
MONTREAL REFINERY

INFORMATION TO VESSELS

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

IMPORTANT

- Smoking is strictly prohibited 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:

514 640 8177

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

For more information

Suncor Marine Department

marineop@suncor.com

<http://www.suncor.com/marine>

Version:

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GENERAL INFORMATION

1 GENERAL INFORMATION

1.1. LOCATION

The facility is shown on Canadian Hydrographic Service Chart number 1310 - Port de Montreal in latitude 45° 37.8' north, longitude 73° 29.5' west



1.2. BERTH DESCRIPTION

- The wharf is designed primarily to load and discharge vessels containing crude oil, petroleum products and petro chemicals.
- The dock face lies approximately 035° - 215° in close alignment to the navigation channel which runs 025° - 205° in the approaches to and off the berth. The docks breasting length is 278 metres and the overall length, including a mooring dolphin situated off the south west end of the dock, is 345 metres.
- The facility is divided into two berths, namely Berth 109 and Berth 110 East (There is a

short inside berth, 110 West, which is not used for bulk oil or chemical transfers). Each of the two berths is fitted with hard arm transfer manifolds. The location of the shore manifolds and vessels bow to centre of manifold and stern to centre of manifold dimensions are key factors in determining if vessel shall fit to berth or not (See Section 3).

- Two vessels can be moored alongside the facility together. i.e. one at **109** and the other at **110 East**. This is subject to an assessment of the two vessels dimensions, other criteria, and requires approval by Suncor Marine Department.
- Vessels are berthed starboard side to. (i.e. bow to the river current).
- There is no shore gangway and vessels must arrive at the facility with the vessels gangway ready to be deployed. The elevation of the dock is approximately 5.8 metres above the river level at chart datum.

1.3. WATER DEPTH

- The depth of water is published by the Port of Montreal which can be found on below link <http://www.port-montreal.com/pmgeo/navires.do?action=getmap&mapname=installations&lang=en>
- At a minimum, the vessel 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 their ISM guidelines reference to net under keel clearance when alongside the terminal. Copies of the Coastguard regulations can be obtained from the vessels agents.
- Montreal is a fresh water, non-tidal port. Water levels do vary and are subject to climatic conditions such as long periods of sustained precipitation, periods of drought and the thawing of accumulated snow and ice in the spring.
- The Canadian Hydrographic Service (<http://www.charts.gc.ca/index-eng.asp>) provides mariners with continuous, real-time information on water levels at various locations in Montreal Harbour. Statistical data is also maintained to assist in forecasting water levels and aid mariners in voyage planning.
- Suncor advises all Masters, Owners, Operators, Brokers etc. involved in shipments to, from or within the Port de Montreal to secure information on water levels in advance of the vessel's actual dates of the vessels visit. The operation centre of the Port of Montreal interfaces with the Canadian Hydrographic Service, and is an alternative contact point for water level information (**See Section 2, Communications**).

1.4. SERVICES AT THE BERTH

- Bunkers: **No pipeline supply**
Bunkers are not available directly from the refinery. Bunkers are available in the Port of Montreal by marine delivery and truck delivery. Suncor can arrange for supply of Suncor Marine Fuels via the order desk **514-640-8361**. No marine fuelling barge is allowed to come alongside a vessel at the facility if the vessel is engaged in cargo or ballast transfer operations (**See Section 4, Rules and Regulations**).
- Fresh Water: **Available , to be coordinated with Port of Montreal authority through vessel agent.**
- Garbage Disposal: **Only available through private contractors**
Garbage from the vessel cannot be placed on the dock or otherwise accepted into Suncor’s facility. Third party contractors can provide this service directly for the vessel, usually by barge at a location other than at Suncor berths.
- Slop Removal: **Only available through private contractors.**
Engine bilge or other non-cargo slops are not accepted by the refinery. Cargo slops may be accepted, potentially at a cost, into the refinery subject to prior approval and may be required to be analysed for content. Slops, if due to their content are not accepted by the refinery, must be removed directly from the vessel by a third party waste disposal contractor at a location other than at Suncor berths.

1.5. SECURITY

1.5.1 Access to and from the vessel

Access to and from the vessel is controlled by a gate. Masters should advise the refinery operations centre of persons who are approved to visit the vessel.

Port Facility Security Officer (PFSO)

Name	Numbers
Rui Frano	+1-514-650-4446 (office)
E-mail	rfranco@suncor.com
Cell	+1-514-617-5021

Assistant Port Facility Security Officer (APFSO)

Name	Numbers
Steve Richard	+1-514-650-4091 (office)

Email	strichard@suncor.com
Cell	+1-438-827-2754

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.

Suncor has a “Zero Tolerance” policy for Alcohol and Drug intoxication for vessel crew and personnel entering or leaving the facility.

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.

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

- Masters are referred to Canadian Hydrographic Service Publication ATL 112 “*Sailing Directions St. Lawrence River, Cap-Rouge Montreal*” which contains, in its appendices, detailed weather information for the Port of Montreal.
- In general terms, the average temperature is below freezing for December through March requiring Masters to plan ahead and ensure that the deck crew has adequate warm clothing, foot wear, personal protective gear, and that deck machinery is maintained and in operable condition.

1.7 RIVER CURRENT

- Currents are indicated on the Port of Montreal Charts which show the rate off Suncor’s facility is about 2 knots and the direction to be almost parallel to the face of the berths.

COMMUNICATIONS

2 COMMUNICATIONS

2.1 ESTIMATED TIME OF ARRIVAL (ETA)

Masters are required to provide information on ETA's in accordance with the terms of the charter party and to provide the refinery operations centre (514-640-8259) with ETA notice's at 48 hours (if possible), 24 hours (mandatory), again at 12 and 4 hours and if ETA changes by +/- 1 hour.

The operations centre will then track the vessel's progress via the local VTS service.

2.2 USEFUL LOCAL NUMBERS

Contact	Numbers
Suncor Refinery Operations Centre - ETA's, visitors to dock etc.:	514 640 8259 (24 hrs)
Suncor Dock Office, staffed when vessel is alongside	514 640 8265
Port of Montreal Operations Centre, water levels, spills	514 283 7022/3 (24 hrs)
Canadian Coast Guard, Emergencies, Spills	<i>Any Coast Guard Radio Station</i>
Vessel Traffic System	514 651 7312 (24 hrs)
Canadian Hydrographic Service – (Internet)	http://waterlevels.gc.ca/eng
Immigration Canada	514 496 2772
Laurentian Pilotage Authority Dispatch	514 496-2156 (24 hrs)
URGENCE MARINE INC ., garbage and waste disposal	514 640 3138
Ocean Remorquage - Towing and Salvage, tug assist	1 877 694 1414
Montreal Boat Men, tug assist	514 640 4970 (24 hrs)
Police	911
Fire	911
Suncor Marine Department – Voyage Orders	905 804 4500
Suncor Marine Bunker order desk	514-640-8361

BERTHING AND MOORING

3 BERTHING AND MOORING

3.1 VESSEL SIZE AND RESTRICTIONS - BERTH 110 EAST

The key vessel criterion at this berth is “*stern to centre of manifold*”. The shore manifold is located at 30.5 metres, from the downstream end of the dock, resulting in the stern overhanging the dock and all stern lines leading forward. The navigation chart shows shallow water approximately 75 metres downstream from the dock.

Vessel Size Parameters	Restriction
Maximum SCM ^{(1)*}	70 m
Maximum Length	135m
Minimum manifold above water	2.1 m ^{(2)*}
Maximum manifold above water	17.5 m ^{(2)*}
Maximum displacement.	20,000t
*Note ⁽¹⁾ Vessel starboard side to. ⁽²⁾ at chart datum.	

3.2 VESSEL SIZE AND RESTRICTIONS - BERTH 109

The key vessel criteria at this berth is “*bow to centre of manifold*”. As the BCM increases, the vessel can deploy more effective forward breast lines; however the navigational chart indicates shallow water in the vicinity of the mooring dolphin in line with the dock face.

Vessel Size Parameters	Restrictions
Maximum bow to centre of manifold ^{(1)*}	130m
Maximum length ^{(4)*}	170m
Maximum length ^{(1)(3)*}	258m
Maximum displacement ^{(1)(3)*}	98,842t
Minimum manifold above water level (Crude arm L-190039) ^{(5)*}	1.46 ^{(2)*}
Minimum manifold above water level (All other arms)	2.0m ^{(2)*}
Maximum manifold above water level (Crude arm L-190039) ^{(5)*}	19.315 ^{(2)*}
Maximum manifold above water level (All other arms)	17.55m ^{(2)*}
<p>*Note ⁽¹⁾ vessel starboard side to, berth 110 East is vacant ⁽²⁾ at chart datum ⁽³⁾ Berthing velocity not to exceed 0.075m/s ⁽⁴⁾ if berth 110 East is occupied ⁽⁵⁾ reference Section 5.1</p>	

When vessels are berthed simultaneously at berths 109 and 110; a minimum distance of 30m

is to be maintained between the two vessels.

3.3 SPOT APPROVAL

The parameters shown in 3.1 and 3.2 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.

3.4 MOORING CRITERIA

- The two berths do not have a history of mooring problems. Masters should be aware of the strong downstream current and the probability of passing vessel effects while their vessel is secured at the berth.
- All vessel mooring wires must be fitted with synthetic mooring tails that meet OCIMF guidelines. i.e. 11 metres in length with a minimum breaking strength of 125% of the breaking strength of the wire to which they are attached and be connected to the wire with Mandel or Tonsberg type shackles.
- Mooring lines in similar service, e.g. spring lines, should be of the same material and be similar in length. Mixed mooring is prohibited.
- With the exception of the mooring dolphin upstream of Berth 109 and two mooring bollards at the downstream end of Berth 110 West, mooring bollards are along the face of the berths. Vessel Masters should prepare their mooring plan accordingly.
- While the responsibility for the adequate mooring of a vessel rests with the Master, the terminal has an interest in ensuring that vessels are securely and safely moored. Appendix 1, Mooring Guideline Diagrams describes the minimum moorings which terminal staff will expect vessels to deploy while at this facility.

3.5 BERTHING INFORMATION

- Berths 109 and 110 East are almost parallel to the channel and the river current. The preferred berthing procedure - see Section 3.6 - is to stem the current and berth starboard side to.
- Both berths are provided with adequate fendering. Masters are cautioned to exercise care in the berthing manoeuvre to minimize the angle and speed of approach.

3.6 BERTHING MANOEUVRES

- The standard procedure is to approach the facility from downstream, stemming the two knot river current and preparing for berthing starboard side to. Care should be taken to

ensure that the vessel remains in the channel until safely navigated past the shallow water area just downstream of the facility.

- When clear of the shallow water area, the vessel departs the channel to starboard and approaches the berth. When away from the dock, the vessel is manoeuvred using the effect of the current, the vessels engines, the rudder, and is dependent on the vessel size and environmental conditions, tug assist, sideways onto the berth.
- When Berth 110 East is occupied, the berthing of a vessel into Berth 109 is restricted. Vessel berthing will be considered and their acceptance will be subject to Suncor’s Marine Department approval.
- Suncor will not normally permit vessels to berth port side to at either Berth 109 or 110 East.

3.7 TUG ASSIST

- The safe handling of the vessel is the responsibility of the Master and his/her Pilot. Suncor does expect that effective use of tug assist will be utilized by vessel Masters in certain circumstances. The objective of tug assist is to generally aid in the safe berthing and unberthing of the vessel in particular, to minimize the risk of a hard contact with the berth and/or damage to the berth’s hard arm transfer equipment.
- When tugs are required to be utilized they shall be tethered.
- Minimum tug requirements - Masters shall increase these requirements at their discretion but shall not decrease these requirements without the written approval of Suncor’s Marine Department.
- To help minimize the risk of a hard contact while berthing or unberthing, vessels are required to utilize tug assistance in accordance with the following schedule.

Vessel Parameters	# Tugs for Berthing	# Tugs for Unberthing
Up to 19,999 t displ. with Bow Thruster	-	--
Up to 19,999 t displ. without Bow Thruster	1	1
20,000 – 39,999 t displ.	2	2
Vessels over 40,000 t displ.	2	2

N.B. In winter, when ice obstructs the vessels access to the berth, an additional tug will be required for ice management.

3.8 LINESMEN

- An adequate number of shore linesmen will be provided to take vessel lines and perform dock mooring duties.

N.B. vessel crews on both foreign and Canadian flag vessels will not be utilized to perform dock mooring duties.

<i>Guideline</i>	<i>Berthing</i>	<i>Unberthing</i>
Up to 19,999 t displ.	4 Persons	4 Persons
20,000 t displ. and above	6 Persons	4 Persons

3.9 ENVIRONMENTAL LIMITS

- Wind Limits: Berthing

The Port of Montreal is not an exposed port and the Masters decision to berth will be subject to an evaluation of the wind direction and speed, the load condition of the vessel, the availability of tug assist and the capability of the vessels mooring equipment. Vessels should not be berthed in adverse wind conditions i.e. offshore or onshore winds in excess of 30 knots.

- Adverse wind conditions while in the berth.

Masters are reminded that in adverse wind conditions the access to a safe anchorage in the Port may be limited by supply/demand. If a Master elects to remain on the berth in adverse wind conditions he/she must take all necessary precautions such as deploying additional moorings and engaging tugs to aid in keeping the vessel safely alongside.

Stop cargo	25kt
Disconnect arm	30kt
Take precautionary action	35Kts

RULES AND REGULATIONS

4 RULES AND REGULATIONS

4.1 GENERAL FEDERAL GOVERNMENT REQUIREMENTS

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 SPECIAL 'ICE NAVIGATION' REQUIREMENTS

Masters of laden tankers destined for or departing Suncor's Montreal Terminal are advised that vessels must be in compliance with the ***"joint Industry - Coast Guard guidelines for the control of oil tankers and bulk chemical carriers in ice control zones of Eastern Canada"*** when transiting the Gulf and River St. Lawrence in the winter.

4.3 PORT OF MONTREAL REGULATIONS

Masters should ensure compliance with these regulations i.e. National Harbours Board Bylaw A-1.

4.4 SUNCOR MONTREAL REFINERY TERMINAL RULES AND PROCEDURE

Tankers destined for the Terminal are required to have the latest edition of the "International Safety Guide for Oil Tankers and Terminals - ISGOTT" on board.

Suncor is committed to safe operations and the protection of the environment at its Montreal Terminal. Vessel staff are requested to immediately bring any unsafe conditions or pollution risks to the attention of terminal staff and to take appropriate action to remedy the situation, including the suspension of cargo transfer activity.

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 barge supervisors will adhere to the following Suncor Montreal Marine Terminal Rules and Procedures after completion of berthing operations.

2. Safety Check List

On completion of berthing and prior to the commencement of deballasting or 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. This safety Check List is based on the recommendations of the “International Safety Guide for Oil Tankers and Terminals” (ISGOTT).

3. Gangway

The vessels 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 5.8m.

4. Vessels Decks

Walkways required for accessing cargo systems, deck machinery and emergency equipment shall be kept clear of obstructions, and at all times 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 short notice not exceeding 15 minutes.

6. Repairs

No hot work is to be performed on board any vessel while alongside the terminal. The testing of radar, vessels 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 Suncor Marine Department. Chipping and scraping on the deck or hull is prohibited.

7. Staffing

A sufficient number of vessels personnel to safely handle the operation in progress and deal

with emergencies, including an emergency departure from the berth, are to be onboard at all times while the vessel is at the berth.

8. Vessels Moorings

Vessel personnel must frequently monitor and carefully tend the vessels moorings to ensure that the vessel is safely secured having regard for the weather and current conditions. ***N.B. Watch keepers should guard against “passing vessel effect” especially when the under keel clearance is low.***

9. Ship/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 vessel’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 deballasting or 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, then these 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, on the terminal, and 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, 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. Throughout vessel stay at berth, fire line shall be pressurized, 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 shall cease and cargo arm disconnected 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 or ballast 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 forecabin 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 at 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 all-round red light.
- (l) H2S portable monitors must be worn by all personnel working on deck if the cargo contains H2S

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. Emergency Escape

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

29. Noise

Due to the proximity of local residences and City of Montreal public spaces to the dock area at Montreal, vessels are required to make any and all efforts to reduce operational noise levels to the minimum possible while alongside Port of Montreal Sections 109 or 110, in collaboration with the terminal and attending Pollution & Safety Advisor (PSA), and always in consideration of maintaining safe and efficient operations and compliance to procedures

30. Berthing/Unberthing of vessel adjacent to another vessels at Sections 109/110

The vessel alongside the berth will be on 'Standby Mode' for the period of berthing/unberthing of another vessel at the adjacent section of the dock.

Vessel 'Standby Mode' factors to include, but are not limited to:

1. Vessel engines on immediate notice
2. Bridge, forward and aft mooring stations, manifold to be manned
3. Dock watch on standby
4. Portable fender standby, if available.

5

CARGO AND BALLAST TRANSFER

5 CARGO AND BALLAST TRANSFER

5.1 TERMINAL MANIFOLDS

- Both berths are fitted with metal cargo arms which present 8, 10, and 16 inch diameter flanges. Each cargo arm is fitted with an insulating flange.
- Maximum allowable working pressure at the shore manifold is 150 lb. per square inch (psig). For crude imports using loading arm L-190039, the pressure at the vessel manifold must be maintained above 80 psig at all times (target 100 psig) when the crude booster transfer pump, J-170009, is in use.
- *Berth 109* is fitted with six cargo arms. The following table shows the diameter of the transfer arms and the products transferred in them. They are indicated in the same order as found at the wharf starting from the west side going to the east side.

L-19035	L-1908	L-1907	L-1906	L-1905	L-190039
8 inch	8 inch	8 inch	10 inch.	10 inch	16 inch
Benzene vapor to VRU	Benzene	Nonene Mogas Ballast	Xylene Jet Fuel, ULSD, Marine Diesel Ballast	HFO Cat Feed Crude Oil Lube Stock Ballast Slops	Crude Oil VGO HFO

N.B.: There is a crossover between L-1907 and L-1906 to provide either two arms for Mogas or ULSD / Marine Diesel.

- *Berth 110* is fitted with three cargo arms. The following table shows the diameter of the transfer arms and the products transferred in them. They are indicated in the same order as found at the wharf starting from the west side going to the east side.

L-1909	L-1910	L-1911
8 inch	8 inch	8 inch
Jet Fuel ULSD Marine Diesel Ballast	Mogas Ballast	HFO Cat Feed Ballast Slops

- Maximum flow rates
Black products discharging at 10,000 bbl/hr.
Black products loading at 5,000 bbl/hr.

Clean products discharging at 8,000 bbl/hr.

Clean products loading at <5,000 bbl/hr. (if 8 in. piping or cargo arm is used - static and erosive limit)

Clean products loading at <4,500 bbl/hr. (if 10 in. piping or cargo arm is used - static and erosive limit)

Crude oil discharging at 18,000 bbl/hr. (16 in. cargo arm)

5.2 VESSEL MANIFOLDS

- The ship manifolds should be fitted with reducers that are made of steel and fitted with flanges conforming to regulations BS 1560, ANSI B16.5 or equivalent.

5.3 TERMINAL BALLAST RECEIVING CAPACITY

- The terminal capacity to receive ballast is limited as the total storage is 20,000 barrels and the available ullage is often less. Non SBT/CBT vessels destined to load at the terminal and requiring the use of ballast reception facilities should contact the refinery operations center prior to the vessel's arrival to discuss their requirements.

5.4 PUMPING DISTANCE

- The pumping distance from the dock to the shore cargo tanks may vary depending on the distance of the shore tank ranging 1 to 4 km.

5.5 CARGO AND BALLAST OPERATING PROCEDURES

- Before cargo and/or ballast transfer commences, the vessel's officer in charge and the terminal supervisor should exchange information and agree on a transfer plan which should be documented in writing. Information exchanged and the plan must include, as a minimum, the items shown in *Appendix 3*.
- *To facilitate clearing the shore transfer arms while loading/discharging black products, vessels may be requested by the terminal to receive approximately 500 barrels of diesel flush from shore-side for segregated (if possible) stowage onboard, with same to be pumped back ashore upon completion of loading/discharging cargo operations. Above arrangement to be confirmed with terminal and/or attending Pollution & Safety Advisor (PSA) prior to arrival.*

- Due to the proximity of local residences and City of Montreal public spaces to the dock area at Montreal, vessels are required to make any and all efforts to reduce operational noise levels to the minimum possible while alongside Port of Montreal Sections 109 or 110, in collaboration with the terminal and attending Pollution & Safety Advisor (PSA), and always in consideration of maintaining safe and efficient operations and compliance to procedures.

5.6 ENVIRONMENTAL LIMITS - CARGO OPERATIONS

- Stopping of cargo transfer - 25 knots. Disconnecting of loading arms - 30 knots

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 berths. Vessels are expected to be capable of fighting fires which occur on board, including securing capable external support, and notifying the proper authorities.

(Refer 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.

- disconnect transfer arms.
- stand by to cast off the moorings (if conditions allow).
- communicate with authorities.

Vessel will - secure vessel cargo system

- ready vessel for emergency departure.
- communicate with authorities.
- depart berth as required.

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 vessels 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 transfer arms or hoses. (if conditions allow)

- stand by to cast off the moorings.

Vessel will - secure vessel cargo system.

- ready vessel for emergency departure.
- communicate with authorities.
- depart berth as required.

6.2 SPILLS OR LEAKS

When environmental conditions permit, i.e. no ice at the berth, the terminal deploys a boom downstream of the vessel to deflect and capture marine spills occurred from the terminal or vessels at the terminal.

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 terminal's 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 Spill 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 ship 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

7 APPENDIX 1A

APPENDIX 1-A

SUNCOR MONTREAL EAST TERMINAL	MOORING GUIDELINES Minimum mooring requirements for vessels with LOA up to 135 metres	BERTH 109
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WIND LIMITS

- Stop cargo transfer: 25 knots
- Drain, disconnect arms: 30 Knots
- Take precautionary action: 35 knots

- Watch for passing ship effect
- Admissible load on dolphin: 100 t
- Admissible load on Dock Bollards: 64 t

Number of lines	3	2	3
Location	Head and Breast	Fore Springs	Back Springs Breast and Stern

8 APPENDIX 1B

APPENDIX 1-B

<p>SUNCOR MONTREAL EAST TERMINAL</p>	<p>MOORING GUIDELINES Minimum mooring requirements for vessels with LOA from 135 to 180 metres</p>	<p>BERTH 109</p>
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Watch for passing ship effect

- Admissible load on dolphin: 100 t
- Admissible load on Dock Bollards: 64 t

WIND LIMITS

- Stop cargo transfer: 25 knots
- Drain, disconnect arms: 30 Knots
- Take precautionary action: 35 knots

Number of lines	3	2	3
Location	Head and Breast	Fore Springs	Back Springs and Stern

9 APPENDIX 1C

<p>SUNCOR Montreal East Terminal</p>	<p>MOORING GUIDELINES Minimum mooring requirements for vessels with LOA from 180 to 258 metres</p>	<p>Berth 109</p>
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WIND LIMITS

- Stop cargo transfer: 25 knots
- Drain, disconnect arms: 30 Knots
- Take precautionary action: 35 knots

- Watch for passing ship effect
- Admissible load for Dolphin: 100t
- Admissible load on Dock Bollards: 75 t

Number of lines	4	-	4	4	-	4
Location	Head	Forward Breast Lines	Fore Springs	Back Springs	Aft Breast Lines	Stern Lines

10 APPENDIX 1D

APPENDIX 1-D

<p>SUNCOR MONTREAL EAST TERMINAL</p>	<p>MOORING GUIDELINES Minimum mooring requirements for vessels with LOA up to 135 metres</p>	<p>BERTH 110 EAST</p>
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- Watch for passing ship effect
- Admissible load on Dock Bollards: 64 t

WIND LIMITS

- Stop cargo transfer: 25 knots
- Drain, disconnect arms: 30 Knots
- Take precautionary action: 35 knots

Number of lines	3	2	3
Location	Head and Breast	Fore Springs	Back Springs
			Breast and Stern

11 APPENDIX 2 - 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; 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.

12 APPENDIX 3 - SAFETY LETTER**Suncor Energy Products Partnership**

Terminal _____

Date _____

The Master MT _____

Port _____

Dear Sir,

Responsibility for the safe conduct of operations while your ship is at this terminal rests jointly with you, as Master of the ship, and with the responsible Terminal Representative. We wish, therefore, before operations start, to seek your full co-operation and understanding on the safety requirements set out in the Ship/Shore Safety Check-List, which are based on safe practices that are widely accepted by the oil and tanker industries.

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

Before the start of operations, and from time to time thereafter, for our mutual safety, a member of the terminal staff, where appropriate together with a Responsible Officer, will make a routine inspection of your ship to ensure that elements addressed within the scope of the Ship/Shore Safety Check-List are being managed in an acceptable manner. Where corrective action is needed, we will not agree to operations commencing or, should they have been started, we will require them to be stopped.

Similarly, if you consider that safety is being endangered by any action on the part of our staff or by any equipment under our control, you should demand immediate cessation of operations.

There can be no compromise with safety.

Please acknowledge receipt of this letter by countersigning and returning the attached copy.

Signed (Terminal Representative) _____

Terminal Representative on duty is: _____

Position or Title: _____

Contact Details: _____

Signed (Master) _____

SS/MV _____ Date/Time _____

13 APPENDIX 4 - SHIP SHORE SAFETY CHECKLIST (ISGOTT 6TH EDITION)

Refer to page 44 ISGOTT 6 Checklist.

ISGOTT Checks pre-arrival Ship/Shore Safety Checklist

Date and time: _____

Port and berth: _____

Tanker: _____

Terminal: _____

Product to be transferred: _____

Part 1A. Tanker: checks pre-arrival			
Item	Check	Status	Remarks
1	Pre-arrival information is exchanged (6.5, 21.2)	<input type="checkbox"/> Yes	
2	International shore fire connection is available (5.5, 19.4.3.1)	<input type="checkbox"/> Yes	
3	Transfer hoses are of suitable construction (18.2)	<input type="checkbox"/> Yes	
4	Terminal information booklet reviewed (15.2.2)	<input type="checkbox"/> Yes	
5	Pre-berthing information is exchanged (21.3, 22.3)	<input type="checkbox"/> Yes	
6	Pressure/vacuum valves and/or high velocity vents are operational (11.1.8)	<input type="checkbox"/> Yes	
7	Fixed and portable oxygen analysers are operational (2.4)	<input type="checkbox"/> 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)	<input type="checkbox"/> Yes	
9	Inert gas system and associated equipment are operational (11.1.5.2, 11.1.11)	<input type="checkbox"/> Yes	
10	Cargo tank atmospheres' oxygen content is less than 8% (11.1.3)	<input type="checkbox"/> Yes	
11	Cargo tank atmospheres are at positive pressure (11.1.3)	<input type="checkbox"/> Yes	

Part 2. Terminal: checks pre-arrival			
Item	Check	Status	Remarks
12	Pre-arrival information is exchanged (6.5, 21.2)	<input type="checkbox"/> Yes	
13	International shore fire connection is available (5.5, 19.4.3.1, 19.4.3.5)	<input type="checkbox"/> Yes	
14	Transfer equipment is of suitable construction (18.1, 18.2)	<input type="checkbox"/> Yes	
15	Terminal information booklet transmitted to tanker (15.2.2)	<input type="checkbox"/> Yes	
16	Pre-berthing information is exchanged (21.3, 22.3)	<input type="checkbox"/> 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)	<input type="checkbox"/> Yes	
18	Mooring arrangement is effective (22.2, 22.4.3)	<input type="checkbox"/> Yes	
19	Access to and from the tanker is safe (16.4)	<input type="checkbox"/> Yes	
20	Scuppers and savealls are plugged (23.7.4, 23.7.5)	<input type="checkbox"/> Yes	
21	Cargo system sea connections and overboard discharges are secured (23.7.3)	<input type="checkbox"/> Yes	
22	Very high frequency and ultra high frequency transceivers are set to low power mode (4.11.6, 4.13.2.2)	<input type="checkbox"/> Yes	
23	External openings in superstructures are controlled (23.1)	<input type="checkbox"/> Yes	
24	Pumproom ventilation is effective (10.12.2)	<input type="checkbox"/> Yes	
25	Medium frequency/high frequency radio antennae are isolated (4.11.4, 4.13.2.1)	<input type="checkbox"/> Yes	
26	Accommodation spaces are at positive pressure (23.2)	<input type="checkbox"/> Yes	
27	Fire control plans are readily available (9.11.2.5)	<input type="checkbox"/> Yes	

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

ISGOTT Checks pre-transfer Ship/Shore Safety Checklist

Date and time: _____

Port and berth: _____

Tanker: _____

Terminal: _____

Product to be transferred: _____

Part 5A. Tanker and terminal: pre-transfer 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)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
33	Effective tanker and terminal communications are established (21.1.1, 21.1.2)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
34	Transfer equipment is in safe condition (isolated, drained and de-pressurised) (18.4.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
35	Operation supervision and watchkeeping is adequate (7.9, 23.11)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
36	There are sufficient personnel to deal with an emergency (9.11.2.2, 23.11)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
37	Smoking restrictions and designated smoking areas are established (4.10, 23.10)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
38	Naked light restrictions are established (4.10.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
39	Control of electrical and electronic devices is agreed (4.11, 4.12)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
40	Means of emergency escape from both tanker and terminal are established (20.5)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
41	Firefighting equipment is ready for use (5, 19.4, 23.8)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
42	Oil spill clean-up material is available (20.4)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
43	Manifolds are properly connected (23.6.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
44	Sampling and gauging protocols are agreed (23.5.3.2, 23.7.7.5)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
45	Procedures for cargo, bunkers and ballast handling operations are agreed (21.4, 21.5, 21.6)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
46	Cargo transfer management controls are agreed (12.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
47	Cargo tank cleaning requirements, including crude oil washing, are agreed (12.3, 12.5, 21.4.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> 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)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	See also part 7C
49	Cargo and bunker slop handling requirements agreed (12.1, 21.2, 21.4)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	See also part 7C
50	Routine for regular checks on cargo transferred are agreed (23.7.2)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
51	Emergency signals and shutdown procedures are agreed (12.1.6.3, 18.5, 21.1.2)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
52	Safety data sheets are available (1.4.4, 20.1, 21.4)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
53	Hazardous properties of the products to be transferred are discussed (1.2, 1.4)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
54	Electrical insulation of the tanker/terminal interface is effective (12.9.5, 17.4, 18.2.14)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
55	Tank venting system and closed operation procedures are agreed (11.3.3.1, 21.4, 21.5, 23.3.3)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
56	Vapour return line operational parameters are agreed (11.5, 18.3, 23.7.7)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
57	Measures to avoid back-filling are agreed (12.1.13.7)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
58	Status of unused cargo and bunker connections is satisfactory (23.7.1, 23.7.6)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
59	Portable very high frequency and ultra high frequency radios are intrinsically safe (4.12.4, 21.1.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
60	Procedures for receiving nitrogen from terminal to cargo tank are agreed (12.1.14.8)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	

Additional for chemical tankers Checks pre-transfer

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	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
62	Appropriate personal protective equipment identified and available (4.8.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
63	Countermeasures against personal contact with cargo are agreed (1.4)	<input type="checkbox"/> Yes	<input type="checkbox"/> 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)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
65	Cargo system gauge operation and alarm set points are confirmed (12.1.6.6.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> 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)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
67	Information on firefighting media and procedures is exchanged (5, 19)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
68	Transfer hoses confirmed suitable for the product being handled (18.2)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
69	Confirm cargo handling is only by a permanent installed pipeline system	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
70	Procedures are in place to receive nitrogen from the terminal for inerting or purging (12.1.14.8)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	

Additional for gas tankers Checks pre-transfer

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	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
72	Water spray system is operational (5.3.1, 19.4.3)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
73	Appropriate personal protective equipment is identified and available (4.8.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
74	Remote control valves are operational	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
75	Cargo pumps and compressors are operational	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
76	Maximum working pressures are agreed between tanker and terminal (21.4, 21.5, 21.6)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
77	Reliquefaction or boil-off control equipment is operational	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
78	Gas detection equipment is appropriately set for the cargo (2.4)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
79	Cargo system gauge operation and alarm set points are confirmed (12.1.6.6.1)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
80	Emergency shutdown systems are tested and operational (18.5)	<input type="checkbox"/> Yes	<input type="checkbox"/> 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)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
82	Maximum/minimum temperatures/pressures of the cargo to be transferred are agreed (21.4, 21.5, 21.6)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
83	Cargo tank relief valve settings are confirmed (12.11, 21.2, 21.4)	<input type="checkbox"/> Yes	<input type="checkbox"/> 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: Terminal:		
37 38	Dedicated smoking areas and naked lights restrictions	Tanker: Terminal:		
45	Maximum wind, current and sea/swell criteria or other environmental factors	Stop cargo transfer: Disconnect: Unberth:		
45 46	Limits for cargo, bunkers and ballast handling	Maximum transfer rates: Topping-off rates: Maximum manifold pressure: Cargo temperature: Other limitations:		

Part 6. Tanker and terminal: agreements pre-transfer (cont.)				
Part 5 item	Agreement	Details	Tanker initials	Terminal initials
45 46	Pressure surge control	Minimum number of cargo tanks open: Tank switching protocols: Minimum number of cargo tanks open: Tank switching protocols: Full load rate: Topping-off rate: Closing time of automatic valves:		
46	Cargo transfer management procedures	Action notice periods: Transfer stop protocols:		
50	Routine for regular checks on cargo transferred are agreed	Routine transferred quantity checks:		
51	Emergency signals	Tanker: Terminal:		
55	Tank venting system	Procedure:		
55	Closed operations	Requirements:		
56	Vapour return line	Operational parameters: Maximum flow rate:		
60	Nitrogen supply from terminal	Procedures to receive: Maximum pressure: Flow rate:		

Part 6. Tanker and terminal: agreements pre-transfer (cont.)				
Part 5 num ref	Agreement	Details	Tanker initials	Terminal initials
83	For gas tanker only: cargo tank relief valve settings	Tank 1: 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 and time: _____

Port and berth: _____

Tanker: _____

Terminal: _____

Product to be transferred: _____

Part 7A. General tanker: checks pre-transfer			
Item	Check	Status	Remarks
84	Portable drip trays are correctly positioned and empty (23.7.5)	<input type="checkbox"/> Yes	
85	Individual cargo tank inert gas supply valves are secured for cargo plan (12.1.13.4)	<input type="checkbox"/> Yes	
86	Inert gas system delivering inert gas with oxygen content not more than 5% (11.1.3)	<input type="checkbox"/> Yes	
87	Cargo tank high level alarms are operational (12.1.6.6.1)	<input type="checkbox"/> Yes	
88	All cargo, ballast and bunker tanks openings are secured (23.3)	<input type="checkbox"/> Yes	

Part 7B. Tanker: checks pre-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)	<input type="checkbox"/> 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)	<input type="checkbox"/> 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)	<input type="checkbox"/> Yes	
92	Permission for gas freeing operations is confirmed (12.4.3)	<input type="checkbox"/> Yes	
93	Tank cleaning procedures are agreed (12.3.2, 21.4, 21.6)	<input type="checkbox"/> Yes	
94	If cargo tank entry is required, procedures for entry have been agreed with the terminal (10.5)	<input type="checkbox"/> Yes	
95	Slop reception facilities and requirements are confirmed (12.1, 21.2, 21.4)	<input type="checkbox"/> 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	<input type="checkbox"/>	<input type="checkbox"/>
Part 1B. Tanker: checks pre-arrival if using an inert gas system	<input type="checkbox"/>	<input type="checkbox"/>
Part 2. Terminal: checks pre-arrival	<input type="checkbox"/>	<input type="checkbox"/>
Part 3. Tanker: checks after mooring	<input type="checkbox"/>	<input type="checkbox"/>
Part 4. Terminal: checks after mooring	<input type="checkbox"/>	<input type="checkbox"/>
Part 5A. Tanker and terminal: pre-transfer conference	<input type="checkbox"/>	<input type="checkbox"/>
Part 5B. Tanker and terminal: bulk liquid chemicals. Checks pre-transfer	<input type="checkbox"/>	<input type="checkbox"/>
Part 5C. Tanker and terminal: liquefied gas. Checks pre-transfer	<input type="checkbox"/>	<input type="checkbox"/>
Part 6. Tanker and terminal: agreements pre-transfer	<input type="checkbox"/>	<input type="checkbox"/>
Part 7A. General tanker: checks pre-transfer	<input type="checkbox"/>	<input type="checkbox"/>
Part 7B. Tanker: checks pre-transfer if crude oil washing is planned	<input type="checkbox"/>	<input type="checkbox"/>
Part 7C. Tanker: checks prior to tank cleaning and/or gas freeing	<input type="checkbox"/>	<input type="checkbox"/>

In accordance with the guidance in chapter 25 of *ISGOTT*, we have satisfied ourselves that the entries we have made are correct to the best of our knowledge and that the tanker and terminal are in agreement to undertake the 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
Interval time:..... hrs								
8	Inert gas system pressure and oxygen recording operational	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
9	Inert gas system and all associated equipment are operational	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
11	Cargo tank atmospheres are at positive pressure	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
18	Mooring arrangement is effective	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
19	Access to and from the tanker is safe	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
20	Scuppers and savealls are plugged	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
23	External openings in superstructures are controlled	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
24	Pumproom ventilation is effective	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
28	Tanker is ready to move at agreed notice period	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
29	Fendering is effective	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
33	Communications are effective	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
35	Supervision and watchkeeping is adequate	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
36	Sufficient personnel are available to deal with an emergency	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
37	Smoking restrictions and designated smoking areas are complied with	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
38	Naked light restrictions are complied with	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	

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

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