



Reaching Impact, Saturation and Epidemic Control (RISE)

PRE-INSTALLATION CHECKLIST FOR LIQUID MEDICAL OXYGEN (LMO) STORAGE TANKS

YOU ARE INSTRUCTED TO READ THE FOLLOWING THOROUGHLY BEFORE PROCEEDING TO UNDERTAKE THE METHODS DESCRIBED.

UNDER NO CIRCUMSTANCES ARE THESE INSTRUCTIONS TO BE AMENDED OR ALTERED IN ANY WAY OTHER THAN BY THE AUTHOR / APPROVER.

THIS CHECKLIST IS MEANT TO BE USED/ COMPLETED BY ANY TECHNICAL STAFF AVAILABLE AT HOSPITALS MANAGING MGPS, MANIFOLD, PSA PLANTS, AND LMO TANKS.

Date	Author	Reviewer	Version No.	Pages	Next Review
December 2021	Pooja Sharma,	Varun Manhas, Bikramjit Debnath	1		Dec 2022

PESO Licensing					
Documents required for online ¹ submission for License from PESO by Hospital directly (step # 1 prior approval)					
S. No	Description	Yes	No	Remarks	
1.	Land ownership document/agreement copy clearly showing hospital premises submitted				
2.	Khasara no. (applicable for northeast states) available				
3.	Site layout plan/drawing showing 100 m radius submitted				

¹ Online application form can be downloaded from PESO website: www.peso.gov.in

4.	Covering letter submitted			
5.	Layout design for the proposed storage tank submitted			
6.	GST Certificate submitted			
7.	Specimen signature submitted			
8.	Form AS-1 submitted (Please click here)			
9.	Online payment receipt submitted			
10.	HAZOP ² study conducted			
11.	Username and password generated in the facility name on Petroleum and Explosives Safety Organization (PESO) website			
12.	Paid fees up to 5 years (approx. Rs 5,000/year)			
Documents required for online submission for License of PESO by Hospital directly (step # 2 Grant of License)				
13.	Covering letter submitted			
14.	Form AS-1 submitted			
15.	4-Copies of as built site Layout, Foundation, Piping and Installation (P & I) Drawings and (General Arrangement) GA drawings of pressure vessel submitted			
16.	Safety Test and Inspection certificate issued by recognized 3rd party inspecting agency (Original + 2 Copies) submitted			
17.	Safety certificate under rule 33 (original + 2 copies) issued by PESO personnel (Please click the link here)			
18.	3-copies of certificate of testing of vessel and safety valves under rule 18 & 19 certificate submitted (Please click the link here)			
19.	Online Payment Reference No. generated by depositing Grant License fees (usually Rs 5000/- for first 5kL additional 2500/- per additional kL for one year)			
20.	Specimen signature of persons authorized			

² HAZOP study is done to ensure that within 7.5 m radius of the LMO tank, there is no drainage pipe, electrical cabling underneath etc.

	to make correspondence in the subject matter done			
21.	GST-Certificate submitted			
22.	Copy for Initial site approval letter with approved drawings declaration submitted			
Space requirement for installation met according to the (SMPV) Rules 1983				
23.	Space requirement for 1 kL tank - 1 Tank- 6 m x 10 m - 2 Tanks – 9 m x 17 m			
24.	Space requirement for 3 kL up to 30 kL tank - 1 Tank- 9 m x 15 m - 2 Tanks – 12 m x 17 m			
Regulatory Requirements for PESO approval				
25.	Site identified and approved, - Assigned space is well connected with internal roads for smooth movement of LMO transport tanker from/to the Installation - Site should be selected at ground level, outdoor, without overhead power or other utility cable - LMO tanks are installed in open space in the hospital premises			
26.	Civil work approved			
27.	2 gates for entry/exit at the site			
28.	Distance between the LMO tank and the public paths is ensured to be minimum of 3m, and smoking and naked flame is forbidden within 5m except where a separate firebreak wall exists with a minimum height of 2.5m			
29.	a. Vacant space is provided within a radius of 3 m around the tank b. Ensure that no transformer and drainage system and no other fire risk is within 5 m			
30.	About 2m high industrial fencing exists			
31.	Automatic/Manual changeover is provided between the LMO tank and existing oxygen manifold (usually D type cylinders) in the			

	health facility premises			
32.	Lorry stopper 2mtr from the tank			
33.	Availability of fire extinguishers, sand buckets, water connection, lighting, safety signages, earthing pit are ensured			
34.	Display of liquid oxygen level and outlet gas pressure is provided			
MGPS				
35.	Medical Gas Pipeline System (MGPS) network in the hospital is ensured for safe delivery of O2 till patient bedside			
36.	Availability of Back up or secondary source of oxygen, mandatory as per MGPS norms and standards, ideally Oxygen cylinders (Type D) are connected to the manifold			
37.	Supply of liquid medical oxygen is conforming to Medical Oxygen IP 2018 guidelines			

Date:

Plant Location Name:

Plant Capacity/Model Number:

Name of OEM Vendor/Supplier:

Name & Signature of PATH/CHRI representative (auditor):