Composition of the Ship/ Shore Safety Checklist

The Checklist has four main section

- Pre – arrival
- Check after mooring
- Checks pre – transfer (including agreements)
- Summary of repetitive checks during and after transfer , until the tanker departs

Part 1A. Tanker check pre-arrival

Part 1B. Tanker checks Pre- arrival if using an inert gas system

Part 2. Terminal : check pre-arrival

Part 3. Tanker: check after mooring

Part 4. Terminal: check after mooring

Part 5A. Tanker and terminal : pretransfer conference

Part 5B. Tanker and terminal: bulk liquid chemicals . Check pre Transfer

Part 5C. Tanker and Terminal: liquefied gas. Checks pre-transfer

Part 6 Tanker And terminal: agreements pre – transfer

Part 7 A General tanker: check pre-transfer

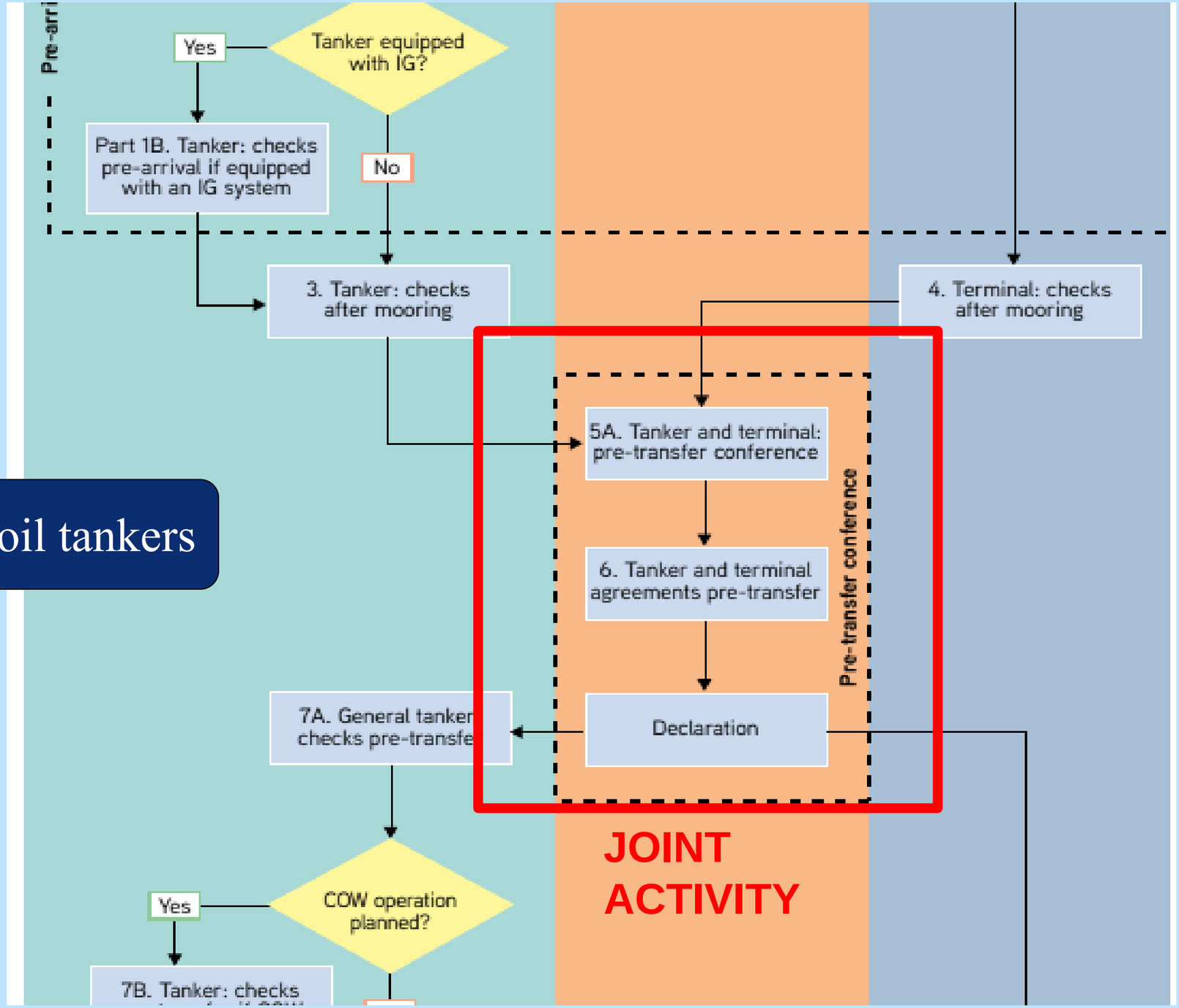
Part 7B Tanker : checks pretransfer if crude oil washing is planned

Part 7C Tanker: checks prior to tank cleaning and/ or gas freeing

Part 8. Tanker: repetitive checks during and after transfer

Part 9. Terminal: repetitive checks during and after transfer

Flowchart for oil tankers



SSSCL Section – Pre arrival

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	Marine Loading Arm / Transfer Hose supplied by the terminal
4	Terminal information booklet reviewed (15.2.2)	✓ Yes	
5	Pre-berthing information is exchanged (21.3, 22.3)	✓ Yes	information transmitted to Vopak via agency
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	

Terminal send Part 2 SSSCL together with Pre-Arrival Communication Exchange and TIB and request Vessel to provide Part 1A

- Tanker complete part 1A (and 1B if using an IG system) and Terminal complete part 2, then forward a copy to each other for review before arrival.
- If it is not possible to send a copy of the completed part to the tanker and/or terminal, then a message should be sent confirming the time and date of completion to the relevant party before arrival.
- If there are any outstanding issues not marked `' in the status box, this should be explained in this communication.
- *25.4.1* Are the following items being addressed pre-arrival?

Part 2. Terminal: checks pre-arrival

12. Pre-arrival information is exchanged (6.5, 21.2)

- Before the tanker arrives at the terminal, it should provide any information demanded by local, regional, national and international requirements. The pre-arrival exchange of information between the tanker and terminal should cover items as per ISGOTT section 21.2.

21.2.3 Tanker to terminal

Whenever possible, the following information should be sent at least 24 hours before arrival:

- Tanker's name, call sign and IMO number.
- Country of registration.
- Length Overall (LOA).
- Beam.
- Arrival draught (fwd, mid and aft).
- Estimated time of arrival.
- Deadweight/displacement.
- If loaded, the type and quantity of cargo and disposition, including any toxic properties.
- Maximum draught expected during cargo handling and when completed.
- Any defects in the hull, machinery or equipment.

Part 2. Terminal: checks pre-arrival

12. Pre-arrival information is exchanged (6.5, 21.2)

- Before the tanker arrives at the terminal, it should provide any information demanded by local, regional, national and international requirements. The pre-arrival exchange of information between the tanker and terminal should cover items as per ISGOTT section 21.2.

21.2.3 Tanker to terminal

- Inert Gas (IG) system, if fitted, is operational and where applicable the tanker's cargo tanks are
- inert (oxygen content less than 8% volume).
- If an alternative fuel system is used, e.g. Liquefied Natural Gas (LNG), confirmation that the control systems are operational.
- Any need for tank cleaning and/or gas freeing-
- Whether Crude Oil Washing (COW) is to be used and that the pre-arrival checklist has been completed.
- Tanker manifold details, including type, size, number, distance between centres of connections to be presented and the products to be handled at each manifold, numbered from forward.
- Proposed cargo handling. including grades, sequence, quantities and any rate restrictions.

Part 2. Terminal: checks pre-arrival

12. Pre-arrival information is exchanged (6.5, 21.2)

- Before the tanker arrives at the terminal, it should provide any information demanded by local, regional, national and international requirements. The pre-arrival exchange of information between the tanker and terminal should cover items as per ISGOTT section 21.2.

21.2.3 Tanker to terminal

- Quantity and nature of slops and dirty ballast and any contamination by chemical additives.

  dentification of any taxic components, such as hydrogen sulphide (H2S) or benzene.
- Quantities and specifications of any bunkers required, including delivery method.
- Ballast on board and individual tank quantities.
- Last calibration certificate of the gas detection system and gas meters, including the IG system.
- Security level currently in effect for the tanker.
- Winterisation procedure, if applicable.
- Contracted Oil Spill Response Organisation (OSRO).
- Any specific additional requirements detailed in the TIB.

Part 1A. Tanker: checks pre-arrival

3. Transfer hoses are of suitable construction (18.2)

- Oil cargo hoses should conform to recognized standard specifications, or as recommended by OCIMF/established hose manufacturers. Hoses should be of a grade and type suitable for the service and operating conditions in which they are to be used.
- Types; Marking; Flow velocities; Inspection; Pressure.

18.2.4 Marking

18.2.4.1 Rubber hoses

Each length of hose should be marked by the manufacturer, in accordance with BS EN1765, with:

- The manufacturer's name or trademark, e.g. XXX.
- Identification with the dated standard specification for manufacture, e.g. EN1765:2016.
- Type and designation, e.g. A15.
- Nominal bore, e.g. 75.
- MWP, e.g. 15 bar.
- Symbol to identify electrical conductivity, e.g. M and Q respectively (type S and L only).
- Quarter and year of manufacture, e.g. 2Q-2015.
- Manufacturer's serial number, e.g. 005.

LOP Review Required

Part 1A. Tanker: checks pre-arrival

3. Transfer hoses are of suitable construction (18.2)

- Oil cargo hoses should conform to recognized standard specifications, or as recommended by OCIMF/established hose manufacturers. Hoses should be of a grade and type suitable for the service and operating conditions in which they are to be used.
- Types; Marking; Flow velocities; Inspection; Pressure.

Example XXX/EN1765:2016/A15/75/15bar/0/2Q2017/005

Electrically discontinuous assemblies should also have the words 'electrically discontinuous. The marking should be permanent and durable.

After testing, the temporary elongation value should be painted legibly at each end of the hose in diametrically opposite positions.

LOP Review Required

Part 2. Terminal: checks pre-arrival

15. Terminal information booklet transmitted to tanker (15.2.2)

- The format of the TIB should follow OCIMF's Marine Terminal Information Booklet: Guidelines and Recommendations. This guidance gives terminal operators a template for presenting important
- terminal and port information in a booklet, for easy and consistent reference by ship personnel, shipowners, operators, charterers and others. The TIB can be stored as an attachment to the MTPQ to facilitate access for stakeholders and to ensure the latest version of the TIB is always available.

15.2.2 Terminal Information Booklet

- Terminals should have procedures in place to manage the exchange of information between the tanker and the terminal before the tanker berths. This will ensure the safe and timely arrival of the tanker at the berth, with both parties ready to commence operations.
- Detailed information on communications at the tanker/terminal interface is given in chapter 21. More information can be found in chapter 6 on security at the tanker/terminal interface.
- The format of the TIB should follow OCIMF's Marine Terminal Information Booklet: Guidelines and Recommendations. This guidance gives terminal operators a template for presenting important terminal and port information in a booklet, for easy and consistent reference by ship personal, ship owners, operators, charterers and others.
- The TIB can be stored as an attachment to the MTPQ to facilitate access for stakeholders and to ensure the latest version of the TIB is always available.

TIB Review Required:

1. OCIMF TIB Format
2. TIB upload into MTPQ

•SSSCL Section – Checks after mooring

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	

Tanker complete part 3 and Terminal complete part 4, then give a copy to each other as soon as possible, but no later than at the Pre-transfer conference.

Terminal provide Part 4 and request Vessel to provide Part 3 during pre- transfer meeting

•SSSCL Section – Checks Pre-transfer (including agreements)

Part 5A, Part 6 & Declaration done together during pre-transfer meeting

- Tanker and Terminal both complete part 5A (additionally 5B for Bulk Liquid Chemicals and 5C for Liquefied Gases).
- Tanker and Terminal should discuss and agree the content of part 6 (Agreements).
- Tanker complete additional pre-transfer checks in part 7A. If COW is planned, they complete part 7B. Any intention for tank cleaning and/or gas freeing alongside should be agreed with Terminal and Tanker complete part 7C.
- The declaration – When completed, each separate checklist part checked off & initialed by Tanker & Terminal

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34. Transfer equipment is in safe condition (isolated, drained and de-pressurised) (18.4.1)

Terminals should have adequate provisions for the clearing of MLAs and hoses. A documented operating procedure should be in place.

18.4.1 Marine Loading Arm/hose clearing

Terminals should have adequate provisions for the clearing of MLAs and hoses. A documented operating procedure should be in place for the type of clearing used.

A backup plan should be considered in the event that the primary means of clearing the arm or hose fails.

Acceptable methods for clearing the MLAs and hoses include:

- Gravity drain from MLA/hose directly to a sump and/or tanker.
- Purging MLA/hose with nitrogen to tanker/terminal.
- Stripping MLA/hose back into shore cargo lines.

LOP Review Required For Line Clearing Procedure

34. Transfer equipment is in safe condition (isolated, drained and de-pressurised) (18.4.1)

Terminals should have adequate provisions for the clearing of MLAs and hoses. A documented operating procedure should be in place.

Facilities and operating procedures for clearing cargo transfer equipment may also need to consider the following:

- Lifting equipment is provided to aid gravity draining of cargo hoses. Suitable means of checking that cargo transfer systems are drained and confirmed zero energy prior to connection/disconnection, e.g. bleeder valve or pressure gauge.
- Means of verification to ensure drain valves are closed prior to cargo transfer operations, e.g.
- interlock system, critical procedure.
- Adequate supply of nitrogen is available where necessary, i.e. contingency plan for when
- nitrogen supply is lost.

LOP Review Required For Line Clearing Procedure

Part 5A. Tanker and terminal: pre-transfer conference

35. Operation supervision and watchkeeping is adequate (7.9, 23.11)

The level of manning should ensure that all operations related to the tanker/terminal interface are carried out safely.

Shore Officer should get the Crew List from vessel and verbally confirm the number of personnel per shift.

Terminals are not subject to global regulation on manning, but local legislation often requires a minimum safe manning level to be maintained at all times (see OCIMF's Manning at Conventional Marine Terminals).

It is recommended that ship and terminal operators have a Competence Management System. For terminal operators, this would be the Marine Terminal Operator Competence and Training Guide (MTOCT) (see chapter 15). For ship operators, this would fall under the STCW Convention. These systems would include the following to develop and assure competence:

Part 6. Tanker and terminal: agreements pre-transfer

45. Limits for cargo, bunkers and ballast handling : Maximum transfer rates:
46. Topping-off rates:
Maximum manifold pressure:
Cargo temperature:
Other limitations:

45. Pressure surge control : Minimum number of cargo tanks open:
46. Tank switching protocols:
Minimum number of cargo tanks open:
Tank switching protocols:
Full load rate:
Topping-off rate:
Closing time of automatic valves:

Need to review the existing pre-transfer meeting checklist if all the items is captured in SSSCL.

XX	Exceptions and additions	Special issues that both parties should be aware of:		

Declaration

- Declaration on agreement between Tanker and Terminal
- Frequency of the repetitive checks

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 *ISGOTT*, we have satisfied ourselves that the entries we have made are correct to the best of our knowledge and that the tanker and terminal are in agreement to undertake the transfer operation.

We have also agreed to carry out the repetitive checks noted in parts 9 and 10 of the *ISGOTT* SSSCL, which should occur at intervals of not more than _____ hours for the tanker and not more than _____ hours for the terminal.

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

Tanker	Terminal
Name	Name
Rank	Position

Declaration done together during pre-transfer meeting to exchange the relevant sections applicable

Declaration/ Tanker & Terminal

- Declaration on agreement between Tanker and Terminal
- Frequency of the repetitive checks

Declaration done together during pre-transfer meeting to exchange the relevant sections applicable

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 *ISGOTT*, we have satisfied ourselves that the entries we have made are correct to the best of our knowledge and that the tanker and terminal are in agreement to undertake the transfer operation.

We have also agreed to carry out the repetitive checks noted in parts 9 and 10 of the *ISGOTT* SSSCL, which should occur at intervals of not more than _____ hours for the tanker and not more than _____ hours for the terminal.

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

Tanker	**Terminal**
Name	Name
Rank	Position
Signature	Signature
Date	Date

•SSSCL Section – Repetitive checks during and after transfer until Tanker departs

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								

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	

Each party checks their checklist and exchange during the closing meeting

4

- Tanker complete repetitive checks in part 8 and Terminal complete repetitive checks in part 9 at agreed intervals. The record should be available for each other to review.
- Where item reviewed is no longer in compliance with original status, immediate steps to be taken to remedy the issue or cease operations.
- Tanker/ Terminal should provide a final copy of their part 9 to the Terminal/ Tanker when operations are completed respectively.

Q&A