PART C: CHECKS PRE-BERTHING

Check	Ship	Bunker vessel	Energy Harbour Port Officer	Code	Remarks
C-1. Energy Harbour Port Officer has been notified before arrival of LNG bunker vessel to harbour area.					VHF Ch. 12 Skarvik VHF Ch. 15/17 Torshamnen
C-2. The LNG bunker vessel has received clearance to go alongside receiving ship, from Port Officer and receiving ship.				P	VHF Ch. 12

PART D: CHECKS AFTER ARRIVAL PRE LNG BUNKERING

Check	Ship	Bunker vessel	Energy Harbour Port Officer	Code	Remarks
D-1. On both ship and LNG bunker vessel the responsible officers / supervisor in charge of the bunker operation are identified and posted.					
D-2. An effective means of communication between the officers / supervisors at the ship and LNG bunker vessel has been established and tested. The communication language has been agreed upon.				A	VHF/UHF Channel:..... Language:..... Primary System:..... Backup System:.....
D-3. An effective deck watch onboard the ship is established.					The deck watch pays particular attention to moorings, fenders and simultaneous activities.
D-4. On both the ship, bunker vessel an effective LNG bunker watch is established.					The LNG bunker watch pays particular attention to hoses, manifold, and bunker controls.
D-5. The emergency signals and shutdown procedures are agreed upon.				A	Emergency Stop Signal: .....
D-6. Present weather and wave conditions are within the agreed limits.				A R	Wind: ..... Waves: .....
D-7. Sufficient fendering is in place. The fenders have been checked and have been found to be in good working order.				A	Metal to metal contact is to be avoided at all times.
D-8. The LNG bunker vessel and the receiving ship are securely moored using none wire moorings lines.					
D-9. There is a safe means of access between the ship and the LNG bunker vessel.				A	If Applicable
D-10. External doors, portholes and accommodation ventilation inlets are closed as per operation manual.					
D-11. The gas detection equipment has been properly calibrated for natural gas. It has been tested and found to be in good working order.					
D-12. Material Safety Data Sheets (MSDS) for the LNG product have been exchanged.					

PART E: CHECKS PRE LNG BUNKERING

Check	Ship	Bunker vessel	Energy Harbour Port Officer	Code	Remarks
E-1. Smoking rooms have been nominated and smoking restrictions are being observed.					Nominated smoking room on receiving ship: ..... Nominated smoking room on bunker vessel: .....
E-2. 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.					
E-3. The main radio transmitter aerials are earthed and radars are switched off or are configured as per operations manual.					
E-4. Fixed VHF/UHF transceivers and AIS switched off or are configured to the correct are power mode as per operations manual.					
E-5. Sufficient suitable protective clothing and equipment is ready for immediate use.					
E-6. 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.					
E-7. Fire hoses and fire-fighting equipment on board the ship and LNG bunker vessel are ready for immediate use.					The water sprinkler system has been tested and is ready for immediate use.
E-8. The water curtain in use or other approved deck/hull protection under LNG bunker manifold.					
E-9. All scuppers in the LNG bunker area are closed during SIMOPS. Spill containment arrangements are of an appropriate volume, in position, and empty.				R	
E-10. Initial LNG bunker line up has been checked. Unused connections are closed, blanked and fully bolted.					
E-11. LNG bunker hoses, fixed pipelines and manifolds are in good condition, properly rigged, supported, properly connected, and certified for the LNG transfer.					Leak test to be carried out before LNG transfer.
E-12. Re-liquefaction or boil off control equipment is found to be in good working order.					
E-13. The vapour connections are properly connected and supported.					If applicable. Leak test to be carried out before LNG transfer.

PART E: CHECKS PRE LNG BUNKERING

Check	Ship	Bunker vessel	Energy Harbour Port Officer	Code	Remarks
E-14. The system and method of electrical insulation has been agreed upon between the ship and LNG bunker vessel. The LNG bunker connection between the ship and the LNG bunker vessel has adequate electrical insulating means in place.				A	
E-15. A break-away coupling is in place and in good working order.					
E-16. All remote control valves and bunker system gauges are well maintained and in good working order.					
E-17. The ship's bunker tanks are protected against inadvertent overfilling at all times, tank content is monitored continously and alarms are correctly set.				R	
E-18. On both the ship and the LNG bunker vessel 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 bunker vessel: ..... seconds
E-19. The LNG specifications have been agreed upon by ship and LNG bunker vessel.				A	E.g. quality, temperature and density of the LNG.
E-20. Maximum working pressure and pump rate has been agreed upon by ship and LNG bunker vessel.				A	Max: ..... m ^{3}/h Max: ..... bar
E-21. Maximum and minimum pressures in the LNG bunker tanks have been agreed upon by ship and LNG bunker vessel.				A	Max: ..... bar Min: ..... bar
E-22. Maximum and minimum LNG temperatures have been agreed upon by ship and LNG bunker vessel.				A	Max: ..... °C Min: ..... °C
E-23. Maximum filling limit of the LNG bunker tanks have been agreed upon by ship and LNG bunker vessel.				A	Max fill: ..... %
E-24. An overall Contingency Plan is available.					
E-25. VTS Gothenburg advised on Ch. 13 when: - Commenced pumping - Stopped pumping - Bunkering completed					Applicable during offshore bunkering only.
E-26. Energy Harbour Port Officer has been notified prior the start of LNG operations.					VHF Ch. 12

PART F: LNG TRANSFER DATA

Starting temperatures and pressures

	LNG receiving ship					LNG bunker vessel				
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 bunker vessel	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							
Initials for bunker vessel							

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.

Gothenburg Port Authority, June 2021.

PART G: CHECKS AFTER COMPLETION OF LNG BUNKERING

Check	Ship	Bunker vessel	Code	Remarks
G-1. LNG bunker hoses, fixed pipelines and manifolds have been purged and are ready for disconnection.			A	
G-2. Remote and manual controlled valves are closed and ready for disconnection.			A	
G-3. Energy Harbour Port Officer have been notified that LNG bunker operations have been completed on VHF Ch. 12.				Time notified: ..... hours
G-4. The terminal has been notified that LNG bunker operations have been completed.				Time notified: ..... hours
G-5. Vessels in the direct vicinity have been informed that LNG bunker operations have been completed.				N/A
G-6. 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 bunker vessel
Name	Name
Position	Position
Signature	Signature
Date	Date
Time	Time