

LGCNCOE Study Guide: Semi-Enclosed Compressor Rooms

References

Regulatory

International Gas Carrier Code (IGC)

Gas Carrier Code (GC)

Existing Gas Carrier Code

CG-543 191819Z MAR 10 Safety Alert - Cargo Compressor Room Entries During Port State Control Exams & Law Enforcement Boardings of Liquefied Petroleum Gas (LPG) Carriers

Other Industry

Ship's Cargo Operations Manual



1. *What type of system/space is represented in this photograph?*

Pictured above is the outside view of a liquefied gas carrier's (LGC) semi-enclosed compressor room.

2. *What hazards are associated with this space?*

There is a potential of a gas leak/release. All personnel working around compressors should be keenly aware of and cautious of gas leaks and review MSDS for specific hazards and exposure limits. Some semi-enclosed compressor rooms rely on natural ventilation which could allow for gas pockets in certain light wind conditions.

3. *Is a marine chemist required before entering?*

No, the Coast Guard does not require a Marine Chemist before entering the space. However, at a minimum, a risk assessment should be conducted to determine if any safety hazards are present.

[Compressor Room Entry Safety Alert - 191819Z MAR 10](#)

4. *What precautions should be taken prior to examining equipment in this space?*

- Utilize correct PPE
- Review the Material Safety Data Sheet (MSDS)
- Verify the Fixed Gas Detection system has been properly calibrated, operating as designed
- Verify designated officers have adequate training and perform regular maintenance
- Verify cargo compressors are off
- Verify cargo compressor room ventilation is in good condition and operating for at least 30 minutes
- Follow vessel procedures for entering the cargo compressor room
- Witness cargo compressor room atmospheric testing by designated officers in accordance with shipboard procedures

5. *Is the space required to have fixed gas detection sampling?*

Yes. This area is still considered a compressor room which is addressed in IGC 13.6.7.2. The new IGC will address this type of space as "semi-enclosed" spaces.

6. *What types of lighting/electrical installations are required?*

Hazard Class 1, Division 1 (intrinsically safe /explosion proof lighting)