

Operating regulations for LNG bunkering from truck to ship



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1 General

All parties concerned are obliged to be aware of the contents of the Port of Luleå's LNG operating regulations. In addition to the provisions of these regulations, all bunkering in the port area of the Port of Luleå is covered by:

- national regulations
- the IMO's IGF Code
- the Swedish Transport Agency's National Guidelines TSG 2018-4023
- the port regulations of the Port of Luleå
- the operating regulations of the Port of Luleå.

1.1 Definitions

Hazardous zone: three-dimensional area around the LNG bunkering site where there is a risk of an explosive atmosphere.

Safety zone: three-dimensional area around the LNG bunkering site to control ignition sources and ensure that only essential personnel and activities are allowed in the area.

Monitoring and security area: extra security area around the LNG bunkering site to prevent disruption during the operation.

Truck: in these regulations means a vehicle for transport of liquefied natural gas.

1.2 Contact

The Port of Luleå is responsible for this publication. Questions may be addressed to:

Operations Manager

+46 920 45 68 17

Officer on call

+46 70 325 12 87

lulea.hamn@portlulea.com

1.3 Scope

These regulations apply to LNG bunkering from truck to ship.

2 Operating regulations

2.1 Basic requirements

The following conditions must be met for bunkering from truck to ship to be carried out:

1. Before bunkering begins, the gas supplier must have prepared a joint risk analysis, presented routines for the bunkering procedure and emergency situations in the part of the port concerned and certified the driver's knowledge in accordance with 2.1.2.

SIMOPS must be taken into account in risk assessment.

The documentation¹ must be approved by the Port of Luleå.

2. Bunkering must be notified not later than 24 h in advance and be approved by the Port of Luleå.

2.1.1 Vessel criteria

A receiving vessel must be certified in accordance with the IGF Code or IMO Resolution MSC 285(86).

The vessel must have relevant equipment for reception of liquefied gas. Personnel who are to handle liquefied gas must be authorised to carry out bunkering operations.

All bunkering operations must take place in accordance with a valid checklist.

2.1.2 Criteria for truck

The driver must have:

- Approved ADR training.
- Knowledge of checking, handling and monitoring the bunkering of liquefied gas.
- Knowledge of the safety regulations and LNG bunkering procedure of the part of the port concerned.

¹ The documentation including SDB/SDS must exist in a Swedish version.

- Personal protective equipment in accordance with Swedish Transport Agency requirements.
- Communications ratio for communication with the vessel.

2.1.3 Criteria for the port operator

The port operator must have routines for the handling concerned, including routines for emergency situations.

The routines must ensure that the truck is parked correctly, that it is not blocked by another vehicle and that it can depart from the site without manoeuvring.

If SIMOPS occur, this must be apparent from the port operator's procedures. The routines must describe what safety measures are required for the operation.

The routines must be approved by the Port of Luleå.

2.2 Hazardous zone and safety zone

Hazardous zone: 30 m from connection point.

Safety zone: 30 m from connection point.

Monitoring and security area: apparent from the routine for the part of the port concerned.

2.3 Weather requirements

No bunkering is permitted in the Port of Luleå when the gusting wind speed exceeds 20 m/s *See ViVa (wind and water information) Strömören.*

The operation must be discontinued during thunderstorms.

2.4 Bunkering procedures and requirements

LNG bunkering may be carried out only in accordance with approved routines.

2.5 LNG checklists

The gas supplier's checklist is used in the Port of Luleå after the Port of Luleå has approved it. The checklist, which must correspond to *IAPH – LNG bunker checklist Truck to ship*, must ensure that the bunkering process takes place step by step.

The port operator's routine for gas bunkering must contain an internal checklist for actions.

3 Distribution of responsibility

The port operator is responsible for coordination in the part of the port concerned, but responsibility for bunkering rests upon the truck driver and the master of the receiving vessel.

The vessel is responsible for the operation taking place in accordance with the checklist, for the parties concerned signing the item concerned and for a completed checklist being distributed.

The parties are responsible for discontinuing the bunkering operation if a high-risk situation arises or to limit incidents and accidents.

The vessel and the truck driver are responsible for no venting of gas taking place to the atmosphere.

3.1 Vessel

The master of the receiving vessel is responsible for all activities being controlled and monitored from the vessel.

3.2 Truck

The truck driver is responsible for:

- all activities controlled from the truck.
- monitoring of the whole bunkering process. Bunkering must under no circumstances be left unattended.

3.3 Port operator

The port operator must have routines for a safe bunkering procedure and an action plan for emergency situations involving gas bunkering.

The monitoring and security area must be established by the port operator. Port personnel must ensure that no one enters the safety zone. This can be done by limiting access by cordoning off.

The port personnel should also ensure that the truck is parked correctly and is not blocked by any vehicle.



The truck must also be parked so that it can depart immediately without manoeuvring.

The port personnel should check that all safety measures have been taken in accordance with the port operator's routines.

4 Accidents and incidents

Accidents or incidents that could have led to an accident in connection with bunkering must be reported without delay to the Swedish Transport Agency (SFS 1994:1009 Chapter 6 Section 14) and to the Port of Luleå.