Can vessels be imported without approval?

No, prior approval from the Chief Controller is required.

32.Q: Who can receive deliveries of compressed gas?

Only those with a storage license or certain authorities like port or railway administrations.

33.Q: Can repairs or modifications be made to any vessel?

Only with prior approval and under specified conditions. Records must be maintained and permissions obtained before re-commissioning.

34.Q: How should new or gas-free vessels be purged?

With inert gas or the gas intended for use. Flammable mixtures formed during purging must be vented safely.

35.Q: Can children or intoxicated persons be employed in handling compressed gas?

No, they are strictly prohibited from such activities.

36.Q: Who should supervise the operation of licensed premises?

Trained and knowledgeable persons must supervise, and all operators should be aware of associated hazards and fire-fighting operations.

37 Q. What precautions must be taken to prevent accidents?

No smoking, open flames, or acts causing ignition are allowed near compressed gas. Empty vessels must be securely closed unless being cleaned or made gas-free.

38 Q: How should fees be paid?

Fees should be paid through a crossed demand draft or online, as specified by the Chief Controller.Now, the fees is accepted through online mode only.

39 Q : How can an organization be recognized as a competent person or inspector?

Submit an application with a scrutiny fee. The Chief Controller will assess competence and may grant or reject recognition based on an interview and other criteria.

40.Q: What standards should pressure vessels be designed and constructed to?

Pressure vessels must be designed, constructed, and tested according to IS 2825; ASME Section VIII Division 1 or Division 2, PD5500, EN 13458, EN 13530, AD:2000 codes, or other standards accepted by the Chief Controller.

41.Q: What documentation is required to verify compliance with the design code?

A test and inspection certificate must be issued by the Inspector and countersigned by the approved fabricator, confirming that the vessel meets the requirements of the applicable standard or code.

42.Q: What are the requirements for the design pressure of vessels?

1. For liquefiable gases, the design pressure should match the gas's vapor pressure at 55°C.
2. For permanent gases, it should match the developed pressure at 55°C.

3. For cryogenic liquids, the design pressure should accommodate maximum allowable service pressure, vacuum, static head, and surge.

43.Q: How should vessels for low-temperature gases be designed?

1. **Refrigerated Vessels:** Design must follow low-temperature requirements of the referenced design code.
2. **Insulated Vessels:** Must have Chief Controller-approved insulation and metal jackets for weather protection.
3. **Cryogenic Vessels:** Inner vessel materials must be suitable for low temperatures, and the outer vessel should be structurally sound with corrosion protection.

44.Q: What are the limits on filling vessels with liquefiable or permanent gases?

1. Liquefiable gas filling must be limited to avoid being liquid-full at 55°C.
2. Permanent gases should not exceed the vessel's design pressure.
3. Cryogenic vessels' usable water capacity should not exceed 95% of gross water capacity.

45.Q: What information must be displayed on each vessel?

A metal plate showing manufacturer’s name, Chief Controller’s approval number, vessel ID, design code, Inspector’s stamp, design and hydrostatic test pressures, capacities, and gas type.

46.Q: What fittings are required for each vessel?

Each vessel must have:

1. Pressure relief valve
2. Drains
3. Contents gauge or maximum level indicator
4. Pressure gauge
5. Means of measuring contents temperature

Connections must meet design code requirements and ensure safety for corrosive, flammable, or toxic gases.

47.Q: What are the requirements for pressure relief devices on vessels?

1. Vessels need two or more pressure-relieving devices as per the design code.
2. Relief valves should be spring-loaded, tamper-proof, and set to discharge at appropriate pressures.
3. For cryogenic vessels, the outer vessel should have a vacuum valve and safety relief device.

48.Q: How often must relief valves be tested?

Relief valves must be tested annually by a Competent Person, and records of such tests must be maintained.

49.Q. What considerations are there for design of static pressure vessels?

Static head (higher of the water column or compressed gas column), wind load, and seismic loads must be considered for vertical cylindrical vessels and Horton spheres.

50.Q. What markings are required on pressure vessels?

Every vessel must have a metal plate showing:

- Manufacturer's name
- Chief Controller's approval number
- Vessel identification number
- Construction standard or code
- Inspector's official stamp
- Design pressure and hydrostatic test pressure
- Initial and subsequent hydrostatic test dates
- Water capacity and gas capacity
- Chemical symbol of the gas
- Design temperature

51.Q. What are the guidelines for shut-off and emergency shut-off valves?

- Liquid and vapor connections must have shut-off valves.
- Emergency shut-off valves, such as excess flow valves or remotely controlled valves, are required, except for certain small-diameter connections or non-corrosive, non-flammable, or non-toxic gases.
- Road tankers for flammable, toxic, and corrosive gases must have internal valves with dual functions for primary shut-off and excess flow control.

52.Q How should liquid level in vessels be gauged?

- Vessels must have a liquid level gauging device suitable for operation at the vessel's design pressure.
- An additional fixed maximum level indicating device is required based on the type of gas.

53.Q. What is the required frequency for hydraulic testing of pressure vessels?

- All pressure vessels should be hydraulically tested every five years. For vessels containing corrosive or toxic gases, the test interval is two years.

54.Q Are there any additional testing requirements for large vessels?

- Yes, vessels with a capacity of more than 100 KL, used for flammable, corrosive, and toxic gases, must undergo Non-Destructive Testing (NDT) for weld inspection in addition to hydraulic testing.

55.QCan pneumatic testing be used instead of hydraulic testing?

- Yes, if vessels cannot be safely filled with water or if traces of water cannot be tolerated, pneumatic testing may be permitted by the Chief Controller, along with NDT.

56.Q How are cryogenic pressure vessels and vessels for liquid Carbon Dioxide tested?

- Cryogenic pressure vessels and vessels for liquid Carbon Dioxide made of stainless steel are tested pneumatically at 1.1 times the maximum allowable working pressure. Carbon Dioxide storage and transport vessels made of carbon steel undergo hydraulic testing.

57.Q. What are the requirements for mounded and underground vessels?

- These vessels must be periodically inspected as specified in Schedule III.

58.Q What is the inspection schedule for Ammonia Horton spheres?

- The first inspection occurs two years after installation with detailed NDT. The second inspection follows three years later, involving NDT and hydro testing. Subsequent inspections are conducted every five years.

59.Q What precautions should be taken during periodic testing?

- Thorough cleaning and external/internal examination for defects and corrosion, degassing of transport vessels, ensuring vessels are dried after testing, marking tested vessels, and destroying unsafe vessels.

60.Q. Where should pressure vessels be installed?

- Vessels should be installed entirely above-ground unless specified otherwise. They should not be located within the bonded area of petroleum or flammable liquid storages and should have sufficient space for fire-fighting operations.

61.Q. What are the requirements for earthing and fire protection?

- Vessels storing flammable gases must be electrically earthed. Adequate fire protection measures, including water supply, fire extinguishers, and mobile or fixed water spray systems, should be in place.

62.Q What should be the design and materials for foundations of pressure vessels?

- Foundations should comply with approved standards, considering ground conditions, loading, settlement, and vessel support requirements.

63.Q. What measures should be taken for cleanliness and restricting unauthorized access?

- The area within the safety distance of the installation must be free of ignitable materials. The area should be enclosed with an industrial-type fence, have at least two exits, and display no-smoking signs.

64Q. What are the specifications for loading and unloading facilities?

- Pumps and compressors must be designed for the gases they handle. Transfer systems should prevent gas of higher vapor pressure from being transferred to equipment designed for lower vapor pressure. Hoses should withstand at least four times the maximum operating pressure.

65.Q. What procedures must be followed before transferring gas?

- **Vehicle Examination:** Ensure every vehicle is carefully examined at the installation, complies with rules, and is completely emptied before filling.
- **Visual Check:** Inspect surroundings for unusual or dangerous situations.
- **Warning Notices:** Display necessary warning notices.
- **Receiving Vessel Check:** Verify the receiving vessel has enough ullage to receive the gas.
- **System Check:** Ensure inter-connecting systems (pipes, valves, hoses) are in safe working condition and only required valves and fittings are open.

66.Q. What should be monitored during the transfer of gas?

- **Filling Capacity:** Check that the receiving vessel is not being filled beyond its safe capacity or design pressure.

67.Q. What procedures should be followed when filling vessels on vehicles with compressed gas?

- **Level Parking:** Ensure the vehicle is parked on a level surface.
- **Prevent Movement:** Activate the parking brake, stop the engine, and use wheel chock blocks if necessary.
- **Isolate Equipment:** Stop or isolate any unnecessary electrical equipment.
- **Bonding:** Electrically bond the vessel to the fixed installation before transferring flammable liquefied gas.
- **Disconnections:** Disconnect electrical and liquid/vapor connections before moving the vehicle, and ensure the vehicle and surrounding areas are safe.

68.Q. Who should be present during gas transfer operations?

- **Attendant:** A skilled and trained person with requisite knowledge and experience must be present to ensure compliance with rules.

69.Q. What are the requirements for dispensers at Auto LPG dispensing stations?

- **Design and Approval:** Dispensers and fittings must meet the design, construction, and maintenance requirements as per Schedule II and be approved by the Chief Controller.
- **Engine Off:** Auto LPG should not be filled into vehicles with the engine running.
- **Unloading:** Do not dispense Auto LPG while unloading from tank-trucks.

70.Q. What are the electrical requirements for installations handling flammable gases?

- **No Overhead Wires:** Electrical wires should not pass over storage vessels.
- **Insulation and Earthing:** Wires in safety zones must be insulated, mechanically continuous, and effectively earthed.
- **Explosion-Proof Equipment:** Equipment in pump rooms must comply with explosion protection standards.

71.Q. How are hazardous areas classified for flammable gases?

- **Zone '0':** Continuously present inflammable gases or vapours.
- **Zone '1':** Inflammable gases or vapours present under normal operating conditions.
- **Zone '2':** Inflammable gases or vapours present only under abnormal conditions.

72.Q. What is required for vehicles transporting compressed gas?

- **Vehicle Approval:** Vehicles must be approved by the Chief Controller.
- **Design and Safety:** Vessels should be designed to withstand road shocks, and all equipment must be protected against damage.
- **Marking:** Vehicles should be clearly marked to indicate the product being carried.
- **Fire Protection:** Vehicles must be equipped with fire extinguishers and comply with no-smoking and no-flammable materials rules.

73.Q. What documentation is required for vehicle safety?

- **Certificate of Safety:** A certificate signed by a competent person must be provided to the licensing authority for the vessel or vehicle to ensure it meets safety requirements.