



SURUHANJAYA PELABUHAN PULAU PINANG

PENANG PORT COMMISSION

Date: 24th May 2021

TO: OWNERS, MASTERS, AGENTS, TERMINAL OPERATORS AND BUNKER SUPPLIERS

PORT CIRCULAR NO. 3/2021

PENANG PORT BUNKERING PROCEDURE

Acknowledging that bunkering operations poses a risk to the environment in terms of pollution and fire, Penang Port Commission (PPC) is introducing regulations and guidelines through the Penang Port Bunkering Procedure as follows:

1. Application

This procedure should apply to all bunkering operations that take place within the Port of Penang.

2. Objectives

This procedure is designed to assist masters, agents, bunker suppliers and terminal operators to carry out their responsibilities for safe bunkering operations required in the Port of Penang.

3. Definitions

'Bunkers' means fuel oils and other petroleum products intended for the propulsion and/or the auxiliary operation of a ship or intended for lubricating the ship's engine or her other machinery;

'Bunker operation' means transfer of fuel oil and other petroleum products on tank to tank basis;

'Bunker Supplier' means a company, which holds a valid bunker supplier's license issued under Petroleum Development Act 1974 by the Ministry of Domestic Trade and Consumer Affairs and registered with the Commission to supply bunker in the Port of Penang;

'Commission' means Penang Port Commission;

'Daylight' means period from 0700 hours until 1900 hours

'Delivering Vessel' means a vessel, which is certified to deliver bunkers to a receiving vessel and registered with the Commission;

'Receiving Vessel' means a vessel, which receives bunkers or other oils;

'Road Tanker' means a tank vehicle fitted for the purpose of delivering bunker to vessels which is licensed for this purpose by the relevant authority;

4. Control

The overall control of the bunker operation should lie with the master of the receiving vessel.

5. Hoses

5.1 The hoses used for bunkering transfer should be specially designed and constructed for handling petroleum products and be of a strength and size which makes them suitable for the actual operation.

5.2 The hoses should be of adequate length to allow different movement of the bunker vessel / road tanker and the receiving vessel.

5.3 The hoses should be pressure tested and flanges and bolts to be certified in accordance with the specification to which they are manufactured before use, and periodically every two years and after the hose has been repaired or exposed to excessive strains.

5.4 The date of the latest pressure testing should be indicated on the hose.

5.5 A record of inspection and pressure testing of the hoses and the specifications from the manufacturers should be kept on board the bunker vessel and be available at all times.

5.6 All lifting gear including support arrangement for the hoses should be made for the purpose and kept in a good condition.

6. General

- 6.1 The Bunker Suppliers shall ensure that bunkering will only take place after the 'Notification to Supply Bunker' is submitted to the Commission through E-Bunkering online system at <https://www.polaris-ppc.gov.my> in advance i.e. not less than 24 hours before the operation commence. Where the Bunker Suppliers is unable to submit in advance the Notification to Supply Bunker due to circumstances beyond his control, such notification shall be submitted to the Commission upon the bunkering operation, prior to the commencement of the operation.
- 6.2 The area in which the bunkering operation takes place should be designated by the Commission taking into consideration the weather and sea condition and the weather forecast.
- 6.3 The checklist shown in **APPENDIX 1** should be satisfactorily completed and signed by the master of the delivering vessel, master of receiving vessel and representative of terminal operator. The checklists should be kept for at least seven years and be available at all times for inspection.
- 6.4 An overall contingency plan covering the known and predicted risk scenarios for the bunkering operations should be developed. The plan should be a part of the Shipboard Oil Pollution Emergency Plan (SOPEP).
- 6.5 Bunkering only permitted during daylight and in good weather condition. Provided that this provision shall not apply to the loading or unloading or discharging of such petroleum in bulk from any vessel and direct to or from any shore installation.
- 6.6 Two firemen, equipped with appropriate firefighting appliances, shall be on standby in vicinity of the operation while at berth.
- 6.7 A restricted area with appropriate radius of safety zone shall be established in vicinity of the operation.
- 6.8 No unauthorized person, no naked light or anything that could compromise the safety of the operation shall be allowed within the restricted area.
- 6.9 The person in charge of the bunker operation of the receiving vessel should agree to a maximum pump rate and the topping up pump rate.
- 6.10 Transfer of bunker is only permitted for the receiving vessel which is not carried dangerous cargoes.
- 6.11 'Notification to Supply Bunker' shall be endorsed by terminal operator before approval by the Commission.

7. Bunkering by delivering vessel to receiving vessel

Before the bunkering operation commence

- 7.1 In the case of bunkering to a receiving vessel while at berth, the permission must be given by the respective terminal operator before submitting to the Commission.
- 7.2 Master of delivering vessel shall notify Port Control via VHF channel 12 or call 04-3737079 / 04-3737083 before commencing the operation.
- 7.3 The receiving vessel should be safe at anchorage, securely berthed or moored before the bunkering operation commences.
- 7.4 Primary fenders of a recognized standard and strength should be positioned along the hull of the delivering vessel and secondary fenders should be ready for use during the berthing operation.
- 7.5 All scuppers on the delivering vessel and the receiving vessel should be plugged.
- 7.6 The mooring equipment should be of a recognized standard and the mooring lines of good quality intended for use in the actual operation.
- 7.7 Direct radio contact via portable VHF radios shall be established between the responsible persons on the delivering vessel and the receiving vessel. Spare batteries for the radios should be easily available. Radio equipment's used shall be certified intrinsically safe.
- 7.8 The hose should be securely connected and the work done should be approved by an officer both on the delivering vessel and the receiving vessel. The hoses should be rigged in such a way that movements of the vessels will not damage them and they are well supported and have sufficient play.
- 7.9 Both the delivering vessel and receiving vessel should have adequate equipment ready to combat oil spills.
- 7.10 The updated emergency contact details should be readily available and displayed on appropriate location on both vessels.
- 7.11 Both vessels shall display appropriate signal according to International Code of Signals (INTERCO).
- 7.12 The receiving vessel's master is to ensure availability of safe access between his/her vessel and the delivering vessel and the shore facility.

- 7.13 Checks should be carried out that all valves in use for the operation on board the receiving vessel are set to the right tanks and there is a sufficient large overflow basin under the bunker pipe connection and the tank air vents and a drip tray under each flange on board both vessels.
- 7.14 Both the delivering vessel and the receiving vessel to ensure that sufficient firefighting arrangement/equipment is readily available and that an emergency tug towing line is arranged forward and aft on the seaward side one meter above the water line.

During the bunkering operation

- 7.15 Throughout the bunkering operation a responsible person holding experience of and trained in the operation should be stationed at the manifold area to observe the hose and connections for leaks on both the delivering vessel and the receiving vessel. The responsible person on the delivering vessel should have means to immediately stop the operation if leakage is observed or on request from the receiving vessel.
- 7.16 A safe radio communication should be maintained between the delivering vessel and the receiving vessel during the entire bunkering operation.
- 7.17 The oil level in the tanks of the receiving vessel should be carefully checked by measuring ullage and/or taking soundings. The greatest caution should be exercised during 'topping up'.

After completion of the bunker operation

- 7.18 The hose should be drained and blinded before being brought back to the delivering vessel.
- 7.19 During disconnection of the hose a drip tray should be used.
- 7.20 Master of delivering vessel shall notify Port Control via VHF channel 12 or call 04-3737079 / 04-3737083 upon completion of bunker operation.

8. Action in case of incidental pollution

If any oil spills or other incidental pollution occur the contingency plan should be brought into operation, which should include immediate reporting of incident to Port Control via VHF channel 12 or call 04-3737079/04-3737083

9. Bunkering by road tanker to receiving vessel

Before the bunkering operation commence

- 9.1 Transfer of bunker by road tankers is only allowed at Prai Wharf, Butterworth Deep Water Wharves or any other place permitted by the Commission during daylight hours and in good weather condition and must be conducted according to the Standard Operating Procedure (SOP) as per **APPENDIX 2**
- 9.2 The checklist shown in **APPENDIX 1** should be satisfactorily completed and signed by the responsible person of the bunker suppliers, master of receiving vessel and representative of terminal operator. The checklists should be kept for at least seven years and be available at all times for inspection.
- 9.3 The bunker suppliers shall ensure that the transfer will only take place after the 'Notification to Supply Bunker' is submitted through E-Bunkering online system at <https://www.polaris-ppc.gov.my> to the Commission in advance i.e. not less than 24 hours before the operation commence.
- 9.4 Bunker suppliers shall notify Port Control via VHF channel 12 or call 04-3737138 / 04-3737079 / 04-3737083 before commencing the operation.
- 9.5 The receiving vessel should be securely berthed or moored before the transferring operation commences.
- 9.6 The bunker suppliers or driver of the road tankers shall not start the transfer unless he has ensured that:
 - 9.6.1 The transfer hoses are in a good condition as per these procedures;
 - 9.6.2 Safety Check List has been completed and signed by both the driver and the master of the vessel;
 - 9.6.3 An appropriate drip tray is in place under hose connection points where required;
 - 9.6.4 All camlock fittings are locked, closed, and secured with wire;
 - 9.6.5 A responsible person or the driver remains adjacent to his vehicle at all times during the transfer operation;
 - 9.6.6 Effective communication has been established and maintained between the vessel and driver or responsible person to enable immediate shutdown if required;

- 9.6.7 Any length of hose spanning the water must be in a continuous length containing no joints or connections;
- 9.6.8 Availability of sufficient absorbent material is available to compact spills; and
- 9.6.9 Proper warning signs are displayed at appropriate position.
- 9.7 Two firemen, equipped with appropriate firefighting appliances, shall be on standby in vicinity of the operation.
- 9.8 A restricted area with appropriate radius of safety zone shall be established in vicinity of the operation.
- 9.9 No unauthorized person, no naked light or anything that could compromise the safety of the operation shall be allowed within the restricted area.

During the bunkering operation

- 9.10 Constant visual watch is maintained throughout the entire transfer operation.
- 9.11 Sufficient absorbent material is available on site to deal with any accidental spillage.
- 9.12 If spillage does occur that all efforts are made to stop or limit the spillage and that Port Control is immediately notified via VHF channel 12 or call 04-3102334 / 04-3737079 / 04-3737083.

After completion of the bunker operation

- 9.13 The hoses should be drained and blinded before being brought back to the road tanker.
- 9.14 Completion of transfer operation is reported to Port Control via VHF channel 12 or call 04-3102334 / 04-3737079 / 04-3737083.

10. Emergency shutdown procedures

10.1 It should be possible to stop the bunkering supply pumps at a place close to the manifold on the bunker vessel. If any of the receiving vessel's personnel discovers an oil spill either on deck outside fixed containment, or on the water, or believes an oil spill is likely, he or she shall request immediate shutdown of the bunkering operation.

10.2 The delivering vessel's/facility personnel shall immediately activate the emergency shutdown device at the request of any person on the receiving.

11. This Port Circular will come into force on 1st June 2021. The Port Circular No.1/2015 and Port Circular No.1/2008 for Penang Port Bunkering Procedure will be revoked when this circular takes effect.

12. Any queries relating to this circular may be directed to the Dangerous Goods Officer, Penang Port Commission as follows: -

Tel : 04 -3238532

Email : fitrey@penangport.gov.my

**General Manager
Penang Port Commission
May 24th, 2021**

| Bunker Safety Checklist | | | |
|---|--|-----------------------------|------------------------------|
| If comply, please tick \checkmark inside the box | Delivering Vessel / Road Tanker | Receiving Vessel | Terminal Operator |
| 1. Are there adequate NO SMOKING signs displayed and being observed? | | | |
| 2. Are there adequate firefighting appliances available? | | | |
| 3. Is there an agreed ship/ship or ship/shore communication system? | | | |
| 4. Are proper gaskets employed? | | | |
| 5. Are drip trays in position? | | | |
| 6. Are unused bunker connections properly blanked? | | | |
| 7. Are scuppers/drains effectively plugged? | | | |
| 8. Have maximum and minimum transfer rates been agreed? | | | |
| 9. Have emergency shutdown procedures been agreed? | | | |
| 10. Are vessels securely moored? | | | |
| 11. Is there a supply of counter oil pollution equipment nearby? | | | |
| 12. Are bunker hoses safely secured at the manifold? | | | |
| 13. Have all unused valves in the bunker system been checked closed and lashed? | | | |
| 14. Are all bunker hoses properly rigged and free from twists? | | | |
| 15. Is two firemen on standby together with appropriate firefighting appliance on-site? | | | |
| 16. Is the safety zone surrounding the operation site established? | | | |

| | |
|---|-----------------------------------|
| Name of bunker vessel / Road Tanker Plate : Number (which applicable) | |
| Name of receiving vessel: | |
| Date: | Location: |
| Time commence: | Estimated time of completion : |
| Quantity of bunkers to be delivered (in Liter) : | |

Declaration

We have checked the items on the checklist and are satisfied that the answers given are correct to the best of our knowledge.

| for Bunker Supplier | for Receiving Vessel | for Terminal Operator |
|---------------------|----------------------|-----------------------|
| Name: | Name: | Name: |
| Designation: | Designation: | Designation: |
| Signature: | Signature: | Signature: |
| Date & Time: | Time & date : | Date & Time: |

**STANDARD OPERATING PROCEDURES
BUNKER OPERATIONS AT BUTTERWORTH DEEP WATER
WHARVES (BDWW)**

| DOCUMENT | PROCEDURES |
|------------------------------|--|
| | <p>1. <u>GENERAL</u></p> <p>1.1 Bunkering activities are only allowed at BDWW through road tanker or delivering vessel with the permission by terminal operator and approval by Penang Port Commission (PPC).</p> <p>1.2 The bunker supplier and receiving vessel must hold full responsibilities during this bunker operation. Any emergencies such as spillage must be reported immediately to the Commission and Penang Port Sdn. Bhd.</p> |
| E-Bunkering – POLARIS System | <p>2. <u>PRE OPERATION REQUIREMENT</u></p> <p>2.1 Bunkering will only takes place after 'Notification to Supply Bunker' is granted by terminal and approved by the Commission not less than 24 hours before operation commence via E-bunkering – POLARIS System at https://www.polaris-ppc.gov.my</p> <p>2.2 All bunker operations must comply strictly to the latest amendment of PPC's Port Circular - Penang Port Bunkering Procedure during the following phases of the bunker operations.</p> <p>2.3 Ensure BDWW are clear and no interruption on berthing for bunker process.</p> <p>2.4 During bunkering, the distance from bunker vessel to the other vessel must be at least 10% of LOA of other vessel.</p> <p>2.5 Two Firemen are in state of readiness one hour before bunker operation take place and must be on standby until bunker operation complete. All equipment must be ready at the operation area.</p> <p>2.6 Port Police are in state of readiness (if necessary decided by the Commission) during bunker operation take place and must be on standby until bunker operation complete.</p> |

| | |
|--------------------------------|--|
| | <p>3. <u>BERTHING OF THE VESSEL</u></p> <p>3.1 Ensure after berthing of a vessel adequate head line, stern line and spring line are properly secured.</p> <p>3.2 Ensure all mooring line fixed with Rat Guards.</p> <p>3.3 Ensure gangway is attached with safety net and placed in at strategic place to enable emergency escape.</p> <p>3.4 Ensure Emergency Towing Wire is arranged forward and aft on the seaward side one meter above the sea level.</p> |
| <p>Bunker Safety Checklist</p> | <p>4. <u>DURING OPERATION</u></p> <p>4.1 Bunker Safety Checklist must be conducted by terminal operator together with receiving vessel and bunker supplier before start the operation.</p> <p>4.2 Ensure the following ship / shore communication equipment are in good working condition.</p> <ul style="list-style-type: none"> • Vessels walkie-talkie switches to channel 12 (Penang Pilot Station) at all time during operations. • Executive Operations office tel. no. 04-3737138. • Security Unit tel. no. 04-3737188 • Fire and rescue station no. 04-3737200 <p>4.3 Ensure flexible hose is properly rigged.</p> <p>4.4 All scuppers on the receiving vessel should be plugged.</p> <p>4.5 Drip tray available on standby at the manifold</p> <p>4.6 Ensure there are an effective deck watch in attendance on board and adequate supervision on the terminal and on the vessels.</p> <p>4.7 A responsible person or the driver (adequate manning) remains adjacent to his vehicle at all times during the transfer operation.</p> <p>4.8 Effective communication has been established and maintained between the vessel and driver or responsible person to enable immediate shutdown if required.</p> |

| | |
|--|--|
| | <p>4.9 Bunker supplier must ensure sufficient absorbent material is available to combat spills.</p> <p>4.10 Bunker supplier and the receiving vessel must ensure the operation commenced smoothly.</p> <p>4.11 Two firemen equipped with appropriate firefighting appliance, shall be on standby in vicinity of the operation.</p> |
| | <p>5. <u>COMPLETION OF THE OPERATION</u></p> <p>5.1 Ensure all valve tighten up before the flexible hoses are disconnected.</p> <p>5.2 When rigging of flexible hoses, drip tray available to collect spillage or drips.</p> <p>5.3 Ensure work area is clean and free from any spillage.</p> <p>5.4 All the barricade and equipment are keep in the designated place after completed the operation.</p> <p>5.5 Bunker Safety checklists shall be kept for at least seven years and be available at all times for inspection by the Commission.</p> |