

Table 11.14: Inspection and Maintenance Checklist

ITEMS	INSPECTION AND MAINTENANCE GUIDELINE
3. SHUT-OFF VALVES	<ul style="list-style-type: none"> i. Shut-off valves shall be as per design specifications. ii. Shall be replaced every 10 years or if any signs of damage are evident. iii. Valves shall be accessible freely and shall not be obstructed.
4. GAUGES	<ul style="list-style-type: none"> i. Gauges shall be as per design specifications. ii. Shall be replaced every 10 years or if any signs of damage are evident.
5. PRESSURE REGULATING DEVICE	<ul style="list-style-type: none"> i. Pressure regulating valves shall be as per design specifications and pressure setting. ii. Pressure regulators shall be locked against unauthorized adjustment. iii. First stage pressure regulating devices shall be located as close as practicable to the storage vessel or vaporizer. iv. Isolating valves shall be provided and in correct position at both sides of regulator.
6. FILLING POINT	<ul style="list-style-type: none"> i. Shall be inspected for tampering, corrosion, cracking, erosion, deformation etc. ii. Filling connections shall be located at suitable height and within protective enclosure. iii. Filling point shall be accessible and shall not be obstructed. iv. Identification Signboard/Label shall be in place and visible.
7. PIPING AND JOINTS	<ul style="list-style-type: none"> i. Visual examination shall ensure that external surfaces and all welds are free from signs of defects such as corrosion, cracking, erosion, deformation etc. ii. Signs of LPG leaks, LPG odor shall not be ignored and proper pressure testing shall be carried out to ensure no leakages. iii. Copper pipe joints shall be brazed properly. iv. The gaskets and flanges shall be LPG resistant types and shall be inspected for wear and tear. v. Piping supports shall be inspected for corrosion, cracks and damages. vi. Pipes penetrating walls and structures shall be appropriately wrapped and enclosed in fire rated sleeves and such arrangements shall be ensured to be in proper condition. vii. Piping labeling and direction indication shall be verified and ensured to be as per original design.
8. LPG DETECTION AND ALARM SYSTEM	<ul style="list-style-type: none"> i. LPG control panel shall have uninterrupted power supply. ii. LPG detectors, solenoid valves and emergency switch shall be visually inspected for blockages, dust and corrosion. iii. LPG detector working condition shall be verified with its blinking LED. iv. Control Panel LED test shall be carried out to verify normal functioning of all indicating LED. v. Inspect and verify the battery and terminals for the control panel for its normal working condition. vi. Inspect, test and verify the supervisory signals controlling other functions. vii. Simulate LPG detectors, triggering the alarm and verify the associated alarm, automatic switch-off of LPG supply and other control functions.