NANAIMO MARINE TERMINAL

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 must be informed!
- In case of any situation or incident that may possibly have impact on health and/or environmental conditions, the terminal control should be informed immediately on the emergency telephone number:

250-754-4461

or by the portable radio!

For more information

Suncor Marine Department,

marineop@Suncor.com

http://www.suncor.com/marine

Version

Date	Revision	Updated by
June 1999	-	-
March 2015	1	Marine Operations
July 2018	2	Marine Operations
November 2020	3	Marine Operations

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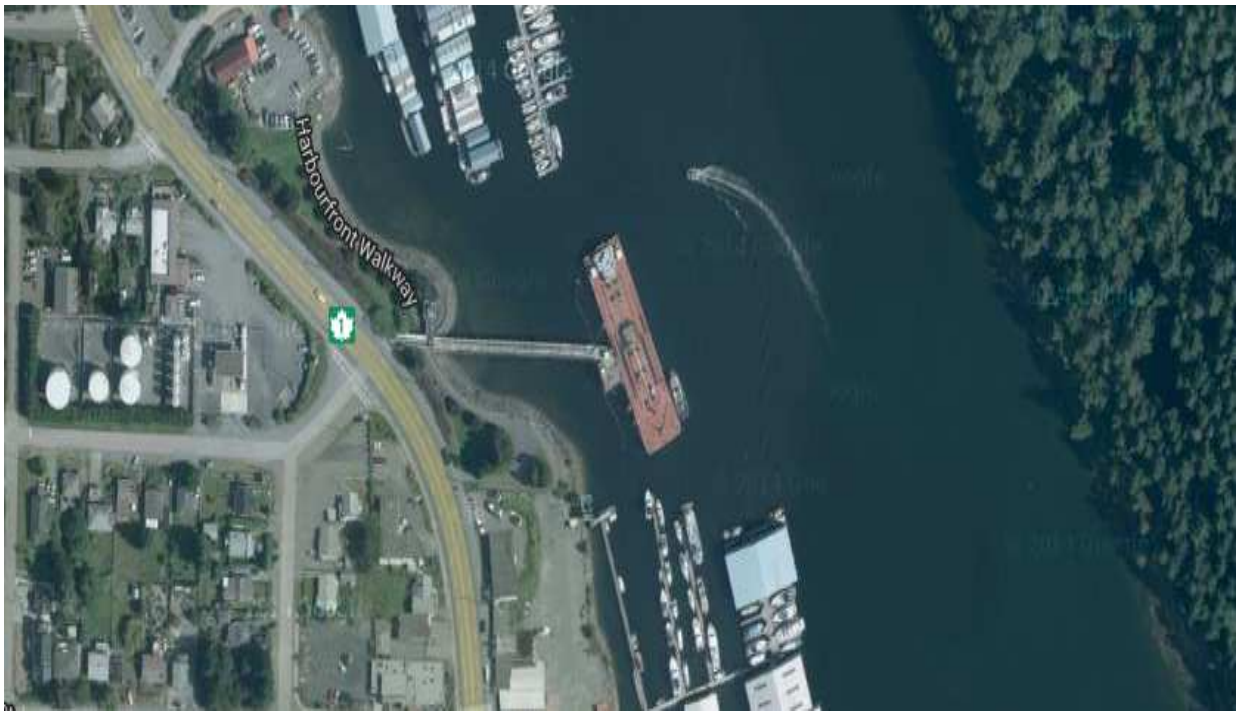
GENERAL INFORMATION

1 GENERAL INFORMATION

1.1. LOCATION

- The facility is shown on Canadian Hydrographic Service Chart number 3447 Nanaimo Harbour, Departure Bay, in Latitude 49°11.2 North, longitude 123° 56.8 West. The facility is accessed via Departure Bay and is positioned on the west side of Newcastle Island Passage. It is situated in a highly sensitive environmental area and in very close proximity to two large marinas that have some "live aboard" craft in situ. Due to these circumstances, Suncor Energy prefers to avoid cargo transfer operations at night when possible.



1.2. BERTH DESCRIPTION

- The berth is utilized to offload clean petroleum products from small, mainly Canadian flag barges.

- The marine facility is "L" shaped and consists of an 82 metre walkway generally perpendicular to the shore, connected to a 12.5 metre wide, 9.0 metre deep dock.

- The face of the dock runs 153° /333° true and is generally parallel to the channel.

- The dock is constructed of timber and has steel piling. There are two breasting dolphins, one at the northerly end and one at the southerly end of the dock. The dolphins provide an effective breasting length of 38 metres.

- There is a short shore gangway to facilitate shore access when the vessels deck is close (plus or minus 1 metre) to the level of the dock. Vessels must provide a safe access to the shore, in accord with Canada Shipping Act Regulations, when the difference between the vessels deck and the docks elevation exceeds 1 metre. NB. the elevation of the dock is approximately 7 metres above the water level at chart datum (lowest normal tide).

1.3. WATER DEPTH

- The density of the water is 1025 g/cm3 i.e. salt water.

- Master should refer to the Canadian Hydrographic Chart #3447, latest Edition. Departure Bay and its approaches are relatively deep water i.e. in excess of 20 metres. Masters should consult relevant publication on water depth when planning their required under keel clearance for berthing and while in berth.
- The Newcastle Island Passage Channel provides adequate water depth for vessels at drafts suitable for the berth. Masters are cautioned to favour the centre of Newcastle Island Passage Channel and to take particular care to avoid the unmarked 4 metre rock shoal to the east side of the channel in Latitude 49° 11 32" North, Longitude 123° 56 50" West.

1.4. SERVICES AT THE BERTH

- The berth is normally accessed by small, short haul tug and barge units and services are neither required nor available at the dock.

1.5. SECURITY

- The terminal normally only receives Canadian Flagged vessels.

Marine Facility Security Officer (MFSO)

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

1.5.1 Access to and from the vessel

- Access to the facility is controlled. There is no capability for vehicle access. No visitors are permitted to the facility or vessels at the facility without the prior approval of the terminal management. Authorized visitors must follow the directions of Suncor's dock attendant and comply with all applicable terminal safety rules and procedures. E.g. visitors to the dock must wear a hard hat and a buoyancy vest.
- Suncor has “Zero Tolerance” policy for Alcohol and Drug intoxication of crew and personnel entering or leaving the facility.

1.5.2 Access to the Terminal

1.5.2.1 - General

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

1.5.2.2 - Crew

- Crew that is mentioned on the crew list has 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 - Ship 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 ship must present documents (i.e. a waybill, packing list etc.) covering the carriage of such goods.

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, we might invite the vessel’s security officer to personally take receipt of this luggage on behalf of its rightful owner.

1.6 WEATHER

- The facility is well protected and vessels are not normally exposed to adverse circumstances.

1.7 TIDAL RANGE AND CURRENT

- The average tidal range is about 3 metres and the large tidal range is about 5 metres.
- Tidal current is not significant with ebb and flow current running generally parallel to the face of the dock at a maximum rate of about 1 knot.

2

COMMUNICATIONS

2 COMMUNICATIONS

2.1 ESTIMATED TIME OF ARRIVAL (ETA)

- Masters are required to co-ordinate their arrival in accord with the agreement reached between the tug company and Suncor's scheduling office and to provide the terminal with one hours' notice prior to arrival. In instances when no arrival time has been pre-arranged, the Master shall notify the terminal upon departure from the loading terminal or the last port of call and provide the terminal with ETA's at 48 hours (if possible), 24 hours (mandatory), again at 12 and 4 hours and if ETA changes by +/- 1 hour and one hours' notice prior to arrival

2.2 USEFUL LOCAL NUMBERS

Contact	Number
Suncor Nanaimo Terminal ETA's, pre-arrival information.	Tel 250-754-4461 Fax 250-754-7855
Suncor Marine Scheduler, Vancouver Operational matters, charter party issues, Voyage Orders	Tel 604-933-3026 Fax 604-933-3071
Wardill Marine Assist and Emergency Tug	250-754-9699 250-616-6000
Canadian Coast Guard, VTS, Emergencies, Spills	Canadian Coast guard – 1-800-889-8852 (24hrs) Marine radio – Channel 11
Oil Pollution Response (WCMRC)	604-294-9116 (24hrs)
Nanaimo Harbour Master	250-753-4146
Canadian Hydrographic Service – (Internet)	http://waterlevels.gc.ca/eng
Police Non-emergency	911 250-753-2345
Fire Non-emergency	911 250-753-7311
Ambulance Non-emergency	911 250-758-8181
Suncor Marine group – voyage orders	905 804 4500

2.3 CARGO TRANSFER COMMUNICATONS

- The Terminal provides portable radios for ship to shore communications on cargo transfer operations i.e. one to the barge supervisor; one to the dock supervisor and one to the terminal tank farm.

3

BERTHING AND MOORING

3 BERTHING AND MOORING

3.1 VESSEL SIZE AND RESTRICTIONS

- A key constraint at the facility is the available manoeuvring space for the tug and barge which must not encroach into the marina slips that are at each end of the berth. Adequate space must be maintained ahead of the barge and, when in the notch, the stern of the tug to allow craft to access the slipways and avoid tug propeller wash impact on craft in the slipways.

3.1.1 Tug/Barge Combination Criteria - Tug in Notch/ATB

Unit Particulars	Restrictions
Maximum LOA of unit Maximum displacement	110 metres 6000 tonnes

3.1.2 Barge Criteria - Tug on Bridle

Barge Particulars	Restrictions
Maximum LOA Maximum bow to cargo manifold Maximum stern to cargo manifold Maximum displacement	84 metres 40 metres 44 metres 6000 tonnes

- Cargo transfer is via barge cargo hoses and barges may accommodate the bow to centre of manifold restriction with extra lengths of hose.

3.2 MAXIMUM DRAFT

- Consult relevant latest chart and publication for depth information.

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.Vessel assumed to be upright and on an even keel.
- Masters are cautioned that in some cases the tug drafts may be deeper than the barge..

3.3 SPOT APPROVAL

- The parameters shown in 3.1 and 3.2 may be relaxed for an individual voyage subject to a marine technical review of the special circumstances of the relaxation request and written approval by Suncor Marine Department management.

3.4 MOORING CRITERIA

- The berth is very well protected and does not have a history of mooring problems.
- The responsibility for the adequate mooring of a barge rests with the Master but the terminal has an interest in ensuring that vessels are securely and safely moored. Appendix 1A, Mooring Guideline Diagram is a minimum mooring arrangement that the terminal staff will expect vessels to deploy while at this facility.

  The breasting dolphins provide an adequate breasting length.
- Mooring lines in the same service e.g. spring lines, should be of the same material and similar in length.

- Vessels deploying mooring wires must be fitted with synthetic mooring tails that meet the OCIMF MEG 4 guidelines. .

3.5 BERTHING INFORMATION

- The berth face lies approximately 153° - 333° T and is generally parallel to the shore and the navigational channel.
- The breasting dolphins provide a good landing and the wooden pile fendering is adequate for normal berthing impacts.
- The cargo transfer manifolds are at the docks northerly corner.
- Water depths decrease inside the line of the face of the breasting dolphins at the south end of the berth.

3.6 BERTHING MANOEUVRES

- The berth is normally utilized by small, regularly trading, tug and barge units. Masters of foreign flagged vessels are reminded that Nanaimo is a compulsory pilotage area and that compliance with the provisions of the Pacific Pilotage Authority Regulations is mandatory.

- Masters may elect to berth the barge either side to. Barges are normally berthed starboard side to as tug Masters prefer to swing the empty barge on departing the berth.

- Care should be taken to land the barge on the breasting dolphin and not on the dock structure.

- The vessel must be positioned spanning both dolphins.

- The normal berthing manoeuvre is for the support tug (see Section 3.7) to rendezvous with the tug and barge in Departure Bay prior to the unit entering Newcastle Island Passage. The unit stays close to the centre of the channel taking particular care to pass well clear of the unmarked 4 metre rock shoal on the east side of the channel. Way is taken off the barge as it nears the berth and it manoeuvred alongside with special care to provide good clearance from the adjacent marine properties and minimize prop wash impact on craft at those properties.

- Tugs towing on bridle should exercise care to avoid entering the shallower water inside the line of the face of the breasting dolphins during the berthing manoeuvre.

- Tug Masters are reminded that they cannot berth barges from the notch if the combined length of the tug and barge unit will exceed 110 metres overall.

- The tug Master should exercise care during the unberthing manoeuvre to ensure:
  - that the tug is properly secured to the barge before the barge mooring lines are let go from the dock;
  - the barge is not swung on the breasting dolphin as the structure is not designed for this use
  - the barge is sufficiently clear of the dock to avoid the stern of the barge contacting the dock during its swing in the channel

3.7 TUG REQUIREMENTS

- The safe handling of the tug and barge is the responsibility of the tug Master. Suncor does expect that, in addition to the towing tug, a support tug will be utilized to escort the unit while navigating Newcastle Island Passage and to assist in berthing the barge. N.B. The towing tug Master may increase these requirements at their discretion e.g. to use a support tug for unberthing.

Tug Parameters	Minimum Support Tug Requirements	
Horse Power	Berthing	Unberthing
500hp	1	-

- The support tug shall be in attendance until the barge is securely moored.

3.8 LINESMEN

- An adequate number of shore linesmen will be provided to take vessel/barge lines and perform dock mooring duties i.e. vessels staff are not to be landed onto the dock to help berth the vessel.

Guideline	Berthing	Unberthing
Domestic Barge	1 person	1 person

3.9 ENVIRONMENTAL LIMITS

- Wind Limits: Berthing
  While weather is not normally a factor at the berth, vessels will not be permitted to berth when wind forces are 30 knots or greater.
- Wind Limits: While Alongside
  Tug Masters are cautioned that unberthing and navigating Newcastle Island Passage in adverse weather conditions may be less safe than taking additional precautions to stay safely moored alongside. Masters should take precautions before adverse weather arrives in the area e.g. by departing the berth or deploying adequate supplemental moorings when wind limits are approaching 30 knots.

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 should ensure that their vessel's agent informs them of distinct Canadian requirements.

4.2 PORT OF NANAIMO REGULATIONS

- These regulations include specific requirements governing the reporting, transportation and transfer of dangerous goods within the harbour and other requirements that encompass all vessel movement within the harbour. Bulk petroleum is included as dangerous goods and the Masters of tugs towing bulk petroleum barges and the barge cargo transfer supervisor are required to take certain actions in order to be in compliance with the regulations.

- Masters of towing tugs and barge supervisors must operate in compliance with the Port of

4.3 NANAIMO REGULATIONS. COPIES OF THE DOCUMENT MAY BE OBTAINED FROM THE HARBOUR MASTER, OR ONLINE AT HTTP://NPA.CA/HARBOUR-OPERATIONS/POLICIES-PROCEDURES/RULES-REGULATIONS-FOR-MARINE-TERMINALSSUNCOR NANAIMO TERMINAL RULES AND PROCEDURE

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

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

- Nothing in these rules and procedures will relieve Masters and/or the barge supervisor* of their responsibilities in observing normal safety, fire prevention, pollution prevention and security precautions. Terminal staff are authorized to advise and request vessel staff 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:

*Where Master appears in these rules, it means Master of the towing tug. Barge Supervisor means the Transport Canada certified "Supervisor of Transfer Operations".

1. Safety Requirements:

- Masters and barge supervisors will be given a copy of the following Suncor Energy Nanaimo Terminal Rules and Procedures by the terminal operator and a signed acknowledgement will be required.

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 representative and a responsible tanker officer. This pre arrival/after mooring/pre transfer/during transfer Ship/Shore safety Checklist is based on the recommendations of the “International Safety Guide for Oil Tankers and Terminals” (ISGOTT 6).

3. Gangway:

- The barge gangway or ladder, when required to be deployed, must be in good condition and of an appropriate length for safe access between ship and shore.

4. Barge 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. Tug Readiness:

- The towing tug shall remain in attendance during the barge’s stay alongside the terminal. The tug must be located in close proximity to the facility for rapid deployment to the barge as required. In the event that the tug remains alongside the barge, it must comply strictly with rules to control potential ignition sources (see Rule 23).

6. Tug Engine’s Readiness:

- The tug's 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.

7. Repairs:

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

8. Staffing:

- Sufficient qualified crew members shall be provided for safe handling of cargo, for the tending of moorings, for effective firefighting and for moving the vessel in the event of an emergency on the tug or the dock. A barge supervisor shall be on duty on the barge throughout the transfer operation and the barge supervisor shall be supplemented by deck hands for mooring, unmooring, adjustment of moorings or other duties, when necessary. The barge supervisor's duty period must not exceed 12 hours without relief in any 24 hour period for any transfer operation.

9. Barge Moorings:

- Tug and/or barge personnel must frequently monitor and carefully tend the barge moorings to ensure that the vessel is safely secured having regard for the weather and current conditions.

10. Tug/Barge/Terminal 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 barge supervisor 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 the cargo transfer. See Section 5.3 and Appendix 3.
- In the event of a total breakdown of radio communication between the terminal and the barge during cargo transfer operations, then these operations shall be immediately suspended and not resumed until satisfactory communications are re-established.

11. Smoking:

- Smoking is strictly prohibited while at the berth except in designated areas which have been jointly approved by the tug master/the barge supervisor and by the terminal operator.

- Where smoking is approved on vessels, approval may be withdrawn by terminal operator if circumstances so warrant.
- Smoking notices specifying the designated smoking areas shall be exhibited in conspicuous places on board the vessel.

12. Matches and Lighters:

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

13. 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 phone and pagers, computers , calculators, smart watch and fitness wrist band, e-cigarette, photographic equipment are not to be active, switched on or used within hazardous areas.

14. 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.

15. 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.

16. 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.

17. 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.

18. Fire Precautions:

- Self-propelled barges and Non Self-propelled barges when similarly equipped

- The vessel's firefighting appliances, including main and emergency fire pumps, shall be kept ready for immediate use.
- Before operations commence, at least two fire hoses and jet/fog nozzles shall be laid out on the tank deck, connected to the fire main and tested as required by the terminal operator. The two fire monitors immediately adjacent to the manifold should be elevated, aligned towards the manifold area and made ready for immediate use. A fire pump shall maintain pressure on the fire main and also be ready for immediate use. Two portable fire extinguishers, preferably of the dry chemical type, shall be available in the proximity of the manifold area.
- Should fire occur on the vessel, the Master or responsible ship's officer shall make an Immediate signal by prolonged blasts on the barge's whistle and by sounding the fire alarm, and will also place the engine on standby. All transfer operations will cease immediately.
- Other Non-Self-propelled barges
- Every barge shall have the firefighting equipment, conveniently located for emergency use in the cargo tank area, as required under article VIII of Transport Canada's "Oil barge Standards" (i.e. two 9 litre foam fire extinguishers or approved equivalent).
- Should fire occur on the vessel, the barge supervisor shall immediately signal the terminal via the portable radio and by any other available means where fitted

19. Emergency Procedures:

- As required by the Ship Shore Safety Check List, the Master of the tug, barge supervisor 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 supervisor. *See Appendix #3*.

21. Sea and Overboard Discharge Valves if fitted:

- 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 Ship Shore 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 Barges, and as applicable, Tugs while alongside During

Transfer Operations:

(a) **Deballasting has to be carried out on the outboard side of the barge. In case this is not possible (due to the pipeline configuration of the vessel) an alternative is to be agreed during initial meeting with terminal representative.**

(b) A barge supervisor, 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 pumproom) 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, and/or caps on

camlock fittings 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 barge supervisor.

(k) The vessel shall by day fly Flag "B" of the International Code, and by night an all-round red light.

(l) The person in charge of the transfer operation on the vessel shall conduct inspections of adjacent water areas around the vessel frequently and at least once each hour to ensure that no oil has spilled or leaked into the water

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

- During transfer operations no craft shall be allowed alongside the vessel unless approval has been given by the terminal operator and agreed to by the Master of the vessel. Tug Masters must consider their vessel to be in a hazardous area if they stay alongside the barge or in the notch and take particular care to comply with Rules 2, 7, 11, 12, 13, 14, 15, 16, 17, 19 and 22.

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 barge supervisor 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, and in addition, all tank openings and cargo valves shall be closed.

(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 Tug Master, barge supervisor or the terminal operator, constitutes a potential hazard to either the ship 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. Manifold containment should be drained before transfer operations commence. Any leakage or spillage must be reported immediately to the terminal operator.

- A supply of absorbent material shall be available at the manifold to facilitate the immediate cleanup of minor spills.

- No hazardous material shall be thrown overboard, nor shall any other objectionable material, either solid or fluid, be thrown overboard from the vessel.

27. Tank Lids:

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

28. List:

- Excessive listing of the vessel must be avoided.

5

CARGO AND BALLAST TRANSFER

5 CARGO AND BALLAST TRANSFER

5.1 TERMINAL MANIFOLDS

- The shore cargo system has a maximum allowable pressure of 150 lb/square inch. N.B. the typical maximum at the shore manifold is 80 lb/square inch. All manifolds are fitted with insulating flanges
- The berth is exclusively used for the discharge of clean petroleum products. There are five manifolds to receive product. Barge hoses are utilized to effect the transfer. All shore manifolds are male camlock connections.

Information on the system is as follows:

Product	Pipeline Diameter	Manifold Size
Premium gasoline	4"	1 x 4"
Regular gasoline	4"	1 x 4"
Regular gasoline	6"	1 x 4"
Stove oil	4"	1 x 4"
Diesel (Furnace)	4"	1 x 4"

- All valves in the shore cargo system are manually controlled.

5.2 BARGE HOSES

- Barge hoses that are used to effect cargo transfers must be in good condition adequately supported, suitable for their intended service, and have been manufactured, marked and tested in accord with the requirements of the Canada Shipping Act

I.E. (a) Has a bursting pressure of not less than four times its maximum working pressure;

(b) Is clearly marked with its maximum working pressure;

(c) Has been tested hydrostatically to a pressure equal to one and one half times its maximum working pressure at least once during the year immediately preceding its use, and has successfully passed that test.

5.3 BARGE PUMPING SYSTEM

- The system is to be equipped with an emergency stop positioned so that terminal staff may shut down the barge pumps in an emergency without having to board the barge.

5.4 CARGO OPERATING PROCEDURE

- Before cargo transfer commences the vessel supervisor and the dock 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.

5.5 ENVIRONMENTAL LIMITS

- Wind Limits - Cargo Transfer Operation
- Transfer operations must be suspended and the cargo hoses disconnected when wind forces increase to 30 knots.

6

EMERGENCY RESPONSE TO FIRES, SPILLS, LEAKS ETC

6 EMERGENCY RESPONSE TO FIRES, SPILLS, LEAKS, ETC

6.1 FIRES

- The terminal does not fight fires on vessels in the berths! The barge supervisor and tug Master are to take appropriate response action including securing capable external support, notifying the proper authorities and emergency removal of the barge from the dock (Refer ISGOTT section 23.8)

6.1.1 Actions in the Event of Fire at Terminal

- The terminal will raise the alarm to vessels 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 hoses.
  - stand by to cast off the moorings.
  - 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:

  - stand by to cast off the moorings.

- *Vessel will - secure vessel cargo system.*

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

6.2 SPILLS OR LEAKS

6.2.1 Terminal Spills or Leaks

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

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

6.2.2 Vessel Spill or Leaks

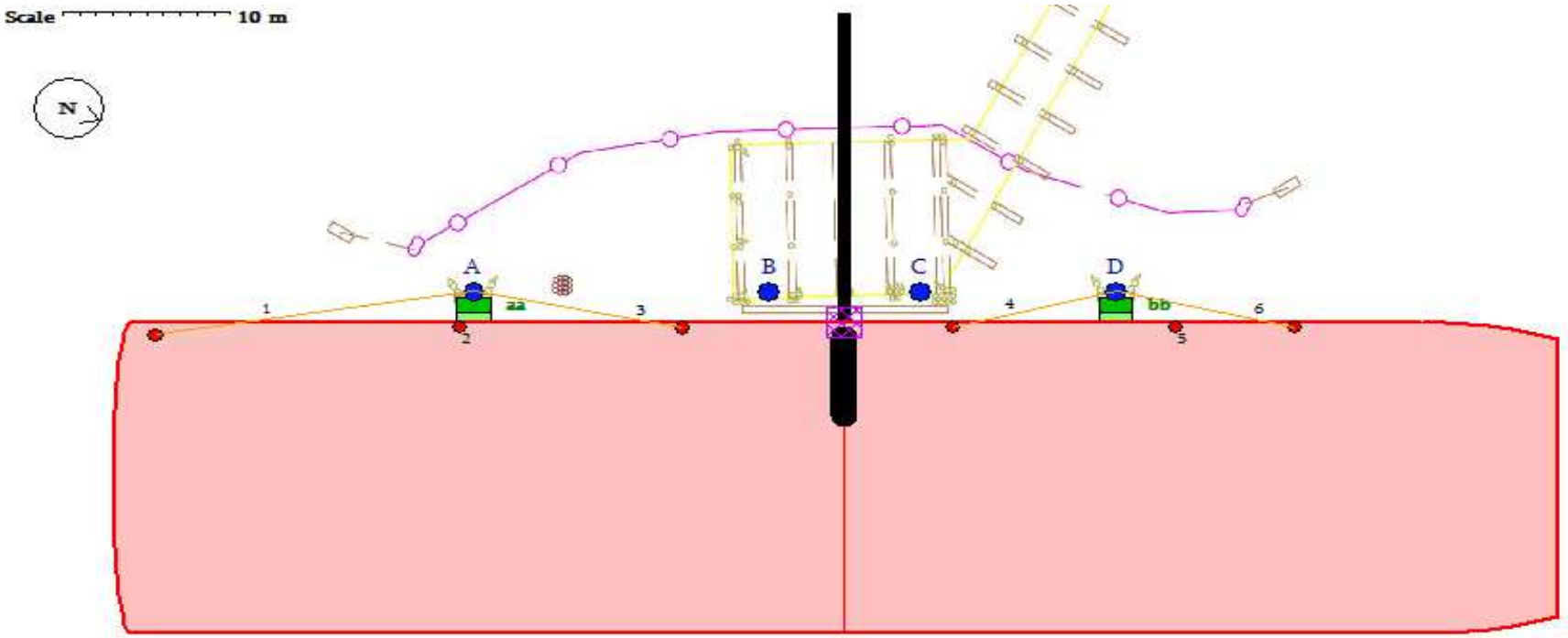
- In the event of a spill or leak from the vessel or cargo hose:

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

6.3 RESTARTING CARGO TRANSFER OPERATIONS AFTER A MARINE POLLUTION INCIDENT

- Cargo transfer operations may only resume once the cause of the spill has been determined and remedied and after it has been clearly determined that re-starting transfer operations will not interfere with the immediate, effective and sustained response to the marine pollution incident.

7 APPENDIX 1 – MOORING GUIDELINE NANAIMO



Vessel to use four long lines to tie-up the barge to the two breasting dolphin bollards. The breasting dolphin bollards have the capacity to accommodate the mooring loads for wind speeds up to approximately 55 knots. Vessel/barge to use the breasting dolphin bollards as illustrated in above figure/diagram to moor. Use of the dock mooring cleats (No. B and C) at the wharf head should be avoided.

.

8 APPENDIX 2 - SAFETY LETTER

Suncor Energy Products Partnership

Terminal _____
Date _____

The Master MT _____
Port _____

Dear Captain,

Accountability for the safe conduct of operations while your ship is at this terminal rests jointly with you, as Master of the tanker, and with the Terminal Representative. Before operations start your full co-operation and understanding is required to ensure the safety requirements set out in the Ship/Shore Safety Check-List are followed. These requirements 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 tanker's stay alongside this terminal. We will ensure that our personnel do likewise and will co-operate fully with you in the mutual interest of safe operations.

Before the start of operations, and from then time to time, for our mutual safety, a member of the terminal staff, together with a Responsible Officer, will make a routine inspection of your tanker.

Where corrective action is needed, we will not agree to operations starting. If they have been started, we will require them to be stopped immediately.

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 _____

9 APPENDIX 3 - SHIP SHORE SAFETY CHECKLIST (ISGOTT 26.3.3)

Refer to ISGOTT 6 Checklist on page 36.

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)	☐ Yes	
2	International shore fire connection is available (5.5, 19.4.3.1)	☐ Yes	
3	Transfer hoses are of suitable construction (18.2)	☐ Yes	
4	Terminal information booklet reviewed (15.2.2)	☐ Yes	
5	Pre-berthing information is exchanged (21.3, 22.3)	☐ Yes	
6	Pressure/vacuum valves and/or high velocity vents are operational (11.1.8)	☐ Yes	
7	Fixed and portable oxygen analysers are operational (2.4)	☐ Yes	

Part 1B. Tanker: checks pre-arrival if using an inert gas system			
Item	Check	Status	Remarks
8	Inert gas system pressure and oxygen recorders are operational (11.1.5.2, 11.1.11)	☐ Yes	
9	Inert gas system and associated equipment are operational (11.1.5.2, 11.1.11)	☐ Yes	
10	Cargo tank atmospheres' oxygen content is less than 8% (11.1.3)	☐ Yes	
11	Cargo tank atmospheres are at positive pressure (11.1.3)	☐ Yes	

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

ISGOTT Checks after mooring Ship/Shore Safety Checklist

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

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

ISGOTT Checks pre-transfer Ship/Shore Safety Checklist

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

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

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	☐ Yes	☐ Yes	
62	Appropriate personal protective equipment identified and available (4.8.1)	☐ Yes	☐ Yes	
63	Countermeasures against personal contact with cargo are agreed (1.4)	☐ Yes	☐ Yes	
64	Cargo handling rate and relationship with valve closure times and automatic shutdown systems is agreed (16.8, 21.4, 21.5, 21.6)	☐ Yes	☐ Yes	
65	Cargo system gauge operation and alarm set points are confirmed (12.1.6.6.1)	☐ Yes	☐ Yes	

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

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	☐ Yes	☐ Yes	
72	Water spray system is operational (5.3.1, 19.4.3)	☐ Yes	☐ Yes	
73	Appropriate personal protective equipment is identified and available (4.8.1)	☐ Yes	☐ Yes	
74	Remote control valves are operational	☐ Yes	☐ Yes	
75	Cargo pumps and compressors are operational	☐ Yes	☐ Yes	
76	Maximum working pressures are agreed between tanker and terminal (21.4, 21.5, 21.6)	☐ Yes	☐ Yes	
77	Reliquefaction or boil-off control equipment is operational	☐ Yes	☐ Yes	
78	Gas detection equipment is appropriately set for the cargo (2.4)	☐ Yes	☐ Yes	
79	Cargo system gauge operation and alarm set points are confirmed (12.1.6.6.1)	☐ Yes	☐ Yes	
80	Emergency shutdown systems are tested and operational (18.5)	☐ Yes	☐ Yes	
81	Cargo handling rate and relationship with valve closure times and automatic shutdown systems is agreed (16.8, 21.4, 21.5, 21.6)	☐ Yes	☐ Yes	
82	Maximum/minimum temperatures/pressures of the cargo to be transferred are agreed (21.4, 21.5, 21.6)	☐ Yes	☐ Yes	
83	Cargo tank relief valve settings are confirmed (12.11, 21.2, 21.4)	☐ Yes	☐ Yes	

Part 6. Tanker and terminal: agreements pre-transfer				
Part 5 item	Agreement	Details	Tanker initials	Terminal initials
32	Tanker manoeuvring readiness	Notice period (maximum) for full readiness to manoeuvre: Period of disablement (if permitted):		
33	Security protocols	Security level: Local requirements:		
33	Effective tanker/terminal communications	Primary system: Backup system:		
35	Operational supervision and watchkeeping	Tanker: 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 item 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)	☐ Yes	
85	Individual cargo tank inert gas supply valves are secured for cargo plan (12.l.13.4)	☐ Yes	
86	Inert gas system delivering inert gas with oxygen content not more than 5% (11.l.3)	☐ Yes	
87	Cargo tank high level alarms are operational (12.l.6.6.l)	☐ Yes	
88	All cargo, ballast and bunker tanks openings are secured (23.3)	☐ 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)	☐ Yes	
90	Crude oil washing checklists for use before, during and after crude oil washing are in place ready to complete, as contained in the approved crude oil washing manual (12.5.2, 21.6)	☐ Yes	

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

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

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

Declaration

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

	Tanker	Terminal
Part 1A. Tanker: checks pre-arrival	☐	☐
Part 1B. Tanker: checks pre-arrival if using an inert gas system	☐	☐
Part 2. Terminal: checks pre-arrival	☐	☐
Part 3. Tanker: checks after mooring	☐	☐
Part 4. Terminal: checks after mooring	☐	☐
Part 5A. Tanker and terminal: pre-transfer conference	☐	☐
Part 5B. Tanker and terminal: bulk liquid chemicals. Checks pre-transfer	☐	☐
Part 5C. Tanker and terminal: liquefied gas. Checks pre-transfer	☐	☐
Part 6. Tanker and terminal: agreements pre-transfer	☐	☐
Part 7A. General tanker: checks pre-transfer	☐	☐
Part 7B. Tanker: checks pre-transfer if crude oil washing is planned	☐	☐
Part 7C. Tanker: checks prior to tank cleaning and/or gas freeing	☐	☐

In accordance with the guidance in chapter 25 of *lSGOTT*, 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 *lSGOTT* 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	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
9	Inert gas system and all associated equipment are operational	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
11	Cargo tank atmospheres are at positive pressure	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
18	Mooring arrangement is effective	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
19	Access to and from the tanker is safe	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
20	Scuppers and savealls are plugged	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
23	External openings in superstructures are controlled	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
24	Pumproom ventilation is effective	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
28	Tanker is ready to move at agreed notice period	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
29	Fendering is effective	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
33	Communications are effective	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
35	Supervision and watchkeeping is adequate	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
36	Sufficient personnel are available to deal with an emergency	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
37	Smoking restrictions and designated smoking areas are complied with	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
38	Naked light restrictions are complied with	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	

Part 8. Tanker: repetitive checks during and after transfer (cont.)								
39	Control of electrical devices and equipment in hazardous zones is complied with	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
40 41 42 51	Emergency response preparedness is satisfactory	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
54	Electrical insulation of the tanker/terminal interface is effective	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
55	Tank venting system and closed operation procedures are as agreed	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
85	Individual cargo tank inert gas valves settings are as agreed	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
86	Inert gas delivery maintained at not more than 5% oxygen	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
87	Cargo tank high level alarms are operational	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ 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	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
19	Access to and from the terminal is safe	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
29	Fendering is effective	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
32	Spill containment and sumps are secure	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
33	Communications are effective	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
35	Supervision and watchkeeping is adequate	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
36	Sufficient personnel are available to deal with an emergency	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
37	Smoking restrictions and designated smoking areas are complied with	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
38	Naked light restrictions are complied with	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
39	Control of electrical devices and equipment in hazardous zones is complied with	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
40 41 47 51	Emergency response preparedness is satisfactory	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
54	Electrical insulation of the tanker/terminal interface is effective	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
55	Tank venting system and closed operation procedures are as agreed	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
Initials								