# RCP Pernis

# Netherlands

# Terminal Information Booklet

## Shell Energy and Chemicals Park Rotterdam

## INTRODUCTION:

In conjunction with these Shell Terminal Pernis Safety Book, the latest edition of the international edition of the International Safety Guide for Oil Tankers and Terminals and The Rotterdam, Port Authority regulations is applicable.

Tankers and their equipment must meet in accordance with the IMO BCH/IBC code guidelines. The criteria stated in this Safety Book do not relief the Tanker and/or Terminal from their obligation to use the best judgement when assessing the suitability of conditions for loading or discharging alongside Shell Terminal Rotterdam.

The master is responsible for the operation of his tanker including the cargo handling operations. He is to ensure that his staff who is delegated for the cargo operations are qualified and competent to do so. At all times, sufficient crew should be available onboard to keep an efficient and safe deck and cargo watch.

| **Content manager** | | | **Owner** |
|---|---|---|---|
| *SNR-DRP/71VP5*<br>*Logistics Coordinator* | | | *SNR-DDRP/71*<br>*Production Unit Manager* |
| **Revisie info** | **Laatste revisie** | **Date** | **Definition** |
| Chemicals | A | 04-03-2025 | Review and new layout |
| Maximum displacement | B | 16-03-2025 | Maximum displacement jetty 17/18 |
| Pre-cargo adjustments | C | 09-05-2025 | Change regulations and name |

**Distribution List**

- Port Authority
- Pilots (Head Office)
- Shipping Agent
- MTA
- Terminal Representatives/Shore Officers]
- Agency

**CONTENT**


Delta Hotel
Nieuwe Maas
Euroloop Gas and Liquid Calibration
Ssc Consolidation
Ctg
Het Scheur
Chane Terminal Pernis
Chane Terminal Nieuwe Maas
Combi Terminal Twente Rotterdam
Madroe haven
SHELL Nederland Verkoopmaatschappij
Esso Nederland
EP NL Rijnmond 1
Exxon Mobil
2e Petroleumhaven
LSC 3247 (Den Hartogh Logistics)
HCS laadstation Shell
Shell Chemicals Europe Bv
Shell Nederland Raffinaderij
Evides
GOD
Pernis, Pernis
Terminal Logistics
NV Rotterdam-Rijn Pijpleiding Maatschappij

# 1. FIRE AND EMERGENCY RESPONSE

## 1.1 EMERGENCY ALARMS AND ACTIONS

| ACTION-SHIP | ACTION-BERTH |
|---|---|
| ***Emergency on your ship*** | ***Emergency on a ship*** |
| • Raise the alarm:<br>Sound one or more blasts on the ships whistle, each blast of not less than 10 seconds duration supplemented by a continuous sounding of the general alarm system. | • Raise the alarm |
| • Inform Terminal Representative | • Contact ship |
| | • Inform all ships in the vicinity |
| | • Contact Port Authorities via CIN |
| • Cease all cargo/ballast operations and close all suitable valves if discharging. If loading only close valve after terminal advise it is safe to do so, after stopping their pumps. | • Cease all cargo operations and close all suitable valves |
| • In case of fire, fight fire and prevent from spreading | • If necessary, standby to assist fire fighting |
| • Standby to disconnect hoses or marine loading arms | • Standby to disconnect hoses or loading arms |
| • Bring engines to standby | • Implement berth emergency plan |
| | |
| ***Emergency on another ship*** | ***Emergency ashore*** |
| Standby, and when instructed: | • Raise alarm |
| • Cease all cargo/ballast operations and close allvalves. If loading only close valve after terminal advise it is safe to do so, after stopping their pumps. | • Cease all cargo operations and close all valves |
| | • In case of fire, fight fire and prevent it from spreading |
| • Standby to disconnect hoses or marine loading arms | • If required, standby to disconnect hoses or marine loading arms |
| • Bring engines and crew to standby, ready to unberth | • Implement berth emergency plan |

## 1.2 EMERGENCY ALARMS

### 1.2.1 In case of fire on the terminal or other ship

1. Sound one or more blasts on the ships whistle, each blast of not less than 10 seconds duration supplemented by a continuous sounding of the general alarmsystem.
2. Contact the **Central Site Emergency Controlroom**
3. Stand by to cease all cargo operations and then close all valves
4. Stand by to disconnect hoses or arms
5. Stand by to start engines

### 1.2.2 In case of fire on the ship

1. Raise alarm
2. Inform terminal
3. Fight fire and prevent fire spreading
4. Stand by to cease all cargo operations and then close all valves
5. Stand by to disconnect hoses or arms
6. Stand by to start engines

#### 1.2.2.1 Emergency respons in case of fire on a ship.

In case of a fire emergency on a ship the Shell emergency Response personel will concentrate the response on the Shell asset . The authorities, who will take over command in such a situation will decide what to do with the vessel and her crew.

### 1.2.3 Fire alarm on the terminal

Fire alarm: Sirene with alternating frequency (sinus wave).

All save signal:Continuous high pitch sound during 1 minute.

Testing fire alarm: Every weekend.

## 1.3 EMERGENCY COMMUNICATIONS

At the Shell Netherlands Terminal Oil Movement berth, the primary method of communication will be via the UHF radio provided by the terminal to ships on their arrival alongside.

The terminal will provide the ship with a portable radio, set on the loading office frequency. During the ship-shore loading and discharging conference the Loadingmaster will write down the mobile number of the ship mobile phone. However, in case of a non-communication occasion the loading and discharging needs to be stopped by the ship on a safe way.

Chemicals Loadingmaster: +31.6.5512.6540

Chemicals Control room: +31.10.431.4250

### 1.3.1 International Shore Fire Connection

The Terminal has International Shore Fire Connections conform ISGOTT appendix E available on the jetties. If the fire alarm is raised the fire water grid on the terminal will be pressurized from minimum 8 bar up to 13 bar maximum.

### 1.3.2 Evacuation / Muster points

**1e Petroleum haven**


**2e Petroleum haven**


Evacuation points (muster stations) are created at the far end of our jetty heads, see muster signs. Boatman craft on site is available.

In case of vessel is required to be removed from our jetty then first clear communication should be established between ships master and Loadingmaster to discuss this operation. The following items should be considered: tugboat -, boatman assistance, release of ropes.

In case of an emergency and an evacuation is required and access to main entrance is not blocked the muster station near the jetty should be considered.

See also the evacuation plan in section 1.3.2 of this document.

# 2. SAFETY AND SECURITY

## 2.1 GENERAL

Responsibility for the safe conduct of operations whilst a ship is alongside the Berth rests jointly with the Master of the ship and the responsible Oil and chemicals Loading master.

We wish therefore, before operations start, to seek your full co-operation and understanding of the safety requirements set out in the Ship/Shore safety checklist, which are based on safe practices that are widely accepted by the oil and tanker industries.

We expect you, and all under your command, to adhere strictly to these requirements throughout your vessels stay alongside Shell jetties and we, for our part, will ensure that our personnel do likewise, and co-operate fully with you in the mutual interest of safe and efficient operations.

Before commencing operations, and every 4 hours as stated repetitive items of the Ship/Shore safety checklist, a terminal representative together with a vessel representative, will make a routine inspection round on your vessel to ensure that all elements addressed within the scope of the Ship/Shore safety checklist are being managed in an acceptable manner. Where corrective action is needed, we will not agree to operations commencing or, should they have started, we will require them to be stopped.

If you consider that safety is being endangered by any action on the part of our staff or by any equipment under the control of the Shell Terminal Oil Movement, you should demand immediately for cessation of operations.

**THERE CAN BE NO COMPROMISE WITH SAFETY!**

## 2.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

The following minimum dress code shall be adhered to by ship's personnel while on duty alongside the Berth:

- Boiler suit / coverall
- Safety Helmet
- Safety goggles
- Safety shoes or boots with steel toe caps
- Life jacket or buoyancy aid when working outside safety rails

Personnel engaged in operations are actively encouraged to use above mentioned P.P.E. at all times during cargo transfer, hose handling and mooring operations. This includes the wearing of safety goggles.

When handling cargoes with additional hazards, e.g., H2S, additional P.P.E are required i.e., H2S warning devices and escape mask.

## 2.3 PORT AND TERMINAL SECURITY

This is to inform you that as from 01-07-2004 Shell Energy and Chemicals Park Rotterdam wishes to comply with the provisions of the International Ship & Port Facility Security Code.

You are therefore invited to complete the provided Declaration of Security, when the levels are equal then it is not necessary to sign this document.

When there is a difference in levels, the Port Facility Security Officer of the installation will review the document with you. You may wish to use your own DOS; we will accept this provided it is in every detail identical to the template, as mentioned as Appendix 1 in the Appendix to part B of the code.

Should you require any further security-related information, please feel free to contact our security-office

## 2.4 PERSONNEL AND VEHICULAR ACCESS

### 2.4.1 Access to Shell Energy and Chemicals Park Rotterdam Pernis

Prior to arrival ship's crew and expected visitors must be reported in writing (i.e., current crew list) to Site Security via e-mail PER-Beveiliging-Poort-5@shell.com". Persons of which Terminal Security isn't notified are denied access to the Shell site. If external medical assistance (e.g., in case of a personal accident) is called in, please advise the Loadingmaster so he can inform site security about their arrival.

Technicians and ship chandlers must report and identify themselves to site security at the gate.

### 2.4.2 For ships moored alongside Shell Energy and Chemicals Park jetties

In order to control the persons allowed to board/disembark the vessel, as well as for general security reasons, identification is required for legitimation by all crewmembers. For this purpose, a passport or seaman book is required and should be shown at the gate. Furthermore, we request you to inform us about the representatives of firms and the visitors you wish to have on board, so they can be added to the crew list.

### 2.4.3 Entering the terminal from the ship

Access to the Shell Terminal is not allowed other than for staff involved in the cargo transfer. Therefore, visits to the shore by crewmembers must be arranged via the ship 's Agent. The Agent will inform the Shell Installation security via e-mailPER-Beveiliging-Poort-5@shell.com". about the shore visit and arranged transport. Accordingly, Shell Security Department will allow access for arranged transport on the Installation to pick-up or deliver crew at the jetty.

### 2.4.4 Entering the jetties from the shore

Before entering the jetties or loading areas one must report themselves to the Control Room. Entering jetties during mooring and unmooring is for safety reasons not allowed. Mooring and unmooring is an activity with increased risk where only the presence of specialized people is accepted. When mooring of the ship and placing of the gangway is completed, the jetty operator will, via the Control Room, release the jetty for access.

# 3. PRE-ARRIVAL COMMUNICATIONS

We send this information digitally.

## 3.1 E.T.A. ADVICE

The vessels agent will contact the Shell Loadingmaster via telephone at least 60 minutes before the vessel arrives at the Pilot station to establish whether the berth will be available.

The 60-minute Notice also applies when vessels shift from berths within the Rotterdam area.

This will enable the terminal to communicate status of the berth or any delay due to unforeseen circumstances and also to issue final directives.

## 3.2 PRE-ARRIVAL EXCHANGE OF INFORMATION

Pre-arrival exchange of information will take place when vessels are scheduled for Shell Energy and Chemicals Park jetties.

An e-mail or digital way containing information concerning the arrival and berth will be sent to the vessel and the vessel's agent.

This e-mail also contains a questionnaire for the vessels Master to be filled out and returned to the terminal via the vessel's agent.

## 3.3 PRE-CARGO REQUIREMENTS FOR CHEMICAL PRODUCTS

These pre-cargo requirements are valid for Jetties: 4, 17, 18, 35 & 35A. For all products including BHC but not Raff 1 & 2 the cargo space needs to be in one of the following conditions:

- Unit transport: This means that the cargo hold may be contaminated with exactly the same product as the one the ship is loading. (By "exact same product," we refer to the same CAS number, recognizing that there may be variations in P & H phrases within the same group.)
- Degassed and ventilated: The ship must be free from gases and vapors from the previous cargo.
- Washed, degassed & ventilated: This indicates that the ship has been washed and is free from gases and vapors from the previous cargo (according to ADN regulations).
- Washed, degassed, ventilated & dry: This means that the ship has been washed and dried and is free from gases and vapors from the previous cargo (according to ADN regulations).

If any of the above requirements are met, the ship will be loaded.

These pre-cargo requirements are valid for Jetties: 4, 17, 18, 35 & 35A. For all products including BHC but not Raff 1 & 2 the cargo space needs to be in one of the following conditions:

### 3.3.1 Pre-cargo requirements for gases

For the loading of gases, the previous cargo must have compatible pressure.

If the pressure is too low, Shell is not responsible for unplanned stopping of the loading and any subsequent damage.

### 3.3.2 Conditions for Raff 1 or Raff 2 cargo's

1. Tank Conditions: Tanks, pipelines, and compressors must be under the vapours of the last cargo, either pure or a mixture of: Raff 1, Raff 2, N-Butane, Isobutane, 1-butene, 2-butene (trans and cis), isobutylene, butadiene.

Free of liquid with a maximum oxygen content of 0.3 volume percent in the vapor phase and a minimum pressure of 0.3 bar.

### 3.3.3 Definition of degassed

Within RCP we use the definitions of degassed cargo space as described by ADN 2025.

A cargo space is degassed and ventilated when there is a written statement from the vessel that the cargo space has a LEL smaller than 10% and (when deemed by column 18 of the ADN table C) a TOX measurements smaller than 1ppm. For the TOX only the latest cargo should be taken in consideration.

All measurements should be taken by a certified person. RCP does not have the capacity to take any measurements.

# 4. ARRIVAL OFF PORT

## 4.1 BERTH APPROACH


## 4.2 PILOTAGE ANCHORAGE AND WAITING AREAS

Seagoing vessels of >70 metre. and/or carrying hazardous materials are obliged to have a pilot on board in order to sail into the Rotterdam

Port of Rotterdam | Rotterdam Port Authority

# 5. BERTHING AND MOORING

## 5.1 GENERAL DESCRIPTION OF BERTH

Shell Energy and Chemicals Park Rotterdam-RCP, has 6 dedicated jetties.

Jetty 4, 17, 18 and 15 only for barges which are located in the 1st Petroleumhaven.

Jetty 35, 35a,which are located in the 2nd Petroleumhaven.

## 5.2 BERTH LIMITATIONS

**1st Petroleum Harbour – Shell Energy and Chemicals Park Rotterdam**

| Jetty | Minimum length (M) | Maximum length (M) | Maximum draft (M) Fresh | Maximum displacement mooring at Jetty (MT) | Minimum PBL at Jetty (M) | Maximum Manifolt hight at Jetty (M) | Maximum Freeboard at Jetty (M) |
|---|---|---|---|---|---|---|---|
| 4 | 85 | 150 | 10,55 | 25.000 | | | 10 |
| 15 | 60 | 90 | 5,55 | 4.000 | | | |
| 17 | 85 | 185 | 9,55 | 20.000 | 47 | | 10 |
| 18 | 90 | 185 | 9,55 | 20.000 | | | 10 |

**2nd Petroleum Harbour – Shell Energy and Chemicals Park Rotterdam**

| Jetty | Minimum length (M) | Maximum length (M) | Maximum draft (M) Fresh | Maximum displacement mooring at Jetty (MT) | Minimum PBL at Jetty (M) | Maximum Manifolt hight at Jetty (M) | Maximum Freeboard at Jetty (M) |
|---|---|---|---|---|---|---|---|
| 35 | 75 | 185 | 10,9 | 50.000 | 49 | 8,8 # | |
| 35a | 75 | 130 | 5,55 | 7.500 | | 8,8 # | |
| 35a* | 75 | 136 | 5,55 | 7.500 | | 8,8 # | |
| | Only for barges | | | | | | |
| # | Only Gas loading or discharging | | | | | | |

## 5.3 MAXIMUM BEAM

There is no restriction regarding beam, with exception of barges calling to a Jetty 35a where maximum breath is 25 m.

Not every berth can accommodate maximum size vessels, check the berth information first.

## 5.4 AIRDRAFT

There is no air draft/overhead clearance restriction/limitation.

## 5.5 TOTAL DISPLACEMENT ALONGSIDE JETTY

Be aware that the total displacement on arrival is taken into account for forces against jetty.

## 5.6 DRAFT TO & FROM PERNIS

Port of Rotterdam | Rotterdam Port Authority

## 5.7 TUGS AND TOWAGE

The Template Port Authority requires all sea-going ships entering the port to be assisted by tugs and it is the Ship's Agent's responsibility to contact Template Tugs at least 2 hours before the ship's arrival at the Harbour Buoy.

The minimum number and bollard pull of tugs will be confirmed by the Pilot. The Template Port Authority advises that a minimum of two tugs should be used for the berthing/unberthing of tankers at the Petroleum Berth, but this may be varied according to the individual Master/Pilot requirements, weather conditions, etc.

The following tugs are available with the following pulling force:

45 Tons, 65 Tons 80 Tons.

Tugboat types: conventional, ASD-type and tractor tugs.

All the tugs are equipped with proper rubber fenders on the front and the stern.

The principal purpose of a harbour tug is helping to control ships during the transit of narrow channels, in turning basins and for careful controlling during the final stages of coming alongside a berth.

Safe use of harbour tugs is the responsibility of the ship's master, under a pilot's advice and this pilot's advice for the terminal Pernis is mandatory.

General: for a ship <10.000 t SDWT fitted with a good working bow propeller with enough power, will not need a tugboat in normal conditions. However, Tug usage depends on factors that include the following:

- The full range of vessel sizes and types to be handled.
- Type of tug propulsion and engine configuration.
- The need to physically swing the ship in narrow turning basins.
- Requirements for escort and assist duties.
- The need to control velocity; and,
- Environmental conditions (e.g., wind, sea, swell, current, ice).

## 5.8 MAXIMUM APROACH SPEED

The max approach speed to jetties is 10 cm/sec = 0.02 NM/hr.

## 5.9 LAY BY BERTH

Shell doesn't have lay by berths. Arrangements for Lay by berths can be made via vessels agent.

## 5.10 MOORING ALONG THE JETTY

Normally ships will berth according to the "bow out"-principle. Deviating from this rule can occur because of other vessels and/or optimizing jetty equipment availability. It is recommended that the pilot contacts the Loadingmaster by mobile phone for assurance.

The Harbour Master can permit deviation from this rule.

## 5.11 RULES FOR MOORING IN GENERAL

- Breast lines should be oriented as perpendicular as possible to the longitudinal Centre line of the vessel and as far aft and forward as possible.
- Spring lines should be oriented as parallel as possible to the longitudinal Centre line of the vessel.
- The vertical angle of the mooring lines should be kept to a minimum.
- Generally, mooring lines of the same size and type (material) should be used for all leads. If this is not possible due to the available equipment, all lines in the same service, i.e., breast lines, spring lines, headlines, etc. should be the same size and type. For example, all spring lines could be wire and all breast lines synthetic.
- Mooring lines should be arranged so that all lines in the same service are about the same length between the vessel's winch and the shore bollard. Line elasticity varies directly with line length and shorter lines will take more load.

Minimum mooring requirements Seagoing vessels:

- Ships up to 10.000 Dwt: 2 Head- and Stern lines, 2 Spring lines Fore and Aft
- Ships up to 25.000 Dwt: 3 Head- and Stern lines, 2 Spring lines Fore and Aft
- Ships over 25.000 Dwt: 4 Head- and Stern lines, 2 Spring lines Fore and Aft
- SDWT is mentioned because of the common notation.

Although SDWT is mentioned, be aware that the total arrival displacement is taken into account for forces against jetty.

Link to Jetty drawings:

Port Information & Mooring Plans - Contractor Website
Home - Contractor Website

## 5.12 RESTRICTION

When in a part of the Rotterdam area visibility decreases to less than 500 meters, the Department of Vessel Traffic & Operations (VTS) will enforce the following rules:

- Visibility between 200 and 500 meters: if the ship requires tugs, the Department of Vessel Traffic & Operations will consult the pilot association and tugboat companies as to whether the ship can sail.
- Visibility less than 200 meters: the Department of Vessel Traffic & Operations will always contact the pilot as to whether the ship can sail.

Traffic guidance is supplied by VTS when visibility is less than 1,000 meters on the river or less than 2,000 meters in the approach area and Europoort.

## 5.13 EMERGENCY TOWING OFF PENDANTS (ETOPS OR FIRE WIRES)

This item is still on the ISGOTT checklist. However, as OCIMF advises to discontinue this practice, this item is not being enforced in the Port of Rotterdam.

# 6. COMMUNICATIONS WHILE BERTHED

## 6.1 GENERAL

Responsibility for the safe conduct of operations whilst your ship is alongside our terminal rests jointly with you, as Master of the vessel, and with the Terminal Loadingmaster.

We wish therefore, before operations start, to seek your full co-operation and understanding of the communication procedure.

Shell Terminal wants full co-operation with you in the mutual interest of safe and efficient operation.

- There must be a continue radio communication established during the entire stay of the vessel alongside Shell Terminal.
- The officer engaged in cargo operations should always be in contact with the Terminal Loading Master.
- A radio check should be conducted every hour.
- A lack of communication results in cessation of the cargo operation.
- The battery exchange will be arranged by loading master every 8 hours.
- Communication language is English.

To enable contact between ship and Terminal Movement control room we will issue a portable radio set to the ships officer. This will enable him to contact the Terminal Movement control room to report/discuss progress of operations, report unsafe situations and calamities. Please address the Terminal Movement control room in the following manner:

"Control room here the 'Vessel name'. Please come in"

As a back-up reading, we would like to use the ship's mobile phone.

## 6.2 SHIP/SHORE SAFETY CHECK LIST AND OPERATIONAL AGREEMENTS

On arrival at the berth, the Terminal representative will discuss the following items with you:

- Safety Letter to Master
- Emergency Procedure Notice
- Ship/Shore Safety Check List
- Cargo Transfer Plans
- Port Security Requirements

The various forms, information and procedures laid out in the document formalize the conduct and procedures governing ship/shore operations at the jetty which are to be mutually agreed before operations commence.

The agreements reached in the document remain in force throughout the time your vessel remains alongside the Petroleum Berth. Any changes made to these agreements during the course of the cargo operation must be again agreed in writing.

All items contained in the Ship/Shore Safety Check List must remain constantly under review. However, the ship and shore are required to jointly recheck those items requiring formal recheck at intervals **not exceeding 4 hours.**

## 6.3 COMMUNICATIONS DURING CARGO TRANSFER

The terminal ask you to use the ship's mobile phone as a backup reading.

During cargo operations, if for any reason it becomes necessary to stop cargo in an emergency, the party requesting the stop should notify the other party by UHF radio, or any other means, requesting ‘Emergency Stop’.

All transfer pumps must be immediately stopped, and ship and shore manifolds closed until the situation is investigated and joint agreement is reached on resuming operations.

During the pre-transfer conference, communications procedures will be agreed for conducting specific activities and will include agreed notice periods for conducting ship or shore stops.

Also, during the pre-transfer conference, the Loadingmaster will write down the mobile number of the ship mobile phone. However, in case of a non-communication occasion, the loading and discharging needs to be stopped by the ship on a safe way.

# 7. RESPONSIBILITIES

## 7.1 JURISDICTION

The Pernis Port is within the jurisdiction of the Port of Rotterdam. Therefore, the vessel could be subject to inspection by inspectors of the Transport and Environmental Safety Department or Port State Control. Because port operations take place around the clock, these inspections take place during day- and night-time. Our experience has learned that on many occasions, especially during the night, documentation or certificates were not available. To ensure a smooth operation, we advise to keep the following documentation and certificates (or certified copies of certificates) available at all times:

- IOPP (International Oil Pollution Prevention)
- SOPEP (*Shipboard Oil Pollution Emergency Plan)*
- Garbage record book
- Oil record book part I and II
- Certificate of Fitness chemical/gas, including product list
- Procedures and arrangements manual
- Cargo record book
- Safety checklist
- Stowage plan on arrival and departure
- Material safety datasheet (s)
- Bill of lading
- Shipping document for bulk liquid cargoes

### 7.1.1 Inspections from port state control

The Paris Memorandum of Understanding (MOU) on Port State Control aims at eliminating the operation of sub-standard ships through a harmonized system of Port State Control inspections on foreign ships in the Paris MOU ports. The organization consists of 25 participating member states and covers the waters of the European coast and the North Atlantic basin from Canada to Europe.

The Dutch Port State Control is carried out by the Transport and Water Management Inspectorate of the Netherlands. It deals with approximately 1,400 inspections each year. Inspections take place on board, ensuring that these ships meet international safety, security and environmental standards, and that crewmembers have adequate living and working spaces.

## 7.2 CONDITIONS OF SHIP ACCEPTANCE

Ships are accepted at Shell Pernis on the understanding that operations will be conducted in accordance with all applicable legislation, together with practices contained in relevant Codes of Practice, in particular, the guidance contained within the latest edition of the International Safety Guide for Oil Tankers and Terminals (ISGOTT).

## 7.3 RESPONSIBILITIES

As stated in the Safety Letter, responsibility for the safe conduct of operations while the ship is at the Petroleum Berth rests jointly with the Master of the ship and with the responsible Terminal Representative.

Emphasis is placed on the fact that the completion of a safe and successful cargo transfer operation is dependent upon effective Co-operation, Co-ordination and Communication between all parties involved. All operations should be conducted in the spirit of this mutual agreement.

## 7.4 RESPONSIBILITIES FOR LOADING

The responsibility for operations on board ship rests solely with the Master, e.g.

Ship's personnel are advised that responsibility for the loading operation **on board the ship** rests solely and absolutely with the Master.It is the responsibility of the ship's personnel to operate valves and to ensure safe and secure connection of all transfer equipment to the ship’s manifold.

Ship's personnel are advised that the responsibility for the discharge or escape of oil from a vessel rests with the ship.

In the event of a prosecution being taken by the appropriate authorities, heavy penalties together with liability for dispersal costs and damages for pollution damage, is provided for by legislation.

## 7.5 RESPONSIBILITIES FOR UNLOADING

The terminal will monitor Loading & discharging operations.

The responsibility for operations on board ship rests solely with the Master, e.g.

Ship's personnel are advised that responsibility for the unloading operation **on board the ship** rests solely and absolutely with the Master. It is the responsibility of the ship's personnel to control pumping rates, to operate valves and to ensure safe and secure connection of all transfer equipment to the ship’s manifold.

Ship's personnel are advised that responsibility for the discharge or escape of oil from a vessel rests with the ship.

In the event of a prosecution being taken by the appropriate authorities, heavy penalties together with liability for dispersal costs and damages for pollution damage, is provided for by legislation.

# 8. OPERATIONS ALONGSIDE

## 8.1 GENERAL

All operations at the Petroleum Berth will be carried out fully in accord with the recommendations contained in the latest edition of the International Safety Guide for Oil Tankers and Terminals (ISGOTT).

### 8.1.1 Personal attendance of jetty

During your stay along our jetty a jetty operator will be permanently monitoring the vessel through CCTV during active loading and discharging operations. He or she will also assist (dis)connecting hoses/loading arms and will start or stop operations in full cooperation with the ship's cargo officer. The jetty operator is in continuous radio contact with our Control Room and will supervise the loading and discharging activities on our behalf.

The jetty operator will periodically visit your ship in order to discuss progress of operations and carry out inspections (repetitive checks) on board of your vessel and shore, conform the ship shore safety checklist. When unsafe situations or calamities occur, he or she will, in cooperation with the vessels crew, take care that loading/discharging operations are immediately and safely stopped.

### 8.1.2 Camera surveillance with remote control of cargo systems

During your stay along our jetty loading and discharging operations are under continuous camera surveillance from our staff in the Control Room. The cargo facility itself is remotely controlled from the same Control Room. One of our staff will periodically visit your ship in order to carry out inspections (repetitive checks) on board of your vessel, and shore, conform the ship shore safety checklist.

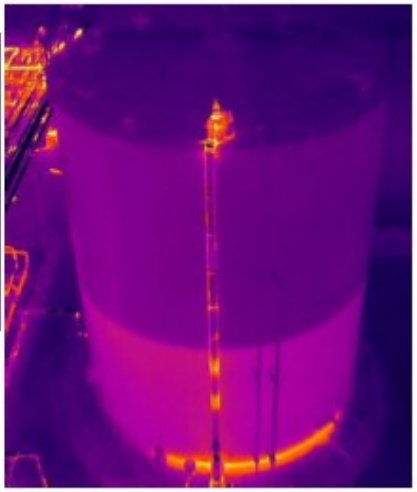
### 8.1.3 DRONE

Drones are being utilized for asset inspection across the Shell property. During these inspections the need to cross water is supported by local regulations. As to maintain safety of seagoing vessels, a 30 meter buffer zone is in place not to fly over vessels. If a vessel is in motion, the drone pilot is made aware by the vessel radar and confirm by the FPV camera of the drone. The drone pilot will cease flight path until the vessel has passed and is safe to proceed.

# Robotics op Pernis - Awareness

The aim of this announcement is to make you aware of the drones and robots while working across the production units. If you see any of these devices, be ensured they are completing a job by collecting data, and do not let them distract you from your work.

*If there are additional concerns, please address with the permit officer prior to work.*



## Personal Privacy

The robots and drones that will be deployed aim to photograph selected process equipment (photo/video in both normal and infrared images).

The recorded images are then analyzed by PU operators or by AI.

The system does not aim to observe individuals and does not store any 'personal sensitive information' such as personal data, customer data, performance/behavior monitoring, etc.

If people occasionally do end up on the recordings, they are in principle unrecognizable due to the large distance of the camera and the camera angle.

**Shell Robotics**

Driving development and deployment

# Robotics op Pernis - Awareness

*The aim of this announcement is to make you aware of the drones and robots while working across the production units. If you see any of these devices, be ensured they are completing a job by collecting data, and do not let them distract you from your work.*

Currently the fleet is operating automatously to increase the safety and efficiency of our day to-day operations:

**Saving time** through automation of operator rounds and automation of reporting

**Improved monitoring** additional monitoring, preventative maintenance, and new insights

**Reducing exposure** decreasing exposure to hazards and safe detection of leaks

**Harnessing valu** by replacing a significant amount of stationary sensor equipment

## Personal Privacy

The robots and drones that will be deployed aim to photograph selected process equipment (photo/video in both normal and infrared images).

The recorded images are then analyzed by PU operators or by AI.

The system does not aim to observe individuals and does not store any 'personal sensitive information' such as personal data, customer data, performance/behavior monitoring, etc.

If people occasionally do end up on the recordings, they are in principle unrecognizable due to the large distance of the camera and the camera angle.

## Shell Robotics

Driving development and deployment



*If you would like to know more about how we are utilizing technology across site, please reach out to the Digital Department. If there are additional concerns, please address with the vergunning officer prior to work.*

## 8.2 HOSE/ARM CONNECTION

Identifying responsibilities and process for the connection of hoses or hard arms, e.g.

On completion of mooring alongside the Petroleum Berth, the ship will be presented with hoses for discharge. It is the responsibility of the shore to ensure that the hoses are manoeuvred and connected safely and are correctly rigged, but the manual assistance of the ship's crew is requested to achieve this. Similarly, on completion of cargo operations, terminal personnel are responsible for ensuring the safe disconnection and manoeuvring of the cargo hoses and ship's staff are requested to manually assist with the process, including bolting in place the cargo hose end blanks.

## 8.3 CARGO HANDLING FACILITIES

During the pre-conference the cargo handling facilities will be discussed and included in the agreement.

## 8.4 CARGO TRANSFER RATES

During the pre-transfer conference the cargo transfer rates will be discussed and included in the agreement.

## 8.5 CHECKS ON QUANTITIES TRANSFERRED

During the pre-transfer conference the check on Quantities procedure will be discussed.

## 8.6 ENVIRONMENTAL CRITERIA FOR SUSPENDING OPERATIONS

**Wind restrictions we use the site below as a reference**

https://weather-tide.portofrotterdam.com/desktop/

If the wind exceeds 14.0 m/s (wind force 7) for longer than 10 minutes reading on site, it should be considered not to start or stop lifting activities on the jetty.

Wind warnings must also be taken into account in the decision.

1. If the wind exceeds 17,2 m/sec (wind force 8) for longer than 10 minutes reading on site, stop cargo transfer can be considered in consultation with the Captain. The wind reading of the shore can be compared with that of the ship.
2. If the wind exceeds 20,8 m/sec (wind force 9) for longer than 10 minutes reading on site, all cargo handling activities will be stopped and the loading arms / ship manifolds will be made empty as much as possible. Also check gangway (safe Access) can be guaranteed.
3. Unberth: the LM has to initiate a conference between LM, Master and MTA about the departure of the vessel.

## 8.7 EMERGENCY SHUTDOWN

**Stop loading**

The terminal will provide the ship with an emergency stop on the cargo deck. This should be positioned on a save location, far from likely sources (i.e. hoses, loading arms, pumps etc.) of leakages or other incidents. It should be easily and safely accessible for the deck watch or cargo officer. It should only be pressed in case of emergency.

To deal with minor leakages operations are preferably stopped in cooperation with the terminal in a controlled manner. Thus, minimizing the risk of further escalation.

**Stop discharging**

The terminal will provide the ship with an emergency stop on the cargo deck. This should be positioned on a save location, far from likely sources (i.e. hoses, loading arms, pumps etc.) of leakages or other incidents. It should be easily and safely accessible for the deck watch or cargo officer. It should only be pressed in case of emergency.

Discharging operations can be stopped by the vessel at any time by stopping pumps and closing ships valve. Shore must be informed. If an emergency stop is required by shore, ship will be informed verbally, cell phone or radio.

## 8.8 'DRY CERTIFICATES'

We as terminal would point out that our liability for the product(s) delivered ends at ships railing so that we cannot be held liable if, after leaving our pipelines the quality of the product(s) delivered should prove to differ from that of the samples taken by us at the end of our pipelines as a result of any circumstances arisen or brought about in any way and any place what so ever on board the vessel.

The Loadingmaster will not sign a clean tank certificate. If appropriate and necessary master will issue a letter of protest. SHELL ENERGY AND CHEMICALS PARK ROTTERDAM Loadingmaster will not sign a dry (empty) tank certificate. If appropriate and necessary master will issue a letter of protest.

## 8.9 HANDLING OF SHIP'S STORES AND SPARE GEAR

Before Arrival of a vessel to SHELL ENERGY AND CHEMICALS PARK ROTTERDAM terminal, expected visitors, suppliers, service providers need to be reported.

A visitor list will be drawn up and forwarded by the vessel's agent to Site Security via e-mail PER-Beveiliging-Poort-5@shell.com". Persons of which Terminal Security isn't notified are denied access to the Shell site.

Intended store supply of a ship to be communicated to our waterfront planning section a day before the expected arrival of the vessel. Information should include projected duration of stores delivery. the weight of the packages delivered via the terminal may not exceed 23 kg, otherwise they must be delivered by barge.

## 8.10 CRAFT ALONGSIDE

Take bunkers/slops and stores alongside our jetties conform the applicable Rotterdam harbour rules in the Havenreglement Gevaarlijke Stoffen Rotterdam and the requirements mentioned in ISGOTT and knowledge by JETTY SCHEDULING.

Having a craft alongside is only possible under the following conditions:

- Intended /storing of a ship are communicated to our jetty planning section a working day before the expected arrival of the vessel. Information should include projected duration of bunkers/stores.
- Only GMAS registered and approved barges are allowed (safety/security check).
- Shell reserves the right to refuse bunkers/stores alongside their jetties that take more than 3 hours.
- Permission is incorporated in our Loading and discharging arrangement.
- The loadingmaster can deviate from above rules i.e. agree, agreement to be incorporated in the loading & discharging arrangement, that the ship takes bunkers or stores.

## 8.11 GARBAGE RECEPTION FACILITIES

Approved garbage reception facilities are available in Port Template via approved contractors by arrangement through the ship's Agents.

Rubbish skips for domestic garbage are compulsory and can be arranged by the ship's Agent.

The garbage may not be dumped in de Terminals waste containers.

## 8.12 POTABLE WATER

In general, you will order supplies of potable water before arrival via your agent. Your agent will arrange that the water barge arrives at the right time. If you are in port, you can order water supplies either directly or via you agent.

## 8.13 BUNKERS AND LUBRICATING OILS

The terminal will accommodate seagoing vessels to take bunkers/slops and stores alongside our jetties. Special attention is required to the dangers of H2S in bunkerfuel conform ISGOTT.

Conform the applicable Rotterdam port regulations in the Havenreglement Gevaarlijke Stoffen Rotterdam and the requirements mentioned in ISGOTT and knowleged by SHELL ENERGY AND CHEMICALS PARK ROTTERDAM jetty planning, this is only possible under the following conditions:

Intended Bunkering/storing of a ship are communicated to our jetty planning section a working day before the expected arrival of the vessel. Information should include projected duration of bunkers/stores.

Only GMAS registered and approved bunker barges are allowed

Shell reserves the right to refuse bunkers/stores alongside their jetties that take more than 3 hours.

Bunkering of a ship takes place after consulting the Loadingmaster. This could be after inspection by the cargo surveyor during loading or after disconnection, depending on the nature of the cargo.

Bunkering of gascarriers is only allowed when loadingarms are disconnected.

Permission is incorporated in our Loading and discharging arrangement.

The master and skipper of the vessels involved have filled out and signed the bunker control checklist prior to bunkering. They should ascertain and agree in writing about:

- Capacity, free space in $m^3$ and filling degree of tanks to be filled.
- Means of communication and procedure.
- Frequency of dipping bunkertanks in minutes and person responsible.
- Who keeps watch and acts on malfunctions.
- Use of an emergency stop and procedure.
- The vessel will report barges coming alongside as soon as possible to the Controlroom stating the name of the barge and the nature of its activities. Activities can only take place after approval of the Loadingmaster.

## 8.14 SLOPS AND BALLAST RECEPTION FACILITIES

There are no facilities at the Petroleum Berth or within Port Template for the receipt of slops or dirty ballast ashore.

In accordance with MARPOL 73/78 and EU-directive 200/59/EG, ports are obliged to ensure port reception facilities for the reception of residues of oil and noxious liquid substances and of garbage, adequate to meet the needs of ships using them, without delay to these ships. Complying with these regulations the Port has designated a number of companies which are entitled to collect or receive and process (harmful) waste from ships. Reception companies collect waste against set tariffs, which may be obtained from these companies via the shipping agent. Collecting waste may take place by means of barges.

# 9. SAFETY REQUIREMENTS

## 9.1 SMOKING

It is not allowed to smoke in the harbour area except in accommodations on board designated and clearly marked as such. With this letter we draw your special attention to the ship/shore safety checklist (smoking requirements) and its explanatory guideline

We herewith clearly point out that violation of these smoking regulations, by any person on board, may result in suspension or stoppage of operations, for which delay we cannot be held responsible.

**SMOKING IS ONLY ALLOWED IN DESIGNATED "SMOKING ROOMS"**

A designated "smoking room":

- MUST have a two (2) door separation with the outside.
- MUST be stated in the ship/shore safety checklist.
- MUST be marked as such Places designated as "smoking room" loose this qualification as soon as either the outside door or the smoking room door cannot be closed properly anymore.
- See ISGOTT checklist.

## 9.2 USE OF MATCHES AND LIGHTERS

Safety matches or fixed (car type) electrical cigarette lighters should be provided in approved smoking locations.

All matches used on board tankers should be of the safety type. The use of matches and cigarette lighters outside the accommodation should be prohibited, except in places where smoking is permitted. Matches should not be carried on the tank deck or in any other place where petroleum gas may be present.

The use of all mechanical lighters and portable lighters with electrical ignition sources should be prohibited on board tankers.

Disposable lighters present a significant risk as an uncontrolled ignition source. The unprotected nature of their spark producing mechanism allows them to be easily activated accidentally. The carriage of matches and lighters through terminals should be prohibited.

## 9.3 DRUG AND ALCOHOL POLICY

All ships chartered by Shell or calling at Shell terminals must have an established Drug and Alcohol policy.

Masters are advised that operations will cease if it is considered that the actions of a person or persons involved in operations are not under proper control as a result of the use of alcohol/drugs and or fatigue.

Operations will not resume until the matter has been reported to and fully investigated by relevant authorities and the Terminal Representative considers it safe to do so. Delay or cancellation of a ship's departure could result.

Access to the Petroleum Berth will be denied to any person suspected of being affected by alcohol or drugs.

## 9.4 PORTABLE ELECTRICAL EQUIPMENT, INCLUDING PHONES AND PAGERS

Use of electronic devices (such as: camera's, telephones, pagers, lap top computers, transistor radios etc.) are strictly forbidden in the harbour area except in designated approved smoking rooms and galleys on board. These devices must be switched off within jetty, loading area's and plants.

**Remark**

Shell approved persons may use an Ex-proof GSM cellular phone.

Because dock facilities are typically rated as a hazardous area and act as an entrance gate for ship personnel, pilots and government officials to and from the ships it's allowed to take non intrinsically safe ATEX equipment to and from a ship under the following conditions:

- Turn device(s) always OFF when entering the jetty.
- Secure device always in a bag (e.g. a bag that protects the device from breaking in the event of a fall such as a backpack, a laptop case, a lunch box, etc, etc,).

## 9.5 ENVIRONMENTAL PROTECTION

The rules and regulations in the port contribute to the safe, efficient and environmentally responsible handling of shipping traffic. The international rules of the IMO, such as the SOLAS convention and its amendments (e.g. the IMDG code and IBC) and national regulations, including the recommendations of the European Community, are in force in the port of Rotterdam. Furthermore, the Port Bye-laws are the "house rules" of the port. Based on the Rotterdam Port Bye-laws, the Port Rules on dangerous substances contain additional, specific regulations for ships carrying dangerous cargoes in the port.

## 9.6 ADVERSE WEATHER

The Harbour Master and Terminal Representative have access to regular weather updates and ships will be advised accordingly should adverse weather be expected. Any decision to leave the berth and port will be taken in consultation with the ship's Master and Harbour Master.

In the event that the ship has to stay within the port, specific mooring instructions will be given by the Harbour Master or Loadingmaster.

## 9.7 STILL AIR CONDITIONS

If there is little air movement, petroleum gas may persist on deck in heavy concentrations on ships that are loading volatile products or ballasting tanks that have previously contained volatile products. Consideration may have to be given to stop operations while these conditions persist.

## 9.8 ELECTRICAL STORMS

All cargo transfer operations, including the ballasting of non-gas-free cargo tanks will be stopped in the event of an approaching electrical storm. All tank openings, vent outlets, cargo and manifold valves will be closed until such time as the storm has passed.

# 10. APPLICABLE TERMINAL REGULATIONS

## 10.1 ULLAGING AND SAMPLING

During loading and for 30 minutes after the completion of loading (relaxation-time) no equipment for dipping, ullaging or sampling may be introduced into the tank.

Portable gauging devices mounted on deck standpipes such as UTI's and operations through correctly designed and installed sounding pipes - pipe which extends to the full depth of the tank - are allowed.

## 10.2 CLOSED OPERATIONS

The loading, discharging and/or ballasting of ship's cargo tanks must be conducted under closed conditions. The use of manual gauging/sampling of cargo tanks via sighting, ullage ports or similar openings is not permitted.

In case of exceptions e.g. Claim Procedure, then a M.O.C (Management of Change process) is required.

## 10.3 INERT GAS

If a ship is fitted with an inert gas system then this system must be fully operational (in accordance with Class requirements) and used at all times. In the event that a ship's inert gas system is not functioning, or not functioning as required, cargo operations must cease immediately and may not resume until the system is repaired or written permission is given from the ship's owners, the Template Port Authority and the Terminal Representative.

## 10.4 STATE OF READINESS OF MAIN ENGINES

The main engines and other essential machinery of all ships alongside must be maintained in a state of readiness for vacating the berth at short notice

## 10.5 MAINTENANCE AND REPAIR WORK ONBOARD

Major planned repair work is not permitted while the ship is alongside the Shell Pernis Berth. Emergency repairs, namely essential repairs needed to rectify malfunctioning equipment and prevent hazardous or unsafe conditions, will be permitted on a case-by-case basis following upon application to the Harbour Master and with the permission of the Terminal Representative.

## 10.6 HOT WORK ON BOARD

Hot work outside a designated space is not permitted on board ships alongside the Pernis Berth.

## 10.7 TANK CLEANING, PURGING AND GAS FREEING

During ships stay at our jetty all cleaning operations and tank entries are prohibited. If a vessel alongside is rejected, she has to leave the berth and proceed to another berth / anchorage for cleaning.

## 10.8 MANAGING SHIP-/SHORE INTERFACE

Shell Energy and Chemicals Park Rotterdam has a firm intent to manage the ship- shore interface to a high standard with respect to Health, Safety and Environment. In order to achieve this, we gather data about HSE-performances of ships we charter and of our own HSE-performance. This data will be analyzed and communicated back to our transport partners and our own Shell community. If data is actionable we ourselves will implement improvements and will propose opportunities for improvement to our shipping partners.

## 10.9 HSE LETTERS OF PROTEST

By these letters we will inform you about breaches of accepted HSE standards observed on board of your vessel. If these breaches jeopardize the safety of our installation or staff we will suspend operations immediately until you have remedied matters to acceptable standards. We hold you accountable for any loss of lay time that may arise. Copies of these letters will be sent to the ship's agent and ship's owner. Periodically we will meet with your company to discuss our findings. This data will also be used in our supplier ranking.

## 10.10 TERMINAL EVALUATION BY SHIP

To acquire information of our own HSE-performance we can, randomly, request you to fill out a so called "HSE-evaluation form for Terminal activities at Pernis. In this document you can rate the terminal's performance and facilities. We ask you to be frank and illuminate your score by relevant comments. Thanks in advance for your cooperation.

## 10.11 ACCESS TO SHIP & CLEANLINESS SHIPS DECK

In order to prevent personal incidents like falling and slipping, the ships deck must be clean and free of obstacles. Means to access the deck from the shore should be sturdy and immobilized and offer support to maintain balance (preferably a handrail along the stairs).

## 10.12 ENTERING ENCLOSED SPACES

Entering ship's compartments for any reason whatsoever is strictly prohibited by default. Exceptions to this rule can only be made after consulting the Shell Loadingmaster.

## 10.13 INSPECTION AND/OR DIVING ALONGSIDE JETTIES

Diving alongside Shell jetties is for safety reasons not allowed. In case of emergency always contact the Loadingmaster.

## 10.14 CRUDE OIL WASHING

Washing and ventilation is N/A at RCP.

## 10.15 ADDITIONAL DANGEROUS PRODUCT INSTRUCTION

Per product to be loaded the vessel will receive from our shore representative a relevant and current Safety Data Sheet (SDS) Digital prior to loading. Please communicate the information incorporated in these SDS to all crew.

If products handled constitute a risk that is extraordinary compared to generally handled cargoes, Shell will issue you an additional dangerous product instruction. Herein additional instructions are given for both ship and shore. These instructions are an integral part of the loading and discharging agreement.

## 10.16 STATIC ELECTRICITY

Static electricity presents fire and explosion hazards during the handling of petroleum, and several chemicals. Certain operations can give rise to accumulations of electric charge, which may be released suddenly in electrostatic discharges with sufficient energy to ignite flammable gas/air mixtures.

*There is no risk of ignition unless a flammable mixture is present.*

## 10.17 IF A FLAMMABLE MIXTURE IS PRESENT THEN

The flow of liquids never to exceed 1 m/sec till level of liquid is 30 cm above opening of the loading line, this to avoid the dangerous splash filling. When bottom structure is covered and after all splashing and surface turbulence has ceased, the rate can be increased until a maximum velocity of 7 m/s.

If the standard loading rate exceeds the velocity of 1 m/s, open more tanks, or limit initial liquid flow speed during start loading and at switching tanks. When start loading with more than 4 ships tanks open, the cargo will not flow into all tanks simultaneously so the initial rate must not exceed the maximum of 4 tanks.

**Reference table**

Diameter of transfer lines x number of tanks = max. initial loading speed.

## 10.18 DEPARTURE / ORDERING PILOT & BOATMEN

After cargo operations are finished, the appointed surveyors will perform the necessary activities e.g. establishing ROB, OBQ and sampling, analyzing.

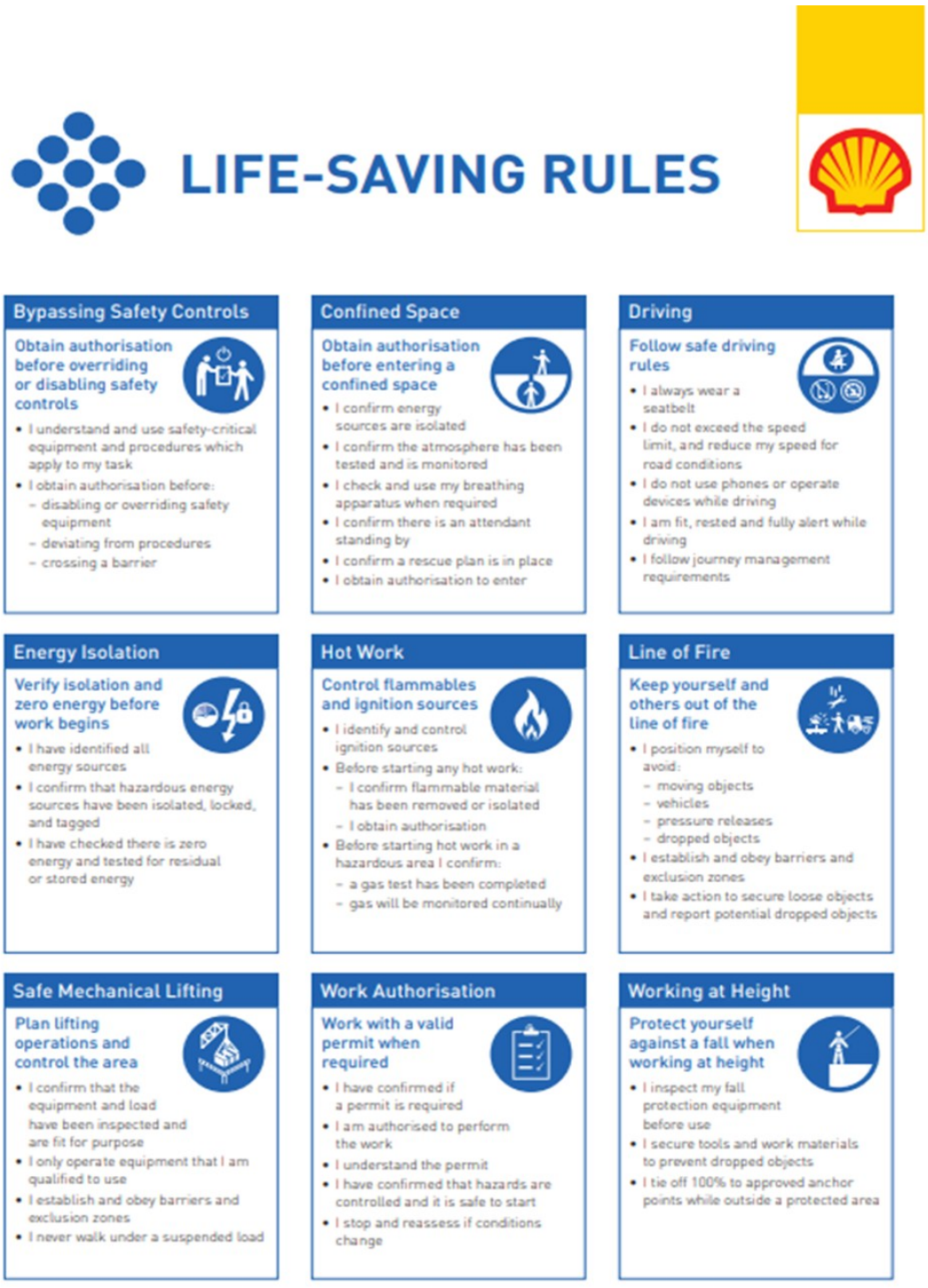
As soon as we are able to establish the completion time of a.m. activities , we will notify ships agent to order the pilot (incl. tugs and boatmen). We use following guidelines for departure: After loading: end of cargo transfer + time required for analyses + 2 hours.

After discharging: end of cargo transfer + 2 hours.

In this time we will complete cargo calculations and cargo documents. If you choose to order the pilot yourself for an earlier moment, we can and will not guarantee that transport documents will be ready. Any delay within this period will be for your account.

These guidelines are experience based and are necessary to give all parties involved the opportunity to execute their activities safely and accurately. Deviation from these guidelines is only possible by mutual agreement between the Loadingmaster and the master/skipper of the vessel involved.

## 11. LIFE SAVING RULES



## 12. APPENDIX A: CONTACT LIST

| | Telephone | E-mail | Opening hours |
|---|---|---|---|
| Emergency General<br>Deputy PFSO /Security Dept | +31 10 431 8000 | | |
| LM Chemical office<br>PTL | +31 10 431 1670<br>+31 10 431 2238 | N/A | |
| Chemie<br>Controlroom | | SNR-RCP-Loadingmaster@shell.com<br>MWC.CFD@shell.com | 24/7 |
| Harbour number<br>Visiting address | 3223<br>Vondelingenweg 601<br>3190 GB Hoogvliet | N/A | |
| MTA<br><br>MTA | +31 6 29354026 | N/A | Standard office hours<br>24/7 |
| Shell Energy and Chemicals Park Rotterdam<br>Jetty Planning | +31 10 441 5063 | SNV-OEMS-JETTY-SCHEDULING@shell.com | Standard office hours |