

PORT OF ENERGY IN GOTHENBURG • SHORE TO SHIP

Original: Ship • Copy 1: Plant Operator • Copy 2: Energy Harbour Port Officer

PAGE 1/7

Ship's name	LNG Plant Operator
Berth	Port
Date of arrival	Time of arrival
Terminal	

The presence of the letters 'A' , 'R' or 'P' 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 Energy Harbour Port Officer.

I. PART A: PRE BUNKER OPERATIONS CHECKLIST

Check	Ship	LNG Plant Operator	Energy Harbour Port Officer	Code	Remarks
Energy Harbour Port Officer have granted permission for the LNG bunker operation.				Р	24h notice.
Energy Harbour Port Officer has been notified one hour prior the start of LNG bunker operations.					Time notified:hours Phone: +46 31 368 75 25
3. The terminal has been notified one hour before the start of the LNG bunker operations.					Time notified:
4. Port Authority's regulations are being observed.					LNG Operation Regulations.
5. The Ship Shore Safety Checklist of the terminal has been filled in correctly.					If applicable.
Vessels in the direct vicinity of the transfer location are informed of the LNG bunkering.					N/A
7a. The ship's class approved bunker plan and operations manual are available.					Procedures for line clearance agreed between ship and LNG Plant Operator before disconnection of bunker hose.
7b. The approved plant operator checklist and operations manual are available.					
All certified LNG bunker hoses and pipe are in good condition and are appropriate for the service intended.				A	
9a. The bunker location is sufficiently illuminated.				A	
9b. LNG trucks are able to be moved in a safe and non-obstructed direction in case of emergency.				R	
10. Personnel involved comply with the work and rest hour requirements of IL0180, STCW or national regulations.					As appropriate.



Ship's name Date

PAGE 2/7

I. PART B: PLANNED SIMULTANEOUS ACTIVITIES

Check	Ship	LNG Plant Operator	Energy Harbour Port Officer	Code	Remarks
11a. The predetermined LNG bunkering safety zone has been established. Appropriate signs mark this area.					At the truck unloading facility the safety and hazardous zone is 3 m. From vessel bunker connection the safety zone is 25 m.
11b. The planned simultaneous activities are approved by the ships LNG bunker manual.					
12. Energy Harbour Port Officer have granted simultaneous cargo and bunker operations during the LNG bunkering.				Р	No other activity is allowed within the safety zone of 25 m.
13. Safety procedures and mitigation measures as mentioned in the ship's LNG bunker manual for simultaneous cargo or bunker operations are agreed and being observed by all parties involved.				A	No simultaneous operations are allowed within the hazardous area of the LNG-bunkering station. Sign vessel:
14. If cargo handling*) of low flashpoint cargo (below 30°C) is a part of the simultaneous operation plan, current hazardous zones must be observed and not interfered with.					*) or previous cargo.

Bunker and cargo operations plan

	Oil bunker	Cargo	LNG	
Product				
Volume to be transferred				m³
Starting rate				m³ per hour
Max transfer rate				m³ per hour
Topping of rate				m³ per hour
Max pressure at manifold				bar



Ship's name Date

PAGE 3/7

I. PART C: PRE LNG TRANSFER CHECKLIST

Check	Ship	LNG Plant Operator	Energy Harbour Port Officer	Code	Remarks
15. On both ship and shore a responsible officers / supervisor in charge of the bunker operation are identified and posted. (PIC)					
16. An effective means of communication between the officers / supervisors / drivers / jetty operator at the ship and LNG tank truck has been established and tested. The communication language has been agreed upon.				A	VHF/UHF Channel: Language: Primary System: Backup System:
17. An effective deck watch on board the ship is established and adequate supervision of the bunker operation is in place.					The deck watch pays particular attention to manifold, moorings, fenders and simultaneous activities.
18a. At the LNG unloading station an effective LNG bunker watch is established and adequate supervision of the bunker operation is in place.					The plant operator pays particular attention to hoses connection, and bunker controls.
18b. A Jetty operator is established, and adequate supervision of the jetty operation is in place.					The jetty operator have received a UHF radio and adequate information regarding the LNG bunkering.
19. The emergency signals and shutdown procedures are agreed upon.				A	Emergency Stop Signal:
20. Present weather conditions are within the agreed limits.				A R	Wind: Wind limitations 20 m/s
21. The receiving ship are securely moored using none wire moorings lines.					
22. There is a safe means of access between the ship and the jetty.					
23. External doors, portholes and accommodation ventilation inlets are closed as per operation manual.				A	
24. The gas detection equipment has been properly calibrated for natural gas. It has been tested and found to be in good working order.					
25. Material Safety Data Sheets (MSDS) for the LNG product have been exchanged.					
26. The ship's emergency fire control plans are located externally.					Location:



Ship's name Date

PAGE 4/7

I. PART C: PRE LNG TRANSFER CHECKLIST

Check	Ship	LNG Plant Operator	Energy Harbour Port Officer	Code	Remarks
27. Smoking rooms have been nominated and smoking restrictions are being observed.					Nominated smoking room on receiving ship:
28. Naked light regulations as defined in the operations manual are being observed and all terminal lightning and cables shall be switched off in a way of that the lights are totally powerless in the bunker area. (This is not applicable if equipment is EX-proof). Remote electrical cabinets on quay deck has to be totally powerless.					
29. The main radio transmitter aerials are earthed and radars are switched off or are configured as per operations manual.					
30. Fixed VHF/UHF transceivers and AIS are switched off or are configured to the correct power mode as per operations manual.					
31a. Sufficient suitable protective clothing and equipment is ready for immediate use.					
31b. 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.					
32. All mandatory fire-fighting equipment on board the ship and at the LNG plant are ready for immediate use.					The water sprinkler system has been tested and is ready for immediate use onboard the ship.
33. The water curtain in use or other approved deck/hull protection under LNG bunker manifold.					
34. All scuppers in the LNG bunker area are closed during SIMOPS. Spill containment arrangements are of an appropriate volume, in position and empty.				R	
35. Initial LNG bunker line up has been checked. Unused connections are closed, blanked and fully bolted.					
36. LNG bunker hoses, fixed pipelines and manifolds are in good condition, properly rigged, supported, properly connected, and certified for the LNG transfer.					
37. Re-liquefaction or boil off control equipment is found to be in good working order.					
38. The vapour connections are properly connected and supported.					If applicable.



Ship's name Date

PAGE 5/7

I. PART C: PRE LNG TRANSFER CHECKLIST

Check	Ship	LNG Plant Operator	Energy Harbour Port Officer	Code	Remarks
39. The system and method of electrical insulation has been agreed upon between the ship and shore connection. The LNG bunker connection between the ship and the shore has adequate electrical insulating means in place.				A	
40. A break-away coupling and PERC is in place and in good working order.					
41. All remote control valves and bunker system gauges are well maintained and in good working order.					
42. The ship's bunker tanks are protected against inadvertent overfilling at all times, tank content is monitored continously and alarms are correctly set.				R	
43. On both the ship and the LNG plant the emergency shutdown devices (ESD's), automatic valves or similar devices have been tested, haven been found to be in good working order, and are ready for use. The closing rates of the ESD's have been exchanged.				A	Ship:seconds LNG plant:seconds
44. The LNG specifications have been agreed upon by ship and LNG plant.				A	E.g. quality, temperature and density of the LNG.
45. Maximum working pressure and pump rate has been agreed upon by ship and LNG plant.				A	Max: m³/h Max: bar
46. Maximum and minimum pressures in the LNG bunker tanks have been agreed upon by ship and LNG plant.				A	Max: bar Min: bar
47. Maximum and minimum LNG temperatures have been agreed upon by ship and LNG Plant Operator.				A	Max:°C Min:°C
48. Maximum filling limit of the LNG bunker tanks have been agreed upon by ship and LNG Plant Operator.				A	Max fill: %
49. An overall Contingency Plan is available and all parties are well informed about all details.					
50a. The tank truck / container is electrically grounded and the wheels are chocked.					
50b. The tank truck engine is off during the connection, purging and disconnection of the LNG bunker hoses.					
50c. The tank truck engine is switched off during transfer.					Unless the truck engine is required for transfer of LNG.



Ship's name	Date	

PAGE 6/7

I. PART D: LNG TRANSFER DATA

Starting temperatures and pressures

	LNG receiving ship			LNG Plant Operator					
LNG tank temperature									°C
LNG tank pressure									bar

DECLARATION

We, the undersigned, have checked the above items in Parts A, B, C and D 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 Plant Operator	Energy Harbour Port Officer		
Name	Name	Name		
Position	Position	Position		
Signature	Signature	Signature		
Date	Date	Date		
Time	Time	Time		

	Record of repetitive checks							
Date								
Time								
Initials for ship								
LNG Plant Operator								

Guidelines for completing the LNG Bunker Checklist

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.



Ship's name Date

PAGE 7/7

II. AFTER LNG TRANSFER CHECKLIST

Check	Ship	LNG Plant Operator	Code	Remarks
51. LNG bunker hoses, fixed pipelines and manifolds have been purged and are ready for disconnection.			A	
52. Remote and manual controlled valves are closed and ready for disconnection.			A	
53. Energy Harbour Port Officer have been notified that LNG bunker operations have been completed on UHF/VHF Ch.12.				Time notified:
54. The terminal has been notified that LNG bunker operations have been completed.				If Applicable.
55. Vessels in the direct vicinity have been informed that LNG bunker operations have been completed.				N/A
56. Near misses and Incidents have been reported to Energy Harbour Port Officer.				Report No:

DECLARATION

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

Ship	LNG Plant Operator
Name	Name
Position	Position
Signature	Signature
Date	Date
Time	Time