



LNG Bunker Checklist Truck to Ship

PART A: Planning Stage Checklist

This part of the checklist should be completed in the planning stage of an LNG bunker operation. It is a recommended guideline for the, in advance, exchange of information necessary for the preparation of the actual operation.

Planned date and time: _____

Designated LNG bunker location: _____

LNG receiving ship: _____

LNG supplying bunker truck: _____

Check	Ship	LNG Truck	Terminal	Code	Remarks
1 Competent authorities have granted permission for LNG transfer operations for the specific location and time.				P	
2 The terminal has granted permission for LNG transfer operations for the specific location and time.				P	
3 Competent authorities have been notified of the start of LNG bunker operations as per local regulations.					Day/time notification: _____ Day time notified: _____
4 The terminal has been notified of the start of LNG bunker operations as per terminal requirements.					Day/time notification: _____ Day time notified: _____
5 Competent authorities requirements are being observed.					e.g. Port byelaws.
6 Local terminal requirements are being observed.					e.g. Terminal regulations
7 All personnel involved in the LNG bunker operation have the appropriate training and have been instructed on the specific LNG bunker equipment and procedures.	For the Ship:	For the Truck	For the Terminal		
8 The bunker location is accessible for the LNG supplying tank truck and the total truck weight does not exceed the maximum permitted load of the quay or jetty.					

9	The bunker operation area can be sufficiently illuminated					
10	All LNG transfer and gas detection equipment is certified, in good condition and appropriate for the service intended.	For the Ship:	For the Truck			
11	The procedures for bunkering, cooling down and purging operations have been agreed upon.				A	Reference to procedures::
12	The system and method of electrical insulation have been agreed upon by ship and truck.				A	Method:
13	The restricted area on the shore has been agreed upon by ship, truck and terminal				A	Safety zone: _____ mtr / ft
14	Regulations with regards to ignition sources can be observed.	For the Ship:	For the Truck	For the terminal		
15	All in local requirements required firefighting equipment is ready for immediate use.	For the Ship:	For the Truck	For the terminal		If applicable

For registration of the, in the planning, involved representatives:.

Ship		LNG Truck		Terminal	
Name		Name		Name	
Rank		Position		Position	
Date		Date		Date	
Time		Time		Time	

PART B: Pre Transfer Checklist

(This mandatory part should be completed before actual transfer operations start)

Date and time: _____

Designated LNG bunker location: _____

LNG receiving ship: _____

LNG supplying tank truck: _____

	Check	Ship	LNG Truck	Terminal	Code	Remarks
16	Part A is used prior and preparatory of the actual operation	For the Ship:	For the Truck	For the Terminal		If applicable
17	Present weather and wave conditions are within the agreed limits.				A R	
18	The LNG receiving ship is securely moored. Regulations with regards to mooring arrangements are observed. Sufficient fendering is in place.				R	
19	There is a safe means of access between the ship and shore. When mandatory, there is a safe emergency escape route between ship and shore				R	
20	All mandatory firefighting equipment is ready for immediate use	For the Ship:	For the Truck	For the Terminal		
21	The bunker operation area is sufficiently illuminated.				A R	
22	The ship and truck are able to move under their own power in a safe and non-obstructed direction.	For the Ship:	For the Truck		R	
23	Adequate supervision of the bunker operation is in place both on the ship and at the LNG tank truck and an effective watch is being kept at all time.					
24	An effective means of communication between the responsible operators and supervisors on the ship and at truck has been established and tested. The communication language has been agreed upon.				A R	VHF / UHF Channel: _____ Language: _____ Primary System: _____ Backup System: _____
25	The emergency stop signal and shutdown procedures have been agreed upon, tested,				A	Emergency Stop Signal: _____

	Check	Ship	LNG Truck	Terminal	Code	Remarks
	and explained to all personnel involved. Emergency procedures and plans and the contact numbers are known to the persons in charge.					
26	The predetermined restricted area zone has been established. Appropriate signs mark this area.				A	
27	The restricted area is free of unauthorized persons, objects and ignition sources.				R	
28	External doors, portholes and accommodation ventilation inlets are closed as per operations manual.				R	At no time they should be locked
29	The gas detection equipment has been operationally tested and found to be in good working order.					
30	Material Safety Data Sheets (MSDS) for the delivered LNG fuel are available.				A	
31	Regulations with regards to ignition sources are observed.				R	
32	Appropriate and sufficient suitable protective clothing and equipment is ready for immediate use.					
33	Personnel involved in the connection and disconnection of the bunker hoses and personnel in the direct vicinity of these operations make use of sufficient and appropriate protective clothing and equipment.					
34	A (powered) emergency release coupling {(P)ERC} is installed and is ready for immediate use					If applicable
35	The water spray system has been tested and is ready for immediate use.					If applicable.
36	Spill containment arrangements are of an appropriate material and volume, in position, and empty.					
37	Hull and deck protection against low temperature is in place.					If applicable.
38	Bunker pumps and compressors are in good working order.				A	If applicable.
39	All control valves are well maintained and in good working order.					
40	Bunker system gauges, high level alarms and high-pressure alarms are operational, correctly set and in good working order.					
41	The ship's bunker tanks are protected against inadvertent overfilling at all times, tank content is constantly monitored and alarms are correctly set.				R	Intervals not exceeding _____ minutes
42	All safety and control devices on the LNG installations are checked, tested and found to					

	Check	Ship	LNG Truck	Terminal	Code	Remarks
	be in good working order.					
43	Pressure control equipment and boil off or re-liquefaction equipment is operational and in good working order.					If applicable
44	Both on the ship and at the tank truck the ESDs, automatic valves or similar devices have been tested, have found to be in good working order, and are ready for use. The both ESD systems are linked. The closing rates of the ESDs have been exchanged.				A	ESD Ship: _____ seconds ESD Truck: _____ seconds
45	Initial LNG bunker line up has been checked. Unused connections are closed, blanked and fully bolted.					
46	LNG bunker hoses, fixed pipelines and manifolds are in good condition, properly rigged, supported, properly connected, leak tested and certified for the LNG transfer.					
47	The LNG bunker connection between the ship and the truck is provided with dry disconnection couplings.					If applicable.
48	The LNG bunker connection between the ship and the LNG bunker truck has adequate electrical insulating means in place.					
49	Dry breakaway couplings in the LNG bunker connections are in place, have been visually inspected for functioning and found to be in a good working order.				A	
50	The tank truck is electrically grounded and the wheels are chocked.					
51	The tank truck engine is off during the connection and disconnection of the LNG bunker hoses.					
52	The tank truck engine is switched off during purging or LNG transfer.					Unless the truck engine is required for the purging or transfer of LNG.
53	If mandatory the ship's emergency fire control plans are located externally.					Location: _____
54	An International Shore Connection has been provided.					If applicable
55	Competent authorities have been informed that bunker transfer operations are commencing and have been requested to inform other vessels in the vicinity.					Date /time of the notification _____

PART C: LNG Transfer Data

(This part should be completed before actual transfer operations start)

Agreed starting temperatures and pressures

Note the agreed Physical Quantity Unit (PQU): ☐ m³ ☐ Tonnes ☐ _____

	Ship		Truck		
LNG tank: start temperature:					°C / °F*
LNG tank: start pressure:					bar / psi* (rel)
LNG tank: available (rest) capacity					PQU

*: delete as appropriate

Agreed bunker operations

Note the agreed Physical Quantity Unit (PQU): ☐ m³ ☐ Tonnes ☐ _____

	Tank 1	Tank 2	
Agreed quantity to be transferred:			PQU
Starting pressure at the manifold:			bar / psi* (rel)
Starting rate:			PQU per hour
Max transfer rate:			PQU per hour
Topping up rate:			PQU per hour
Max pressure at manifold:			bar / psi* (rel)

*: delete as appropriate

Agreed maximums and minimums

	Maximum	Minimum	
Pressures during bunkering:			bar / psi* (rel)
Pressures in the LNG bunker tanks:			bar / psi* (rel)
Temperatures of the LNG:			°C / °F*
Filling limit of the LNG bunker tanks:			%

*: delete as appropriate

Declaration

We, the undersigned, have checked the above items in chapter I parts A, B and C in accordance with the instructions and have satisfied ourselves that the entries we have made are correct.

We have also made arrangements to carry out repetitive checks as necessary and agreed that those items coded 'R' in the checklist should be re-checked at intervals not exceeding _____ hours.

If, to our knowledge, the status of any item changes, we will immediately inform the other party.

Ship	LNG Truck	Terminal
Name	Name	Name
Rank	Position	Position
Signature	Signature	Signature
Date	Date	Date
Time	Time	Time

Record of repetitive checks								
Date								
Time								
Initials for ship								
Initials for truck								
Initials for terminal								

Guideline for completing this checklist

The presence of the letters 'A' or 'R' in the column entitled 'Code' indicates the following:

- A ('Agreement').
This indicates an agreement or procedure that should be identified in the 'Remarks' column of the checklist or communicated in some other mutually acceptable form.
- R ('Re-check').
This indicates items to be re-checked at appropriate intervals, as agreed between both parties, at periods stated in the declaration.
- P ('Permission')
This indicates that permission is to be granted by authorities.

The joint declaration should not be signed until both parties have checked and accepted their assigned responsibilities and accountabilities. When duly signed, this document is to be kept on board of the LNG receiving vessel conform applicable regulations or company requirements.

Part D: After LNG Transfer Checklist

(This part should be completed after transfer operations have been completed)

	Check	Ship	LNG Truck	Terminal	Code	Remarks
57	LNG bunker hoses, fixed pipelines and manifolds have been purged and are ready for disconnection.				A	
58	Remote and manually controlled valves are closed and ready for disconnection.				A	
59	After disconnection the restricted area has been deactivated. Appropriate signs have been removed.				A	
60	Competent authorities have been notified that LNG bunker operations have been completed.					Time of notification _____ hrs
61	The terminal has been notified that LNG bunker operations have been completed.					Time of notification: _____ hrs
62	Competent authorities have been informed that bunker transfer operations have ceased and have been requested to inform other vessels in the vicinity.					
63	If applicable near misses and incidents have been reported to competent authorities.					Report nr: _____

Declaration

We, the undersigned, have checked the above items in chapter II in accordance with the instructions and have satisfied ourselves that the entries we have made are correct.

Ship		LNG Truck	Terminal
Name		Name	Name
Rank		Position	Position
Signature		Signature	Signature
Date		Date	Date
Time		Time	Time

Guideline for completing this checklist

The presence of the letters 'A' or 'R' in the column entitled 'Code' indicates the following:

- A ('Agreement').
This indicates an agreement or procedure that should be identified in the 'Remarks' column of the checklist or communicated in some other mutually acceptable form.
- R ('Re-check').
This indicates items to be re-checked at appropriate intervals, as agreed between both parties, at periods stated in the declaration.
- P ('Permission')
This indicates that permission is to be granted by authorities.

The joint declaration should not be signed until both parties have checked and accepted their assigned responsibilities and accountabilities. When duly signed, this document is to be kept at least one year on board of the LNG receiving vessel.