OAKVILLE 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 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:

  905 804 7641

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

*For more information*

Suncor Marine Department

2489 North Sheridan Way, Mississauga

Ontario, Canada L5K 1A8

(905) 804-4500

marineop@suncor.com

**Version:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Updated by</th>
</tr>
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<tr>
<td>June 1999</td>
<td>-</td>
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</tr>
<tr>
<td>July 2011</td>
<td>1</td>
<td>Marine Operations</td>
</tr>
<tr>
<td>October 2016</td>
<td>2</td>
<td>Marine Operations</td>
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GENERAL INFORMATION
1 GENERAL INFORMATION

1.1 LOCATION

- The facility is shown on Canadian Hydrographic Service Chart numbers 2086 Toronto to Hamilton and 2077 Lake Ontario, Western Region in latitude 43° 22’ North, longitude 79° 43’ West.
- Vessels must transit the St. Lawrence Seaway to access the facility.

1.2 BERTH DESCRIPTION

- The berths are designed to load and discharge light oils to/from foreign and domestic tankers.
- The marine facility projects 651 metres into Lake Ontario. This length is a combination of a 165 metre causeway and a 486 metre jetty laying approximately 315° - 135°. The jetty is a finger pier, constructed of a series of cells bearing the dock structure. The spacing between the cells is open to the lake which flows through the structure. i.e. Wave action can and does carry through to vessels in the lee berth.
• The segment of the jetty used as the berth consists of four large breasting cells at the outward end of the jetty. This provides a total breasting face of approximately 120 metres. The normal berthing position for a typical 163 metre LOA vessel spans three of the large cells with an effective breasting face of approximately 65 metres. Vessels are to berth on the West side of the jetty.

• There is no shore gangway and vessels must arrive at the facility with the ships gangway ready to be deployed. N.B. The elevation of the dock is approximately 5.5 metres above lake level at chart datum.

1.3 WATER DEPTH

• The lake water is fresh and chart datum is 74.2 metres above the International Great Lakes Datum 1985 (IGLD 1985)

• Water levels fluctuate during the season and Masters should secure the latest information on water levels when planning their required under keel clearance for berthing and while in berth.

• The Canadian Hydrographic Service provides mariners with continuous, real time, information on water levels at various locations in the Great Lakes through a telephone accessed voice recording or online (http://www.charts.gc.ca/index-eng.asp).

• The facility is situated close to Burlington. (See telephone numbers in Section 2, Communications).

• For most recent soundings taken at the dock, refer to Appendix 5, provided as information only and strictly not to be used for navigation purposes. Suncor accepts no liability for and does not warrant the currency and accuracy of any such information and shall not be liable should any such information prove to be inaccurate, and the master is advised to ask his local agents to supply current information prior to arrival in order to ensure safe navigation at all times.

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

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

1.4 SERVICES AT THE BERTH

• **Bunkers:** Not available at the dock by pipeline or by barge.

• **Fresh Water:** No pipeline supply. Only with prior approval by Suncor Oakville Terminal control room, the vessel may be allowed to arrange for a private contractor to deliver water by truck.

• **Garbage Disposal:** Not Available.

• **Slop and Tank Cleanings:** Not accepted.
• **Ballast**: Not accepted.

### 1.5 SECURITY

**Access to and from the Vessel:**

- Access to the marine facility is strictly controlled. The gate is closed and attended by a security guard. Crew members leaving the facility will be logged out at the gate and logged in on their return. Crew Members must display adequate photographic ID upon return. Taxi’s etc. are not allowed past the gate. Vehicles transporting materials may, with the Terminal’s authorization, and with the dock operator’s direction, be permitted to drive onto the dock (See Section 2 - Communications).

**Port Facility Security Officer (PFSO):**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Ashraf Agayby</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phone Numbers:</strong></td>
<td>+1-905-804-5766 (office)</td>
</tr>
<tr>
<td></td>
<td>905-208-2242 / 905-208-2237 (24/7 Contact Number)</td>
</tr>
<tr>
<td><strong>E-mail:</strong></td>
<td><a href="mailto:aagayby@suncor.com">aagayby@suncor.com</a></td>
</tr>
</tbody>
</table>

- 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.

**Access to the Terminal:**

**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.

**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.
**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 license. Government officials, in their official capacity, will be granted access upon presentation of their official ID-card.

- Furthermore, anyone carrying goods that are to be delivered on board a vessel must present documents (i.e. a waybill, packing list etc.) covering the carriage of such goods to security guards before entry is granted.

- For security and logistical purposes, advance notice of any planned delivery of equipment or stores to a vessel at Oakville Terminal dock must be given during weekdays a MINIMUM of 24 hours prior to the planned delivery timing to the Terminal. In case of any emergency, equipment/spares delivery to a vessel, advance notice must be given to the Terminal at earliest possible time. In either case, no delivery is to be effected without having received Terminal approval.

**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 vessel’s security officer to personally take receipt of this luggage on behalf of its rightful owner.

**1.6 WEATHER**

- The facility is exposed to lake winds and wind driven waves. This is a potential problem to vessels with wave action causing vessels to move in the berth and for contact to occur with the dock. Adverse conditions can develop quickly, mainly due to easterly weather, but sustained south westerly weather can also be of concern.

- Masters should closely monitor the weather and marine weather forecasts and maintain a state of readiness to permit evacuation of the berth at full power at short notice.

- Masters are referred to The Great Lakes Marine Weather Guide, published by Environment Canada and the Sailing Directions which contain useful meteorological data for the area.

**1.7 LAKE CURRENT**

- Surface currents generally move counter clockwise and around Lake Ontario at an average rate of 0.1 knot. Surface current is however significantly affected by winds, especially from the east, and currents can reach in excess of 0.5 knots in sustained winds.
2 COMMUNICATIONS

2.1 ESTIMATED TIME OF ARRIVAL (ETA)
- Masters are required to provide information on ETA’s in accord with the terms of the charter party and to provide the terminal operations centre with ETA’s at twenty four (24) hours and three 4 hours prior to arrival.

2.2 USEFUL LOCAL NUMBERS

<table>
<thead>
<tr>
<th>Service</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oakville Terminal Manager:</td>
<td>+1-905-825-1748</td>
</tr>
<tr>
<td>Vessel ETA’s, visitors to dock:</td>
<td>+1-905-208-2242 (24hrs)</td>
</tr>
<tr>
<td>OR if above number is busy:</td>
<td>+1-905-208-2237 (24 hrs)</td>
</tr>
<tr>
<td>Dock Operations – Intertek:</td>
<td>1-905-529-0090</td>
</tr>
<tr>
<td>Canadian Coast Guard, Emergencies, Spills:</td>
<td>Any Coast Guard Radio Station</td>
</tr>
<tr>
<td>Or:</td>
<td>+1-519-337-6360</td>
</tr>
<tr>
<td>Voice announcing Great Lakes water level gauges:</td>
<td>+1-416-868-6026</td>
</tr>
<tr>
<td>Burlington:</td>
<td>+1-905-544-5610</td>
</tr>
<tr>
<td>Toronto:</td>
<td>+1-416-868-6026</td>
</tr>
<tr>
<td>McKeil Marine Limited, Hamilton - Tugs:</td>
<td>+1-905-528-4780</td>
</tr>
<tr>
<td>Fire:</td>
<td>911</td>
</tr>
<tr>
<td>Police:</td>
<td>911</td>
</tr>
<tr>
<td>Ambulance:</td>
<td>911</td>
</tr>
<tr>
<td>Oil Pollution Response:</td>
<td>+1-613-930-9690</td>
</tr>
<tr>
<td>Suncor Marine Department:</td>
<td>+1-905-804-4500</td>
</tr>
</tbody>
</table>
BERTHING AND MOORING
3 BERTHING AND MOORING

3.1 VESSEL SIZE AND RESTRICTIONS WEST BERTH

- The berth is well placed at the outer end of the jetty to take advantage of the deeper water provided by the natural sloping of the lake bed. The criteria that follows provides for the typical largest vessels to lay in the berth with a good breasting face and a standard mooring deployment with well placed fore and aft breasts and springs. The centre of the shore transfer manifold is located approximately 83 metres from the end of the dock and the water depth shoals naturally towards the shoreline.
- Connection to the transfer manifold is by ships flexible hose. The refinery does have a limited supply of flexible hose available for emergency use.
- Suncor prefers vessels to dock bow out and the criteria assumes that vessels in the West Berth are port side to. The key vessel criteria at this berth is “stern to centre of manifold”.
- Masters may elect to dock their vessel bow in, especially when planning to trim by the stern to maximize mean draft, in which case the key vessel criteria changes to “bow to centre of manifold”.

<table>
<thead>
<tr>
<th>Vessel Size Parameter:</th>
<th>Restriction:</th>
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<tr>
<td>Maximum length:</td>
<td>163 m</td>
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<tr>
<td>Maximum SCM /BCM:</td>
<td>82 m</td>
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<tr>
<td>Maximum displacement:</td>
<td>20,000 tons</td>
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</table>

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

- Masters should be alert to the relatively exposed nature of the dock. Easterly winds can quickly give rise to wave action at the dock sufficient to cause vessels berthed there to move and make contact with the jetty structure. Vessels will have to evacuate the berth to avoid contact damage at moderate easterly wind speeds i.e. 20 knots.
- Similar circumstances can arise in sustained south-westerly winds.
- All ship mooring wires must be fitted with synthetic mooring tails that meet OCIMF guidelines (i.e. Maximum 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 mandal 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 tanker rests with the Master, the terminal has an interest in ensuring that vessels are securely and safely moored. Appendix 1 Mooring Guideline Diagrams are guidelines for minimum moorings which terminal staff will expect vessels to deploy while at this facility. Masters should ensure that to the maximum extent possible, breast lines shall be deployed at right angles to the longitudinal axis of the vessel and spring lines shall be deployed parallel to the longitudinal axis of the vessel.

3.4 BERTHING INFORMATION

• The berthing pier extends out into the lake about perpendicular to the shore and its face lies 315°/135°.

• The fendering at the berths is 38 cm cylindrical rubber secured with cable. Masters are advised to avoid hard contacts while berthing to minimize the risk of exceeding the fendering systems energy absorption capacity.

• In consideration of the exposed nature of the berth, and the possibility of the sudden onset of adverse weather conditions, Suncor prefers vessels at this facility to berth bow out. This enhances the safe departure of the vessels in an emergency situation. Tugs are available from Hamilton to assist vessels who may require tug assist for the maneuver.

• It should be noted that due to the distance the tugs have to travel to get to Oakville, vessels may have to wait two or more hours for tugs to arrive in an emergency.

3.5 BERTHING MANOEUVRES

• The pier is approached from the open lake on, or close to a 315° direction. Suncor prefers Masters will turn their vessel around for a bow out berthing using the maneuver most suitable to the vessel’s handling capabilities, its laden condition and the prevailing weather.

• Vessels should not be swung by landing on the end of the dock as it is not designed to be used as a turning knuckle.

• Attention is drawn to Section 3.8 Environmental Limits for berthing.

• Nothing in this berthing principle shall exonerate the master from taking any precautions required by the ordinary practice of seamen, or by any relevant special circumstances of the case. At all times the vessel should proceed at a safe speed so that she can take effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

3.6 TUG ASSIST

• All vessels visiting this facility will be comparatively small, capable, seaway traders. There will however be variations in the maneuvering characteristics of the vessels. Suncor is aware that
berthings have been conducted safely with and without the use of tugs for decades. There is therefore no blanket requirement for vessels to utilize tug assist when berthing.

- Masters of vessels with less maneuvering capability, e.g. with no bow thruster, are encouraged to utilize tug assist; as are the Masters of a more capable vessel when, in their judgment, tug assist will enhance the safety of the berthing, or unberthing, of the vessel.
- Assist tugs can be obtained from Hamilton Harbour should the circumstances dictate. Due to the distance to the facility, Masters should allow for a two hour positioning time and advance confirmation of availability.

3.7 **LINESMEN**

- An adequate number of shore linesmen will be provided to take vessel lines and perform dock mooring duties.
- N.B. vessels crews on both foreign and Canadian flag vessels will not be utilized to perform dock mooring duties.

<table>
<thead>
<tr>
<th>Guidelines:</th>
<th>Berthing</th>
<th>Unberthing</th>
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</thead>
<tbody>
<tr>
<td>4 Persons</td>
<td>2 Persons</td>
<td></td>
</tr>
</tbody>
</table>

3.8 **ENVIRONMENTAL LIMITS**

**Wind Limits: Berthing**

- The berth is exposed to winds and lake wind wave action and this is more pronounced in easterly and sustained south-westerly winds. The Masters decision to berth will be subject to an evaluation of the wind direction and speed, the wind wave levels, the effect of vessels movement in the berth on under keel clearance and, the freeboard (sail area) of the vessel. Vessels should not be berthed in easterly winds in excess of 20 knots or in winds in excess of 30 knots from any other direction.

**Adverse wind and/or wind wave effect while in berth.**

- Masters are advised that in adverse or impending adverse conditions, it may be advisable to evacuate the berth and steam to safer conditions in the open lake. When planning the berthing manoeuvre due consideration should be given to the advantage of being berthed bow out if an emergency evacuation is required. Vessels WILL be required to evacuate the berth when easterly winds of 20 knots are developing.

<table>
<thead>
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<th>Activity:</th>
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<th>EASTERLY winds:</th>
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<tr>
<td>Stop Cargo</td>
<td>20 knots</td>
<td>20 knots</td>
</tr>
<tr>
<td>Disconnect arms</td>
<td>25 knots</td>
<td>20 knots</td>
</tr>
<tr>
<td>Take Precautionary action</td>
<td>30 knots</td>
<td>20 knots</td>
</tr>
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</table>
RULES AND REGULATIONS
4 RULES AND REGULATIONS

4.1 FEDERAL GOVERNMENT

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

4.2 SPECIAL ‘ICE NAVIGATION’ REQUIREMENTS

- Masters of laden tankers destined for or departing Suncor’s Oakville Terminal are advised that vessels must be in compliance with the “Joint Industry - Coast Guard Guidelines for the Control of Oil Tankers and Bulk Chemical Carriers in Ice Control Zones of Eastern Canada” when transiting the Gulf and River St. Lawrence in the winter.

4.3 SUNCOR OAKVILLE TERMINAL RULES AND REGULATIONS

- Tankers destined for the Terminal are required to have on board the latest edition of the “International Safety Guide for Oil Tankers and Terminals - ISGOTT”.
- Suncor is committed to safe operations and protection of the environment at its Oakville Terminal. Vessel staff is 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 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 is 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 Oakville Terminal Rules and Procedures after completion of berthing operations.

2. Safety Check List

- On completion of berthing and prior to the commencement of deballasting or cargo transfer, the Vessel/Terminal Safety Check List - Appendix 2 will be completed following a joint inspection by the terminal representative 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.

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 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

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

9. Vessel/Shore Communications
• Communication between the terminal and vessel will be by intrinsically safe smart phones with push to talk capability. These shall be tested and found satisfactory before transfer operations commence. The vessel’s responsible officer and the terminal representative shall confirm with each other that the communication system and signals for controlling the operations are understood by all personnel involved prior to the commencement of deballasting or cargo transfer. See Section 5.3 and Appendix 3.

• In the event of a total breakdown of 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 representative.
- 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 representative 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 representative 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 representative.

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 repressurized. The next tank is not to be isolated and opened until the preceding tank is secured and open to the IG system.
• All gauging, sampling water dips and temperatures will be taken either through special fittings provided; or if it is necessary to open up tanks for this purpose, then this will be done one tank at a time as described above.

(b) Failure of IGS
• If at any time the IGS is not maintaining the prescribed conditions, the terminal representative 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 representative. The two fire monitors immediately adjacent to the manifold should be elevated, aligned towards the manifold area and made ready for immediate use. Throughout vessel stay at berth, fire line
shall be pressurized, ready for immediate use. Two portable fire extinguishers, preferably of the dry chemical type, shall be available in the proximity of the manifold area.

- Should fire occur on the vessel, the Master or responsible vessel’s officer of such vessel shall make an immediate signal by prolonged blasts on the vessel’s whistle and by sounding the fire alarm, and will also place the engine on standby. All transfer operations shall cease and cargo arm disconnected immediately.

19. Emergency Procedures
- As required by the Vessel/Terminal Safety Check List, the Master of the vessel and the terminal representative 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 representative and the vessel’s Master or Chief Officer. See Appendix #3.

21. Sea and Overboard Discharge Valves
- Before any cargo or ballast transfer commences, sea and overboard discharge valves connected to the cargo or ballast system shall be closed and sealed with numbered seals. When sealing is not practicable, as with hydraulic valves, some suitable means of marking should be used to indicate that the valves are to remain closed. Seal numbers should be recorded on the Vessel/Terminal Safety Check List. Except in an emergency, these seals shall be removed only with the approval of the terminal representative. 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) A qualified vessel’s officer, able to communicate effectively in English with the terminal staff, is required to be on deck or in the control room at all times. A continuous deck watch is to be maintained to ensure moorings are carefully tended and cargo transfer arms are under observation at all times.

  (b) 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.

  (c) 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.

(d) 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.

(e) The venting of the vessel’s tanks shall take place only through the vessel’s fixed venting system.

(f) All cargo, ballast and bunker tank lids and tank washing openings shall be securely closed.

(g) 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.

(h) 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.

(i) 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 representative or the responsible vessel’s officer.

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

(k) 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 representative, 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

- Cargo transfer operations shall not be started, or if started, shall be discontinued by either the responsible officer of the vessel or the terminal representative when any of the following conditions is noted:
  
  (a) On the approach of and during electrical storms, heavy rainstorms or period of high winds, all tank openings and cargo valves shall be closed, and transfer arms disconnected.
  
  (b) If a fire occurs on the terminal, the vessel or any craft in close proximity, and in addition, all tank openings and cargo valves shall be closed.
  
  (c) If there are insufficient competent personnel aboard the vessel to safely handle the operation in progress, and to handle any emergency situation.
  
  (d) If a spill or leak occurs aboard the vessel or on the terminal.
  
  (e) If any other emergency situation arises which, in the opinion of the vessel’s responsible officer or the terminal representative 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 representative and regulatory authorities.

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

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

27. Tank Lids

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

28. List

- Excessive listing of the vessel must be avoided

29. Vessel Noise
• Due to the proximity of local residences and Town of Oakville public spaces to the dock area at Oakville, vessels are required to make any and all efforts to reduce operational noise levels to the minimum possible while alongside Oakville Terminal dock, in collaboration with the terminal and attending Pollution & Safety Advisor (PSA), and always in consideration of maintaining safe and efficient operations and compliance to procedures.
CARGO AND BALLAST TRANSFER
5 CARGO TRANSFER

5.1 TERMINAL MANIFOLDS

- There is one shore manifold assembly on the west side of the jetty. This manifold is located approximately 83 metres inshore from the outer end of the jetty.
- The west manifold assembly has three manifolds; one for clean product transfer, one for the ballast and one for black product transfer. The manifolds for black oil and ballast transfer are no longer in use. The clean product manifold, which is closest to the end of the jetty, can present two flange connections.
- All manifolds present eight inch flanges. Each manifold is fitted with an insulating flange.
- The maximum allowable pressure at the shore manifold is 125lbs/square inch.
- The shore cargo transfer system consists of one 10” clean product line. Typical flow rates are 2500 to 3500 bbls per hour.

5.2 VESSEL MANIFOLDS

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

5.3 CARGO OPERATING PROCEDURES

- Before cargo transfer commences the ship’s officer in charge and the terminal supervisor should exchange information and agree on a transfer plan which should be documented in writing. Information exchanged and the plan must include, as a minimum, the items shown in Appendix 3.
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 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 cargo hose (if conditions allow)
  - 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 communication system and give five or more prolonged blasts on the vessels whistle, repeated at interval:
  - 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 cargo hose (if conditions allow)
Stand by to cast off the mooring lines (if conditions allow)

Vessel will:
Secure vessel cargo system
Ready vessel for emergency departure
Communicate with authorities
Depart berth as required

6.2 SPILLS OR LEAKS

6.2.1 Terminal Spills or Leaks

In the event of a spill from the terminal or a leak from the hose or shore cargo piping:
- The transfer operation is to be stopped immediately and vessel to be informed.
- The Marine 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.
- Suncor Marine Department is to be informed
- The vessel will 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, rectified and confirmed by the Suncor Marine Department prior to 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.
APPENDIX 1 - MOORING DIAGRAM

<table>
<thead>
<tr>
<th>Lines per Bollard</th>
<th>Breast Lines</th>
<th>Spring Lines</th>
<th>Head/Stern Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum 2 on outer end bollard</td>
<td>Minimum 4 (ie. 2 forward &amp; 2 aft) At or close to 90° angle</td>
<td>Minimum 4 (ie. 2 forward &amp; 2 aft) May be deployed from forecastle &amp; poop if deployment from main deck is not practical</td>
<td>As required by vessel</td>
</tr>
</tbody>
</table>

WIND LIMITS
- Watch for adverse Easterly wind/wave conditions
## APPENDIX 2 – 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.

<table>
<thead>
<tr>
<th>Bulk Liquid - General</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is safe access between the ship and shore.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>2. The ship is securely moored.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>3. The agreed ship/shore communication system is operative.</td>
<td></td>
<td>A</td>
<td>R</td>
<td>System ……………………… Back-up system …………………</td>
</tr>
<tr>
<td>4. Emergency towing-off pennants are correctly rigged and positioned.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>5. The ship’s fire hoses and fire-fighting equipment is positioned and ready for immediate use.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>6. The terminal’s fire-fighting equipment is positioned and ready for immediate use.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
</tbody>
</table>
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.

11. Temporarily removed scupper plugs will be constantly monitored.

12. Shore spill containment and sumps are correctly managed.

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.

18. The ship’s emergency fire control plans are located externally.

<table>
<thead>
<tr>
<th>Inert Gas System</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td></td>
<td></td>
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<td>R</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Date of publication October 2016
19. Fixed IGS pressure and oxygen content recorders are working.  

20. All cargo tank atmospheres are at positive pressure with oxygen content of 8% or less by volume.

---

**PART ‘B’ – BULK LIQUID GENERAL – VERBAL VERIFICATION**

<table>
<thead>
<tr>
<th>Bulk Liquid - General</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. The ship is ready to move under its own power.</td>
<td></td>
<td></td>
<td>P</td>
<td>R</td>
</tr>
<tr>
<td>22. There is an effective deck watch in attendance on board and adequate supervision of operations on the ship and in the terminal.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>23. There are sufficient personnel on board and ashore to deal with an emergency.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>24. The procedures for cargo, bunker and ballast handling have been agreed</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td>25. The emergency signal and shutdown procedure to be used by the ship and shore have been explained and understood</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>26. Material safety data sheets (MSDS) for the cargo transfer have been exchanged where requested.</td>
<td></td>
<td></td>
<td>P</td>
<td>R</td>
</tr>
<tr>
<td>27. The hazards associated with toxic substances in the cargo being handled have been identified and understood.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H₂S Content …………………</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Benzene Content…………..</td>
</tr>
<tr>
<td>28. An International Shore Fire Connection has been provided.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>29. The agreed tank venting system will be used.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Method ………………………</td>
</tr>
<tr>
<td>30. The requirements for closed operations have been agreed.</td>
<td></td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>31. The operation of the P/V system has been verified.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>32. Where a vapour return line is connected, operating parameters have been agreed.</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Independent high level alarms, if fitted, are operational and have been tested.</td>
<td></td>
<td>A R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Adequate electrical insulating means are in place in the ship/shore connection.</td>
<td></td>
<td>A R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Shore lines are fitted with a non-return valve or procedures to avoid ‘back filling’ have been discussed.</td>
<td></td>
<td>P R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Smoking rooms have been identified and smoking requirements are being observed.</td>
<td></td>
<td>A R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Naked light regulations are being observed.</td>
<td></td>
<td>A R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Ship/shore telephones, mobile phones and pager requirements are being observed.</td>
<td></td>
<td>A R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. Hand torches (flashlights) are of an approved type.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Fixed VHF/UHF transceivers and AIS equipment are on the correct power mode or switched off.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. Portable VHF/UHF transceivers are of an approved type.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. The ship’s main radio transmitter aerials are earthed and radars are switched off.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Electric cables to portable electrical equipment within the hazardous area are disconnected from power.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. Window type air conditioning units are disconnected.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Positive pressure is being maintained inside the accommodation and air conditioning intakes, which may permit the entry of cargo vapours, are closed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Measures have been taken to ensure sufficient mechanical ventilation in the pump room.</td>
<td></td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. There is provision for an emergency escape.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. The maximum wind and swell criteria for operations has been agreed.</td>
<td></td>
<td>A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nominated smoking rooms:  

Stop cargo at:  
Disconnect at:  
Unberth at:  

Date of publication October 2016
49. Security protocols have been agreed between the Ship Security Officer and the Port Facility Security Officer, if appropriate.

50. Where appropriate, procedures have been agreed for receiving nitrogen supplied from shore, either for inerting or purging ship’s tanks, or for lines clearing into the ship.

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

<table>
<thead>
<tr>
<th>Inert Gas System</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>51. The IGS is fully operational and in good working order.</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52. Deck seals, or equivalent, are in good working order.</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53. Liquid levels in pressure/vacuum breakers are correct.</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54. The fixed and portable oxygen analysers have been calibrated and are working properly.</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. All the individual tank IGS valves (if fitted) are correctly set and locked.</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56. 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.</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Crude Oil Washing</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>57. The Pre-Arrival COW checklist, as contained in the approved COW manual, has been satisfactorily completed.</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58. The COW check lists for use before, during and after COW, as contained in the approved COW manual, are available and being used.</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>Tank cleaning operations are planned during the ship’s stay alongside the shore installation.</td>
<td>Yes/No*</td>
<td>Yes/No*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>If ‘yes’ the procedures and approvals for tank cleaning have been agreed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Permission has been granted for gas freeing operations.</td>
<td>Yes/No*</td>
<td>Yes/No*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Delete Yes or No as appropriate

### PART ‘C’ – BULK LIQUID CHEMICALS - VERBAL VERIFICATION

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material Safety Data Sheets are available giving the necessary data for the safe handling of the cargo.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>A manufacturer’s inhibition certificate, where applicable, has been provided.</td>
<td></td>
<td></td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Counter measures against accidental personal contact with the cargo have been agreed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sufficient protective clothing and equipment (including self-contained breathing apparatus) is ready for immediate use and is suitable for the product being handled.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The cargo handling rate is compatible with the automatic shutdown system, if in use.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Cargo system gauges and alarms are correctly set and in good order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Portable vapour detection instruments are readily available for the products being handled.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Information on fire-fighting media and procedures has been exchanged.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Transfer hoses are of suitable material, resistant to the action of the products being handled.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Cargo handling is being performed with the permanent installed pipeline system.</td>
<td></td>
<td></td>
<td>P</td>
<td></td>
</tr>
</tbody>
</table>
11. Where appropriate, procedures have been agreed for receiving nitrogen supplied from shore, either for inerting or purging ship's tanks, or for lines clearing into the ship.

Date of publication October 2016
<table>
<thead>
<tr>
<th></th>
<th>Bulk Liquefied Gases</th>
<th>Ship</th>
<th>Terminal</th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material Safety Data Sheets are available giving the necessary data for the safe handling of the cargo.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>A manufacturer’s inhibition certificate, where applicable, has been provided.</td>
<td></td>
<td></td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The water spray system is ready for immediate use.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>There is sufficient protective equipment (including self-contained breathing apparatus) and protective clothing ready for immediate use.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Hold and inter-barrier spaces are properly inerted or filled with dry air, as required.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>All remote control valves are in working order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The required cargo pumps and compressors are in good order, and the maximum working pressures have been agreed between ship and shore.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Re-liquefaction or boil off control equipment is in good order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The gas detection equipment has been properly set for the cargo, is calibrated and is in good order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Cargo system gauges and alarms are correctly set and in good order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Emergency shutdown systems have been tested and are working properly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ship and shore have informed each other of the closing rate of ESD valves, automatic valves or similar devices.</td>
<td></td>
<td></td>
<td>A</td>
<td>Ship ..........</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shore ...</td>
</tr>
<tr>
<td>13</td>
<td>Information has been exchanged between ship and shore on the maximum/minimum temperatures/pressures of the cargo to be handled.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>
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 alarm system is working.

16. Cargo tank relief valves are set correctly and actual relief valve settings are clearly and visibly displayed. (Record settings below)

<table>
<thead>
<tr>
<th>Tank No 1</th>
<th>Tank No 2</th>
<th>Tank No 3</th>
<th>Tank No 4</th>
<th>Tank No 5</th>
<th>Tank No 6</th>
<th>Tank No 7</th>
<th>Tank No 8</th>
<th>Tank No 9</th>
<th>Tank No 10</th>
</tr>
</thead>
</table>
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.

<table>
<thead>
<tr>
<th>For Vessel:</th>
<th>For Shore:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name..................</td>
<td>Name..................</td>
</tr>
<tr>
<td>Rank..................</td>
<td>Position...............</td>
</tr>
<tr>
<td>Signature............</td>
<td>Signature...............</td>
</tr>
<tr>
<td>Date..................</td>
<td>Date..................</td>
</tr>
</tbody>
</table>

Record of repetitive checks:

<table>
<thead>
<tr>
<th>Date:</th>
<th>Time:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initials for Vessel:

Initials for Shore:
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 __________________________

Date of publication October 2016
APPENDIX 5 – OAKVILLE SOUNDING CHART