THUNDER BAY TERMINAL

INFORMATION TO VESSELS

Current versions of approved documents are maintained online. Printed copies are uncontrolled



IMPORTANT

- Smoking is <u>strictly prohibited</u> outside designated smoking areas!
- Cargo operations require at least one qualified person to be stationed on deck during loading or discharge!
- In case of an oil spill or other emergency, cargo operations must be stopped immediately and the terminal control room and Voyage Order contact must be informed.
- In case of any situation or incident that could possibly have an impact on health and/or environmental conditions, the terminal control room should be informed immediately on the emergency telephone number:

403-296-3000

or by the portable radio. Voyage Order contact should also be informed.

For more information:
Suncor Marine Department

150 6 Avenue S W, Calgary AB T2P 3E3

marineop@suncor.com

http://www.suncor.com/marine

Version:

Date	Revision	Updated by

June 1999	-	-
March 2016	1	Marine Operations
March 2018	2	Marine Operations
September 2021	3	Marine Operations
April 2024	4	Marine Operations

TABLE OF CONTENTS

1	General Information	7
	1.1 Location	7
	1.2 Berth Description	7
	1.3 Water Depth	8
	1.4 Services at the berth	8
	1.5 Security	9
	1.5.1 Access to and from the vessel	9
	1.5.2 Access to the Terminal	9
	1.5.2.1 General	9
	1.5.2.2 Crew	9
	1.6 Weather	. 10
	1.7 River Current	. 10
2	Communications	. 12
	2.1 Estimated time of arrival (ETA)	. 12
	2.2 Useful Local Numbers	. 12
	2.3 Cargo Transfer Communication	. 12
3	Berthing and Mooring	. 14
	3.1 Vessel size and restrictions	. 14
	3.2 Spot Approval	. 14
	3.3 Mooring Criteria	. 14
	3.4 Berthing Information	. 15
	3.5 Berthing/Unberthing Manoeuvres	. 15
	3.6 Tug Assist	. 15
	3.7 Linesmen	. 16
	3.8 Environmental Limits	. 16
4	Rules and Regulations	. 18
	4.1 General Federal Government Requirements	. 18
	4.2 Port of Thunder Bay Regulations	. 18
	4.3 Suncor Thunder Bay Rules and Regulations	. 18
5	Cargo transfer	. 27
	5.1 Terminal Manifolds	. 27
	5.2 Vessel Manifolds	. 27
	5.3 Cargo Operating Procedures	. 27
	5.4 Environmental Limits - Cargo Operations	27

6	Emergency Response to Fires, Spills, leaks, etc	29
	6.1 Fires	29
	6.1.1 Actions in the Event of Fire at Terminal	29
	6.1.2 Action in Event of Fire on Board a Vessel	29
	6.2 Spills or Leaks	30
	6.2.1 Terminal Spills or Leaks	30
	6.2.2 Vessel Spills or Leaks	30
	6.3 Restarting Transfer Operations after a Marine Pollution Incident	30
7	Appendix 1 Mooring Diagram	31
8	Appendix 2 Vessel Shore Safety Checklist (ISGOTT 26.3.3)	32
9	Appendix 3 Cargo Ballast Transfer Planning	32
10	Appendix 4 Safety Letter	33
11	Appendix 5 Thunder Bay Sounding Chart	34

1

GENERAL INFORMATION



1 GENERAL INFORMATION

1.1 LOCATION

The facility is shown on Canadian Hydrographic Service Chart numbers 2314 Port of Thunder Bay in latitude 48° 22.2' North, longitude 89° 14.8' West.



1.2 BERTH DESCRIPTION

- The berth is designed to offload bulk petroleum products, primarily gasolines and distillates, from domestic tankers.
- The dock is constructed of three large cylindrical cells that present a berthing face of approximately 56 metres. It is situated parallel to the shore.
- The facility is 2.5 nautical miles from open water and is on the Mission River. The Port Authority
 prefers vessels to use the Mission River approach instead of the Kaministikquia River approach
 which requires the road and rail bridges to be opened. The Harbour by-laws set speed and
 wake restrictions on vessels navigating the Mission River (see Section 4 Rules and Regulations).
- The cargo transfer manifolds are positioned on the centre cell and vessels normally berth starboard side to but can be berthed either port or starboard side to.

Date of publication April 2024

• There is no shore gangway and vessels must arrive at the facility with the vessel's gangway ready to be deployed. N.B. The elevation of the dock is approximately 3.0 metres above lake level at chart datum.

1.3 WATER DEPTH

- The lake water is fresh and chart datum is 183.2 metres above the International Great Lakes Datum 1985 (IGLD 1985).
- Water levels fluctuate during the season and Masters should secure the latest information on water levels when planning their required under keel clearance for berthing and while in berth.
- The Canadian Hydrographic Service provides mariners with continuous, real time, information on water levels at various locations in the Great Lakes through a telephone accessed voice announcing water level gauge system. The facility is situated five miles from the Thunder Bay gauge at Keefer Terminal and some discrepancy may occur between the actual level at the dock and the gauge (see telephone numbers in Section 2, Communications).
- For most recent soundings taken at the dock, refer to Appendix 5, provided as information only and strictly not to be used for navigation purposes. Suncor accepts no liability for and does not warrant the currency and accuracy of any such information and shall not be liable should any such information prove to be inaccurate, and the master is advised to ask his local agents to supply current information prior to arrival in order to ensure safe navigation at all times.
- The Mission River and the berth is subject to siltation and the depths found in the last survey
 will be subject to change (Suncor requests Masters to use caution when establishing their
 vessel's draft for voyages early in the navigation season and to keep Suncor's Marine
 Department apprised of any actual water depths that deviate from the information in this
 booklet.)
- The bottom in the Mission River and at the berth is mud

The vessels must follow their company ISM policies for under keel clearances and be guided by Canadian Coast Guard regulations.

Masters are advised to be in full compliance with the Canadian Coast Guard guidelines reference to net under keel clearance when alongside the terminal. Copies of these regulations can be obtained from the vessel's agents.

1.4 SERVICES AT THE BERTH

Bunkers	No pipeline supply	
Fresh Water	Non potable water is available (vessel hose required)	
Garbage Disposal	Not accepted across the dock	

Slop and Tank Cleanings	Not accepted at the facility (This facility is a cargo
	discharge terminal)

1.5 SECURITY

1.5.1 Access to and from the vessel

- Access to and from the vessel is controlled by a gate. Taxicabs are not allowed past the
 gate, which is a short walk to/from, the berth. Masters must advise the terminal
 operations staff who are approved to visit the vessel. All vessels must provide a crew list
 and visitors to vessels at the berths who are not crew members must be pre-approved
 by Suncor Marine Department.
- All persons and property may be subject to search. If you elect to enter the terminal area, you are deemed to have given consent to search and inspection

Marine Facility Security Officer (MFSO:

Contact	Numbers	
Global Security Operation Centre	Office: +1-403-296-3000	
GSOC 24/7	Toll Free 1-833-623-2100	
E-mail	securityoperations@suncor.com	

 The terminal is compliant with the requirements of the International Code for the Security of Vessels and of Port Facilities and the relevant amendments to Chapter XI of SOLAS (ISPS Code). It is mandatory that all vessels comply with the referenced ISPS code. A compliant Declaration of Security (DoS) will be issued between vessels and shore for each call to the marine facility.

1.5.2 Access to the Terminal

1.5.2.1 General

Anyone who has been granted access to the premises has to proceed to and from the
vessel via the shortest route possible, using only the main road between the gate and the
jetty.

1.5.2.2 Crew

 Crew that are mentioned on the crew list have permission to leave and re-enter the terminal. They must carry identity papers to enable the security guard to check their identity versus the crew list.

Date of publication April 2024

1.5.2.3 Vessel chandlers and other visitors to the vessel

- Access to the premises is only allowed to visitors mentioned on the visitor list, issued by
 the agent or after approval by the vessel's master. All visitors have to identify themselves
 at the gate by means of a passport or driving licence. Government officials, in their official
 capacity, will be granted access upon presentation of their official ID-card.
- Furthermore, anyone carrying goods that are to be delivered on board a vessel must present documents (i.e. a waybill, packing list etc.) covering the carriage of such goods to security guards before entry is granted.

1.5.2.4 Unaccompanied Luggage

 Depending on the security level, Suncor reserves the right to refuse unaccompanied luggage at the gate. Alternatively, when unaccompanied luggage is presented at the gate, Suncor may invite the vessels security officer to personally take receipt of this luggage on behalf of its rightful owner.

1.6 WEATHER

- The dock is well protected with little or no wave action
- Masters are referred to Environment Canada online at for current meteorological data: https://weather.gc.ca/marine/region_e.html?mapID=09

1.7 RIVER CURRENT

• The Mission River current speeds range between one (1) to in excess of three (3) knots and are roughly parallel with the dock. The current is particularly strong during the spring thaw and after heavy rain.

2

COMMUNICATIONS



2 COMMUNICATIONS

2.1 ESTIMATED TIME OF ARRIVAL (ETA)

- Masters are required to co-ordinate their arrival in accordance with the terms of the charter party, and to provide the terminal with ETA's:
 - On departure from the loading facility; and
 - On departing the Sault St. Marie locks;
 - Four (4) hours prior to arrival at the terminal

2.2 USEFUL LOCAL NUMBERS

Suncor Thunder Bay Terminal	Tel: 807 622 8701 (7am – 5pm ET)
	Tel: 807 627 7114 (after hours)
	Fax: 807 623 0932
Thunder Bay Port Authority	Tel: 807 345 6400 (office hrs)
	Tel: 807 624 8200 (24 hrs)
	Fax: 807 345 9058
	http://www.portofthunderbay.com/
Canadian Hydrographic Service, Water Levels	http://www.tides.gc.ca/eng/info/bulletin
	Tel: 807 344 3141
	Tel: 1877 775 0790
Oil Pollution Response	Tel: 613 930 9690
Police Fire Ambulance	911
Canadian Coast Guard	Tel: 1 800 265 0237 (Any CG radio station)
Oil Spills, Fire/Emergencies - MCTS	Tel: 1 800 265 0237
Gravel and Lake Service - Assist Tugs:	Tel: 807 473 7821
Thunder Bay Tug Service - Assist Tugs	Tel: 807 344 9221

2.3 CARGO TRANSFER COMMUNICATION

• The terminal provides a portable radio for the vessel's use in communicating with terminal staff during cargo transfer operations.

3

BERTHING AND MOORING

3 BERTHING AND MOORING

3.1 VESSEL SIZE AND RESTRICTIONS

 There is less water depth west of the shore manifold and this constrains the forward draft of vessels with longer bow to centre of manifold dimensions when the vessel is berthed in the recommended starboard side to position.

Vessel Size Criteria	Restriction
Maximum Displacement	20,000mt
Maximum Length Overall	163m
Maximum bow to centre manifold	82m

- The vessels must follow their company ISM policies for under keel clearances and be guided by Canadian Coast Guard regulations.
- Masters are advised to be in full compliance with the Canadian Coast Guard guidelines
 reference to net under keel clearance when alongside the terminal. Copies of these regulations
 can be obtained from the vessel agents.

3.2 SPOT APPROVAL

• The parameters shown in 3.1 may be relaxed for an individual vessel call, subject to a marine technical review of the special circumstances of the relaxation request and written approval by Suncor Marine Department.

3.3 MOORING CRITERIA

- The berth is well protected with a good breasting face and well placed mooring bollards.
 Mooring bollards, other than those on the berthing cells, require long leads and handling across open water and the shoreline. Masters should take this into account when planning the execution and duration of the mooring operation and, under these circumstances, synthetic breast and head lines are preferred instead of wire cables.
- There is very little traffic past this berth but, when traffic does occur, the deck watch should guard against passing vessel effect.
- All vessel mooring wires must be fitted with synthetic mooring tails that meet latest OCIMF/ MEG guidelines. (
- Mooring lines in similar service, e.g. spring lines, should be of the same material and be similar in length.

While the responsibility for the adequate mooring of a tanker rests with the Master, the
terminal has an interest in ensuring that vessels are securely and safely moored. Appendix 1
Mooring Guidelines are guidelines for minimum moorings which terminal staff will expect
vessels to deploy while at this facility. Masters should ensure that to the maximum extent
possible, breast lines shall be deployed at right angles to the longitudinal axis of the vessel and
spring lines shall be deployed parallel to the longitudinal axis of the vessel.

3.4 BERTHING INFORMATION

- The dock, which consists of three large cells interconnected by walkways, is close to and parallel with the river bank
- The fendering is solid rubber with energy absorption enhanced by the compression design of the fender. This is very adequate fendering for typical traders and vessels up to the maximum approved criteria (see Section 3.1).

3.5 BERTHING/UNBERTHING MANOEUVRES

- There is adequate water depth in the Mission River for vessels bound for the Suncor facility. Masters are advised to stay in the centre of the river to maximize under keel clearance.
- The dock is usually approached at slow speed stemming the current and berthing starboard side to. Vessels should not plan a port side berthing when the river current is strong i.e. in excess of 1 knot.
- Masters should ensure that the vessel does not fall inshore of the line of the face of the dock as the water depth lessens sharply inside of this line. They should also exercise caution to avoid the vessel proceeding West of the chosen berthing position as the water depths in the West end of the berth decrease quite rapidly (see Section 1.3).
- The unberthing manoeuvre, for vessels berthed starboard side to, requires the vessels to move a few hundred metres ahead to the junction of the Mission and Kaministikquia Rivers where an adequate turning basin is available.
- Nothing in this berthing principle shall exonerate the master from taking any precautions
 required by the ordinary practice of seamen, or by any relevant special circumstances of the
 case. At all times the vessel should proceed at a safe speed so that she can take effective action
 to avoid collision and be stopped within a distance appropriate to the prevailing circumstances
 and conditions

3.6 TUG ASSIST

All vessels visiting this facility will be comparatively small domestic tankers.

- No vessel should attempt to transit the Mission River enroute to the facility unless the vessel's own propulsion and steering mechanisms are in proper working order. Accordingly, Suncor does not require the vessels authorized to visit this facility to utilize tug assist. Masters may elect to use tug assist to aid the berthing or unberthing manoeuvre in ice conditions and are encouraged to utilize tug assist when, in their judgement, it will enhance the safety of the berthing, or unberthing of the vessel.
- Assist tugs are available in Thunder Bay (see Section 2.2).

3.7 LINESMEN

 An adequate number of shore linesmen will be provided to take vessel lines and perform dock mooring duties. Vessel crews are not to be utilized to perform dock mooring duties.

Guideline	Berthing	Unberthing
All vessels	4 Persons	2 Persons

3.8 ENVIRONMENTAL LIMITS

Wind Limits – Berthing:

The Suncor Energy facility is not an exposed berth and the Masters decision to transit the
Mission River and to berth will be subject to an evaluation of the wind direction and speed, the
load condition of the vessel, the river current and other conditions the Master deems
applicable. Vessels should not be berthed in adverse wind conditions (i.e. offshore or onshore
winds in excess of 30 knots).

While alongside:

Stop cargo	30kts
Disconnect arm	35kts
Take precautionary action	40Kts

4

RULES AND REGULATIONS



4 RULES AND REGULATIONS

4.1 FEDERAL GOVERNMENT

 Masters are required to operate their vessels in compliance with Canadian Legislation and Regulations while in Canadian waters. Many of Canada's marine requirements are based on IMO and ILO standards. Certain requirements are, however, unique to Canada and Masters of non-Canadian vessels and should ensure that their vessel's agent informs them of distinct Canadian requirements.

4.2 PORT OF THUNDER BAY REGULATIONS

 Masters should ensure compliance with these regulations and attention is drawn to speed and wake restrictions in the Mission River.

4.3 SUNCOR THUNDER BAY RULES AND REGULATIONS

- Tankers destined for the Terminal are required to have on board, the latest edition of the "International Safety Guide for Oil Tankers and Terminals ISGOTT".
- Suncor is committed to safe operations and protection of the environment at its Thunder Bay Terminal. Vessel crew are requested to immediately bring any unsafe condition or pollution risk to the attention of terminal staff and to take appropriate action to remedy the situation, including the suspension of cargo transfer activity.
- Suncor has "Zero Tolerance" policy for Alcohol and Drug intoxication for vessel crew and personnel entering or leaving the facility.
- Nothing in these rules and procedures will relieve Masters of their responsibilities in observing normal safety, fire prevention, pollution prevention and security precautions.
- Terminal staff are authorized to advise and request Masters to take additional measures to
 ensure safe operations should circumstances so require. Terminal staff are also authorized to
 suspend oil transfer operations in the event of an infringement of terminal rules and
 procedures or if any other hazardous situation is encountered.

The following safety regulations have been developed in an effort to reduce the possibility of an incident involving fire, explosion, spills or other hazard:

1. Safety Requirements

 Masters and/or tankerman will adhere to the following Suncor Thunder Bay Terminal Rules and Procedures after completion of berthing operations.

2. Safety Check List

 On completion of berthing and prior to the commencement of cargo transfer, the Vessel/Terminal Safety Check List - Appendix 2, will be completed following a joint inspection by the terminal operator and a responsible tanker officer / barge supervisor. This safety Check List is based on the recommendations of the "International Safety Guide for Oil Tankers and Terminals" (ISGOTT).

3. Gangway

• The vessel's gangway must be in good condition and of an appropriate length for safe access between vessel and shore. An effective safety net must be deployed. N.B. elevation of dock above chart datum is 3.0m.

4. Vessels Decks

 Walkways required for accessing cargo systems, deck machinery and emergency equipment shall be kept clear of obstructions and, in winter, provide a safe walking surface

5. Engine Readiness

 The vessels main engines, steering machinery and other equipment essential for manoeuvring shall be maintained in a state of readiness for vacating the berth under full engine power at 15 minutes' notice.

6. Repairs

No hot work is to be performed on board any vessel while alongside the terminal. The
testing of radar, vessel's radio equipment and other electrical equipment is prohibited
unless written permission is received from the terminal supervisor. Tank cleaning and
gas freeing shall not be carried out alongside without written approval from the terminal
supervisor. Chipping and scraping on the deck or hull is prohibited.

7. Staffing

 A sufficient number of vessel's personnel to safely handle the operation in progress and deal with emergencies, including an emergency departure from the berth, are to be onboard while the vessel is in the berth.

8. Vessels Moorings

 Vessels personnel must frequently monitor and carefully tend the vessels moorings to ensure that the vessel is safely secured having regard to the weather and current conditions.

9. Vessel/Shore Communications

- Communication between the terminal and vessel will be by portable UHF radios. These shall be tested and found satisfactory before transfer operations commence. The tanker's responsible officer and the terminal operator shall confirm with each other that the communication system and signals for controlling the operations are understood by all personnel involved prior to the commencement of cargo transfer. See Section 5.3 and Appendix 3.
- In the event of a total breakdown of radio communication between the terminal and the vessel during cargo transfer operations, operations shall be immediately suspended and not resumed until satisfactory communications are re-established.

10. Smoking

- Smoking is strictly prohibited while at the berth except in designated areas which have been jointly approved by the Master and by the terminal operator.
- Smoking notices specifying the designated smoking areas shall be exhibited in conspicuous places on board the vessel.
- Where smoking is approved on vessels, approval may be withdrawn by terminal operator if circumstances so warrant.

11. Matches and Lighters

• The carrying and use of matches and lighters is prohibited on board the vessel while alongside the terminal except under controlled circumstances in the designated smoking areas.

12. Portable Electrical Equipment

- Portable electric lamps and portable electric equipment for use in hazardous areas must be of an approved type.
- Any other electrical or electronic equipment of non-approved type, such as radios, mobile telephones, smart watches, radio pagers, calculators, photographic equipment are not to be active, switched on or used within hazardous areas.

13. Radio Equipment

 The use of the vessels radio transmitting equipment while alongside is prohibited and the transmitting antennae should be earthed. This does not apply to permanently and correctly installed VHF and UHF equipment provided the power output is reduced to one watt or less.

14. Galley Stoves and Other Cooking Equipment

 The use of galley stoves and other cooking equipment shall be permitted, provided the Master and terminal operator agree to their use.

15. Radar - Satellite Communication Terminals - Closed Circuit Television

• The use of this equipment for any purpose is prohibited during the period that the vessel is alongside, except with the approval of the terminal operator.

16. Prevention of Sparking and Excessive Smoke

 Soot blowing and excessive smoke are prohibited, and immediate steps shall be taken to eliminate any sparking from funnels/stacks

17. Inert Gas Systems

 All tankers fitted with cargo tank inerting system should arrive with cargo tanks inerted to 8% O2 or less by volume and pressurized as required by the SOLAS Convention.

(a) Tank Inspection, Gauging, Sampling, Water Dips and Temperatures

- Cargo tanks requiring inspection should only be opened on a tank-by tank basis. The IG system shall be maintained at about 200mm water gauge except for the individual tank to be opened which, if possible, is to be isolated from the system and the sighting port opened with care. On completion of inspection the tank shall be secured and repressurized. The next tank is not to be isolated and opened until the preceding tank is secured and open to the IG system
- All gauging, sampling water dips and temperatures will be taken either through special
 fittings provided; or if it is necessary to open up tanks for this purpose, then this will be
 done one tank at a time as described above.

(b) Failure of IGS

 If at any time the IGS is not maintaining the prescribed conditions, the terminal operator shall order a suspension of transfer operations. The cost of any delays and shifting shall be on the vessel's account.

18. Fire Precautions

- The vessel's firefighting appliances, including main and emergency fire pumps, shall be kept ready for immediate use.
- Before operations commence, at least two fire hoses and jet/fog nozzles shall be laid out on the tank deck, connected to the fire main and tested as required by the terminal operator. The two fire monitors immediately adjacent to the manifold should be elevated, aligned towards the manifold area and made ready for immediate use. A fire pump shall maintain pressure on the fire main and also be ready for immediate use. Two portable fire extinguishers, preferably of the dry chemical type, shall be available in the proximity of the manifold area.
- Should fire occur on the vessel, the Master or responsible vessel's officer of such vessel shall make an immediate signal by prolonged blasts on the vessel's whistle and by sounding the fire alarm, and will also place the engine on standby. All transfer operations will cease immediately.

19. Emergency Procedures

 As required by the Vessel/Terminal Safety Check List, the Master of the vessel and the terminal operator should discuss and agree upon the action to be taken in the event of an emergency or a fire on board either the tanker or the terminal. This should include means of communication and emergency procedures. See Section 6.

20. Operating Procedures

• Procedures for cargo and/or ballast operations shall be agreed in writing between the terminal operator and the vessel's Master or Chief Officer. See Appendix 3.

21. Sea and Overboard Discharge Valves

• Before any cargo transfer commences, sea and overboard discharge valves connected to the cargo or ballast system shall be closed and sealed with numbered seals. When sealing is not practicable, as with hydraulic valves, some suitable means of marking should be used to indicate that the valves are to remain closed. Seal numbers should be recorded on the Vessel/Terminal Safety Check List. Except in an emergency, these seals shall be removed only with the approval of the terminal operator. A careful watch shall also be maintained to ensure that oil is not leaking through sea and overboard discharge valves.

22. Conditions to be observed on Board Vessels During Transfer Operations

- (a) Deballasting has to be carried out on the outboard side of the vessel. In case this is not possible (due to the pipeline configuration of the vessel) alternative to be agreed during initial meeting with terminal representative
- (b) A qualified vessel's officer, able to communicate effectively in English with the terminal staff, is required to be on deck or in the control room at all times. A continuous deck watch is to be maintained to ensure moorings are carefully tended and cargo transfer arms are under observation at all times.
- (c) Towing off wires shall be made fast to bitts as far forward and aft as possible on the outboard side. The wires shall be in good condition, at least 1 1/8" (28mm) diameter, and secured with at least five turns or have the eye on the bitts. The outboard eye shall be maintained at a height of between 1 metre and 2 metres above the water at all times using a small diameter heaving line for this purpose.
- (d) All doors, portholes and openings leading from or overlooking the main deck to accommodation, machinery spaces (excluding pump room) and forecastle shall be kept closed. Cargo control room doors opening on to or above the main deck may be opened momentarily for access.
- (e) All ventilators through which gas can enter accommodation or machinery spaces shall be suitably trimmed. Air conditioning units shall be stopped or operated in a recirculation mode. Window type air conditioning units shall be electrically disconnected.
- (f) The venting of the vessel's tanks shall take place only through the vessel's fixed venting system.
- (g) All cargo, ballast and bunker tank lids and tank washing openings shall be securely closed.
- (h) Sighting and ullage ports when not in use shall be kept closed. When any are open for operational reasons, the openings shall be protected by approved gauze flame screens. These screens shall be kept clean and in good condition. Portable screens should be a good fit.
- (i) All unused cargo and bunker connections shall be properly blanked, fitted with a gasket and bolted with a bolt in every hole at the manifold. Stern cargo pipelines (if fitted) shall be isolated forward of the aft accommodation by blanking.

- Any part of a slop transfer system which extends into machinery spaces shall be securely blanked and isolated on the tank deck.
- (j) If for any reason there is poor dispersion which results in an accumulation of gas on or about the decks of the vessel, transfer shall be stopped or the transfer rate relevant to a particular tank or tanks reduced at the discretion of either the terminal operator or the responsible vessel's officer.
- (k) The vessel shall by day fly Flag "B" of the International Code, and by night an allround red light.
- (I) H2S portable monitors must be worn by all personnel working on deck if the cargo contains H2S
- (m) The person in charge of the transfer operation on the vessel shall conduct inspections of adjacent water areas around the vessel frequently and at least once each hour to ensure that no oil has spilled or leaked into the water.

23. Movements of Refuelling Vessels, Garbage Barge, Tugs, Workboats and Other Craft

During transfer operations, no craft shall be allowed alongside the vessel unless approval
has been given by the terminal operator, Suncor Marine Department and as agreed to
by the Master of the vessel.

24. <u>Emergency Escape</u>

 Means for emergency escape shall be provided on the offshore side of the vessel. For security reasons such means is to be stowed at deck level in such a manner as to be ready for expeditious use in an emergency. Such means shall be of adequate length to reach the water at all times.

25. Conditions Requiring Immediate Action

Ballast or Cargo transfer operations shall not be started, or if started, shall be discontinued by either the responsible officer of the vessel or the terminal operator when any of the following conditions is noted:

- (a) On the approach of and during electrical storms, heavy rainstorms or period of high winds, all tank openings and cargo valves shall be closed, and transfer arms disconnected.
- (b) If a fire occurs on the terminal, the vessel or any craft in close proximity, and in addition, all tank openings and cargo valves shall be closed.

- (c) If there are insufficient competent personnel aboard the vessel to safely handle the operation in progress, and to handle any emergency situation.
- (d) If a spill or leak occurs aboard the vessel or on the terminal.
- (e) If any other emergency situation arises which, in the opinion of the vessel's responsible officer or the terminal operator constitutes a potential hazard to either the vessel or the terminal.

26. Avoidance of Oil Pollution

- During transfer operations all scuppers shall be effectively plugged, fixed or portable manifold oil containment shall be in place, and no leakage or spillage of oil or water which can possibly contain oil shall be allowed to escape overboard. Scupper plugs may be removed to drain off accumulations of water periodically and replaced immediately after the water has been run off. Plugs to be manned at all times while open for draining. Manifold containment should be drained before transfer operations commence. Any leakage or spillage must be reported immediately to the terminal operator and regulatory authorities.
- A supply of absorbent material shall be available at the manifold to facilitate the immediate cleanup of minor spills.
- No hazardous material shall be thrown overboard, nor shall any other objectionable material, either solid or fluid, be thrown overboard from the vessel.

27. Tank Lids

 All cargo tank lids, ullage and sighting ports shall be securely closed before berthing or unberthing operations commence.

28. List

Excessive listing of the vessel must be avoided

5

CARGO AND BALLAST TRANSFER

5 CARGO AND BALLAST TRANSFER

5.1 TERMINAL MANIFOLDS

- The berth is fitted with two manifolds which with 8" diameter flanges. Each manifold is fitted with an insulating flange.
- One manifold is for gasoline and the other is for distillates. The manifolds each connect to separate 8" diameter pipelines and the two grades can be discharged simultaneously.
- Maximum allowable working pressure at the shore manifold is 90lbs/square inch.
- Typical flow rates are 400 to 500 M3 per hour. All dock pipelines are pumped dry after the vessel is discharged.

5.2 VESSEL MANIFOLDS

- Vessel cargo hoses must be provided to effect the flexible connection between the vessel and shore manifolds. The connection to the shore manifold should be an eight inch (8") steel flange or reducer, conforming to BS1560, ANSI B16.5 or equivalent.
- Vessel cargo hoses must be in good condition and have been tested in accordance with the
 requirements of the Canada Shipping Act. The date of the test should be visibly and
 permanently marked on the hose and the test certificate must be readily available for
 inspection by the terminal.

5.3 CARGO OPERATING PROCEDURES

• Before cargo transfer commences the vessel's officer or barge tankerman, the supervisor and where applicable, the loading master should exchange information and agree on a transfer plan which should be documented in writing. Information exchanged and the plan must include the items shown in *Appendix 3* at a minimum.

5.4 ENVIRONMENTAL LIMITS - CARGO OPERATIONS

. Stopping of cargo transfer - 30 knots. Disconnecting of loading arms - 35 knots

6

EMERGENCY RESPONSE TO FIRES, SPILLS, LEAKS ETC



6 EMERGENCY RESPONSE TO FIRES, SPILLS, LEAKS, ETC

6.1 FIRES

The terminal does not fight fires on vessels at the berth(s). Vessels are expected to be capable of fighting fires which occur on board, including securing capable external support, and notifying the proper authorities. (Refer to ISGOTT section 26.5)

6.1.1 Actions in the Event of Fire at Terminal

The terminal will raise the alarm to vessel at the berths via the portable radio communication system;

- The transfer operation is to be stopped immediately
- The terminal will respond to the fire
- Both the terminal and the vessel will take action to mitigate the spread of the fire to the vessel

Terminal will:

- Secure shore cargo system
- Stand by to cast off the moorings (if conditions allow)
- Disconnect hoses (if conditions allow)
- Communicate with authorities

Vessel will:

- Secure vessel cargo system
- Disconnect hoses
- Ready vessel for emergency departure
- Communicate with authorities.

6.1.2 Action in Event of Fire on Board a Vessel

The vessel will raise the alarm to the terminal via the portable radio communication system and give five or more prolonged blasts on the vessel's whistle, repeated at intervals;

- The transfer operation is to be stopped immediately.
- The vessel will respond to the fire.
- Both the terminal and the vessel will take action to mitigate the spread of the fire to the terminal.

Terminal will:

- Secure shore cargo system
- Disconnect hoses
- Stand by to cast off the moorings (if conditions allow)

Vessel will:

- Secure vessel cargo system
- Ready vessel for emergency departure
- Communicate with authorities
- Depart berth as required

6.2 SPILLS OR LEAKS

6.2.1 Terminal Spills or Leaks

In the event of a spill from the terminal or a leak from the cargo arms or shore cargo piping:

- The transfer operation is to be stopped immediately and vessel to be informed
- The terminals spill response plan is to be implemented as appropriate. This will
 include informing the proper authorities and initiating containment recovery and
 clean up procedures.
- The cause of the spill must be determined and rectified before operation is resumed.

6.2.2 Vessel Spills or Leaks

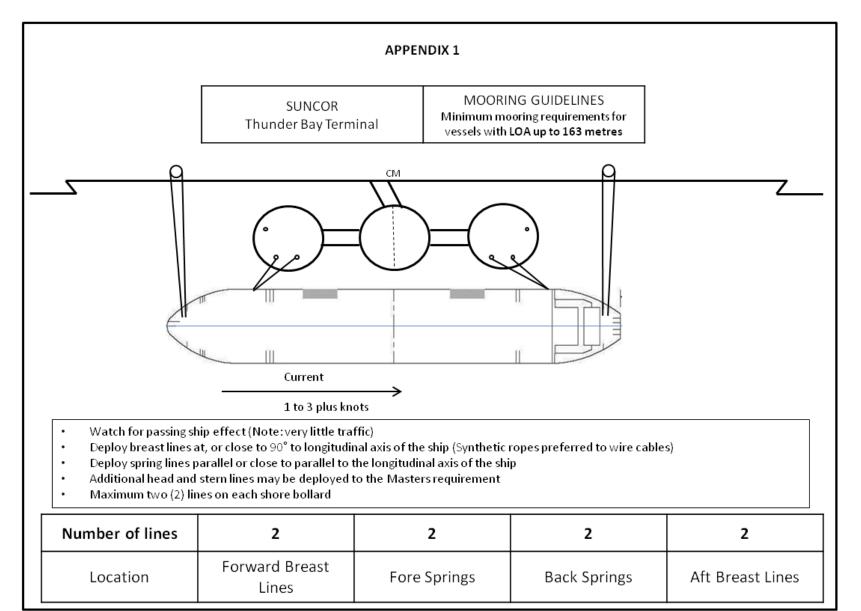
In the event of a spill or leak from the vessel:

- The transfer operation is to be stopped immediately and terminal to be informed.
- Suncor Marine Department to be informed.
- The vessel spill response plan is to be implemented as appropriate. This will include informing the proper authorities and initiating containment, recovery, and clean up procedures.
- The cause of the spill must be determined and rectified and confirmed with the Suncor Marine Department prior resumption of transfer operations

6.3 RESTARTING TRANSFER OPERATIONS AFTER A MARINE POLLUTION INCIDENT

 Transfer operations may only resume once the cause of the spill has been determined and remedied and after it has been clearly determined that restarting transfer operations will not interfere with the immediate, effective and sustained response to the marine pollution incident and after the terminal, Suncor Marine Department and the vessel have authorized a resumption of the transfer operation.

7 APPENDIX 1 MOORING DIAGRAM



Appendix 2 Vessel Shore Safety Checklist

8 APPENDIX 3 CARGO BALLAST TRANSFER PLANNING

Information Exchange

- Volume and grade of cargo/ballast to be transferred.
- Cargo location on vessel.
- Maximum acceptable pressure and flow rates.
- Preferred/mandatory transfer sequence.
- Communication process.
- Terminal rules and procedures.
- Notification required to slow down and stop flow.
- Emergency stops.
- Weather outlook.

Documented Operational Plan

- Volume and grade of cargo and ballast to be transferred.
- Agreed sequence of multi-grade cargo transfers.
- Communication signals for: standby to transfer; start transfer; slow down transfer; stand by to stop transfer; emergency stop of transfer; emergency shutdown of transfer.
- The maximum pressure at: the vessels manifold; the terminal manifold.
- The start-up flow rate, the maximum transfer flow rate, the tank topping (slowdown) rate.
- The notification time for slowing and stopping transfer.
- The emergency shutdown procedure and time required to implement.
- Cargo temperature limits.
- System of venting.
- Times of staff's duty change on vessel and in terminal.

9 APPENDIX 4 - SAFETY LETTER

Suncor Energy Products Partnership

		Terminal
		Date
		The Master MT
		Port
Dear Captain,		
Master of the tanker, and and understanding is requ	with the Terminal Representat irred to ensure the safety requ	our ship is at this terminal rests jointly with you, a ive. Before operations start your full co-operation uirements set out in the Ship/Shore Safety on safe practices that are widely accepted by the
tanker's stay alongside this		strictly to these requirements throughout your tour personnel do likewise and will co-operate
•		e, for our mutual safety, a member of the ake a routine inspection of your tanker.
. Where corrective action is we will require them to be		operations starting. If they have been started,
There can be no comprom	nise with safety.	
Please acknowledge recei	pt of this letter by countersign	ing and returning the attached copy.
	Signed (Terminal Rep	resentative)
	Terminal Representati	ve on duty is:
	Position or Title:	
	Contact Details:	
	Signed (Master)	
SS/MV		

10 APPENDIX 5 - THUNDER BAY SOUNDING CHART

Refer to embedded PDF for sounding chart (NOT INTENDED FOR NAVIGATION PURPOSE).

ISGOTT Checks pre-arrival Ship/Shore Safety Checklist

Date a	nd time:					
Port ar	nd berth:					
Tanker	:					
	al:					
Produc	ct to be transferred:					
	Part 1A. Tanker: checks pre-arrival					
Item	Check	Status	Remarks			
1	Pre-arrival information is exchanged (6.5, 21.2)	☐ Yes				
2	International shore fire connection is available (5.5, 19.4.3.1)	☐ Yes				
3	Transfer hoses are of suitable construction (18.2)	☐ Yes				
4	Terminal information booklet reviewed (15.2.2)	☐ Yes				
5	Pre-berthing information is exchanged (21.3, 22.3)	☐ Yes				
6	Pressure/vacuum valves and/or high velocity vents are operational (11.1.8)	☐ Yes				
7	Fixed and portable oxygen analysers are operational (2.4)	☐ Yes				
	Part 1B. Tanker: checks pre-arrival if using an inert gas system					
Item	Check	Status	Remarks			
8	Inert gas system pressure and oxygen recorders are operational (11.1.5.2, 11.1.11)	☐ Yes				
9	Inert gas system and associated equipment are operational (11.1.5.2, 11.1.11)	☐ Yes				
10	Cargo tank atmospheres' oxygen content is less than 8% (11.1.3)	☐ Yes				
11	Cargo tank atmospheres are at positive pressure (11.1.3)	☐ Yes				

ISGOTT Sixth Edition

Part 2. Terminal: checks pre-arrival				
Item	Check	Status	Remarks	
12	Pre-arrival information is exchanged (6.5, 21.2)	☐ Yes		
13	International shore fire connection is available (5.5, 19.4.3.1, 19.4.3.5)	☐ Yes		
14	Transfer equipment is of suitable construction (18.1, 18.2)	☐ Yes		
15	Terminal information booklet transmitted to tanker (15.2.2)	☐ Yes		
16	Pre-berthing information is exchanged (21.3, 22.3)	☐ Yes		

ISGOTT Checks after mooring Ship/Shore Safety Checklist

	Part 3. Tanker: checks after mooring					
Item	Check	Status	Remarks			
17	Fendering is effective (22.4.1)	☐ Yes				
18	Mooring arrangement is effective (22.2, 22.4.3)	☐ Yes				
19	Access to and from the tanker is safe (16.4)	☐ Yes				
20	Scuppers and savealls are plugged (23.7.4, 23.7.5)	☐ Yes				
21	Cargo system sea connections and overboard discharges are secured (23.7.3)	☐ Yes				
22	Very high frequency and ultra high frequency transceivers are set to low power mode (4.11.6, 4.13.2.2)	☐ Yes				
23	External openings in superstructures are controlled (23.1)	☐ Yes				
24	Pumproom ventilation is effective (10.12.2)	☐ Yes				
25	Medium frequency/high frequency radio antennae are isolated (4.11.4, 4.13.2.1)	☐ Yes				
26	Accommodation spaces are at positive pressure (23.2)	☐ Yes				
27	Fire control plans are readily available (9.11.2.5)	☐ Yes				

	Part 4. Terminal: checks after mooring					
Item	Check	Status	Remarks			
28	Fendering is effective (22.4.1)	☐ Yes				
29	Tanker is moored according to the terminal mooring plan (22.2, 22.4.3)	☐ Yes				
30	Access to and from the terminal is safe (16.4)	☐ Yes				
31	Spill containment and sumps are secure (18.4.2, 18.4.3, 23.7.4, 23.7.5)	☐ Yes				

ISGOTT Checks pre-transfer Ship/Shore Safety Checklist

Date an	nd time:			
Port an	d berth:			
Tanker:				
Termina	al:			
Produc	t to be transferred:			
	Part 5A. Tanker and	terminal: p	re-transfer o	conference
Item	Check	Tanker status	Terminal status	Remarks
32	Tanker is ready to move at agreed notice period (9.11, 21.7.1.1, 22.5.4)	☐ Yes	☐ Yes	
33	Effective tanker and terminal communications are established (21.1.1, 21.1.2)	☐ Yes	☐ Yes	
34	Transfer equipment is in safe condition (isolated, drained and de-pressurised) (18.4.1)	☐ Yes	☐ Yes	
35	Operation supervision and watchkeeping is adequate (7.9, 23.11)	☐ Yes	☐ Yes	
36	There are sufficient personnel to deal with an emergency (9.11.2.2, 23.11)	☐ Yes	☐ Yes	
37	Smoking restrictions and designated smoking areas are established (4.10, 23.10)	☐ Yes	☐ Yes	
38	Naked light restrictions are established (4.10.1)	☐ Yes	☐ Yes	
39	Control of electrical and electronic devices is agreed (4.11, 4.12)	☐ Yes	☐ Yes	
40	Means of emergency escape from both tanker and terminal are established (20.5)	☐ Yes	☐ Yes	
41	Firefighting equipment is ready for use (5, 19.4, 23.8)	☐ Yes	☐ Yes	
42	Oil spill clean-up material is available (20.4)	☐ Yes	☐ Yes	
43	Manifolds are properly connected (23.6.1)	☐ Yes	☐ Yes	
44	Sampling and gauging protocols are agreed (23.5.3.2, 23.7.7.5)	☐ Yes	☐ Yes	
45	Procedures for cargo, bunkers and ballast handling operations are agreed (21.4, 21.5, 21.6)	☐ Yes	☐ Yes	
46	Cargo transfer management controls are agreed (12.1)	☐ Yes	☐ Yes	
47	Cargo tank cleaning requirements, including crude oil washing, are agreed (12.3, 12.5, 21.4.1)	☐ Yes	☐ Yes	See also parts 7B/7C as applicable

	Part 5A. Tanker and terminal: pre-transfer conference (cont.)					
Item	Check	Tanker status	Terminal status	Remarks		
48	Cargo tank gas freeing arrangements agreed (12.4)	☐ Yes	☐ Yes	See also part 7C		
49	Cargo and bunker slop handling requirements agreed (12.1, 21.2, 21.4)	☐ Yes	☐ Yes	See also part 7C		
50	Routine for regular checks on cargo transferred are agreed (23.7.2)	☐ Yes	☐ Yes			
51	Emergency signals and shutdown procedures are agreed (12.1.6.3, 18.5, 21.1.2)	☐ Yes	☐ Yes			
52	Safety data sheets are available (1.4.4, 20.1, 21.4)	☐ Yes	☐ Yes			
53	Hazardous properties of the products to be transferred are discussed (1.2, 1.4)	☐ Yes	☐ Yes			
54	Electrical insulation of the tanker/terminal interface is effective (12.9.5, 17.4, 18.2.14)	☐ Yes	☐ Yes			
55	Tank venting system and closed operation procedures are agreed (11.3.3.1, 21.4, 21.5, 23.3.3)	☐ Yes	☐ Yes			
56	Vapour return line operational parameters are agreed (11.5, 18.3, 23.7.7)	☐ Yes	☐ Yes			
57	Measures to avoid back-filling are agreed (12.1.13.7)	☐ Yes	☐ Yes			
58	Status of unused cargo and bunker connections is satisfactory (23.7.1, 23.7.6)	☐ Yes	☐ Yes			
59	Portable very high frequency and ultra high frequency radios are intrinsically safe (4.12.4, 21.1.1)	☐ Yes	☐ Yes			
60	Procedures for receiving nitrogen from terminal to cargo tank are agreed (12.1.14.8)	☐ Yes	☐ Yes			

	Part 5B. Tanker and terminal: bulk liquid chemicals. Checks pre-transfer					
Item	Check	Tanker status	Terminal status	Remarks		
61	Inhibition certificate received (if required) from manufacturer	☐ Yes	☐ Yes			
62	Appropriate personal protective equipment identified and available (4.8.1)	☐ Yes	☐ Yes			
63	Countermeasures against personal contact with cargo are agreed (1.4)	☐ Yes	☐ Yes			
64	Cargo handling rate and relationship with valve closure times and automatic shutdown systems is agreed (16.8, 21.4, 21.5, 21.6)	☐ Yes	☐ Yes			
65	Cargo system gauge operation and alarm set points are confirmed (12.1.6.6.1)	☐ Yes	☐ Yes			

	Part 5B. Tanker and terminal: bulk liquid chemicals. Checks pre-transfer (cont.)					
Item	Check	Tanker status	Terminal status	Remarks		
66	Adequate portable vapour detection instruments are in use (2.4)	☐ Yes	☐ Yes			
67	Information on firefighting media and procedures is exchanged (5, 19)	☐ Yes	☐ Yes			
68	Transfer hoses confirmed suitable for the product being handled (18.2)	☐ Yes	☐ Yes			
69	Confirm cargo handling is only by a permanent installed pipeline system	☐ Yes	☐ Yes			
70	Procedures are in place to receive nitrogen from the terminal for inerting or purging (12.1.14.8)	☐ Yes	☐ Yes			

	Part 5C. Tanker and terminal: liquefied gas. Checks pre-transfer				
Item	Check	Tanker status	Terminal status	Remarks	
71	Inhibition certificate received (if required) from manufacturer	☐ Yes	☐ Yes		
72	Water spray system is operational (5.3.1, 19.4.3)	☐ Yes	☐ Yes		
73	Appropriate personal protective equipment is identified and available (4.8.1)	☐ Yes	☐ Yes		
74	Remote control valves are operational	☐ Yes	☐ Yes		
75	Cargo pumps and compressors are operational	☐ Yes	☐ Yes		
76	Maximum working pressures are agreed between tanker and terminal (21.4, 21.5, 21.6)	☐ Yes	☐ Yes		
77	Reliquefaction or boil-off control equipment is operational	☐ Yes	☐ Yes		
78	Gas detection equipment is appropriately set for the cargo (2.4)	☐ Yes	☐ Yes		
79	Cargo system gauge operation and alarm set points are confirmed (12.1.6.6.1)	☐ Yes	☐ Yes		
80	Emergency shutdown systems are tested and operational (18.5)	☐ Yes	☐ Yes		
81	Cargo handling rate and relationship with valve closure times and automatic shutdown systems is agreed (16.8, 21.4, 21.5, 21.6)	☐ Yes	☐ Yes		
82	Maximum/minimum temperatures/pressures of the cargo to be transferred are agreed (21.4, 21.5, 21.6)	☐ Yes	☐ Yes		
83	Cargo tank relief valve settings are confirmed (12.11, 21.2, 21.4)	☐ Yes	☐ Yes		

	Part 6.	Tanker and terminal: agreements pre-transfer		
Part 5 item	Agreement	Details	Tanker initials	Terminal initials
32	Tanker manoeuvring readiness	Notice period (maximum) for full readiness to manoeuvre:		
		Period of disablement (if permitted):		
33	Security protocols	Security level:		
		Local requirements:		
33	Effective tanker/terminal communications	Primary system:		
		Backup system:		
35	Operational supervision and watchkeeping	Tanker:		
	. 0	Terminal:		
37 38	Dedicated smoking areas and naked lights restrictions	Tanker:		
30		Terminal:		
45	Maximum wind, current and sea/swell criteria or other	Stop cargo transfer:		
	environmental factors	Disconnect:		
		Unberth:		
45 46	Limits for cargo, bunkers and ballast handling	Maximum transfer rates:		
40	, and the second	Topping-off rates:		
		Maximum manifold pressure:		
		Cargo temperature:		
		Other limitations:		

Tanker initials	Terminal initials
	initiats

	Part 6. Tanker and terminal: agreements pre-transfer (cont.)				
Part 5 item ref	Agreement	Details	Tanker initials	Terminal initials	
83	For gas tanker only:	Tank 1:			
	cargo tank relief valve settings	Tank 2:			
		Tank 3:			
		Tank 4:			
		Tank 5:			
		Tank 6:			
		Tank 7:			
		Tank 8:			
		Tank 9:			
		Tank 10:			
XX	Exceptions and additions	Special issues that both parties should be aware of:			

Date a	nd time:		
Port ar	nd berth:		
Tanker	:		
Termin	al:		
Produc	et to be transferred:		
	Part 7A. Gener	al tanker: che	cks pre-transfer
Item	Check	Status	Remarks
84	Portable drip trays are correctly positioned and empty (23.7.5)	☐ Yes	
85	Individual cargo tank inert gas supply valves are secured for cargo plan (12.1.13.4)	☐ Yes	
86	Inert gas system delivering inert gas with oxygen content not more than 5% (11.1.3)	☐ Yes	
87	Cargo tank high level alarms are operational (12.1.6.6.1)	☐ Yes	
88	All cargo, ballast and bunker tanks openings are secured (23.3)	☐ Yes	
	Part 7B. Tanker: checks pr	e-transfer if	crude oil washing is planned
Item	Check	Status	Remarks
89	The completed pre-arrival crude oil washing checklist, as contained in the approved crude oil washing manual, is copied to terminal (12.5.2, 21.2.3)	☐ Yes	
90	Crude oil washing checklists for use before, during and after crude oil washing are in place ready to complete, as contained in the approved crude oil washing manual (12.5.2, 21.6)	☐ Yes	

ISGOTT Checks after pre-transfer conference Ship/Shore Safety Checklist

For tankers that will perform tank cleaning alongside and/or gas freeing alongside

	Part 7C. Tanker: checks prior to tank cleaning and/or gas freeing				
Item	Check	Status	Remarks		
91	Permission for tank cleaning operations is confirmed (21.2.3, 21.4, 25.4.3)	☐ Yes			
92	Permission for gas freeing operations is confirmed (12.4.3)	☐ Yes			
93	Tank cleaning procedures are agreed (12.3.2, 21.4, 21.6)	☐ Yes			
94	If cargo tank entry is required, procedures for entry have been agreed with the terminal (10.5)	☐ Yes			
95	Slop reception facilities and requirements are confirmed (12.1, 21.2, 21.4)	☐ Yes			

Declaration

We the undersigned have checked the items in the applicable parts 1 to 7 as marked and signed below:

	Tanker	Terminal
Part 1A. Tanker: checks pre-arrival		
Part 1B. Tanker: checks pre-arrival if using an inert gas system		
Part 2. Terminal: checks pre-arrival		
Part 3. Tanker: checks after mooring		
Part 4. Terminal: checks after mooring		
Part 5A. Tanker and terminal: pre-transfer conference		
Part 5B. Tanker and terminal: bulk liquid chemicals. Checks pre-transfer		
Part 5C. Tanker and terminal: liquefied gas. Checks pre-transfer		
Part 6. Tanker and terminal: agreements pre-transfer		
Part 7A. General tanker: checks pre-transfer		
Part 7B. Tanker: checks pre-transfer if crude oil washing is planned		
Part 7C. Tanker: checks prior to tank cleaning and/or gas freeing		
In accordance with the guidance in chapter 25 of <i>ISGOTT</i> , we have satisfied of made are correct to the best of our knowledge and that the tanker and termin		

ne transfer operation.

We have also agreed to carry out the repetitive checks noted in parts 8 and 9 of the ISGOTT SSSCL, which should occur at intervals of not more than ____ hours for the tanker and not more than ____ hours for the terminal.

If, to our knowledge, the status of any item changes, we will immediately inform the other party.

Tanker	Terminal
Name	Name
Rank	Position
Signature	Signature
Date	Date
Time	Time

ISGOTT Checks during transfer Ship/Shore Safety Checklist

Repetitive checks

	Part 8. Tanker: repetitive checks during and after transfer							
Item ref	Check	Time	Time	Time	Time	Time	Time	Remarks
Interv	Interval time: hrs							
8	Inert gas system pressure and oxygen recording operational	☐ Yes						
9	Inert gas system and all associated equipment are operational	☐ Yes						
11	Cargo tank atmospheres are at positive pressure	☐ Yes						
18	Mooring arrangement is effective	☐ Yes						
19	Access to and from the tanker is safe	☐ Yes						
20	Scuppers and savealls are plugged	☐ Yes						
23	External openings in superstructures are controlled	☐ Yes						
24	Pumproom ventilation is effective	☐ Yes						
28	Tanker is ready to move at agreed notice period	☐ Yes						
29	Fendering is effective	☐ Yes						
33	Communications are effective	☐ Yes						
35	Supervision and watchkeeping is adequate	☐ Yes						
36	Sufficient personnel are available to deal with an emergency	☐ Yes						
37	Smoking restrictions and designated smoking areas are complied with	☐ Yes						
38	Naked light restrictions are complied with	☐ Yes						

Part 8. Tanker: repetitive checks during and after transfer (cont.)									
39	Control of electrical devices and equipment in hazardous zones is complied with	☐ Yes							
40 41 42 51	Emergency response preparedness is satisfactory	☐ Yes							
54	Electrical insulation of the tanker/terminal interface is effective	☐ Yes							
55	Tank venting system and closed operation procedures are as agreed	☐ Yes							
85	Individual cargo tank inert gas valves settings are as agreed	☐ Yes							
86	Inert gas delivery maintained at not more than 5% oxygen	☐ Yes							
87	Cargo tank high level alarms are operational	☐ Yes							
Initial	s								

	Part 9. Terminal: repetitive checks during and after transfer							
Item ref	Check	Time	Time	Time	Time	Time	Time	Remarks
Interv	Interval time: hrs							
18	Mooring arrangement is effective	☐ Yes						
19	Access to and from the terminal is safe	☐ Yes						
29	Fendering is effective	☐ Yes						
32	Spill containment and sumps are secure	☐ Yes						
33	Communications are effective	☐ Yes						
35	Supervision and watchkeeping is adequate	☐ Yes						
36	Sufficient personnel are available to deal with an emergency	☐ Yes						
37	Smoking restrictions and designated smoking areas are complied with	☐ Yes						
38	Naked light restrictions are complied with	☐ Yes						
39	Control of electrical devices and equipment in hazardous zones is complied with	☐ Yes						
40 41 47 51	Emergency response preparedness is satisfactory	☐ Yes						
54	Electrical insulation of the tanker/terminal interface is effective	☐ Yes						
55	Tank venting system and closed operation procedures are as agreed	☐ Yes						
Initial	s							

