
TERMINAL MONTREAL EAST SECTIONS 95, 96, 97

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 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:

For Asphalt: 514-968-1981

For Light Petroleum Products: 514-475-4062

Or 24/7 call number: 403-296-3000

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

For more information

Suncor Marine Department

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Version

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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
1.5.2.3	Vessel Chandlers and Other Visitors to Vessel.....	9
1.5.2.4	Unaccompanied Luggage	10
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
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	14
3.5	Berthing 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	Special ‘ice navigation’ requirements.....	18
4.3	Port of Montreal regulations	18
4.4	Suncor TME rules and procedure	18
5	Cargo and Ballast transfer.....	27
5.1	Terminal Manifolds.....	27
5.2	Terminal Ballast Receiving Capacity	27
5.3	Cargo and Ballast Operating Procedures.....	27

5.4 Environmental Limits - Cargo Operations.....	28
6 Emergency Response to Fires, Spills, leaks, etc.....	30
6.1 Fires.....	30
6.1.1 Actions in the Event of Fire at Terminal.....	30
6.1.2 Action in Event of Fire on Board a Vessel	30
6.2 Spills or Leaks	31
6.2.1 Terminal Spills or Leaks	31
6.2.2 Vessel Spill or Leaks.....	31
6.3 Restarting Transfer Operations after a Marine Pollution Incident.....	31
7 Appendix – 1 Vessel Shore Safety Checklist (isgott 26.3.3)	32
8 Appendix 2 –Mooring guidelines	40
9 Appendix 3 - Cargo ballast transfer planning.....	41
10 Appendix 4 Safety Letter	42

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° 36' north, longitude 73° 30' west



1.2 BERTH DESCRIPTION

- The wharf is designed to load and discharge vessels containing petroleum products

95 and 96	97
Petroleum products. Dry bulk cargoes	Asphalt Dry bulk cargoes

- 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 6 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

	95	96	97
Bunker delivery	No	No	No
Fresh water	-	-	Available by hose from the hydrant.
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	Engine bilge or other slops are not accepted at the terminal.		

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 terminal operations centre of persons who are approved to visit the vessel.

Port Facility Security Officer (PFSO)

Name	Rui Franco
Office	1-(514) 650-4446
E-mail	rfranco@suncor.com
Cell	1 (514) 617-5021

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.

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.

Vessel bunker fuel deliveries by truck is not permitted at the terminal.

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.

For security and logistical purposes, advance notice of any planned delivery of equipment or stores to a vessel at Terminal Montreal East dock must be given during weekdays a MINIMUM of 24 hours prior to the planned delivery timing to the Terminal. No delivery is to be effected without having received Terminal approval in advance.

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 terminal operations centre (514-968-1981) 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

TME Operator	For Asphalt: 514-968-1981 / 514-640-9361 For Light Petroleum Products: 514-475-4062 / 514-650-4003
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)
R. Berthiaume Marine Inc., garbage and waste disposal	514 640 3138
Urgence Marine	514-640-3138
Tug assistance: Groupe Océan Remorquage Montréal Inc	514 849 5511
Police	911
Fire	911
Suncor Marine Department – Voyage Orders	905 804 4500

BERTHING AND MOORING

3 BERTHING AND MOORING

3.1 VESSEL SIZE AND RESTRICTIONS

	Berths 95/96	Berth 97
Vessel Size Parameters	Restrictions	Restrictions
Maximum length	258m	135m
Maximum displacement	98,842t	20,000t
*Note Berthing velocity not to exceed 0.075m/s		

When vessels are berthed simultaneously at berths 95/96 and 97; a minimum distance of 30m is to be maintained between the two vessels.

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 does 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.
- 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 2, Mooring Guideline Diagrams describes the minimum moorings which terminal staff will expect vessels to deploy while at this facility.

3.4 BERTHING INFORMATION

- TME 95, 96 and 97 are almost parallel to the channel and the river current. The preferred berthing procedure - see Section 3.5 - is to stem the current and berth starboard side to.

- Berths are provided with adequate fendering. Masters are cautioned to exercise care in the berthing manoeuvre to minimize the angle and speed of approach.

3.5 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. It is to be noted, depth of water in metres at chart datum is 10.7m except between bollards 22 and 33 the depths is 9.1m.
- 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.

3.6 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 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.

3.7 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

3.8 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 hose	30kt
Take precautionary action	35Kts

4

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 Terminal Montreal East 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 TME 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 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 1 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 6.1m.

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 1.*

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 5% 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 re-pressurized. 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 hose 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 1.

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 hoses 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 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 hoses 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

CARGO AND BALLAST TRANSFER

5 CARGO AND BALLAST TRANSFER

5.1 TERMINAL MANIFOLDS

-

	Section 95-96	Section 97
Shore manifold diameter	10" flanges	10" flanges
Maximum allowable working pressure at the shore manifold	120psi	100psi
Maximum flowrate	8,000BBLH per hose for a max of 7 m/s	8,000BBLH per hose for a max of 7 m/s

- Section 95-96 is equipped with 2 flanged connections 10" diameter. One connections is for Distillate cargo operations and one connection is for Gasoline cargo operation
- Section 95-96 has 3 hoses of 10" diameter each 65ft long. One is for Gasoline, one is for Distillate and one is a spare for use when one is under inspection or to increase hoses length.
- As accessories section 95-96 has a bleeding ring to break vacuum when draining the hoses. When needed, this bleeding ring shall be installed between the hose flange and the ship manifold flange.
- Section 97 is equipped with one flanged connection 10" diameter for Asphalt cargo operations.
- 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.

5.2 TERMINAL BALLAST RECEIVING CAPACITY

- The terminal does not have ballast receiving capability

5.3 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 4*.

5.4 ENVIRONMENTAL LIMITS - CARGO OPERATIONS

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

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 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 hoses.
- 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 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 – 1 VESSEL SHORE SAFETY CHECKLIST (ISGOTT 26.3.3)

Vessel's Name

Berth Port

Date of Arrival Time of Arrival

PART 'A' – BULK LIQUID GENERAL - PHYSICAL CHECKS

Coding of Items

The presence of the letters 'A', 'P' or 'R' in the column entitled 'Code' indicates the following:

A ('Agreement'). This indicates that the referenced consideration should be addressed by an agreement or procedure that should be identified in the 'Remarks' column of the Check List, or communicated in some other mutually acceptable form.

P ('Permission'). In the case of a negative answer to the statements coded 'P', no operations are to be conducted without the written permission from the appropriate authority.

R ('Re-check'). This indicates items to be re-checked at appropriate intervals, as agreed between both parties and stated in the declaration.

The joint declaration should not be signed until all parties have checked and accepted their assigned responsibilities and accountabilities

Bulk Liquid - General	Ship	Terminal	Code	Remarks
1. There is safe access between the ship and shore.			R	
2. The ship is securely moored.			R	
3. The agreed ship/shore communication system is operative.			A R	System Back-up system
4. Emergency towing-off pennants are correctly rigged and positioned.			R	
5. The ship's fire hoses and fire-fighting equipment is positioned and ready for immediate use.			R	
6. The terminal's fire-fighting equipment is positioned and ready for immediate use.			R	
7. The ship's cargo and bunker hoses, pipelines and manifolds are in good condition, properly rigged and appropriate for the service intended.				

8. The terminal's cargo and bunker hoses/arms are in good condition, properly rigged and appropriate for the service intended.				
9. The cargo transfer system is sufficiently isolated and drained to allow safe removal of blank flanges prior to connection.				
10. Scuppers and 'save alls' on board are effectively plugged and drip trays are in position and empty.			R	
11. Temporarily removed scupper plugs will be constantly monitored.				
12. Shore spill containment and sumps are correctly managed.			R	
13. The ship's unused cargo and bunker connections are properly secured with blank flanges fully bolted.				
14. The terminal's unused cargo and bunker connections are properly secured with blank flanges fully bolted.				
15. All cargo, ballast and bunker tank lids are closed				
16. Sea and overboard discharge valves, when not in use, are closed and visibly secured.				
17. All external doors, ports and windows in the accommodation, stores and machinery spaces are closed. Engine room vents may be open.			R	
18. The ship's emergency fire control plans are located externally.				Location

If the ship is fitted, or required to be fitted, with an Inert Gas System (IGS) the following points should be physically checked:

Inert Gas System	Ship	Terminal	Code	Remarks
19. Fixed IGS pressure and oxygen content recorders are working.			R	
20. All cargo tank atmospheres are at positive pressure with oxygen content of 8% or less by volume.			P R	

PART 'B' – BULK LIQUID GENERAL – VERBAL VERIFICATION

Bulk Liquid - General	Ship	Terminal	Code	Remarks
21. The ship is ready to move under its own power.			P R	
22. There is an effective deck watch in attendance on board and adequate supervision of operations on the ship and in the terminal.			R	
23. There are sufficient personnel on board and ashore to deal with an emergency.			R	
24. The procedures for cargo, bunker and ballast handling have been agreed.			A R	
25. The emergency signal and shutdown procedure to be used by the ship and shore have been explained and understood.			A	
26. Material safety data sheets (MSDS) for the cargo transfer have been exchanged where requested.				
27. The hazards associated with toxic substances in the cargo being handled have been identified and understood.				H ₂ S Content Benzene Content.....
28. An International Shore Fire Connection has been provided.				
29. The agreed tank venting system will be used.			A R	Method
Bulk Liquid - General	Ship	Terminal	Code	Remarks
30. The requirements for closed operations have been agreed.			R	
31. The operation of the P/V system has been verified.				
32. Where a vapour return line is connected, operating parameters have been agreed.			A R	
33. Independent high level alarms, if fitted, are operational and have been tested.				
34. Adequate electrical insulating means are in place in the ship/shore connection.				
35. Shore lines are fitted with a non-return valve or procedures to avoid 'back filling' have been discussed.				

36. Smoking rooms have been identified and smoking requirements are being observed.			A R	Nominated smoking rooms:
37. Naked light regulations are being observed.			A R	
38. Ship/shore telephones, mobile phones and pager requirements are being observed.			A R	
39. Hand torches (flashlights) are of an approved type.				
40. Fixed VHF/UHF transceivers and AIS equipment are on the correct power mode or switched off.				
41. Portable VHF/UHF transceivers are of an approved type.				
42. The ship's main radio transmitter aerials are earthed and radars are switched off.				
43. Electric cables to portable electrical equipment within the hazardous area are disconnected from power.				
44. Window type air conditioning units are disconnected.				
45. Positive pressure is being maintained inside the accommodation.				
46. Measures have been taken to ensure sufficient mechanical ventilation in the pump room.			R	
47. There is provision for an emergency escape.				
48. The maximum wind and swell criteria for operations has been agreed.			A	Stop cargo at: Disconnect at: Unberth at:
Bulk Liquid - General	Ship	Terminal	Code	Remarks
49. Security protocols have been agreed between the Ship Security Officer and the Port Facility Security Officer, if appropriate.			A	

If the ship is fitted, or required to be fitted, with an Inert Gas System (IGS) the following statements should be addressed.

Inert Gas System	Ship	Terminal	Code	Remarks
50. The IGS is fully operational and in good working order.			P	
51. Deck seals, or equivalent, are in good working order.			R	

52. Liquid levels in pressure/vacuum breakers are correct.			R	
53. The fixed and portable oxygen analysers have been calibrated and are working properly.			R	
54. All the individual tank IGS valves (if fitted) are correctly set and locked.			R	
55. All personnel in charge of cargo operations are aware that in the case of failure of the Inert Gas Plant, discharge operations should cease, and the terminal be advised.				

If the ship is fitted with a crude oil washing (COW) system, and intends to COW, the following statements should be addressed.

Crude Oil Washing	Ship	Terminal	Code	Remarks
56. The Pre-Arrival COW checklist, as contained in the approved COW manual, has been satisfactorily completed.				
57. The COW check lists for use before, during and after COW, as contained in the approved COW manual, are available and being used.			R	

If the ship is planning to tank clean alongside, the following statements should be addressed.

Tank Cleaning	Ship	Terminal	Code	Remarks
58. Tank cleaning operations are planned during the ship's stay alongside the shore installation.	Yes/No*	Yes/No*		
59. If 'yes' the procedures and approvals for tank cleaning have been agreed.				
60. Permission has been granted for gas freeing operations.	Yes/No*	Yes/No*		

* Delete Yes or No as appropriate

PART 'C' – BULK LIQUID CHEMICALS - VERBAL VERIFICATION

Bulk Liquid Chemicals	Ship	Terminal	Code	Remarks
1. Material Safety Data Sheets are available giving the necessary data for the safe handling of the cargo.				
2. A manufacturer's inhibition certificate, where applicable, has been provided.			P	

3. Counter measures against accidental personal contact with the cargo have been agreed.				
4. Sufficient protective clothing and equipment (including self-contained breathing apparatus) is ready for immediate use and is suitable for the product being handled.				
5. The cargo handling rate is compatible with the automatic shutdown system, if in use.			A	
6. Cargo system gauges and alarms are correctly set and in good order.				
7. Portable vapour detection instruments are readily available for the products being handled.				
8. Information on fire-fighting media and procedures has been exchanged.				
9. Transfer hoses are of suitable material, resistant to the action of the products being handled.				
10. Cargo handling is being performed with the permanent installed pipeline system.			P	

PART 'D' – BULK LIQUEFIED GASES - VERBAL VERIFICATION

Bulk Liquefied Gases	Ship	Terminal	Code	Remarks
1. Material Safety Data Sheets are available giving the necessary data for the safe handling of the cargo.				
2. A manufacturer's inhibition certificate, where applicable, has been provided.			P	
3. The water spray system is ready for immediate use.				
4. There is sufficient protective equipment (including self-contained breathing apparatus) and protective clothing ready for immediate use.				
5. Hold and inter-barrier spaces are properly inerted or filled with dry air, as required.				
6. All remote control valves are in working order.				
7. The required cargo pumps and compressors are in good order, and the maximum working pressures have been agreed between ship and shore.			A	
8. Re-liquefaction or boil off control equipment is in good order.				
9. The gas detection equipment has been properly set for the cargo, is calibrated and is in good order.				
10. Cargo system gauges and alarms are correctly set and in good order.				
11. Emergency shutdown systems have been tested and are working properly.				
12. Ship and shore have informed each other of the closing rate of ESD valves, automatic valves or similar devices.			A	Ship
				Shore
13. Information has been exchanged between ship and shore on the maximum/minimum temperatures/pressures of the cargo to be handled.			A	
14. Cargo tanks are protected against inadvertent overfilling at all times while any cargo operations are in progress.				
15. The compressor room is properly ventilated; the electrical motor room is properly pressurised and the				

DECLARATION

We, the undersigned, have checked the above items in Parts A and B, and where appropriate, Part C or D, in accordance with the instructions and have satisfied ourselves that the entries we have made are correct to the best of our knowledge.

We have also made arrangements to carry out repetitive checks as necessary and agreed that those items coded 'R' in the Check List should be re-checked at intervals not exceeding ____ hours.

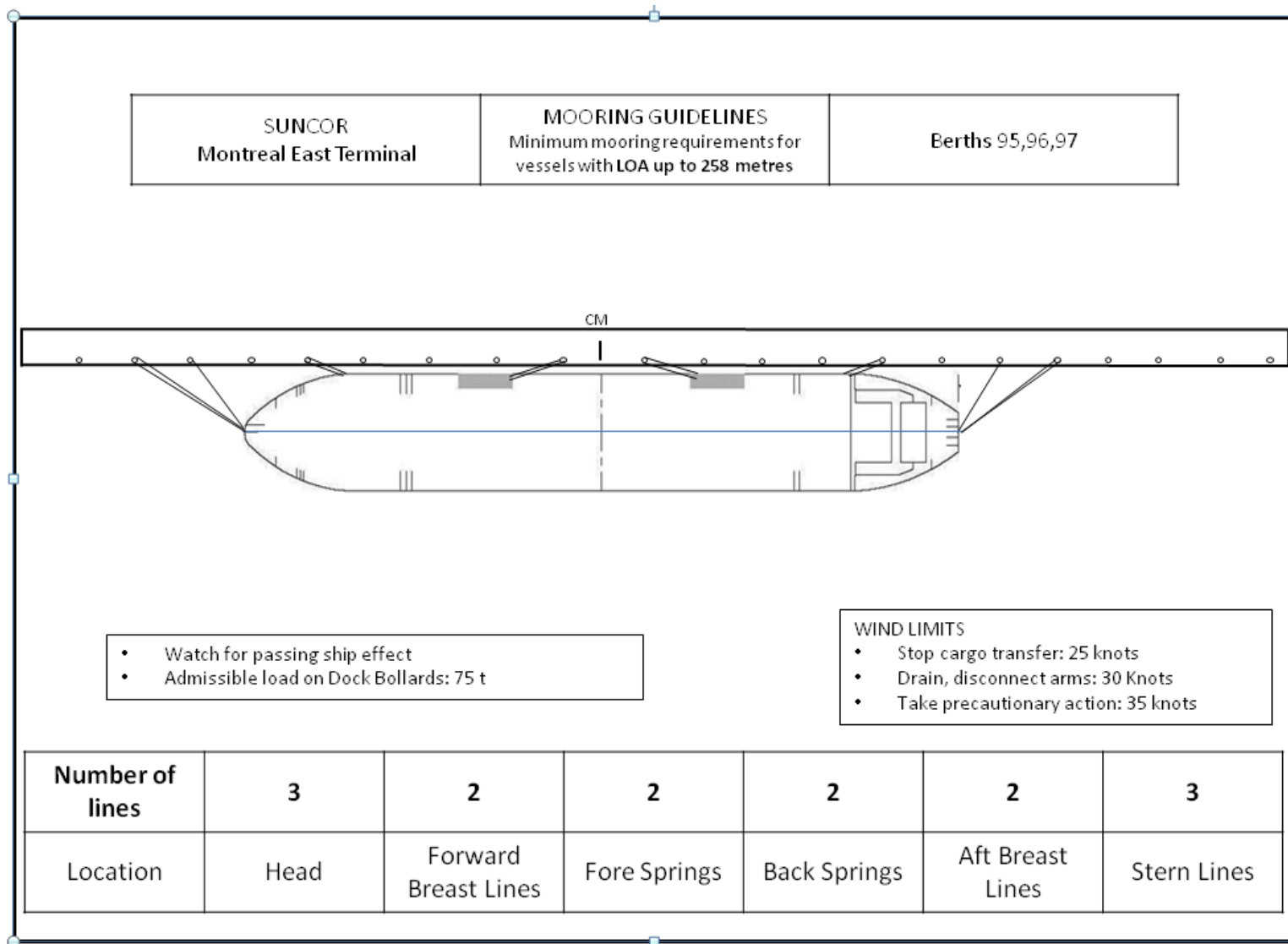
If to our knowledge the status of any item changes, we will immediately inform the other party.

For Vessel	For Shore
Name.....	Name.....
Rank.....	Position.....
Signature.....	Signature.....
Date.....	Date.....

Record of repetitive checks:

Date:							
Time:							
Initials for Vessel:							
Initials for Shore:							

8 APPENDIX 2 –MOORING GUIDELINES



9 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; 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.

10 APPENDIX 4 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 _____