



## **PRE-ARRIVAL INFORMATION BOOKLET**

### **JUNCTION 2 or JUNCTION 3**

## **S.H.M.P.P.**

Harbour installation N° 18675/0232 ---- FRELEH\_0015

**Société Havraise de Manutention de Produits Pétroliers**

**Route de la Pointe du Hoc**

**Port du Havre - 4066**

**B.P. 64 – 76050 Le Havre Cedex France**

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## **WARNING**

### **IT IS IMPERATIVE FOR THE SHIP'S CREW TO READ THIS DOCUMENT**

This document contains all of the information ships need to ensure smooth and safe operations at SHMPP berths. Under no circumstances shall it be considered to replace local and international safety rules, nor the ship's safety rules under the captain's responsibility.

This information booklet about the terminal and jetties is transmitted to all ships mooring at SHMPP. Receipt of this document on board implies that all crew members have been informed of its contents and that they will comply with SHMPP's instructions.

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## **1 – Presentation of SHMPP**

Founded in 1971 and modernised since then, SHMPP has a storage capacity of 388,000 m<sup>3</sup> for gasoil, residual fuel oil and sulphur. A centralised piping system enables all operations to be conducted while ensuring the safety and security of products and product movements.

Open 24 hours a day, seven days a week, product reception and loading operations are performed:

- By sea, from three jetties that can receive barges, coastal vessels and tankers up to 100,000 tonnes in a constant-level basin.
- By pipeline from refineries in the Lower Seine region, via private pipelines or through the TRAPIL national network.
- By road, for fuelling operations.

SHMPP is equipped to fight fires. A water treatment station enables treated our runoff.

Maritime operations are conducted at three jetties: Junction 3 (for tankers), Junction 2 (barges, coastal vessels and tankers) and Junction 1 (for barges).

## 2- SAFETY RULES

Any person who does not comply with the safety rules below shall be denied access to the jetty.  
On the jetty, the following rules apply:

- No smoking
- No consumption/possession of alcoholic beverages
- No consumption/possession of drugs
- The jetty gates shall remain closed
- No use of non-ATEX electrical equipment

The ship shall:

- Ensure a permanent watch throughout the entire duration of the operations
- Ensure that its fire-fighting equipment is operational
- Keep its main and auxiliary engines in working order (any dismantling work, etc., preventing start-up of the ship's propulsive equipment in normally expected times must be authorised by the harbour authorities and by SHMPP)
- Be able to leave the jetty as quickly as possible
- Complete the safety checklist jointly with the terminal
- Notify shore personnel about any deviations from the safety checklist
- Notify shore personnel about any spillage in the basin
- Communicate (via the maritime agent) the list of all persons who might board the ship during its stay at the jetty.

## 3- HEALTH

### Toxicity

### APPENDIX 1

The presence of H<sub>2</sub>S or any other gas shall be immediately reported to the Jettyman. Protective measures shall be initiated jointly by the ship's crew and jetty personnel.

## 4- SECURITY

### A. ISPS code requirements

SHMPP enforces the requirements of the ISPS code. The ship's security level shall be communicated to SHMPP via the maritime agent.

**Code ID : 18...      UN Locator code : FRLEH      Assigned port facilities number : 0232**

Junctions are 'ZAR' (Restricted area) and are submitted to requirements of ZAR.

### B. Procedure for entering and leaving the jetty

The requirements of the ISPS code shall be followed and enforced. Access to the jetties shall be filtered, filmed and controlled. Movements of personnel and equipment (e.g. deliveries) shall be the subject of a detailed list (name, equipment type, hauler, vehicle no., etc.) that shall be prepared in advance and submitted to SHMPP via the maritime agent. Any persons not involved in jetty operations or not declared in advance shall not be authorised to enter the jetty area. Crew members who wish to go on land shall first register with the Jettyman before leaving the jetty area. Re-entry to the jetty area shall not be authorised without prior registration.

## 5- SAFETY

### A. Emergency stop (AU)

APPENDIX 2

Two emergency stop switches shut down the terminal's pumps and automatically close the foot valves on the loading arms (10 s). These emergency stop (AU) switches are located on the gatehouse wall and on the electrical cabinet near the jetty entrance gate.

### B. Product quality

Authorised products : Gasoil, residual fuel oil and liquid sulphur

Minimum flash point : 55°C

No other product grades shall be authorised.

### C. Personal protective equipment (PPE)

Persons not wearing the appropriate PPE shall stay within the marked pathways. For workers, appropriate PPE shall be worn at all times: safety shoes, helmet, coveralls, gloves, goggles and life vest.

### D. Inert gas system

Ships equipped with inert gas equipment in their tanks shall use said equipment before and during operations at the berth (including for ballast tanks). Any non-use or malfunction shall be reported to the Jettyman.

### E. Electrical equipment

Equipment used on board the ship and on the jetty shall be ATEX-approved (radios, walkie-talkies, telephones, lighting, etc.).

### F. Tugboats

The number and towing power of the tugboats needed for mooring manoeuvres shall be determined jointly by the Le Havre harbour authorities and the ship. SHMPP may offer its opinion about the number of tugboats needed.

### G. Bonding equipment

Prior to any operation, bonding between ship and shore shall be ensured via a bonding clamp. "Metal to metal" contact shall be ensured.

### H. Fire-fighting equipment

Two powder fire extinguishers (9 kg in the gatehouse, 50 kg on the jetty). Industrial water at 3 bars pressure, 30 m<sup>3</sup>/hr. International flanges are available at the jetty. The embankment is equipped with a water cannon (J3 = 7000 L/min, J2 = 3000 L/min) for the protection of the terminal facilities.

### I. Jetty evacuation plan

APPENDIX 3

Plan attached in appendix.

### J. Mooring and plan

APPENDIX 4

Mooring quality and security shall be under the ship's responsibility; however, the terminal shall reserve the right to intervene if safety considerations require it. An example of the minimum acceptable mooring plan is attached in the appendix. For mooring at Junction 2, the proximity of barges berthed at Junction 1 shall be taken into account.

### K. Risk assessment

APPENDIX 5

See risk analysis and means of prevention in Appendix 5.

### L. Emergency situation

APPENDIX 6

See appendix "Emergency situation – How to react?"

#### **M. Ship-to-ship or bunker operations**

Any ship-to-ship or bunker operations shall mandatorily be authorised by the Le Havre harbour authorities and by the terminal.

#### **N. Handling and lifting on jetty**

Deliveries of goods shall be organised jointly by the ship, the agent and the terminal prior to the ship's arrival.

Deliveries of fuel and any other goods by truck shall comply with the harbour's safety rules and with applicable regulations (establishment of a safety protocol).

Use of the ship's crane shall in no way create a risk of compromising smooth and safe operations. If not, lifting shall be performed before or after the commercial operations.

#### **O. Maintenance or repair work**

All maintenance or repair work representing a risk shall imperatively be subject to the authorisation of the terminal and the harbour authorities (hot work, use of open flames, work on the ship's safety apparatus, work affecting the ship's manoeuvrability, underwater work, etc.). Work in enclosed spaces or in a tank that has not been isolated from the rest of the tanks shall be prohibited.

In the event of absolute necessity, any requests shall be made in advance to the terminal. The terminal's procedure shall be used as concerns authorisations to "enter an enclosed space or tank" (atmospheric control, etc.). The terminal and the harbour authorities shall give their final approval before any work is actually performed.

## **6- ENVIRONMENT**

#### **A. Tides**

The mooring basin is at constant level. Tidal range between 40 and 60 cm due to movements at the François 1<sup>er</sup> lock gate. Average water density: 1.025 kg/l

#### **B. Harbour traffic**

Ship traffic from and to the François 1<sup>er</sup> lock. Monitoring on channel VHF 83.

#### **C. Prevailing winds**

West to south-west.

#### **D. Weather conditions**

In the event of storms or very high winds (storm alert from the weather service with wind speeds > 110 km/hr.), operations shall be stopped. In the case of high winds (60 km/hr.), moorings shall be retightened. In all cases, decisions shall be made by the ship and the terminal.

#### **E. Observation of anomalies and problems**

SHMPP procedures shall be used in this case. The ship shall also be able to use its own Quality documents.

Any spillage or discharge in the water shall be reported to the Jettyman.

#### **F. Prevention skid**

#### **APPENDIX 2**

There is a first-response prevention skid at each jetty. The terminal possesses a hydrophobic floating barrier (150 m, ø 20cm). More extensive resources are available from the harbour.

#### **G. Discharge/spillage in the basins**

It is prohibited to discharge pollutants in the sea.



## 7 – JETTY OPERATIONS

### A. Organisation

Before starting any jetty operations, the ship and terminal shall agree on the principle and sequence of operations. This consultation can occur when the ship-shore safety checklist is filled in. Non-compliance with any of the checklist items may lead to stoppage of the operations.

Loading and unloading operations shall be performed with the hatches closed.

### B. Types of operations

The following operations are performed at the jetties:

- Unloading from the ship to a tank at the terminal,
- Loading of the ship from a tank at the terminal,
- Unloading from the ship to a tank at the Total refinery 4 km away,
- Loading of the ship from a tank at the Total refinery 4 km away,
- Debballasting (subject to authorisation by harbour authorities and SHMPP)

### C. Piping

The fuel-oil loading arm is connected to the terminal by means of a pipe about 500 m long with a capacity of 50 m<sup>3</sup>. After operation, the line is kept empty under air pressure (7 bar). Two foot valves on the loading arm enable the pipe to be isolated from the arm.

The gasoil loading arm is connected to the terminal by means of a pipe about 500 m long with a capacity of 50 m<sup>3</sup>. After operation, the line is kept full under air pressure (7 bar). Two foot valves on the loading arm enable the pipe to be isolated from the arm.

### D. Loading/unloading conditions

The loading rate for fuel oil ranges from 250 to 800 m<sup>3</sup>/hr. The loading rate for gasoil ranges from 500 to 1000 m<sup>3</sup>/hr. Loading from the terminal is done with positive-displacement pumps for fuel oil and centrifugal pumps for gasoil. The positive-displacement pumps have internal valves (8 bar and 10 bar). Loading from the refinery is done with centrifugal pumps. In the event of excess pressure, a valve ensures pressure relief to an SHMPP tank (15 bar).

### E. Sampling

Sampling on board is generally conducted by an inspection company. The terminal performs sampling on shore. A sampling document shall be filled in by the ship and the Jettyman.

## 8 – COMMUNICATION

### A. Organisation

During the operation, there are three participants: the ship, the Jettyman and the terminal control room. The main contact for the ship is the Jettyman. He receives and transmits all information to/from the ship and the control room.

### B. Equipment

A walkie-talkie (WT) is systematically given to the ship's crew at the end of mooring. This walkie-talkie shall be used to contact the Jettyman (JON2 or JON3) and the terminal control room. Harbour authorities can be contacted on VHF channel 88 or 83.

Throughout the operations, the Jettyman on shore and the manifold operator on the ship shall be in direct contact. The Jettyman may contact the terminal control room at any time by telephone or walkie-talkie.

### C. Emergency number

See Appendix 8.

## **9 - TECHNICAL INFORMATION: MOORING - JETTY**

	Junction 2 (JON 2)		Junction 3 (JON 3)		Comments
Mooring basin: tidal range max. 60 cm	Bossière canal		Henri Deschênes basin		Constant-level basin
Loading arm	GASOIL	FUEL OIL	GASOIL	FUEL OIL	
Maximum throughput (m <sup>3</sup> /hr)	1200	1100	1500	1500	
Average throughput (m <sup>3</sup> /hr)	1000	500	1000	1000	
Maximum pressure (bar)	7	7	8	8	
Maximum temperature (°C)	55	90	55	90	
Max./min. distance from flange to rail (m)	1	4	2	4.6	
Maximum lateral oscillation (m)	3	3	3	3	
Pipe diameter (in inches)	12	12	14	14	
Arm diameter (in inches)	10	10	12	12	
Fitting diameter (in inches)	10	10	12	12	
Equipped with a vacuum breaker?	No	No	Yes	No	
Fitting type	Screw clamps		Screw clamps		
Dead weight (metric tonnes)	25,000		105,000		
Draft (m)	9.7		12.9		The exact draught shall be requested from GPMH
Maximum air draft (m)	11.3		16.5		
Jetty length (m)	40		56		
Number of dolphin-type fenders	5		4		The dolphins are equipped with a mooring bollard
Length between inner dolphins (m)	27		50		
Length between outer dolphins (m)	57		76		
Number of moorings to shore	5 (40 T) + 1 (60 T)		6 (100 T)		
Maximum speed of approach	0.16 m/s		0.2 m/s		
Maximum ship length (m)	170		280		
Distance jetty <-> dolphin (m)	2.6		2.1		

## 10 - SERVICES

### A. Bunkering

Possibility for direct bunkering of ships, preferably before or after commercial operations. This operation is dependent on the placement of bunkering flanges or movement of ship. Bunkering shall be subject to approval by the harbour authorities.

### B. Gangway

Junction 3: Use of the shore gangway is mandatory (length: 21 metres; weight: 1.3 metric tonnes). It shall be positioned with the ship's crane or by an external crane.

Junction 2: Use of the shore gangway is mandatory (length: 14 metres; weight: 700 kg). It shall be positioned with the ship's crane or by an external crane.

### C. Domestic waste containers

#### APPENDIX 8

Rental of containers for domestic waste only (4x1000 litres at Junction 3 and 4x1000 litres at Junction 2). For other types of waste, please contact a specialist firm via the maritime agent. The consent of SHMPP is required, and waste removal shall comply with the requirements of the Ecoport programme.

N.B : Invoicing shall be established per container.

### D. Water

Industrial water supply at 30 m<sup>3</sup>/hr max. 3 bar.

N.B : Water use shall be invoiced per m<sup>3</sup> after meter reading.

### E. Guard service

Guard service at the jetty. When commercial operations are not being performed, and in compliance with general operating conditions and market prices, ships can remain at the berth with simple surveillance/guard watch. Guard service requires the presence of a jetty operator. The jetty operator shall use an hourly watch log. Watch hours shall start three hours after the ship's arrival if the loading arm has not been connected and three hours after disconnection if the ship has not yet left the berth. After quarter past the hour, any partial hours shall be billable.

## **APPENDIX 1 – H<sub>2</sub>S INFORMATION**

### **H<sub>2</sub>S - Product description:**

- Colourless gas, highly flammable and explosive when mixed with air, highly toxic by inhalation and for aquatic organisms.
- Strong odour (rotten eggs) at low concentration, but undetectable at high concentration.

Mean explosion value = 5 ppm

Explosion threshold = 10 ppm

#### **• Procedure to follow when H<sub>2</sub>S is present:**

- At least 24 hours before ship arrival: report to SHMPP, via the maritime agent, the measured H<sub>2</sub>S level (tank vapour phase).
- Jetty personnel shall go on board the ship equipped with evacuation masks and a working H<sub>2</sub>S detector.

If the H<sub>2</sub>S detector goes off, the operator shall proceed no further on board the ship, until safe conditions are re-established by the ship.

The terminal shall be immediately notified by the ship about the presence of H<sub>2</sub>S.

### **Three cases are possible:**

#### **➤ H<sub>2</sub>S content < 10 ppm**

- Possible sampling after reconnaissance of tanks by the ship's crew.

#### **➤ 10 ppm < H<sub>2</sub>S content < 100 ppm**

- No sampling or access to the pump room.
- H<sub>2</sub>S content shall be measured by certified staff from the inspection company, equipped with self-contained breathing apparatus.
- Tank reconnaissance shall be conducted via vapour lock-type measurement chambers. If not available, mandatory ship/terminal meeting.

#### **➤ 100 ppm < H<sub>2</sub>S content < 1000 ppm**

- H<sub>2</sub>S content shall be measured by continuous detection apparatus.  
Prior to any connection/disconnection operations, this measurement shall be made by certified staff from the inspection company, equipped with self-contained breathing apparatus.
- No tank reconnaissance (except if one of the parties demands it; in such a case, it shall be done by certified staff equipped with self-contained breathing apparatus).

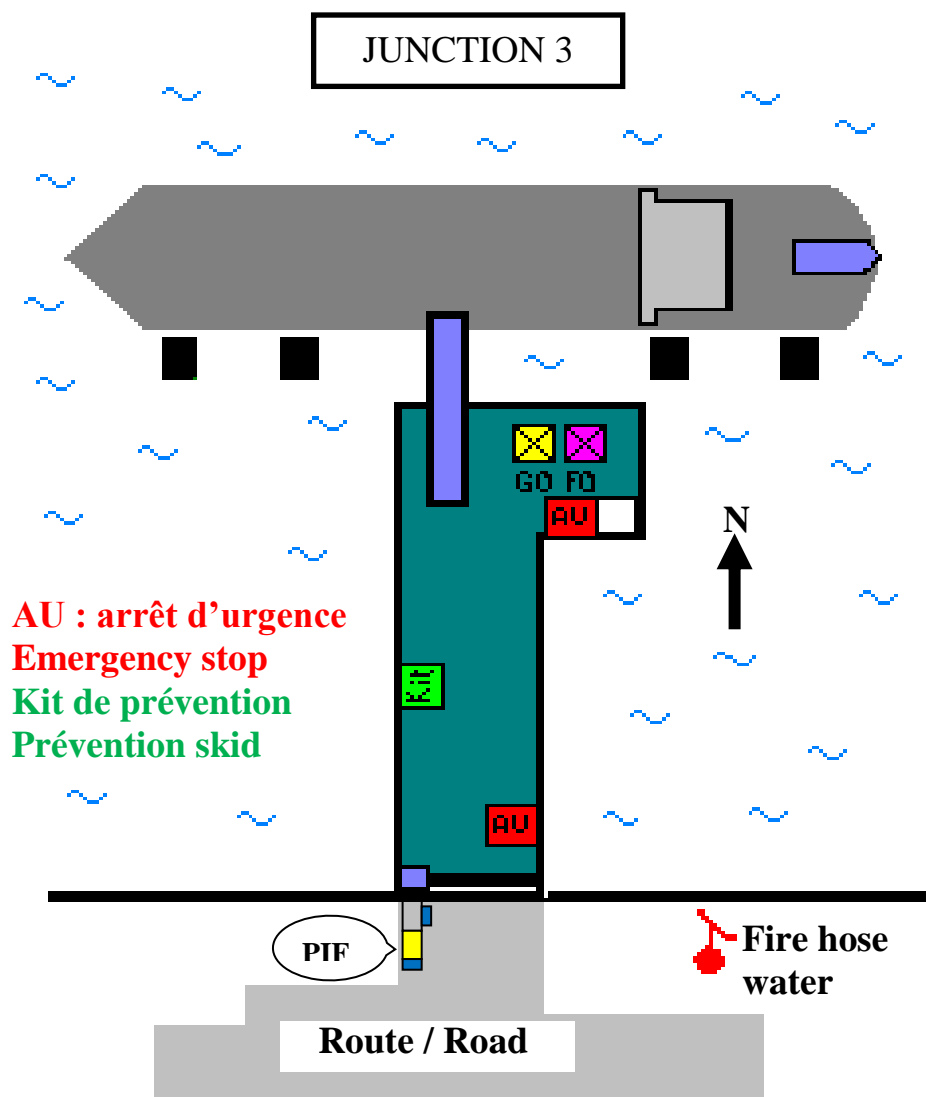
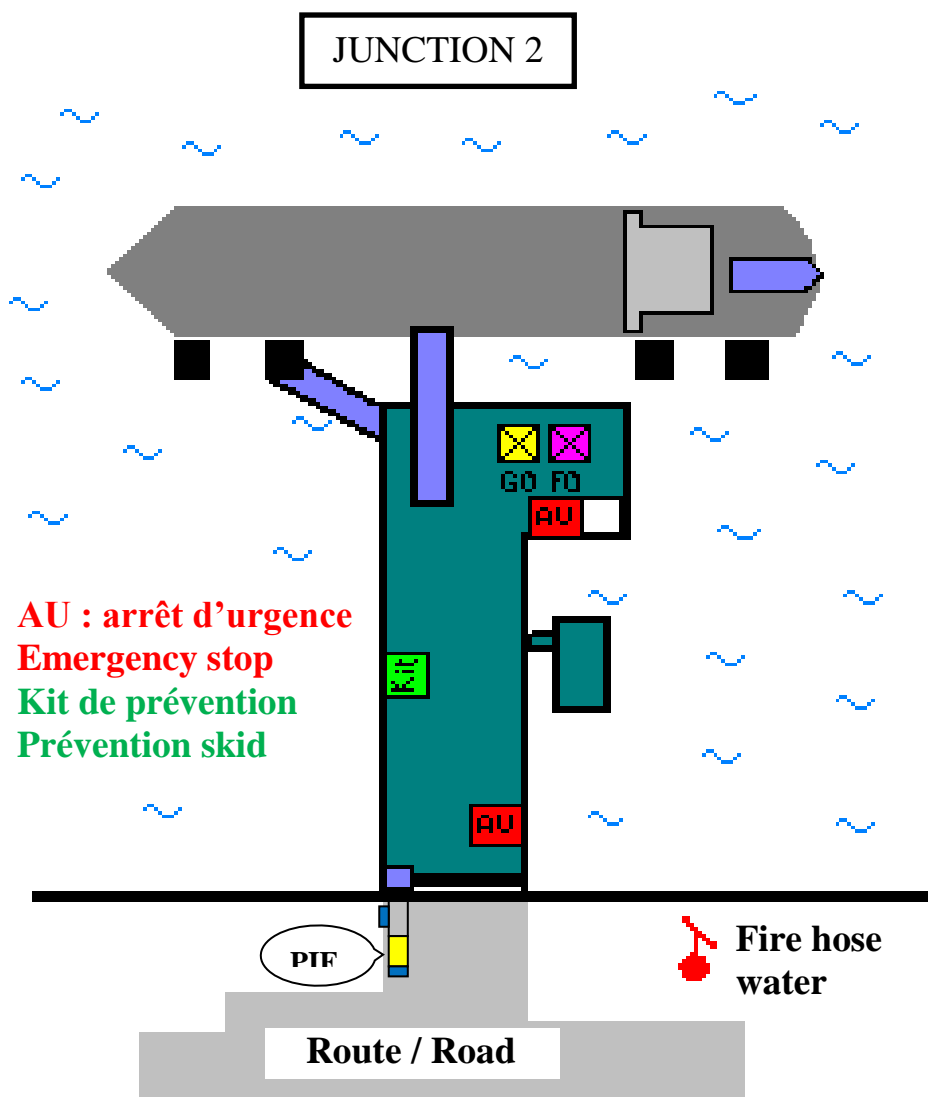


**: H<sub>2</sub>S content > 1000 ppm : Death occurs immediately after inhalation**

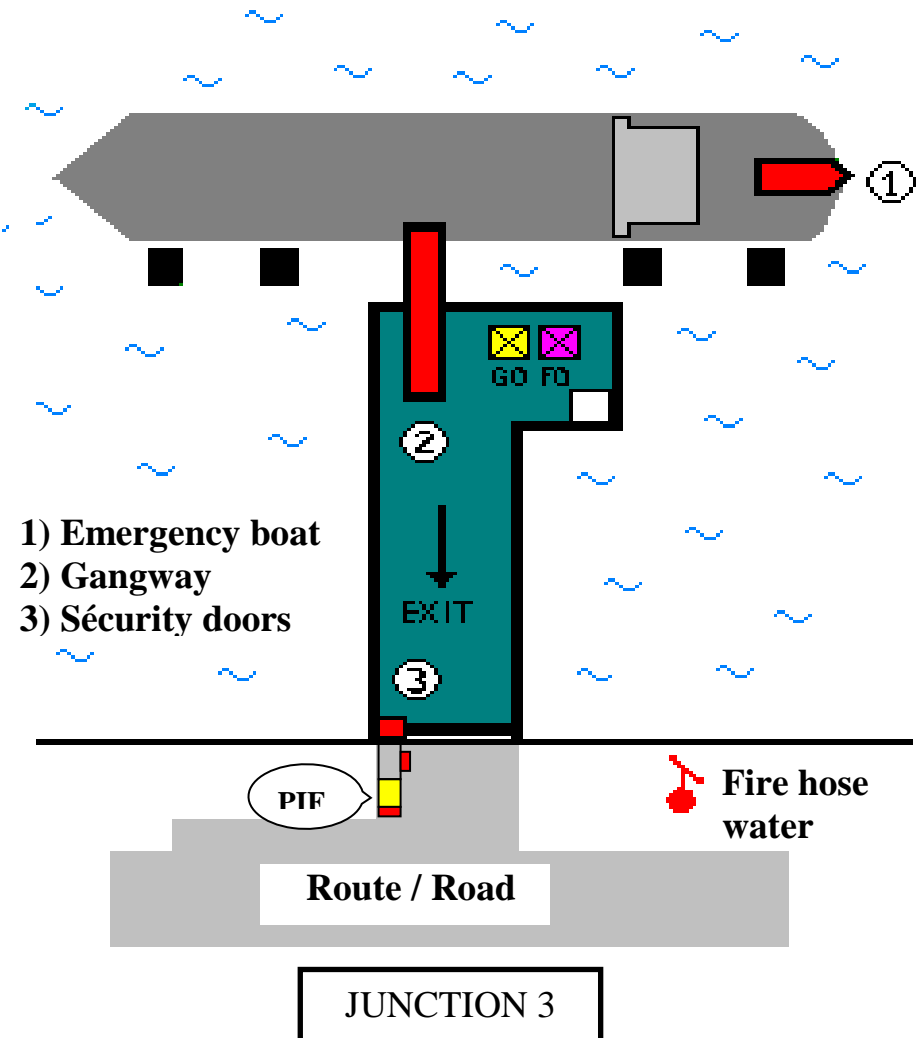
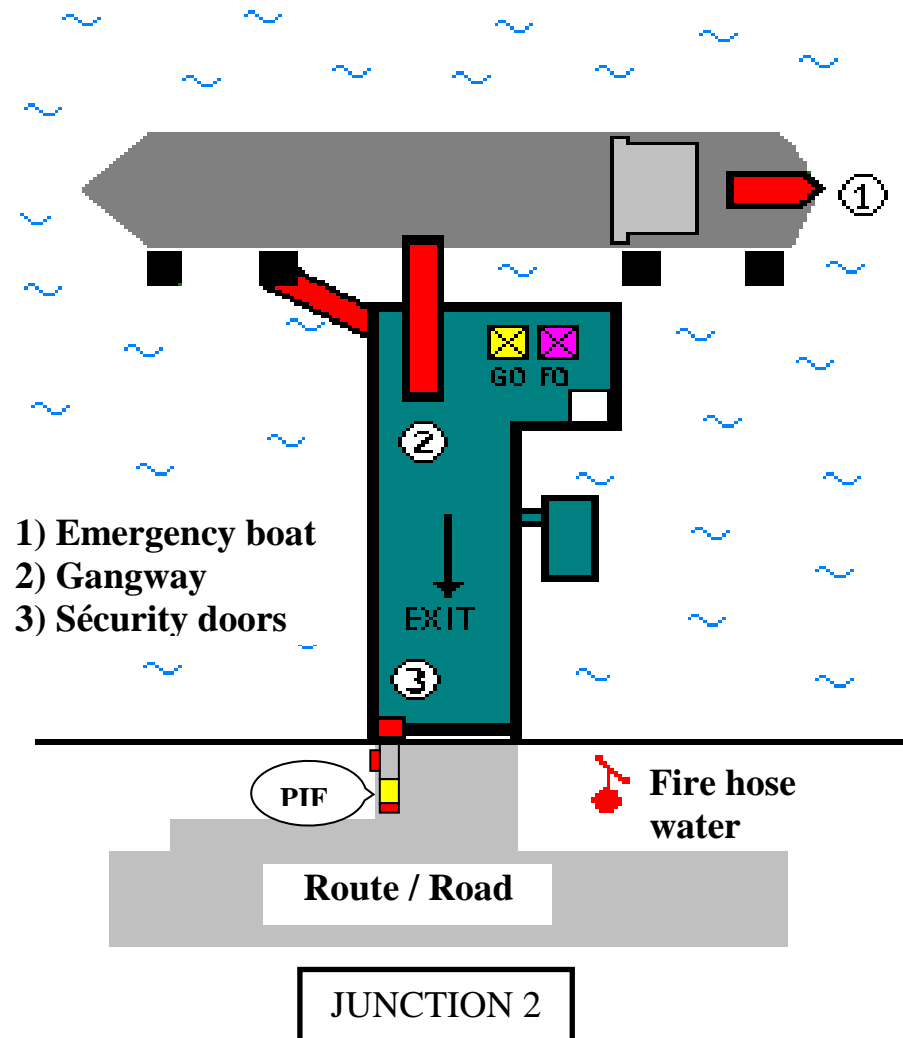
### **Personal protective equipment (PPE):**

- Protective mask (on belt or within reach)
- Protective coveralls
- Neoprene gloves
- Protective goggles
- H<sub>2</sub>S detector

## APPENDIX 2 – EMERGENCY STOP PLAN



## APPENDIX 3 – JETTY EVACUATION PLAN



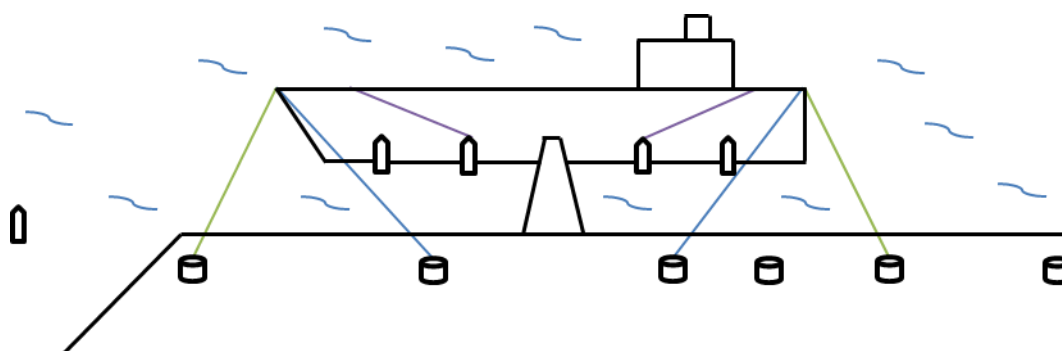
## **APPENDIX 4 – MINIMUM MOORING EXAMPLE**

### **RULES:**

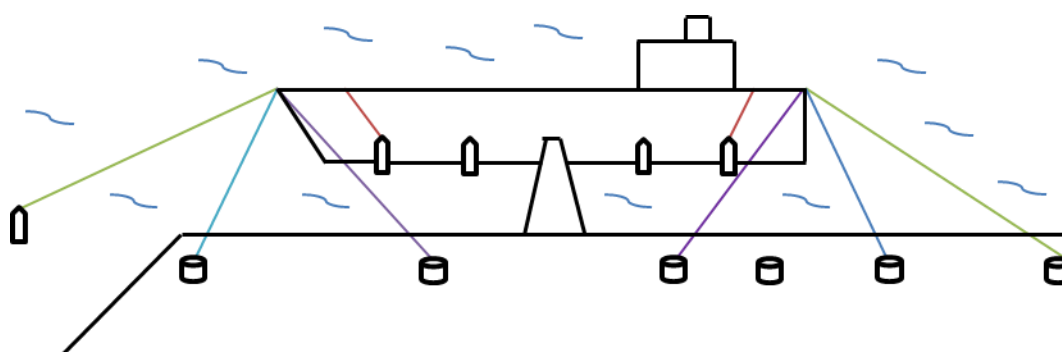
- Mooring shall be the ship's responsibility and shall be continuously monitored.
- Mooring shall be balanced and ensure ship stability, regardless of wind direction and speed.
- Double moorings shall be tightened together and shall be of the same quality.
- Opposite moorings shall be tightened together and shall be of the same quality.
- The number of hawsers shall be determined as a function of their resistance, the ship's surface area and wind speed.

### **Junction 2 :**

Ship with 19,000 metric tonnes dead weight (DW) max.



Ship with 19,000 to 25 000 metric tonnes dead weight (DW) max.

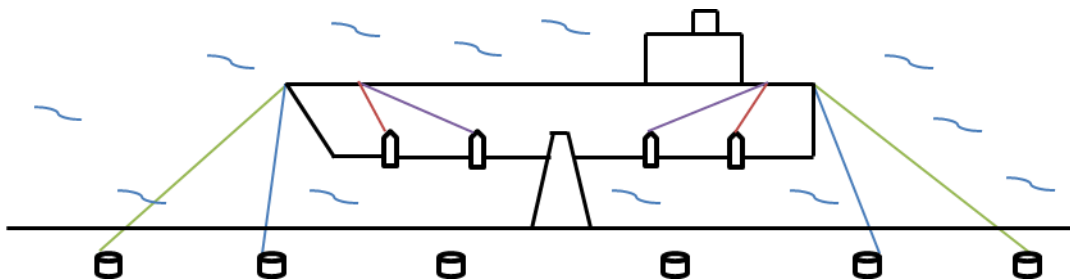




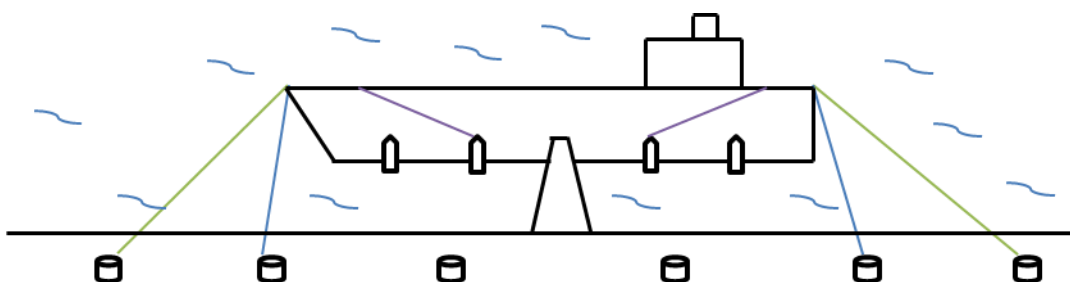


### **Junction 3:**

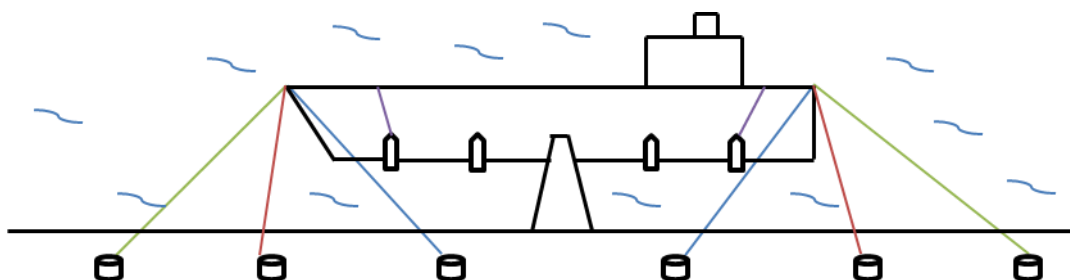
Up to 30,000 metric tonnes DW:

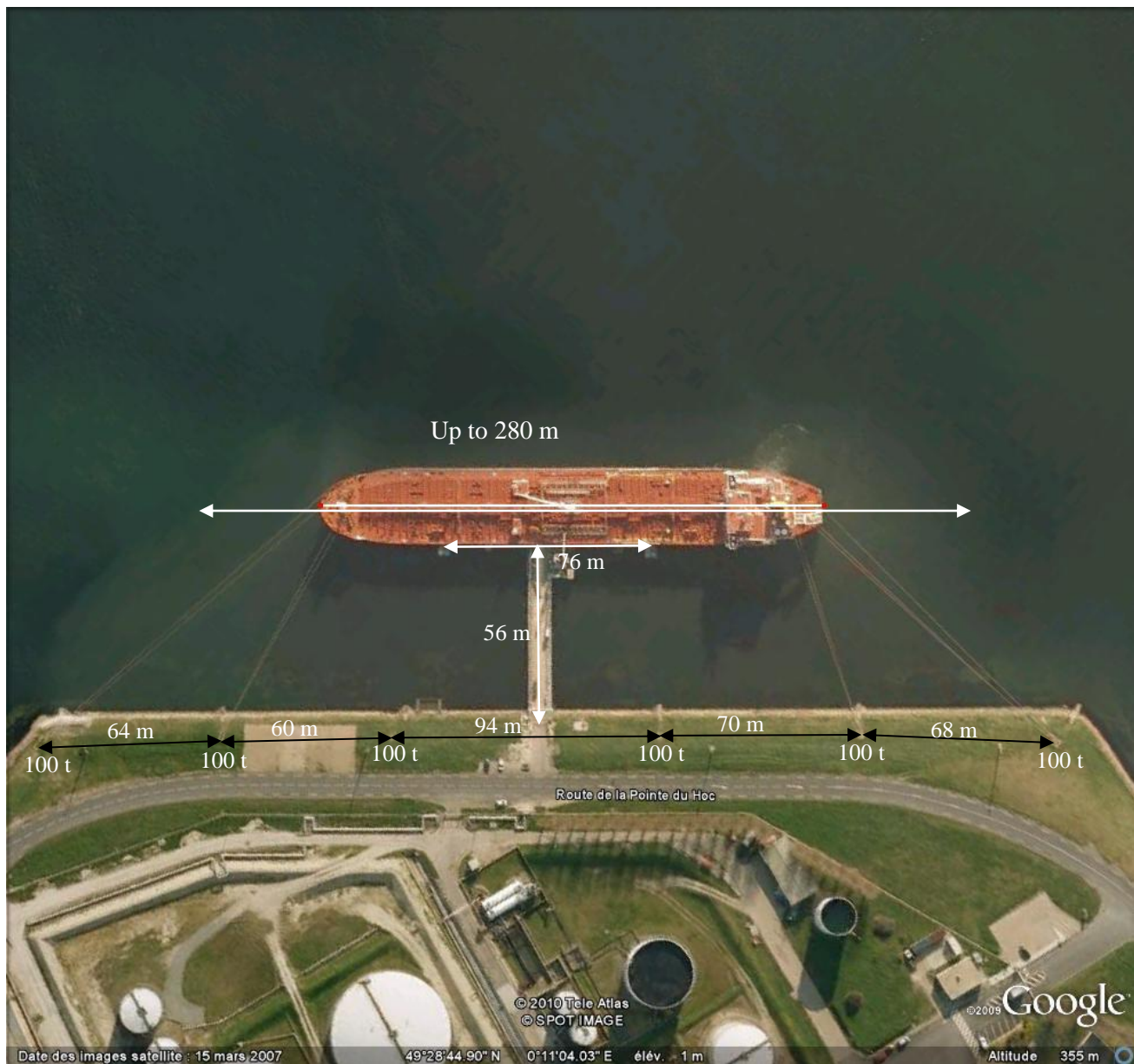


30,000 to 60,000 metric tonnes DW:



More than 60,000 metric tonnes DW:

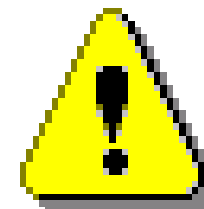




## **APPENDIX 5: Risk Analysis**

Type of activity	Related risks	Means of prevention	Terminal	Ship
Connection/disconnection	Electric arc	Bonding	X	
	Crushing	Loading arm balanced and controlled	X	
		Do not walk under arm when being moved	X	X
	Pressure in TK piping	Flange removal from ship		X
	Pressure in arm	Vacuum control – valves or vacuum breaker	X	
		Use of PPE	X	X
Loading/unloading	Plugging	Special monitoring at start-up	X	X
		Clearing of FO line at end of operations	X	X
		Control of pressure and product inlet	X	X
	Leakage	Permanent control of operations	X	X
		Emergency stop	X	X
		Quantity control at tank/Tk outlet/inlet	X	X
	Excess pressure	Air test for connection tightness	X	
		Safety instructions	X	
		Valves on lines or on pumps	X	X
	Product overflow	Visual control of pressure	X	X
		Quantity control at tank/Tk outlet/inlet	X	X
		Safety instructions	X	
	Temperature rise	Temperature control	X	X
	Voltage	Bonding	X	
	Arm failure	Preventive maintenance	X	X
		Safety instructions	X	X
Installation of gangway	Fall from gangway	Gangway control and sling	X	X
	Injury	Sign “Do not walk or stand under load”	X	
Crane operations	Falling objects	Gangway control and sling	X	X
	Injury	Sign “Do not walk or stand under load”	X	X
	Impact from arm or pipe		X	X
Sampling	Spraying	Personal protective equipment	X	X
	Presence of gas	Gas detector + evacuation mask		X

## **APPENDIX 6 – EMERGENCY SITUATION**



### **How to react? Who to inform?**

FIRE	SPILL	OTHER PROBLEMS...
Stop all operations  Notify the terminal  Notify the fire brigade and harbour authorities  Fight fire	Stop all operations  Notify the terminal  Notify harbour authorities  Implement first-response resources	Stop all operations  Notify the terminal  Diagnose and resolve problem  Validate repairs with terminal

## APPENDIX 7 – COMMUNICATION



Terminal control room :

02.35.25.80.31

Le Havre harbour authorities:

02.32.74.70.71

VHF channel: 83

Fire brigade:

18

European emergency number:

112

## ANNEXE 8 – WASTE TREATEMENT

### ACCEPTED / REFUSED WASTE

#### ACCEPTED



#### REFUSED



**Household waste only**

**And no :  
- Soiled waste  
- Glass**

TO PROTECT ENVIRONMENT: PLEASE LIMIT WASTE' PRODUCTION