

LYONDELL EUROPE ‘TERMINAL REGULATIONS’

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1 COMMUNICATION AND TELEPHONE NUMBERS

Communication with the Lyondell terminals:

The terminals Control Room will continuously be staffed by the terminal personnel when vessels are alongside one of the Lyondell jetties.

Communication between vessels and quay during operations will be maintained using radio handsets provided by the terminal.

Maasvlakte port nr. 8220:

Alarm	radio handsets or 555 (Phone cabinet on jetty deck)
Main control room	+31615167632 (loading master)/+31181235055
Telephone number	+31 (0)181 235000
Fax number	+31 (0)181 235099

BERTH AVAILABILITY INFORMATION DURING OFFICE HOURS

Rotterdam Botlek & Maasvlakte, Finished goods & Raw materials:

General number	+31 (0)10 2755500
Telephone number	+31 (0)10 2755795 (Marine Coordinator)
Fax number	+31 (0)10 2755569

2 LYB MAASVLAKTE TERMINAL

Situation of the terminal

The LYB Maasvlakte terminal is situated at the Europahaven. Port number 8220.

Quay

The terminal berthing facilities consist of 4 jetties:

1. Styrene monomer and Benzene
2. Benzene and PO
3. Styrene monomer and PO
4. Propylene, Caustic soda, Benzene and Styrene monomer.

Water depth

The water depth at the quay is 15.65 meters (N.A.P.).

Berth availability

The Logistics Operations' Marine Coordinator located at Lyondell WHQ in Rotterdam will give berth availability information. After office hours, all communications via the LYB jetty loading master.

Tugs

Please see enclosure for the use of tugs

Tide

Difference between high and low water is approximately 1.80 mtrs.

Pilotage

All sea-going vessels need a pilot for all operations.

Mooring arrangements

Vessels will berth at jetty 1 & 3 starboard and at jetty 2 & 4 portside. The quay is equipped with a total of 23 bollards.

Barges will berth at jetty 1 & 3 preferably starboard, portside also allowed and at jetty 2 & 4 preferably portside side, starboard also allowed.

**Ships with the exhaust on the port, mooring starboard alongside jetty, ships with the exhaust starboard, port alongside side jetty.

Vapour return lines

During loading operations for PO and Styrene Monomer, vapour return lines will be used.

Styrene loading arm restrictions

Not allowed to connect flex hoses between loading arm and manifold

Propylene product temperature

The product discharge temperature for Propylene is ambient.

Vessel and barge sampling requirements

Imperative for vessels and barges to be equipped with a closed loop sampling system.

Vessel/barge inspections

All vessel and barge operations will be attended by a surveyor, where it's prohibited for surveyors to enter the vessel or barge tanks for visual inspection.

Weather limitations

As from wind force 7, connecting or disconnecting of vessels and barges may be stopped.

As from wind force 10, loading or unloading operations may be stopped / interrupted.

This will be decided by the plant's Shift Supervisor or Head Technician for each vessel or barge.

Personal Protection Equipment (PPE)

The following PPE's are required at the jetty;

1. Safety helmet, safety glasses, coverall (fire retardant and anti static according DIN:EN ISO 11612 and 531, DIN:EN 1149-3-5) safety shoes (type 53).
2. Life jackets available at places where required, see signs

Exception; for crew change and/or visitors when no (un-)loading operations take place.

3 PORT SECURITY REGULATIONS

Security regulations

All seagoing vessels must comply with ISPS requirements. These terminal regulations are applicable at security level 1. At Security level 2 and 3 additional regulations apply.

Security level 2

The Ship Security Officer must inform the terminal representative in advance when the ship is under security code 2.

The terminal representative will inform the Ship Security Officer when Security level 2 is applicable at the terminal.

At Security level 2 the following is mandatory:

- Complete and sign Declaration of Security for sea going vessels.
- Any person leaving the ship must be reported in advance to the terminal representative in advance and must be accompanied by a Lyondell employee on the terminal. Formal identification must be shown and luggage, material and personnel will be subject to a search.
- All visitors for the ship must be reported in advance. And will be accompanied by a Lyondell employee.
- All deliveries to the ship, including personal belongings will be subject to search and must be collected personally at the terminal gate.

Security level 3

The Ship Security Officer must inform the terminal representative in advance when the ship is under security code 3.

The terminal representative will inform the Ship Security Officer when Security level 3 is applicable at the terminal.

At Security level 3 the following is mandatory:

- No vessel is permitted to move inside the terminal port unless formal permission is granted by the Port Authorities.
- Complete and sign Declaration of Security for sea going vessels.
- No person is allowed to leave the ship without formal permission of the Port Facility Security Officer. On the terminal any person granted permission to leave the ship must be accompanied by a Lyondell employee on the terminal. Formal identification must be shown and luggage, material and personnel will be subject to a search.
- No visitors for the ship are allowed unless formal permission is granted by the Port Facility Security Officer.
- No deliveries to the ship, including personal belongings are allowed unless formal permission is granted by the Port Facility Security Officer.

4 PORT REGULATIONS

Traffic regulations

No vessels, regardless of size are permitted to move inside the Caland canal area unless authorized by the Rotterdam harbour office.

Mooring arrangements

It is of utmost importance for a safe operation that all ships are securely moored and maintained in the desired position at all times.

The master of the vessel shall ensure that vessel moorings are closely watched and tended regularly, to prevent undue movement of the vessel. All moored vessels on self tension winches should be secured with winch brakes in locked position. Use of self tension winches in automatic position is strictly forbidden.

All mooring wires shall have rope tail ends. All vessels, while secured alongside the quay must provide rig towing wires with sufficient length and strength on seaward bow and quarter. The eyes must be maintained just above the water level, ready for emergency towing. The wires must be securely fastened to the ship's bollards.

Weather limitations

No special weather limitations are applicable, if the pilot or the harbour authorities find the situation unsafe they will not allow the vessel to enter or leave the port. All operations can be stopped on shore order during severe weather conditions. At Maasvlakte terminal, operations will stop when exceeding wind force 7.

Pre-operational procedures

Before any operations commence, a pre-operation meeting will take place between the terminal representative and the master of the vessel in charge of the cargo operations.

They will agree on the following

- Complete and sign ship/shore safety checklist for sea going vessels or ADN checklist for inland barges.
- Discuss any deficiencies shown up by the above checklist and agree any additional precautions required. The terminal reserves the right to refuse to load or discharge, if the requirements are not met.
- Agree a loading or discharging program, for example quantities and grades to be loaded or discharged and the loading or discharging rates.
- Discuss and agree the means of communication to be used during operations.
- Ensure that the vessel has all relevant documents in it's possession prior to loading or discharging.
- Lyondell will supply the necessary Logistics documents.

Cargo handling requirements

All operations shall in general be conducted in accordance with the international chamber of shipping. "Tanker Safety Guide for Liquefied Petroleum Gases", Tanker Safety Guide (chemicals). ISGOTT "International Safety Guide for Oil Tankers and Terminals" and all relevant IMO codes and conventions.

Quantity certificate

The quantity certificate will be issued by the independent surveyor.

Emergency shutdown system

In order to protect the loading and discharging system from dangerous stresses / surge pressure the terminal shutdown system should, whenever possible, be used. The vessel emergency shutdown system should NOT be activated except in extreme emergencies. Minimal shut-off time for valves on cargo lines and manifolds is 20 seconds except for Lyondell Maasvlakte terminal which is 15 seconds.

Nitrogen

Nitrogen is available for blanketing only, NOT for purging!

Portable instruments

The terminal requires safe portable instruments (EX proof) to be placed on board during operations.

Third party independent surveyor

The terminal reserves the right to employ an independent surveyor for inspection of the ship plus sampling and measuring of the cargo.

Operational procedures

Loading and discharging will not commence until all the safety checks have been carried out to the satisfaction of the terminal.

- Loading or discharging is only allowed for inland barges if two adequate escape routes are in place as required by the ADNOR.
- Suitable Personal Protective Equipment shall be worn near the manifold during connecting, loading/unloading and disconnecting
- The jetty operators will connect and disconnect the loading or discharging arms to the vessel's correct manifold as indicated by the vessel's responsible personnel. This is a joint effort. The jetty loading / discharging connection arms will be pressure tested with nitrogen prior to use.
- The jetty operator and the ship's responsible officer will agree that systems are correctly lined up before starting any operations.
- The whole loading and discharging operation will be monitored by person or by cameras
- A crew member with good command of Dutch or English must remain on deck at all time during loading or discharging
- The ship must give at least 10 minutes notice of requirements to start or stop pumping except for emergency conditions.
- The jetty operators will clear the loading / discharging arms with nitrogen to a slop system/ cont flare or back into the ship, before disconnecting.
- The cargo loaded / discharged will primarily be calculated according to the ship's metering system.
- The independent surveyor will determine the loaded or unloaded quantity.
- Taking bunkers during (un-)loading operations is not allowed.
- Only when approved prior to operations by Marine Coordinator and/or Jetty Operators, bunkering may take place before or after (un-)loading operations.

Fire precautions

The vessel fire fighting appliances, including main and emergency fire pumps, shall be ready for immediate use, and pressure shall be maintained on the fire main while alongside. Portable fire extinguishers of the dry powder type, with minimum 12 kilos capacity, shall be placed near the vessel's manifold. On vessels equipped with dry powder monitors, hoses should be run out and control boxes open for access to control valves. In addition, fire hoses should be run out and connected to the fire main sufficient to cover the deck area and manifolds.

The master of the vessel is responsible for retaining sufficient crew members on board the vessel at all times for effective fire fighting and to move the vessel if so directed by the terminal.

The quay is equipped with fixed equipment for applying water and portable dry powder extinguisher to fight fires on the quay. Lyondell Maasvlakte has got 3 elevated monitors which can spray water / foam operated from a safe area.

In case of fire on board the ship, the responsible officer should take action as follows:

1. Activate ship's fire alarm
2. Notify the terminal by telephone or other established means of communication. The terminal will inform the local authorities.
3. Make a signal by a series of prolonged blasts on the whistle of the vessel. Ref. also attachment 4.2
4. Stop all operations.

In case of fire on Terminal side, either the terminal or the responsible operator will inform the ship's responsible officer accordingly. In all events of fire, whether on board or on shore all operations will cease. Loading and discharging arms will be disconnected.

Hot work

Hot work is defined as work of any kind involving the use of naked lights, equipment which may create sparks or sufficient heat to ignite inflammable liquids or gases. Hot work is forbidden.

Smoking, Matches and lighters

Smoking and the use of matches or lighters is prohibited except in places where smoking is permitted.

On shore smoking is strictly prohibited!

Matches and lighters shall not be carried by personnel outside these places nor should they be carried on the main deck or in any other places where an explosive atmosphere may be encountered.

Naked lights

The use of naked lights is prohibited.

Cargo handling requirements

Any repair or maintenance work which may immobilize the vessel is prohibited, unless this is communicated in advance and approved by the loading master and port authorities. Unless otherwise agreed, vessels must at any time be ready to depart on their own or arrange a tugboat to remain standby.

Prevention of sparks

Connecting and disconnecting arms, hoses and any other operations on deck involving metal instruments shall be carried out in a manner that avoids the generation of sparks.

The vessel funnels must be equipped with effective spark arresters or flame screens.

Immediate steps must be taken to eliminate sparking from the vessel funnels.

Transportation, ship stores handling incl. bunkers

No ships, regardless of size, are permitted alongside vessels or barges at the quay while cargo is being handled. Small items of ship stores, excluding drums and gas-cylinders, may be taken on or off board during handling

only if carried by hand. All personnel and items brought on site, including personal belongings, may be subject to a search. All other items of ship's stores will have to be supplied via barge.

The responsible terminal representative will inform the ship's officer if there are visitors for the ship. The ship's officer must inform the terminal representative in advance of visitors or personnel leaving the ship. All visitors must show formal identification before allowed to enter the terminal.

Bunkers

Bunkers in bulk from a barge can be taken on board while alongside the quay but only before or after (un-)loading operations, and only when requested in a timely matter to the Marine Coordinator in Rotterdam. Final confirmation for bunkering will be given by Loading master of the terminal prior to or upon arrival. See exception for Europoort plant on page 4. In case of a fire alarm, all traffic and operations must be stopped !

Tank cleaning, gas freeing and purging

Tank cleaning, cooling down or gas freeing will not be permitted alongside Lyondell terminals.

Ballast water

Only clean ballast water contained in segregated tanks will be permitted to be discharged into the waters at the terminal harbour area.

Contaminated ballast water, defined according to the Dutch and international law, may not be discharged

Pollution and pollution prevention

Care must be exercised when handling cargo, ballast and bunkers in order to avoid spills into the harbour. Any pumping from vessel / barge is prohibited. Emission of smoke, including soot blowing is prohibited.

It is prohibited to throw garbage and other refuse overboard. Garbage disposal will be arranged by the ship's agent.

If, in spite of precautions, oil spills should occur, an immediate report to jetty personnel must be given and all efforts to recover or limit the spill taken. Use of oil dispersants is forbidden unless authorized by local authorities. The terminal will report to the proper local authorities and request further assistance if needed.

Violation of the Dutch and/or international pollution regulations may result in heavy fines both for the responsible officers and ship; in addition, the cost of the recovery / cleaning operation will be charged to the owner's account.

Ship stability

The master of the vessel is responsible for maintaining the vessel's stability within the vessel's criteria during loading, discharging and ballasting. Special attention should be paid to trim/list conditions which could endanger safe operation of (un) loading arms.

Certificate of fitness

The vessel must be in good state of repair and with all equipment properly working prior to proceeding to berth. The vessel shall be presented in every respect ready to load or discharge product, with tanks, piping and pumps free of any liquid or vapour which could contaminate or degrade the product.

Day and night signals

All vessels must comply with international signals for “not gas-free” vessels.

Inspection

The terminal representatives shall at any time have permission to board the vessel, to ensure that the harbour regulations, including ISPS requirements, are being complied with and that vessel equipment is in good working order.

CDI-M

All seagoing vessels must be CDI-M inspected and approved by Lyondell Chemical or by Lyondell Chemical authorized independent third party before arrival.

EBIS

All inland barges must be EBIS inspected and approved by Lyondell Chemical or by Lyondell Chemical authorized independent third party before arrival.

Propylene unloading operations

After transferring liquid phase on shore, vessel to compress remaining vapours into liquid and transfer on shore for max. 3 hours. Blowing vapours on shore is not permitted unless agreed. Maximum temperature of vapours should be 40 degrees Celsius max.

Potable water

Potable water is NOT available.

Board / Board

Board / Board operations are never allowed at the LyondellBasell sites.

5 Fire or emergency at the terminal

Also see the emergency notices cards!

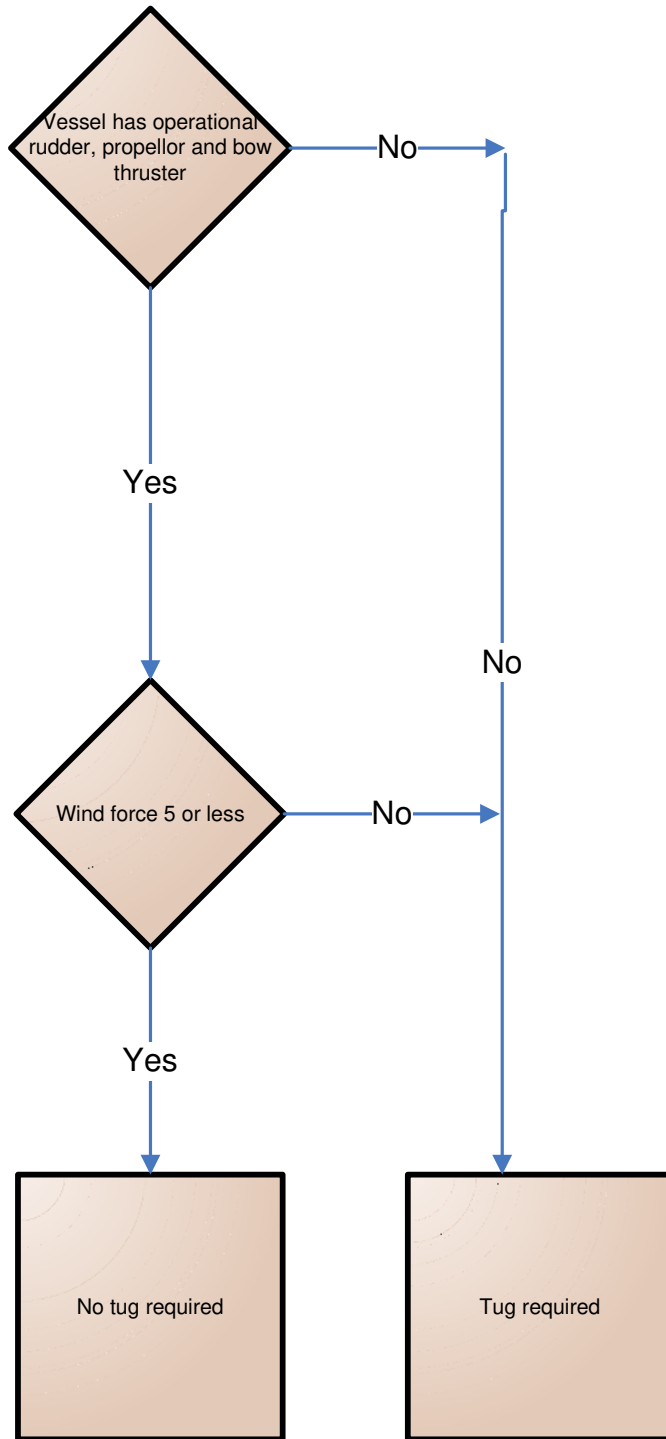
The terminal personnel will inform the officer in charge of the actual status. Ships alongside the quay will be informed in case of and prior to testing of alarm systems.

Fire or emergency on board

In case of any emergency, ships must comply with the following:

- Fire fighting appliances on the vessel including main and emergency fire pumps shall be kept ready for immediate use.
- Fire hoses of sufficient length to cover deck area including manifolds shall be run out and connected to the fire main with at least one fire pump maintaining pressure.
- Two portable extinguishers of dry powder type, minimum 12 kilo each, shall be placed near the vessel's manifold during operations.
- On the outbreak of fire, all operations shall be stopped.
- Instructions according to section “Fire precautions” are to be adhered to.
- Liquid and / or vapour release.

Lyondell's TUG DECISION TREE



Lyondell Europe Terminal Regulations -attachment II

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TECHNICAL DATA BY PLANT

Lyondell Maasvlakte							
Product	Manifold	Max. draft meter	Speed in m3/hr	Load / Discharge	Max LOA in meter	Minimum in meter	Maximum in meter
Styrene	SP1334	15	300	Load	110	2m	8m
PO	SP1333	15	300	Load	110	2m	8m
Styrene	SP1314	15	1000	Load	180	2m	16m
Benzene	SP1311	15	300	Discharge	180	2m	16m
Propylene	SP1342	15	300	Discharge	110	2m	8m
Loog	SP1348	15	75	Discharge	110	2m	8m
Benzene	SP1341	15	300	Discharge	140	2m	8m
Styrene	SP1344	15	300	Load	110	2m	8m
Benzene	SP1321	15	300	Discharge	180	2m	16m
Po	SP1323	15	500	Load	180	2m	8m