SEA-Tank 700 B

Main Office

Skaldenstraat 1
9040 Desteldonk

Terminals

SEA-TANK 700B NV
Antwerpsebaan 11 – K706
2040 Antwerpen

TERMINAL HANDBOOK FOR INLAND BARGES

CONTENTS

1. INTRODUCTION

1.1 General information

The information contained in this handbook is intended to familiarize vessel/barge owners, operators, charterers and barge captains with the general conditions, rules and regulations,facilities and availability of services at the Sea Tank 700B N.V. terminal.

This information is presented without guarantee or warranty on the part of Sea Tank 700B N.V.as to its accuracy or completeness and does not replace nor supersede any local, national or international regulation. Sea Tank 700B N.V. does not assume nor accept any responsibility forthe use of any information contained herein by any person.

In all circumstances, barge captains shall remain solely responsible for:

- The safe operation of their vessel;
- Compliance with all applicable international, national and local laws, rules and regulations;
- Adherence to the provisions of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN);
- Adherence to the guidelines contained in the International Safety Guidelines for Inland Navigation Tank-barges and Terminals (ISGINTT);
- Adherence to this terminal handbook.

As captain you are hereby notified that your vessel may be boarded at any time by terminal personnel to ensure compliance with the requirements laid out in this handbook. Any non- compliance will result in the interruption of the on-going cargo operations and may affect future approval status of your vessel at this terminal and any consequent costs will be for theaccount of the barge owners / managers.

1.2 Terminal layout

SEA-Tank 700B is located in the port of Antwerp on the right bank of the river Schelde, in the south eastern part of Kanaaldok B2 between Quay numbers 622 & 716 (see BA Chart 128).

Berth coordinates are 51°19'24.2"N 004°19'06.2"E.

The docks of the port of Antwerp are non-tidal docks. Access between the River Schelde and the docks is achieved via two 2 lock complexes situated at the north west and south west end of the dock.

The density of the dock water is 1004 kg/m^3.

2. SAFETY

2.1 Electrical equipment

Any electrical or electronic equipment used in hazardous area must be of an approved type, having a minimal approval for ATEX Zone 1 / T4 or equivalent.

Appropriate labels and certificates will be readily available at all times for inspection. Any other electrical or electronic equipment of a non-approved type will not be used while the vessel is alongside.

Radar equipment shall not be used while vessel is alongside.

Radio transmission on fixed VHF installations is permitted provided the unit is set to low power mode.

The use of satellite communication equipment is allowed.

2.2 State of readiness of the vessel

Vessels are requested to maintain their ability to unberth under their own power on short notice (less than 15 minutes) in the event of an emergency.

Any repairs or maintenance that may affect the ability of the vessel to manoeuvre are not allowed.

2.3 Drug and alcohol Policy

The use, possession, distribution, sale or being under the influence of alcohol or a controlled substance is prohibited on the terminal.

Disorderly or intoxicated persons, visitors or crewmembers will be denied access to the terminal.

Should intoxicated persons be found on board, the terminal reserves its right to inform the competent authorities in order to establish the nature of the intoxication. Cargo operations could be interrupted until the situation has been satisfactorily rectified. All costs related to delays will be borne by the vessel.

2.4 Enclosed space entry

Entry of any enclosed space (cofferdams, ballast tanks, double bottoms, void spaces, etc.) is not allowed.

2.5 Hot Work

No hot work is allowed at any time and in any location on board.

2.6 External doors, hatches, ports and accommodation ventilation

All external accommodation, engine casing, forecastle and main deck storeroom doors, ports, hatches and openings shall be kept closed while the vessel is alongside, except for routine opening for personnel passage.

Hatches and openings for enclosed spaces shall remain closed for the entire stay.

Air-conditioning system should be kept on recirculation mode to avoid ingress of cargo vapours into living and working spaces.

Ventilation systems must be capable of maintaining an overpressure of 0.1 kPa in the accommodation spaces.

2.7 Manning

Vessels shall be properly manned at all times in order to safely manage shipboard emergencies and to carry out emergency manoeuvres, including assisting in the disconnection of loading arms in the event of an emergency.

2.8 Smoking areas

Smoking and the carriage of matches or gas lighters is prohibited on the entire terminal. Smoking on board is only permitted inside the accommodation spaces provided that all doors are maintained closed and the barge complies with ADN rules 9.3.1.52.3, 9.3.2.52.3 or 9.3.3.52.3.

Gas lighters are strictly forbidden and measures should be in place to provide sufficient amount of safety matches (or acceptable alternative) in the dedicated smoking areas.

2.9 Personal protective equipment

Every crewmember present on deck or on the jetty is expected to wear proper personal protective equipment. Suitable PPE shall be, as a minimum:

- A safety helmet with goggles;
- Anti-static and fire-retardant working clothes covering the whole body;
- Safety shoes or boots with reinforced toe cap and oil resistant soles;
- Suitable protective gloves;
- An approved work vest when working in areas not protected by a handrail;
- When required, an approved H_2S detector;
- When required, suitable face protection or full-face respirator.

Technicians, contractors, suppliers involved in works on deck are expected to follow the above mentioned standards.

Crewmembers walking form and to the terminal gate are expected to wear:

- A safety helmet;
- Safety glasses or goggles;
- Safety shoes;
- Clothes covering the whole body.

The same standards are expected for all visitors to the vessel not involved in cargo operations.

2.10 Mobile phones

Non intrinsically safe mobile phones shall not be used inside the terminal and shall be turned off before entering the terminal area at the gate.

Mobile phones may be used inside the accommodation spaces.

2.11 Painting and sandblasting

For pollution prevention purposes, spray painting, overboard hull painting and sandblasting operations are prohibited while alongside the terminal.

Due to possible spark generation, wire brushing and mechanical rust chipping is not allowed.

2.12 Main engine testing

Main engines must not be tested as long as a marine loading arm is connected.

2.13 Vehicles

There is a strict speed limitation of maximum 20 km/h on the entire terminal.

The quay area is provided with clearly marked parking spots that must be used by all vehicles (see plan in section 10). Improperly parked vehicles will be removed at the vehicle owner's expenses.

Parked vehicles must remain unlocked with the key in the ignition to allow fast removal in case of emergency.

2.14 Safe access from ship to shore

The terminal is fitted with equipment for access and for emergency escape purposes at eachberth suitable for barges:

- Berth 24, 25: 1 fixed gangway and 2 dolphins with ladders;
- 36 and 37: 1 portable gangway and 2 dolphins with ladders;
- Berths 23, 26, 34, and 38: 2 portable gangways.

Depending on the nature of the cargo being handled, the following minimum emergency escaperoutes will be provided:

ESCAPE ROUTE	P1/P2 PRODUCTS	P3 PRODUCTS
1 gangway	Not acceptable	Acceptable
2 gangways	Acceptable	Acceptable
2 dolphins with ladder	Acceptable	Acceptable
1 dolphin with ladder + 1 gangway	Acceptable	Acceptable

Portable gangways shall be rigged as far as practically possible from the loading arm connection.

3. POLLUTION PREVENTION

The barge captain is responsible for ensuring that every precaution has been taken that no pollution incidents of any nature occur while the vessel is alongside the terminal.

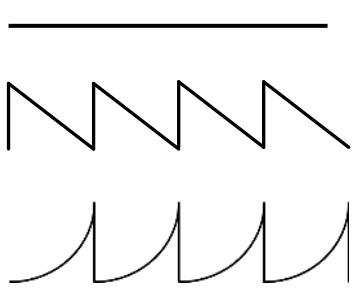
Prior to the vessel's arrival, it shall be verified that:

- All deck scuppers are plugged and sealed. Supper plugs are not required if the handled product has a boiling point < 0°C and/or a flash point <35°C;
- An adequate amount of absorbent material is available on deck for immediate use;
- A pumping system is in place to draw off all deck water contaminated by oil or grease to a containment tank
- Measures are in place to provide for immediate deck containment recovery in the event of a spill;
- Measures are in place to minimize the accumulation of rain water on the cargo deck;
- A pumping system is in place to draw off all oil or oily liquid from the cargo manifold drip pan to a containment tank. Manifold drips pans must be kept dry at all times;
- All unused cargo and bunker connections are closed and blinded;
- All sea suctions and overboard valves, except for segregated ballast and machinery seawater cooling systems, are closed and sealed;
- No bilge water or sewage shall be discharged from any compartment;

4. EMERGENCY PROCEDURES

4.1 Emergency signal

The terminal is fitted with its own siren that will sound in the event of an emergency with thefollowing signals:



All clear

WARNING - details communicated via a radio message

Terminal evacuation

The emergency siren is tested every Friday at 16:30h (automatic activation) and the first Thursday of each month at 13:00h (manual activation) with the following sequence:

all clear – warning – evacuation – all clear

4.2 Terminal evacuation

If the evacuation alarm is sounded, the following steps are to be followed:

- Stop cargo operations with the appropriate ESD-system and close all valves;
- Stop all ventilations and close all doors;
- Gather all crew and visitors inside the accommodation. Make sure everybody is accounted for;
- Wait for instructions from terminal via radio or mobile phone.

Depending on the nature and location of the emergency you will either be directed to one of the assembly points outside the terminal or one of the safe havens located at both ends of the jetty.

Should neither of these evacuation routes be available, evacuation will be organized by boat.

4.3 Fire emergency

4.3.1 Fire emergency equipment

Vessels

while alongside vessels shall have 2 fire hoses connected in the vicinity of the manifold. Additional protection against flash fire shall be provided by having two suitable portable fire extinguishers readily available on the manifold.

Main deck fire line must be ready for immediate use.

Terminal

The terminal is protected by a fire water and foam system supplied from fire pumps located within the terminal, a spray water cooling system, remotely operated foam monitors, portable dry chemical fire extinguishers and a fire truck. Each jetty is also equipped with international fire connections.

4.3.2 Procedure in the event of vessel fire

Should a fire be detected on board of the vessel, following steps are to be followed:

- Stop cargo operations with the appropriate ESD system and close all valves when safe to do so;
- Sound the vessels fire alarm;
- Advise the terminal control room by radio or mobile phone;
- Start firefighting to prevent it from spreading;
- Bring main engine to stand-by and have personnel readily available to assist in disconnecting the loading arm;
- Once shore firefighting personnel arrives on scene, assist as requested.

4.3.3 Procedure in the event of terminal fire

Should a fire be detected on the terminal, following steps are to be followed:

- Immediately advise the terminal control room by radio or mobile phone;
- Stop cargo operations with the appropriate ESD system and close all valves when safe to do so;
- Evaluate if the vessel should unberth from the jetty and put main engine on stand-by and have personnel readily available to assist in disconnecting the loading arm;
- If necessary, protect the vessel by using the on board firefighting equipment;
- If instructed to do so, assist shore firefighting personnel.

4.4 Pollution incident

The terminal is equipped with a containment boom that can be readily deployed in the event ofa spill and is operated by the local spill response organisation.

If a spill occurs on board, is detected on the jetty or on the surrounding waters, the followingsteps are to be followed:

- Immediately advise the terminal control room by radio or mobile phone;
- Stop cargo operations with the appropriate ESD system and close all valves when safe to do so;
- Eliminate all possible sources of ignition;
- If the spill is limited to the cargo deck, start clean-up actions as soon as possible;
- NEVER use oil spill dispersant on the surrounding waters unless expressly instructed to do so by the shore oil spill response team.

4.5 Breakaway from berth

In the event of your vessel breaking out of its moorings, every effort should be made to regaincontrol over the vessel a soon as possible to minimize damages to the cargo connection, terminal facilities and other vessels including immediate call for harbour tug assistance on VHFCh. 18.

5. TERMINAL FACILITIES

BERTH NUMBER	J12 / 704	J14 / 708	J21 / 622	J22 / 624	J23 / 710	J24 / 712B
MOORING SIDE	Port	Port	Port	Port	Port	Port
MIN AVAILABLE WATER DEPTH ALONGSIDE[1]	15.30	15.30	15.50	15.50	13.50	13.50
MAX LOA	300	300	230	230	145	147
MAX BEAM	55	55	50	50	25[2]	23[3]
MAX DISPLACEMENT	171 000	171 000	100 000	100 000	26 000	26 000
CARGO CONNECTION SIZE	ANSI 16"	ANSI 16"	ANSI 16"	ANSI 16"	ANSI 12"- 8"	ANSI 12"
ERC	No	No	No	No	Yes (C4)	No
MIN / MAX MANIFOLD HEIGHT ABOVE WL	3.50 / 20.50	3.50 / 20.50	2.00 / 20.50	2.00 / 20.50	1.00 / 14.00 1.00 / 7.00 (C4)	1.00 / 14.00
MAX DISTANCE SHIP'S RAIL TO MANIFOLD	5.00	5.00	5.00	5.00	5.00	5.00
VAPOUR RETURN [4]	Yes	Yes	Yes	Yes	Yes	Yes
VAPOUR CONNECTION SIZE	ANSI 8"	ANSI 8"	ANSI 8"	ANSI 8"	ANSI 6"	ANSI 6"
BUNKERS VIA BARGE[5]	Yes	Yes	Yes	Yes	Yes	No
FENDERING ON BERTH	No[6]	No[6]	Yes	Yes	No[6]	Yes
SHORE GANGWAY	No	No	No	No	No	Yes[7]
MAX FREEBOARD FOR SHORE GANGWAY	20	20	12.75	12.75	6,5	6,5
STORE SUPPLY VIA BARGE[5]	Yes	Yes	Yes	Yes	Yes	No
STORE SUPPLY VIA SHORE[5]	Yes	Yes	Yes	Yes	Yes	No
BERTH NUMBER	**J25 / 712C**	**J26 / 716**	**J35 / 712**	**J36 / 712A**	**J37 / 712D**	**J38 / 714**
MOORING SIDE	Starboard	Starboard	Port	Starboard	Starboard	Port
MIN AVAILABLE WATER DEPTH ALONGSIDE[1]	13.50	13.50	12	12	12	12
MAX LOA	145	145	135	135	135	135
MAX BEAM	23[3]	25[2]	21[2]	25[2]	25[2]	25[2]
MAX DISPLACEMENT	26 000	26 000	19 000	19 000	19 000	19 000
CARGO CONNECTION SIZE	ANSI 12"	ANSI 12"	ANSI 10"	ANSI 10"	ANSI 10"	ANSI 10"
ERC	No	No	No	No	No	No
MIN / MAX MANIFOLD HEIGHT ABOVE WL	1.0 / 14.0	1.0 / 14.0	1.0 / 7.0	1.0 / 7.0	1.0 / 7.0	1.0 / 7.0
MAX DISTANCE SHIP'S RAIL TO MANIFOLD	5.00	5.00	5.00	5.00	5.00	5.00
VAPOUR RETURN [4]	Yes	Yes	Yes	Yes	Yes	Yes
VAPOUR CONNECTION SIZE	ANSI 6"	ANSI 6"	ANSI 6"	ANSI 6"	ANSI 6"	ANSI 6"
BUNKERS VIA BARGE [5]	No	Yes	No	No	No	No
FENDERING ON BERTH	Yes	No[6]	No[6]	Yes	Yes	No[6]
SHORE GANGWAY	Yes[7]	No	No	No	No	No
MAX FREEBOARD FOR SHORE GANGWAY	6,5	6,5	5	5	5	5
STORE SUPPLY VIA BARGE[5]	No	Yes	No	No	No	No
STORE SUPPLY VIA SHORE[5]	No	Yes	Yes	No	No	Yes

[1] A bathymetric survey of the area is carried out twice a year.
[2] Sum of the beams of J23/J35/J36 and J26/J37/38 cannot exceed 50m.
[3] Maximum 23m due to restrictions by the Port of Antwerp.
[4] Vapour connection is available for gasoline loading operations only.
[5] Only when loading arm is not connected and subject to prior agreement of terminal. Requests must be submitted via agents before arrival of the vessel.
[6] Proper fendering to protect vessel and berth is to be arranged by the vessel.
[7] Seagoing vessels must rig a proper safety net under the gangway.

6. BERTHING AND MOORING

6.1 Angle and speed of approach

The angle of approach shall be as close to parallel to the jetty line as possible but in no casemore than 10 degrees from parallel.

The maximum landing velocity on the fendering shall not exceed 12 cm/s.

All costs related to damages to berth installations during berthing manoeuvres will be borne by the vessel's owners.

6.2 General mooring requirements

It is required that all moorings are maintained in tight condition at all times.

Barges shall at all times have a deck watch available to ensure that safe mooring is maintained. The vessel must be moored to the satisfaction of terminal operators. Moorings will be checked on periodical basis by jetty operators. Any shortcoming will lead to immediate stop of cargo operations. Costs for the delay will be for vessel's owners.

General mooring requirements:

- The general mooring layout shall be symmetric to the centre of the ship;
- All mooring lines shall be kept tight at all times;
- Lines that are frayed, spliced or damaged shall not be used.

During loading and unloading operations, the barge may be moored by means of synthetic ropes only when steel cables are used to prevent the vessel from going adrift. Steel cables sheathed in synthetic material or natural fibre are considered as equivalent when the minimum tensile strength required is obtained from the steel strands.

6.3 Mooring when loading cargoes requiring a vapourreturn connection

When loading gasoline or gasoline components on berth 23, 24, 25, 26, 36 or 37 a vapour return connection is required.

When loading UN3082 fuel oil with CMR characteristics on jetties 23, 35 or 38, a vapour return connection is available.

Care must be taken that the barge is moored in such a way that the vapour manifold is presented on the correct side of the cargo manifold to allow easy connection with the vapour return hose.

To achieve this, the mooring side must be discussed and agreed upon when contacting the control room before arrival (see section 7.1)

6.4 Specific berth requirements

The safe mooring of a barge remains the master's responsibility. The bellow details the minimum requirements for each berth. In any circumstances the master can decide to set outadditional lines to his own discretion and best judgement.

6.4.1 Berths 23 to 26

For barges with a length of 125 meters or less:

A minimum of 4 lines, including forward – 1 headlines and 1 springs, and aft – 1 sternlines and 1 springs.

For barges over 125 meters in length:

A minimum of 6 lines, including forward – 2 headlines and 1 spring, and aft – 2 sternlines and 1 spring.

Heaving lines are available to be used by barge crews to facilitate the transfer of mooring lines between the jetty and mooring dolphins. Barge crews are expected to rigthe heaving lines back properly after each use.

6.4.2 Berths 35 to 38

A minimum of 4 lines, including Forward – 1 headlines and 1 springs, andAft – 1 stern lines and 1 springs.

6.5 Vessel movement after mooring

If vessels move away in any direction from the fendering system, all cargo transfer operationswill be stopped until the situation has been satisfactorily rectified.

The Marine Loading Arms are fitted with alarms that detect excessive movement. These alarmswill automatically shut down the shore cargo pump and close all valves.

6.6 Anchors

Except in emergency situations, the use of anchors while moored is not allowed.

However anchors should remain available for use in emergency and should be unlashed withthe anchor lock in position to prevent accidental release.

7. CARGO OPERATIONS

7.1 Pre arrival information

Arrival announcement is done on-line via UAB only (www.uab-online.eu).

For an announcement to be accepted the barge must be able to arrive at the terminal within 60minutes of the announcement time.

Terminal control room will contact the barge by mobile phone for berthing information.

7.2 Pre operation key meeting

As soon as possible after berthing, you are expected to go to the terminal control room for the pre-operations key meeting.

The “ADN-checklist” and the “Loading and unloading agreement” will be completed.

All safety and operational matters need to be discussed and agreed upon during this meeting.

7.3 Loading arm connection and disconnection

Loading arm operation, connection and disconnection will be performed by terminal personnel only.

7.4 Cargo tank and sample hatch opening

Opening of sample hatches and ullage openings is not permitted except for the purpose ofinspecting an empty cargo tank, after the tank has been relieved of pressure.

When in column (17) of table C anti-explosion protection is required, the opening of hatch covers is only permitted if the tank in question has been gas-freed and the concentration offlammable gasses is less than 10% of the lower flammable limit.

7.5 Cargo tank sampling and ullaging

Sampling shall be carried out only by means of a minimum or a safer device as prescribed in column (13) of table C.

Opening of sample hatches and ullage openings of cargo tanks loaded with a substance for which marking with one or two blue cones is prescribed in column (19) of table C shall be permitted only when loading has been interrupted for not less than 30 minutes.

Sampling receptacles including all accessories such as ropes, etc., shall consist of electrostatically conductive material and shall, during the sampling, be electrically connected to the vessel’s hull.

7.6 Line clearing and blowing to shore

Due to the nature of the cargoes being handled, line clearing and blowing to shore will be doneusing nitrogen only. The use of compressed air is not allowed.

If the vessel is not equipped with nitrogen, the terminal can supply nitrogen for line clearingpurpose only.

7.7 Wind and weather restrictions

Cargo operations will be interrupted and loading arm emptied if the wind force exceeds 13.9 m/s (7 Bft) or during thunderstorms.

Loading arm will be disconnected when wind speed exceeds 17.2 m/s (8 Bft).

7.8 Effective deck watch

At all times during while alongside an effective deck watch must be maintained by a competent person.

The deck watch must at all times be able to communicate with the control room using the provided portable radio.

7.9 Communication

7.9.1 Communication equipment

During the pre-operation meeting, the loading master will hand over one intrinsically safe portable radio with leather case.

A jetty operator will replace the battery of the portable radio on regular basis. The supplied equipment will be collected before departure by a jetty operator.

The portable radio is under your responsibility during your stay and you will be liable for any losses and/or damages (1050- EUR for portable radio)

7.9.2 Contact numbers

Terminal control room	radio Ch. “1” or +32 3 200 38 00
PFSO (24/7)	+32 486 971 406
Deputy PFSO	+32 473 114 690
Police (emergency 24/7)	101
Fire brigade (emergency 24/7)	112
Ambulance (emergency 24/7)	112
Port of Antwerp harbour master (24/7)	+32 3 205 21 52

7.10 Tank cleaning, gas freeing and ventilation

Tank cleaning and gas freeing operations are not allowed while alongside.

7.11 Overfill protection (ADN cable)

All barges must be equipped with a working overfill protection system and be able to connect the shore overfill protection cable (the ADN cable).

ADN cable must be tested and operational before any cargo operations can be initiated.

- Orange cable: connection to the vessel overfill alarm system (loading);
- Black cable: connection to the terminal overfill alarm system (discharging).

Vessels loading cargo are to arrive with clean ballast and with cargo tanks suitable/ready to load nominated cargoes. There are no shore ballast/slop reception facilities at the Terminal.

7.12 Ship to ship transfer operations

STS operations are authorized at 700B. In case of direct ship to ship or ship to barge cargo transhipments, agreements for the transfer of cargo will be made between the discharging and the receiving ship.

The terminal will inform the Port Authority about the operations. The Port of Antwerp Ship to Ship Transfer Checklist (HKD 26) must be completed before any transfer operations take place. A copy of the completed document should be handed over to a terminal representative.

It is the Masters' responsibility to ensure safe access between ships. If gangways cannot be utilized it may be necessary to use alternate means of access, such as mooring boats or launches. The terminal will not allow pilot ladders in between vessels. The terminal will only arrange launches for his own personnel and cargo surveyors if necessary. All others arrangements will be organized by the agent. The terminal does not provide for hoses or fenders. If not available on board those must be arranged by the ship's agent.

The terminal will provide shore radios for the communication between the vessels. During cargo transfer, key personnel on both ships must maintain a common means of communication. English is the only authorized language during STS operations.

The crew on each ship is responsible for connecting and disconnecting cargo and vapour return hoses. Oil transfer hoses must be connected before vapour return hoses to avoid the risk of electrical arcing. Always ask confirmation to the terminal before connecting the cargo hoses.

The shore loading arms have to be disconnected while the second vessel is mooring of un-mooring.

When ships are fitted with IGS, each vessel is and remains inerted in case of flammable cargo (FP<60°c) on board throughout its time alongside.

Environmental protection is of paramount importance. Therefore the slow speed checks for hose integrity and ship's cargo line integrity are vital.

8. SPECIFIC CARGO REQUIREMENTS

8.1 Static accumulative cargoes

All precautions as described in ISGINTT chapters 3.2 and 11.1.7 for handling static accumulating cargoes in non-inerted tanks shall be strictly adhered to.

Particular attention is drawn to precautions relating to initial loading rates that must be clearly specified in the loading agreement made during the pre-operation meeting.

Gauging and sampling must be performed under closed conditions. The recommended relaxation time of 30 minutes must be observed before introducing conductive objects into the cargo tank. Metallic objects must be electrically bonded to the ship's hull.

8.2 Benzene

For benzene cargoes or cargoes containing benzene gauging and sampling must be undertaken under closed condition.

In the event that airborne concentrations of benzene within an area are likely to exceed maximum allowable exposure limits (PEL of 1 ppm and STEL of 5 ppm), that area should be designated as a regulated area and clearly marked and identified as such.

Suitable PPE and approved respirators must be used at all times when exposure limits are likely to be exceeded (sampling, ullaging, connecting, disconnecting or within regulated areas).

Recommendations outlined in ISGINTT Chapter 11.1.10 must be followed.

8.3 Hydrogen sulfide (H_2S)

Hydrogen sulfide (H_2S) may be present in significant concentrations in crude oils and refined products such as naphtha, fuel oil, bitumen and gas oils and in the vapour spaces of tanks that have previously contained such cargoes. Vessels should be aware of the potential presence of H_2S and should adopt appropriate monitoring procedures. Exposures to concentrations exceeding 10 ppm should not be permitted without proper respiratory protection (SCABA). Vessel crew must be provided with appropriate H_2S detection equipment while within the cargoarea.

Recommendations outlined in ISGINTT Chapter 11.1.9 must be followed.

8.4 Gasoline and gasoline components

Due to flammability and high vapour pressure, special precautions must be taken when handling gasoline and gasoline components.

Ullaging and sampling should preferably be performed under closed conditions. Should closed ullaging and/or sampling not be possible due to design, the guidelines set out in part 7.5 must be strictly adhered to.

Approved respirators must be used when operations are undertaken likely to expose personnel to an elevated concentration of vapours (ullaging, sampling, connecting and disconnecting).

9. TERMINAL SERVICES

9.1 Potable water

Potable water supply is available at all berths. The potable water supply is controlled by a service from the City of Antwerp and must be arranged via the water supplier before arrival.

9.2 Garbage disposal

Garbage collection can be arranged via your agent using an external garbage collection company. Garbage will be collected by truck or barge.

No garbage or waste shall be left on the jetty. If any, costs for removal and disposal will be forwarded to your owner/operator.

9.3 Store handling

See chapter 5. Terminal facilities

Please note that the terminal does not allow stores or provisions to be kept on the jetty area for a prolonged amount of time as it could block emergency escape routes or access for emergency services.

10. TERMINAL SAFETY PLAN